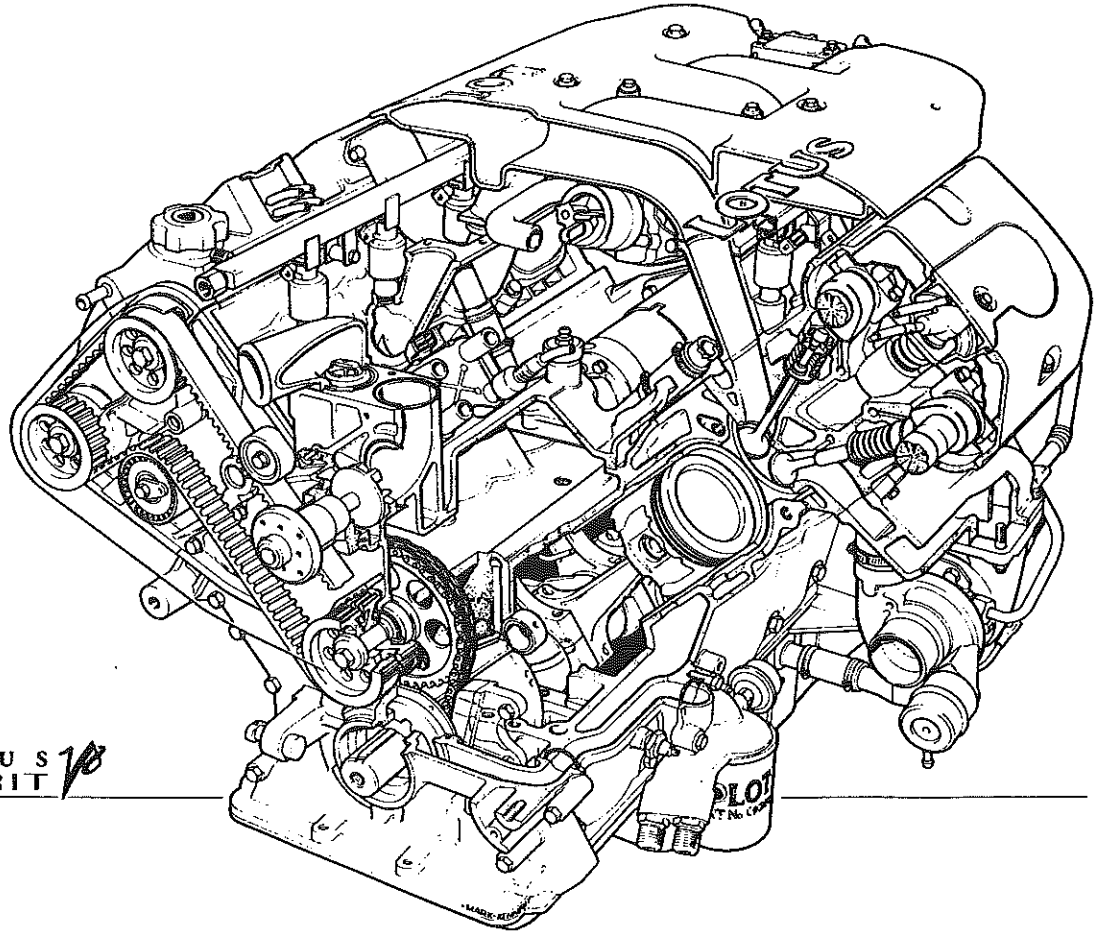
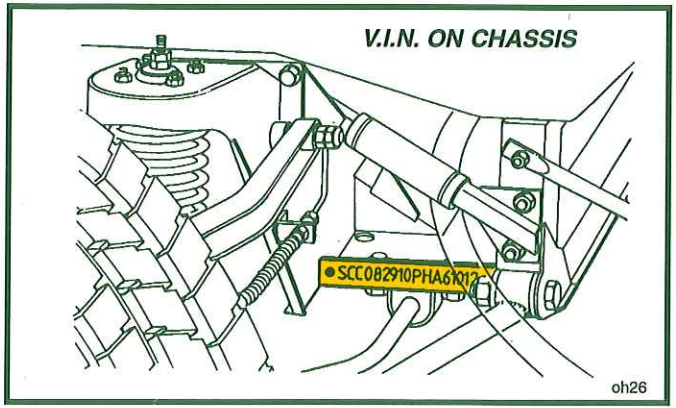
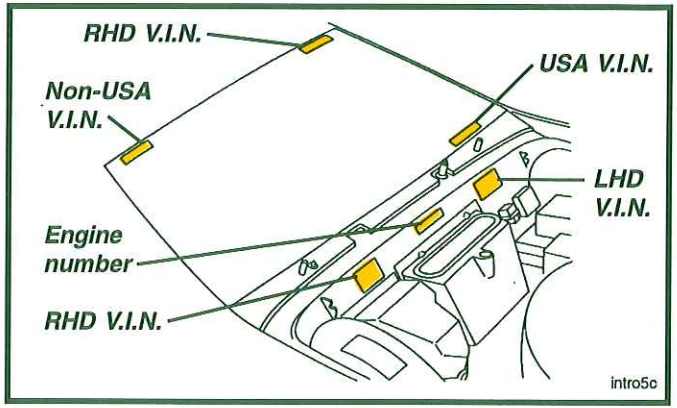
Vehicle Operation & Maintenance



LOTUS ESPRIT V8





FOREWORD

This handbook has been written for the owner and driver of the Lotus Esprit. It should be read before driving the car, and then stored in the vehicle for ready reference. The handbook includes safety considerations, explanations and instructions for operating the driving controls, and details of the technical specifications and maintenance requirements. It is not intended to provide all the technical information required for servicing, and should any adjustment become necessary which is not detailed in the handbook, owners are urged to contact their Lotus dealer.

In order to comply with emission regulations, emission control servicing must be undertaken at the mileage stated in the Maintenance Schedule. Owners must ensure that all servicing occurs at the correct interval, otherwise the Warranty could be invalidated and the legal requirements of emission regulations contravened.

Lotus has a policy of continuous product improvement, and reserves the right to change specifications and equipment at any time without notice. Keeping in regular contact with your Lotus dealer ensures that you may be kept informed of any technical developments which may improve the specification, performance or safety of your own vehicle.

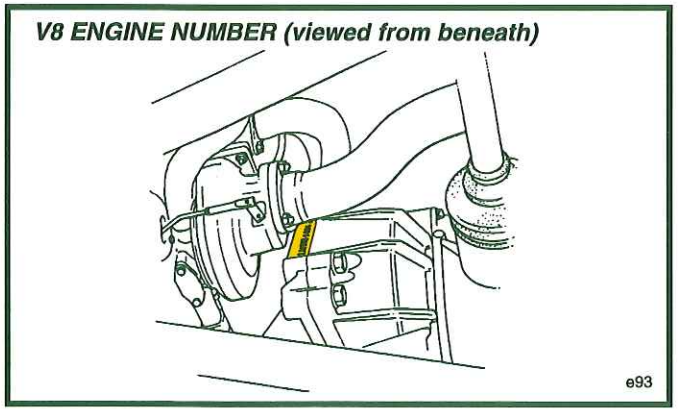
The specification of some export models may differ in detail from the text and illustrations contained within this handbook, and if any query should arise, the Lotus importer for that territory should be consulted.

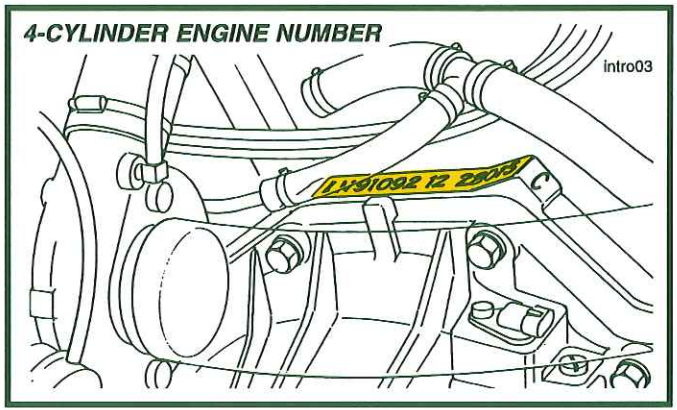
Messages in this handbook prefaced by '**WARNING**' in bold type, describe areas of danger to life and limb. Death or injury can result from a failure to follow these instructions.

Vehicle Identification

The Vehicle Identification Number (V.I.N.) is stamped on a vertical flange at the right hand front corner of the chassis, between the pivot points of the front suspension lower wishbone.

The engine number on V8 models is stamped on a vertical





flange at the left hand rear of the cylinder block alongside the clutch housing jointface, and is most easily viewed from beneath. On four cylinder models the number is stamped on a horizontal surface at the right hand rear of the cylinder block, alongside the clutch housing jointface. Both the V.I.N. and engine number are duplicated on printed labels fixed to the body in the front luggage compartment, and on some vehicles the V.I.N. is repeated for convenience on a label viewable through the windscreen. **It is essential that both the V.I.N. and engine numbers are quoted in any correspondence concerning the vehicle, or when ordering spare parts.**

Safety

The Esprit has been designed to comply with all applicable safety regulations and incorporates passive safety features, which include occupant protection door beams, burst resistant door locks, a collapsible steering column, and on some models, crash triggered inflatable air bags for either the driver only, or for both the driver and passenger. Active safety features include powerful anti-lock four wheel disc brakes, high geared power assisted steering requiring only small steering wheel movements to alter course, excellent road holding with optimised handling characteristics, and rapid acceleration to permit swift and safe overtaking.

Drivers should be aware of their own capabilities as well as those of the vehicle, and at all times drive well within those limitations, particularly on wet roads, or under adverse weather conditions. Never drive whilst under the influence of alcohol or drugs, or allow the car to be driven unsupervised by inexperienced drivers.

Precautions

Owners should note that the only approved extras and conversions are those which are specified by the Factory and carried out by the Factory or by an authorised dealer. Lotus Cars Ltd. does not accept any liability whatsoever for defects which arise from extras or conversions which are not factory approved. Inexpert modifications or additions, especially to the electrical

or fuel systems could jeopardise safety.

All USA specification vehicles, and some cars in other markets are fitted with a Supplementary Inflatable Restraint (S.I.R.) for either on the driver only, or for both the driver and passenger. It is important that any technicians working on the car are made aware that the vehicle is fitted with the S.I.R. system, in order that they may take suitable precautions to guard against accidental deployment. See 'Supplementary Inflatable Restraint System' and 'Vehicle Servicing With S.I.R.' later in the handbook. All Lotus cars are equipped with seat belts, which should be worn by both driver and passenger whether or not the car is fitted with S.I.R.(s).

The exhaust system of the Esprit incorporates a 'three way' catalytic converter in order to reduce the noxious content of the exhaust gases, and comply with emission control regulations. It is essential that ONLY UNLEADED FUEL is used (see page a44). The use of as little as one tankful of leaded fuel will cause irreversible contamination of the precious metal catalysts and the exhaust gas sensors used by the computer controlled engine management system.

It is important that the Maintenance Schedule in section 'c' of this handbook is followed at the specified time and mileage intervals, and that the vehicle is kept in proper operating condition. Failure to do so may result not only in a loss of fuel economy and emission control, but may cause damage to the catalytic converter. If an engine malfunction should occur, particularly involving engine misfire or other noticeable loss of performance, do not continue to operate the vehicle in that condition but have the fault diagnosed and repaired promptly. If the 'Check Engine' tell tale lamp comes on whilst driving, or stays on after engine start up, the engine management self-diagnostic system has detected a fault, and the car should be taken to a Lotus dealer without delay for rectification. Continued operation of the vehicle with a severe malfunction could cause a catalytic converter to overheat, resulting in damage to the converter itself, and the risk of consequent vehicle damage.

As with any vehicle, do not park or drive the car in areas where combustible material, such as dry grass or leaves, could come into contact with the hot exhaust system. Under certain wind and weather conditions a grass fire could be initiated.

DO NOT tamper with any electrical components with the battery connected.
DO NOT attempt to use the lifting jack until you have read the relevant information in the handbook.
DO NOT check or adjust any engine bay equipment with the engine running.
DO NOT use the car if for any reason fuel leakage occurs, indicated by a persistent smell of fuel, until the fault has been traced and rectified.
DO NOT touch or approach, any part of a hot exhaust system or turbocharger, including the EGR pipe at the rear of the V8 engine.
DO NOT allow servicing or repairs to be carried out by unqualified persons. Lotus dealers have trained staff who are best qualified to maintain your car to the correct specification.

Before driving the car:

- Check all windows, mirrors and lights are clear and unobstructed;
- Check that the doors, tailgate and front bonnet are latched;
- Adjust the seat and mirrors, and familiarise yourself with the controls.
- Check all instruments and tell tales are reading correctly.
- Fasten the seat belt and lock the doors.

Care of the Environment

Be aware of the affect of motor vehicle exhaust emissions on the environment and adopt driving practices which minimise unnecessary pollution. Noxious emissions, which are reduced considerably by the catalytic converter, are harmful to the health of humans, animals and plant life, and the production of carbon dioxide, a 'greenhouse' gas which is not reduced by the catalytic converter, is considered to contribute to global warming. Also, the reserves of fossil fuels are finite and should not be wasted.

When traffic conditions are such as to dictate the pace of travel, significant savings in fuel use, exhaust emissions, wear and tear, and noise nuisance can be achieved whilst enhancing driving comfort by:

- Anticipating traffic flow to avoid needless acceleration and braking.
- Using the highest suitable gear.
- Switching off rather than idling for long periods.

In general:

- Drive off as soon as possible after starting; it is not necessary or beneficial to the engine to allow extended idling from cold.
- Have the car serviced regularly as a poorly maintained car will use more fuel; have any engine faults attended to immediately.
- Maintain the tyres at the correct pressures. Under inflation causes increased rolling resistance and uses more fuel.
- Whenever possible, avoid driving during busy periods, or on overcrowded routes.
- The noxious emissions produced by an engine are many times greater when cold than when warm. Consider the need to use the car for very short journeys.
- Always be aware of other road users, and give maximum consideration to cyclists, pedestrians, horse riders and animals. Courtesy and tolerance are the foundations of safe and enjoyable motoring.

VEHICLE SECURITY

In order to provide an exceptional level of theft and vandal protection, the Lotus Esprit is factory fitted with a vehicle security alarm incorporating a Cobra 6422 system. Features include:

- 'Dynamic coding' of the transmitter keys; Each time the transmitters are used, the operating frequency is randomly changed to guard against the possibility of code copying.
- Self powered siren to maintain protection if the vehicle power supply is interrupted.
- Automatic (passive) engine immobilisation to prevent the engine from being started.
- Selectable cabin intrusion sensing using a hyperfrequency radar sensor.
- 'Deadlocking' of the door latches to disable the interior release handles.

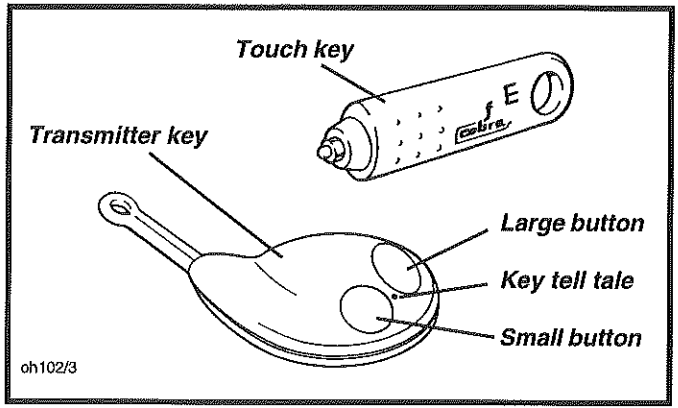
Transmitter Keys

Two transmitter keys are provided with the car, together with two electronic touch keys. The transmitter key is used to arm and disarm the alarm and to remotely lock and unlock the driver's and passenger's doors. The touch key is provided as a safety back up in case of transmitter key failure (e.g. flat battery), and should be kept separate but available.

Arming the Alarm

Remove the ignition key, close the roof panel, tailgate, front bonnet and both doors. Press once, the larger of the two buttons on the transmitter key. This command will be acknowledged by:

- Two flashes of the hazard warning lamps;
- Flashing of the alarm tell tale on the centre console.



Check that these indications occur. If not, press the button a second time, as the first press may have switched off the passive immobilisation (see later).

The arming command initiates the following actions:

The locking of both doors;
On non-USA cars, the automatic closing of both door windows;
The immobilisation of the engine via two separate circuits.

Note that if the system is armed when a door, tailgate or front bonnet is not fully closed, the buzzer will sound continuously until the opening is secured. **If still open after 40 seconds, the siren will sound.**

After arming the system, a period of at least 40 seconds must elapse before all functions and sensors become fully active. After this time, the alarm will be triggered by any of the following actions:

- Opening a door, tailgate or front bonnet;
- Movement detected within the cabin;
- Energising the ignition circuit ('hot wiring').

When triggered, the electronic siren will sound and the hazard warning lamps will flash for a period of approximately 30 seconds before closing down and resetting, ready for any further triggering input. If the tailgate or front bonnet are left open, the alarm will repeat after a short delay, and continue in this sequence for a total of ten cycles.

To silence the siren when the alarm has been triggered, press once the larger of the two buttons on the transmitter key. The siren will reset and the system will remain armed.

Disarming the Alarm

To disarm the alarm prior to entering the vehicle, press once the larger of the two buttons on the transmitter key. This command will be acknowledged by:

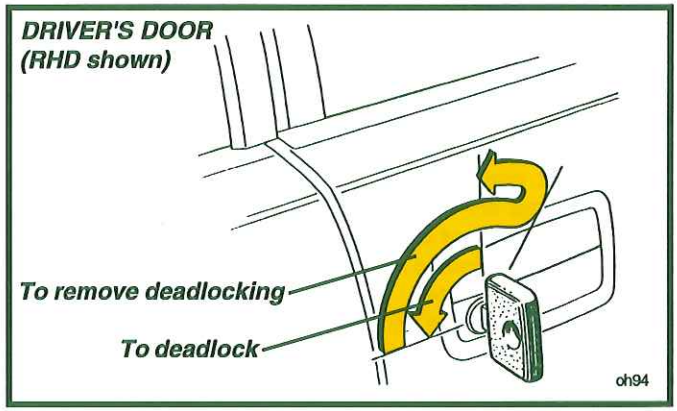
- One flash of the hazard warning lamps;
- Extinguishing of the alarm tell tale on the centre console. (If the tell tale is flashing intermittently, the alarm has been triggered during the armed period - see 'Trouble Shooting')
- In addition, both doors will be unlocked.

Deadlocking

For the highest level of protection, the interior door release handles may be disabled ('deadlocked') by using the mechanical door key ***before*** the alarm has been armed with the transmitter key:

1. Close all apertures, and use the mechanical (ignition) key in the driver's door handle to turn the lock 90° to the horizontal positon:
   - counterclockwise on RHD cars;
   - clockwise on LHD cars;
   and withdraw the key.

2. Arm the alarm with the transmitter key (see above).



WARNING: Do not deadlock with persons remaining in the vehicle, as they will be unable to open the doors.

Note that if the alarm is armed when the deadlocking operation is performed, only the driver's door will be deadlocked, and a loss of syncronisation may occur with the central locking function.

To remove the deadlocking, ***first disarm the alarm*** before using the mechanical key to return the driver's door lock to the vertical position. Performing this operation when the alarm is armed will result in the passenger door remaining deadlocked.

Passive Immobilisation

The system will automatically immobilise the engine four minutes after switching off the ignition, or one minute after switching off and opening and closing a door. Immobilisation will be indicated by:

- The alarm tell tale flashing.
  And if initiated by the door being opened and closed:
- Two flashes of the hazard warning lamps.

Note that these indications are the same as those for the arming of the alarm, but in this instance it is only engine immobilisation which is activated.

To start the car after immobilisation has been activated, it is necessary to switch ***OFF*** the ignition and press once the large button on the transmitter key. The alarm tell tale will be extinguished.

Intrusion Sensing

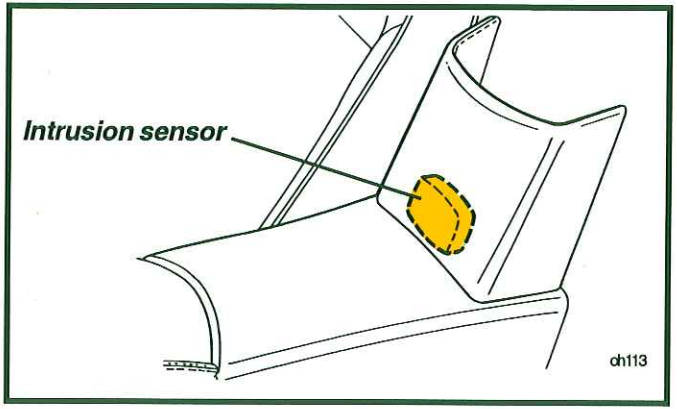
A hyperfrequency radar detector, mounted in the map pocket at the rear of the centre tunnel, is able to detect substantial movement within the cabin and trigger the alarm in the event of unauthorised entry. In order for the radar detection to operate effectively, it is necessary to close the windows and roof panel. The sensitivity of the intrusion sensor may be adjusted by your dealer if necessary.

If an animal is to be left in the vehicle when the alarm is armed, it is necessary temporarily to switch off the intrusion sensing by the following procedure:

- Arm the system in the usual way by pressing once the large button on the transmitter.
- Within 40 seconds, press once the smaller button on the transmitter. This action will be acknowledged by a single buzz of the buzzer.

Note:

Switching off the intrusion sensing will cancel the automatic window closure feature.
Intrusion sensing will automatically be reinstated the next time the alarm is armed.
Do not inhibit operation of the radar detector by placing bags or large objects on the tunnel top close to the map pocket.



Summary of Alarm Normal Operation

In normal use, whenever leaving the car, close all apertures and press once the transmitter large button to lock the doors and arm the alarm - acknowledged by two hazard lamp flashes, and the alarm tell tale flashing. **Check that two hazard flashes occur** and not one (see below).

On return to the car, whether or not the alarm is armed, again press once the transmitter large button. This will either unlock the doors and disarm the alarm, or, if the alarm was not armed, the passive immobilisation will be switched off. In both cases, this will be acknowledged by **one hazard lamps flash** and the alarm tell tale going out.

For details of deadlocking and intrusion sensing override, see above, and for diagnostic code interpretation, see below.

Emergency Disarming

In the event of lost or failed transmitter keys, an electronic touch key may be used to mobilise the engine:

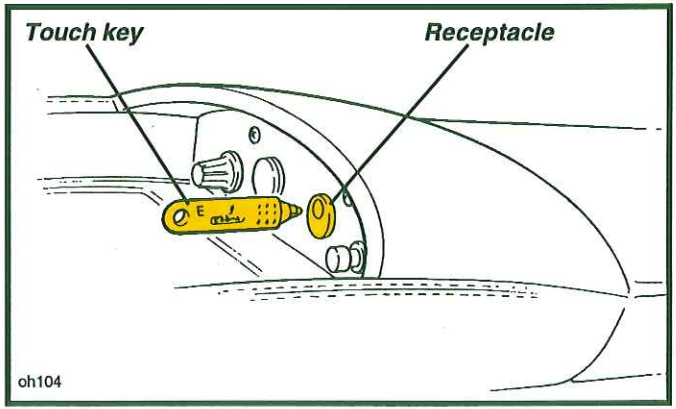
- Use the mechanical key to unlock the door and enter the vehicle, causing the alarm to be triggered.
- With the ignition ***OFF***, insert the touch key into the receptacle on the tunnel top switch panel. This will disarm the alarm and mobilise the engine. Note that if this operation is performed with the ignition ***ON***, the transmitter key codes will be wiped, and must be reprogrammed (see below).

Passive immobilisation will still function as normal (see above), requiring further use of the touch key to overcome (ignition OFF).

New Transmitter Programming

If a transmitter key is lost or damaged, a new key may be purchased through your Lotus dealer, and then programmed to the alarm system in your own car using the following procedure:

1. With the alarm system disarmed ***and mobilised***, switch on the ignition.
2. Insert a touch key into the receptacle on the tunnel top switch panel. The alarm tell tale will light steady.
3. Press, simultaneously, both buttons on the new transmitter key for about ten seconds, until the tell tale in the ***key*** stops flashing and goes out. When the buttons are released, the key tell tale will light steady.
4. Press either one of the transmitter key buttons; the transmitter key tell tale will blink, and the alarm tell tale on the fascia will go out for one second.
5. Repeat 3 and 4 for all other transmitter keys to be used, up to a maximum of four. When all keys have been programmed, switch off the ignition (alarm tell tale will go out). Note that this programming procedure erases all existing transmitter codes, so that all keys to be used must be reprogrammed at the same time.



Checking the Alarm System

To ensure that optimum vehicle protection is maintained, the alarm system function should be checked periodically:

1. Arm the alarm and wait for 40 seconds;
2. Open either door; The siren should sound and the hazard lamps flash for 30 seconds. To turn off the siren before the 30 seconds have elapsed, press the large button on the transmitter key - this will not disarm the alarm.
3. Repeat step (2) testing the opposite door, the tailgate and the front bonnet. (Sit in car with intrusion sensing turned off in order to open the tailgate and bonnet)
4. If the tailgate or front bonnet are left open, the alarm will stop after approximately 30 seconds, and then repeat after a short delay, and continue in this sequence for ten cycles.
5. To test the intrusion sensing, remain in the vehicle and arm the system. Within the 30 second arming period, substan-

tial body movement should trigger the alarm and be signalled by the sounding of the buzzer. Disarm the alarm before the 30 seconds elapses, or the siren will be activated.

If the alarm system does not operate as described, refer to to your Lotus dealer, or to the 'Trouble Shooting' guide below.

Alarm Trouble Shooting

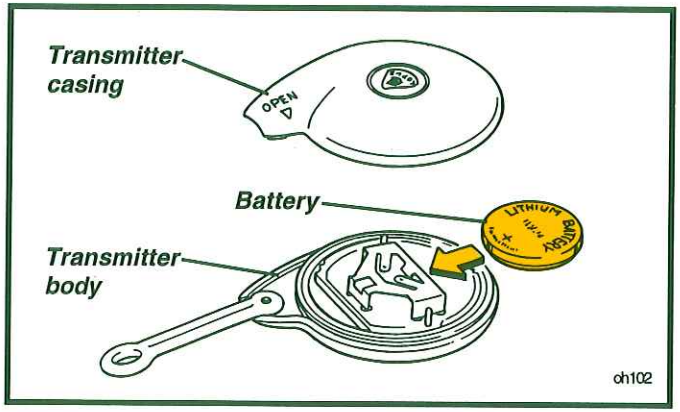
In the unlikely event of any problem being experienced with the vehicle security system, your Lotus dealer should be consulted at the first opportunity. If this is not immediately possible, the following notes may be of some assistance:

Symptom: Vehicle was left for a few minutes without setting the alarm, and now the engine won't start.
Possible cause: Passive immobilisation has taken effect (indicated by the tell tale flashing), as designed - see above.

Symptom: The transmitter key will not arm or disarm system.
Possible cause: Transmitter key battery low. When the key battery becomes low, the transmitter key L.E.D. will blink in an irregular manner, or once only instead of remaining lit until the button is released.
To replace transmitter battery:

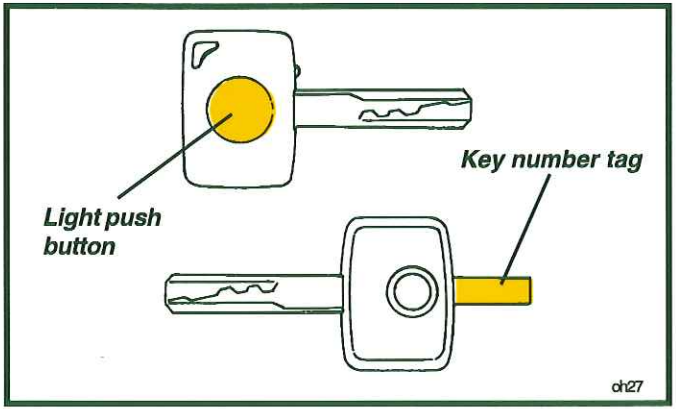
a). Open the transmitter key body by levering in the zone marked 'OPEN', and withdraw the battery.
b). The keys are powered by a 3v long life lithium battery type CR2032. With normal use, this should last between 3 and 5 years. After opening the new battery packaging, touch only the sides of the battery, and fit the battery into the key case with the positive side (+) upwards as shown.
c). Press the battery case together.

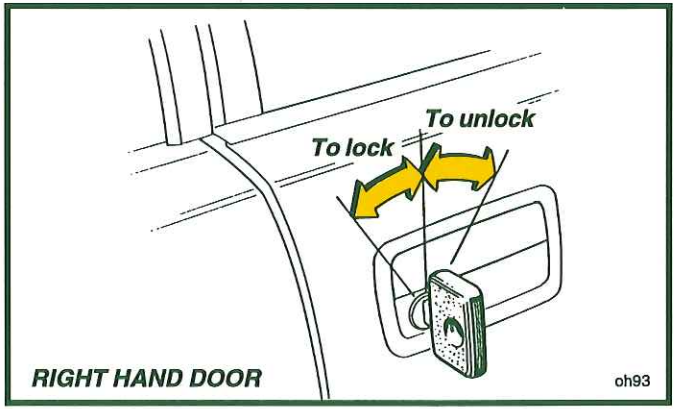
Symptom: Both transmitters fail to operate with good batteries.



Possible cause: Transmitter programming has been inadvertently wiped during use of touch key - reprogramme keys (see above).

Symptom: The alarm triggers for no apparent reason.
Possible cause: When the transmitter key is used to disarm the system, if the alarm had been triggered during the armed period, a 'diagnostic code' will be displayed by the alarm tell tale until the ignition is next switched on.
The flash codes are interpreted as follows:
Single flash followed by 2 second break: Caused by a door, tailgate or front bonnet sensor. A sensing switch may require attention.
Three flashes followed by 2 second break: Caused by the intrusion sensor. If there are no loose or moving objects or animals in the vehicle, the sensitivity of the sensor may need adjustment by your dealer.
Four flashes followed by a 2 second break: Caused by the ignition circuit being energised.





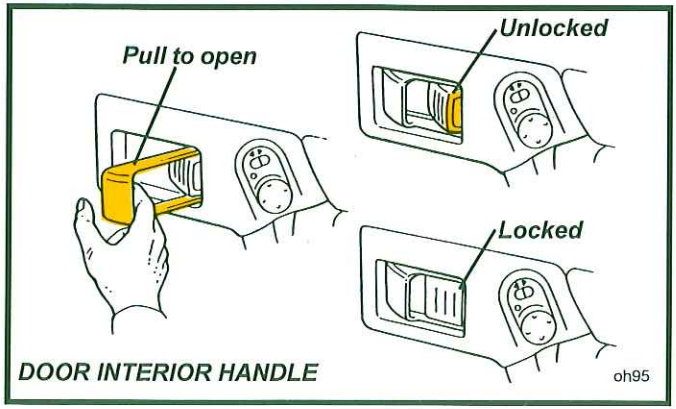
Mechanical Keys

A single key operates the ignition switch/steering column lock, door deadlocking and (except cars with passenger side S.I.R.) glovebox. On receipt of the vehicle, separate the duplicate key and keep in a safe place, for use in an emergency. The key number is printed on a plastic tag attached to the head of the key, and should be noted before removing the tag to prevent unauthorised recording. Keep a record of the number with your vehicle documents and in your diary, to enable your dealer to have a replacement key made if necessary. If a key is lost, a duplicate should be ordered at the earliest opportunity, so that a spare is always available.

The key need be used in the doors only in order to 'deadlock' the interior handles (see 'Deadlocking'), or in the absence of the alarm transmitter keys.

To unlock either door from outside, insert the key into the lock and turn clockwise (RH door) or counter-clockwise (LH door) as appropriate. Lift the door handle and pull open the door. If the door is swung fully open, a spring detent will engage and restrain the door for convenience whilst entering or exiting the vehicle, but the door should be held in windy conditions, or if the vehicle is parked on a slope.

From inside the car, pull the door firmly shut, and if desired, lock each door by pressing the rear of the locking flap, housed within the door interior release handle. Unlock by pressing the front of the interior locking flap and pull the release handle to open the door.



WARNING: Keep fingers well clear when closing a door.

Shut the door from outside by using firm hand pressure towards the rear of the door, and lock by turning the key counterclockwise in the right hand door, or clockwise in the left hand door.

WARNING: If it is desired to lock the car with persons remaining inside, take care not to activate the deadlocking by turning the key in the driver's door to the horizontal position. When deadlocked, the doors cannot be unlocked from inside.

Note that, on cars with 'one touch' window operation, if the key is held at the locking position for a moment, both door windows will close automatically.

To lock the doors from outside without the use of the key; with one door open, lock both doors using the interior locking flaps, and then shut the door. Note that when shutting the driver's door, the exterior handle must be held raised, or else the doors will unlock automatically to help prevent an inadvertent lock out.

On USA market cars, if the ignition has been switched off and the key left in position, a chime will sound when the driver's door is opened.

Note: If the vehicle battery becomes flat whilst the alarm is armed and the doors are deadlocked, the passenger door cannot then be unlocked from inside or outside until power is reinstated.

COCKPIT COMFORT

Seats

On delivery of the car, first remove the protective plastic seat covers, if this has not already been done, and dispose of safely.

Both driver's and passenger's seats, which are fitted with integral head restraints, and have adjustments for fore/aft position, and backrest angle.

Fore/aft: To adjust the fore/aft position, raise the lift bar at the front of the seat base, and slide to the position required. Ensure that the catch is fully engaged after adjustment by attempting to slide the seat with the lift bar lever released. Take care not to trap or damage the seat belt buckle when sliding the seat.

Backrest Angle: Turn the large handwheel at the base of the seatback (outboard side) to adjust the backrest angle as required.

WARNING: Do not attempt to adjust the seat position whilst driving. The vehicle safety systems, including the seat belts and S.I.R. (if fitted), have been optimised for a seat back angle parallel with the rear bulkhead.

Lumbar Support: On seats fitted with adjustable lumbar support, an inflator 'bulb' (A) and air release button (B) are located adjacent to the adjustment lift bar. To increase lumbar support, squeeze the bulb repeatedly until sufficient support is obtained. To decrease support, press the small black button at the base of the inflator bulb until the desired support is achieved.

CORRECT SEAT BELT POSITIONING

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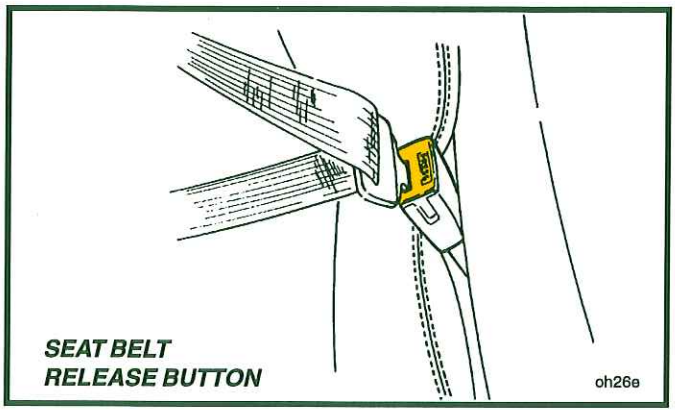

SEAT BELT RELEASE BUTTON

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Seat Belts

Seat belts provide added safety and comfort for both driver and passenger. Notwithstanding any laws compelling their use, it is strongly recommended that the seat belts are worn at all times, no matter how short the journey, particularly since the inertia reel seat belts fitted give the wearer complete freedom of movement under normal driving conditions. The belt reel will lock automatically whenever the vehicle is subjected to braking, acceleration, or cornering forces, or on impact in a collision. Reel locking will also occur on steep hills or slopes, or if the vehicle is tilted.

To use the belt, take the buckle tongue in the outer hand, and drawing the belt through the top slide, pass the belt across the body and push the tongue into the buckle lock at the inboard side of the seat, until a positive 'click' is heard. Pull on the belt to check for correct latching and to ensure that the belt fits snugly against the body with all the slack taken up by the reel. The belt should be worn low across the front of the pelvis, and across the chest and shoulder. Two alternative buckle stalk fixing positions are provided to cater for a range of physiques; if necessary, have your dealer change the position to suit your requirements.

The belts are released by pressing the red button on the buckle lock, and will retract automatically for tidy storage and to permit easy access to the passenger compartment.

On non-USA cars, the seat belt tell tale lamp in the fascia will glow red when the ignition is turned on, as a reminder to fasten the seat belt. The lamp will go out when the driver's seat belt is fastened. On USA market cars, the seat belt reminder tell tale will flash for approximately eight seconds whenever the ignition switch is turned to start the engine. If the driver's seat belt is not fastened, this light will be accompanied by a warning chime.

WARNING: - On fastening the seat belt, ensure that no part of the belt is twisted, or is entangled in the door or seat mechanism.

- Seat belts are designed to bear upon the bone structure of

the body and should be worn low across the front of the pelvis, and across the chest and shoulder. Wearing the lap section of the belt across the abdominal area must be avoided. Pregnant women should consult their doctor to determine whether they should drive, and how to position the seat belt.

- The shoulder portion of the belt must never be worn beneath the arm, or behind the back.

- Each seat belt assembly is designed for use by one occupant of adult build, and should not be used by children under six years old except in conjunction with a suitable child seat or harness.

- Never use one belt around two people, or allow a child to be carried on a driver's or passenger's lap.

- No modifications or additions should be made by the user which will prevent the seat belt mechanism from operating to remove slack. Do not attempt to adjust the seat belt tension by altering the mechanism.

- The belt should be replaced if webbing becomes frayed, contaminated, or damaged. Inspect regularly.

- It is essential to replace the entire seat belt assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious.

Care should be taken to avoid contamination of the webbing with polishes, oils or chemicals and particularly battery acid. Cleaning may be safely carried out using a mild soap and water solution, since Tereylene does not absorb water to any appreciable extent and will therefore dry quite quickly. Ensure the belt is fully dry before using.

Child Restraints

WARNING: On no account must a *REARWARD FACING* child seat be used on a car fitted with a passenger S.I.R. (airbag).

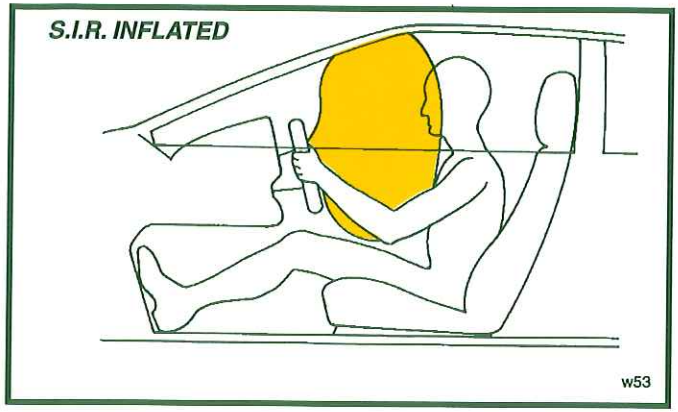
Note that all child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt, and that children could be endangered in a crash if their child restraints are not properly secured in the vehicle.

In the USA, child safety seats must conform to Federal Motor Vehicle Safety Standard 213. Ensure that any seat to be fitted is clearly marked as meeting this standard, and be thorough in following the maker's installation instructions. The passenger seat on USA cars is provided with a ratcheting belt retractor for use with a child seat. To activate the ratcheting mechanism, pull out the belt to its fullest extent before latching, and then allow the retract mechanism to tighten the belt around the child seat in accordance with the seat manufacturer's directions. The belt reel extension mechanism is now locked, and will allow retraction only. When removing the child seat, release the belt from the buckle and allow to fully retract, when the mechanism will automatically revert to normal operation.

In European markets for cars ***without*** a passenger side SIR (airbag), the following Klippan products have been approved by Lotus for use in the Esprit, with the passenger seat **three stops forward** from the fully back position:

Weight/Age	Product
0 - 10 kg) 0 - 9 months)	- Carrytot.
9 - 18 kg) 9 mth - 4 yr)	- Super Dreamseat Recliner.
18 - 36 kg) 4 - 11 yr)	- Duoseat.

Refer to the Klippan literature supplied with the seat for fitting instructions.



Supplementary Inflatable Restraints (if fitted)

Supplementary Inflatable Restraints (S.I.R.) are available for some markets for either the driver only, or for both the driver and passenger, and provide, in the event of a frontal collision, occupant protection additional to that provided by the seat belt. It is strongly recommended that both driver and passenger wear seat belts at all times in order to minimise the risk of severe injury or death, no matter how short the journey. An occupant who is properly restrained by a seat belt, will be in the best position for full effectiveness of the S.I.R.

The S.I.R. system is designed to operate when the vehicle is involved in a frontal collision, and the force of impact is sufficient to warrant additional occupant protection. The driver's 'air bag' is housed in the centre of the steering wheel, and that for the passenger in the top of the fascia. When triggered by a pair of computer monitored crash sensing switches, the air bag(s) inflates in a fraction of a second to form a cushion for the occupant's upper body, and then deflates very rapidly to minimise any obstruction to the driver.

Some parts of the system are designed to operate only once, and need replacing after air bag inflation with new components, before being ready for another deployment.

WARNING: - Do not attach anything to the steering wheel centre pad, or, on passenger S.I.R. cars, to the fascia top, as injury could result when the S.I.R. inflates.

- After the S.I.R. has operated: the dust on the surface of the deployed air bag may cause minor skin irritation, and for those especially susceptible, breathing difficulties. Leave the vehicle as soon as it is safe so to do, or open a window or door for ventilation, and wash the dust off all exposed skin at the first opportunity.

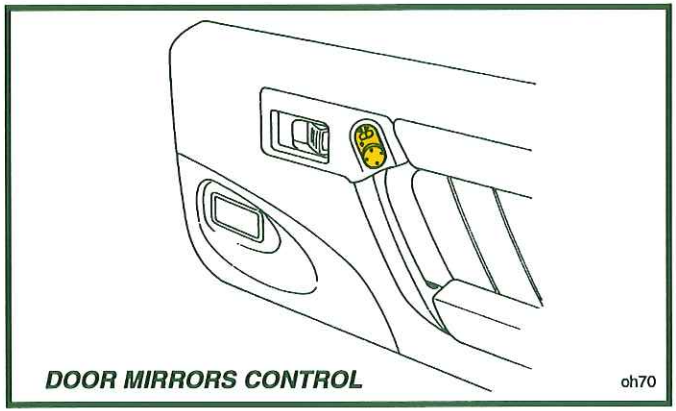
- See your Lotus Dealer without delay to have the inflator module ('air bag') and crash sensors renewed ready for the next deployment.

- Do not change, modify or tamper with the steering wheel or any other part of the S.I.R. system. Such actions could disable the system or cause inadvertent inflation.

- The seat belt and S.I.R. systems have been optimised for a seat back angle parallel with the rear bulkhead.

An S.I.R. tell tale lamp on the fascia provides a warning if the S.I.R. self-diagnostic system detects a fault. See later section on 'Tell Tale Lamps'.

Remember to tell anyone working on the car that it is equipped with an air bag(s), in order that they may follow the correct Lotus servicing procedures to avoid personal injury or damage to the system. If you sell the car, tell the buyer that S.I.R. equipment is fitted.



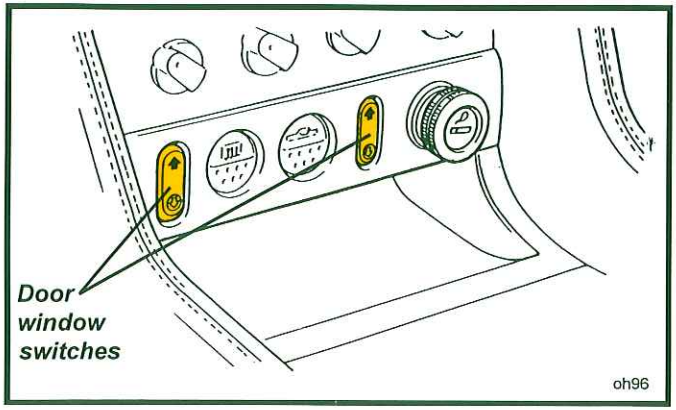
DOOR MIRRORS CONTROL oh70

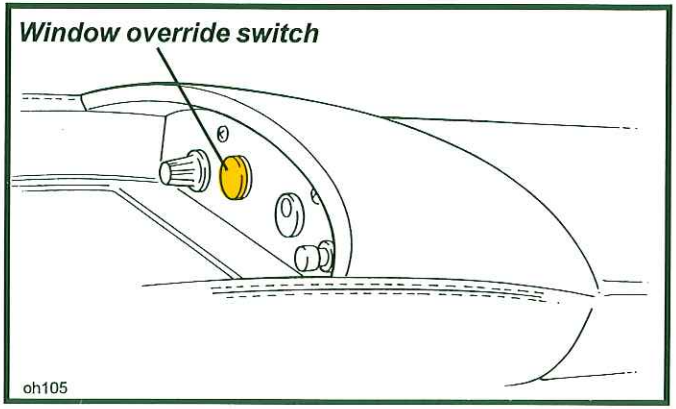
Door Mirrors

The rear view mirrors fitted on both driver's and passenger's doors, are electrically adjustable, and incorporate heating elements to aid de-frosting in icy conditions.

The controls for the adjustment of both door mirrors are located on the driver's door trim panel adjacent to the door pull handle, and are operative only with the ignition switched on. The rocker switch selects control of either the right or left hand mirror, and the dished button adjusts the mirror glass in a plane corresponding to one of the four button positions.

The heating elements in both mirror glasses are energised whenever the heated rear screen is operating. Note that the small amber tell tale on the switch is not used.





Door Windows

Raising and lowering of the electrically operated door windows is controlled by two rocker switches in the centre console, ahead of the gearchange lever. To help locate the switches in the dark, they are backlit green whenever the switch is operative.

To lower a window, switch on the ignition, and press the lower (dished) end of the right or left hand switch. To raise a window, press the top end of the switch. On cars fitted with 'one touch' windows: Tap the switch to move the window in increments, or press for a moment longer for continuous operation to fully open or close the window. To stop the glass movement at any point, press again either end of the switch.

The windows are operative under any of the following conditions:

With 'one touch' windows;

- Whenever the ignition is switched on;
- During the period between switching off the ignition and a door being opened and closed;
- When either door is open;.
- When the transmitter key is used to arm the vehicle alarm, both door windows will automatically close (unless the intrusion sensing has been switched off).
- When using the mechanical key to lock the car, if the key is turned and held at the locking position for a moment, both door windows will close automatically.

USA market & others without 'one touch';

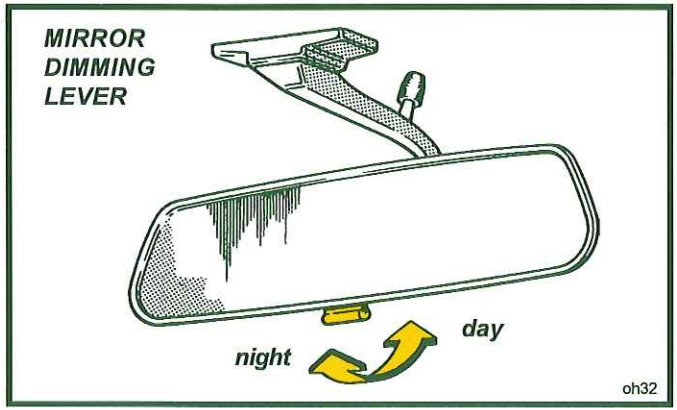
- Whenever the ignition is switched on.

Obstruction Sensing: On cars with 'one touch' windows, a safety feature is incorporated into the window closing mechanism, such that if an obstruction is sensed (increased resistance) during the last third of the travel, the motor stops automatically and reverses window glass movement for a moment. This feature may be manually overridden to cope with frosty conditions and the stiffer window action which may result. An

override button is provided in the tunnel top switch panel, and must be pressed together with the window switch.

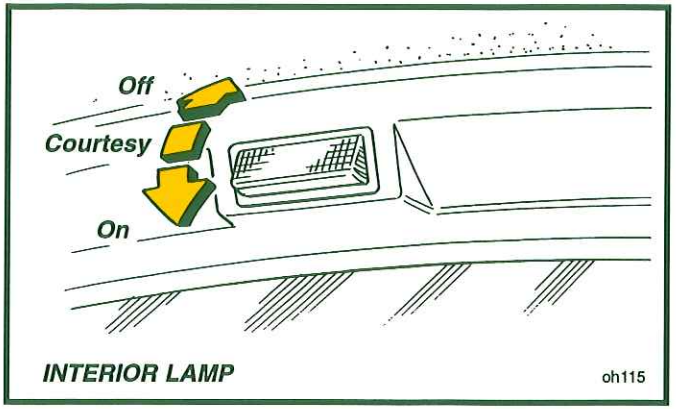
If difficulty is experienced in lowering or raising a window in extremely cold conditions, use a windscreen de-icer spray along the door to glass seal. Do NOT use radiator anti-freeze solutions, as these could seriously damage the paintwork.

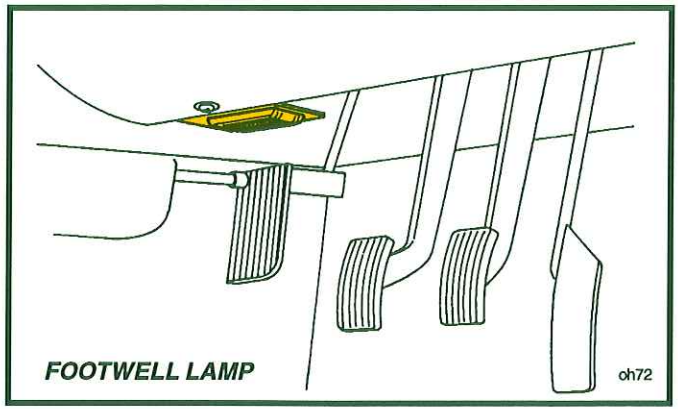
WARNING: - When closing a window, always check that no trapping of persons can occur; careless window operation could be dangerous, especially to children. Ensure that any passenger is also made aware of this danger.
- Do not leave small children unattended in the car with the ignition key in position.
- Do not leave children or animals in a parked car with the windows closed, in weather conditions where suffocation and/or heat exhaustion could ensue.
- On cars with 'one touch' windows, if the battery becomes discharged or the power supply interrupted (e.g. battery disconnected), the window system must be re-programmed after power reinstatement or neither the obstruction sensing or 'one touch' features will operate.
To re-programme each window: Lower the window fully and keep the switch pressed for 5 to 10 seconds until a 'click' is heard. Then raise the window fully and keep the switch pressed until a 'click' is heard. Repeat the procedure for the opposite window.



Interior Rear View Mirror

The mirror can be dimmed to reduce headlamp glare from following vehicles by pressing the lever on the underside of the mirror away from the windscreen. Press the lever towards the windscreen for daytime use.





Interior Lamp

An interior lamp is mounted at the rear of the cabin above the rear window, and uses a rocking lens type of switch in order to allow selection of the following functions:

Courtesy Lamp:

With the lamp lens in its central position, the lamp operates as a courtesy lamp, being on when either door is open, and switching off when both doors are closed. On USA cars, the lamp will remain lit for a few moments after closing both doors to allow time for the key to be inserted into the ignition switch. This extension will be curtailed when the engine is started.

Lamp On:

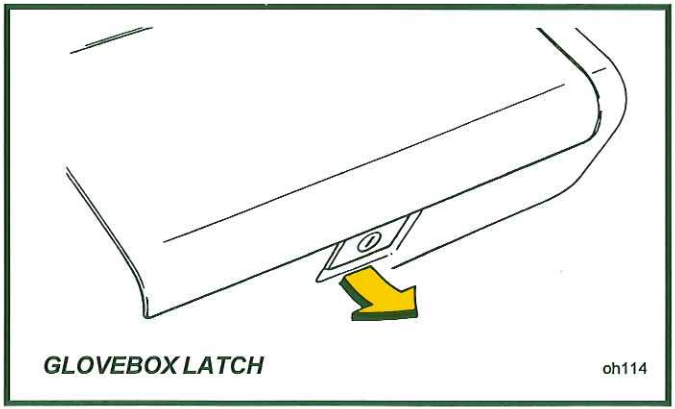
To switch on the lamp, with or without ignition, rock the lens forwards.

Lamp Off:

To switch off the lamp, rock the lens rearwards.

Footwell Lamps (if fitted)

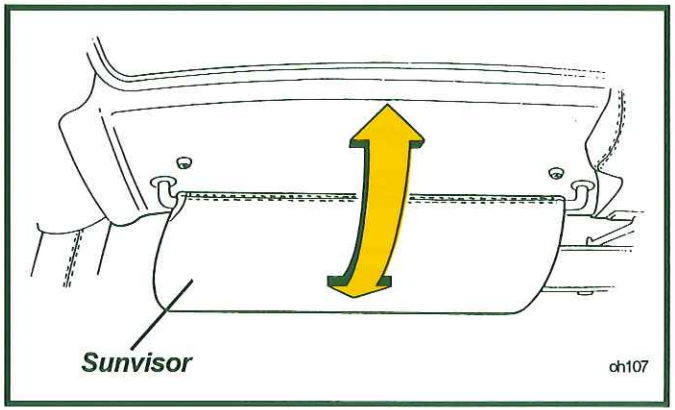
On V8 models not equipped with S.I.R.s, a footwell illumination lamp is fitted in the top of both the driver's and passenger's footwells, and light in conjunction with the interior lamp (see earlier).



Glovebox (not applicable with passenger S.I.R.)

A lockable glovebox is incorporated into the passenger side of the fascia. To open the glovebox, unlock by inserting the key and turning counter-clockwise (slot vertical), before lifting the lower edge of the latch handle.

Press the glovebox shut, and lock with the key, turning clockwise (slot horizontal).



Sunvisors

Pivot down sunvisors are provided for both driver and passenger.

Ignition/Starter Switch/Steering Lock

The switch/lock is located on the right hand side of the steering column.

I - Insert the key into the slot, and turn clockwise to position 'I' to unlock the steering column.

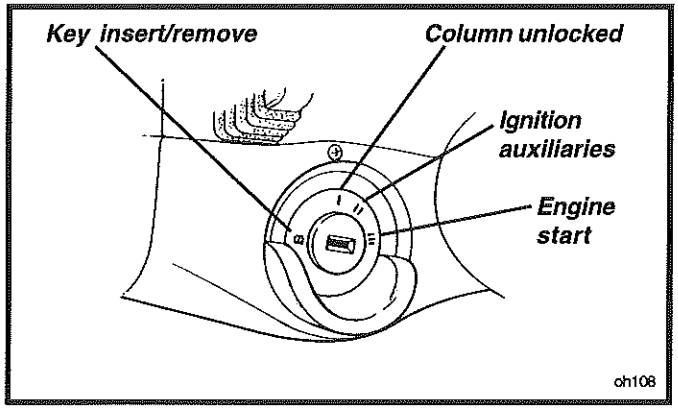
II - Turn to position 'II' to switch on the ignition and operate auxiliary equipment. On four cylinder cars, note that an electric vacuum pump mounted in the engine bay may be heard to run for a short period.

III - Turn further clockwise to 'III' against spring pressure to operate the starter motor. As soon as the engine starts, allow the key to return to position 'II'. For the correct starting procedure, see the later chapter 'Starting Procedure & Running In'. To stop the engine, turn the key back to 'I'.

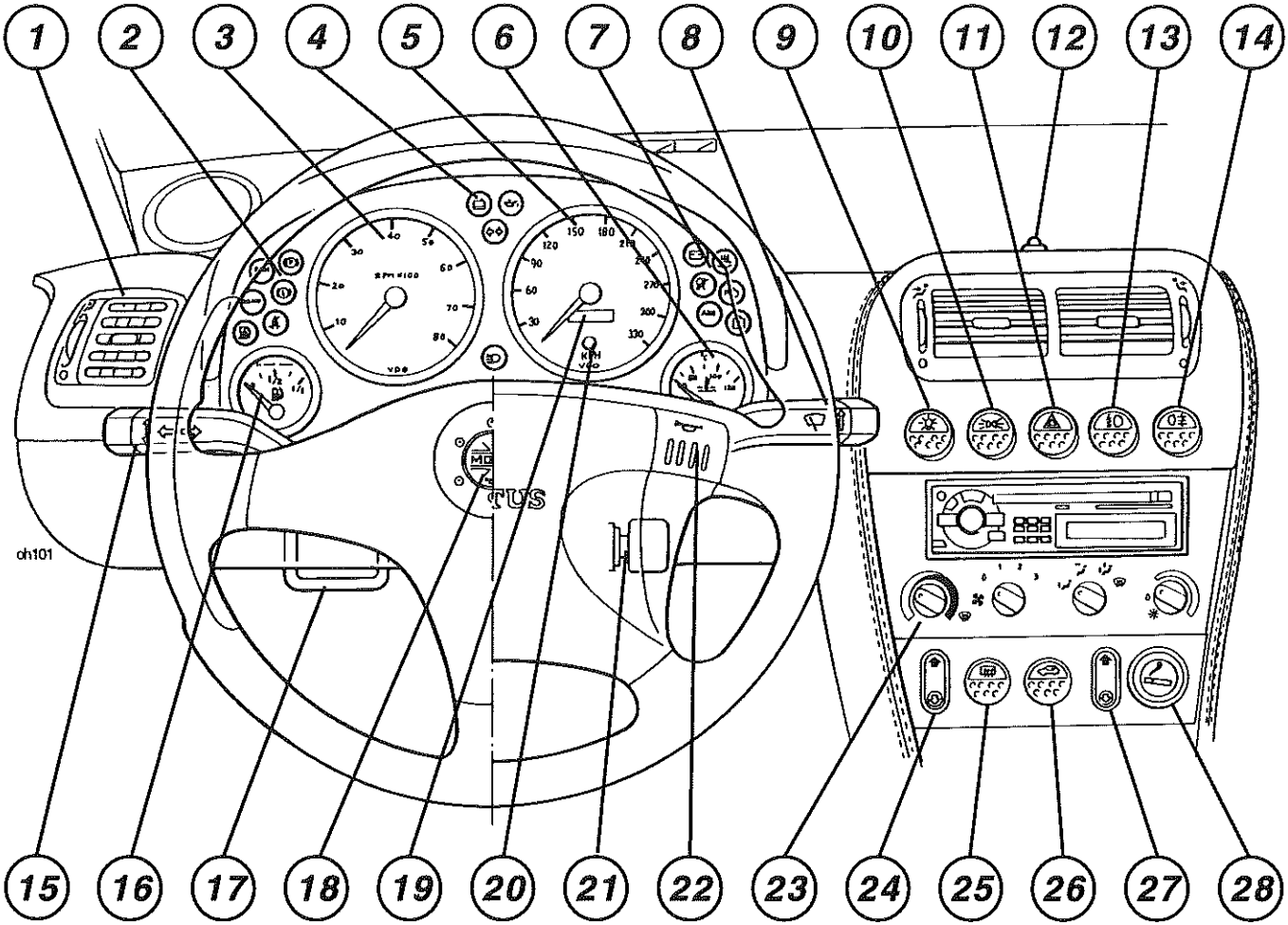
B - To remove the key, turn fully counterclockwise to 'B' and withdraw. The steering column lock will be activated when the key is withdrawn but may not engage until the steering is turned and the mechanism is aligned.

DO NOT leave the ignition switched on for long periods without the engine running, since although the ignition system itself draws no current when the engine is stopped, a battery drain will occur through other circuits even when auxiliary equipment is not being used. A small drain will also occur if the ignition is switched off and the key is left in position 'I' or 'B'. On USA cars, a 'key in' warning chime will sound for about five seconds when the driver's door is opened, if the ignition has been turned off and the key left in position.

On all vehicles, always remove the key when leaving the car in order lock the steering column and guard against a flat battery.



WARNING: - Do not push or tow the car unless the key is first used to unlock the column.
- Never withdraw the key until the vehicle is stationary.
- Do not leave the ignition key in position when leaving a parked car, to protect against theft, and to ensure the safety of any children remaining in the vehicle.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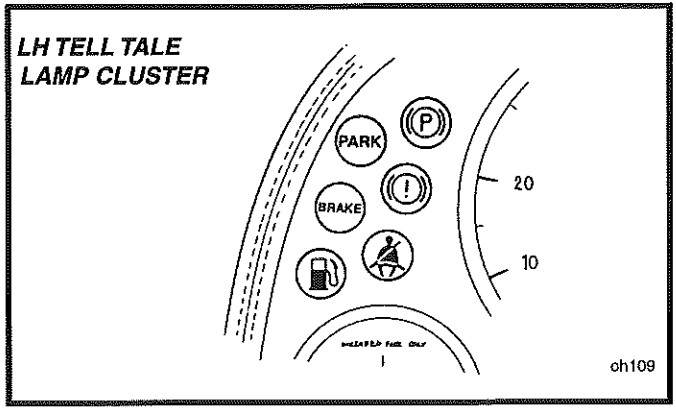
Key to Fascia Layout Diagram

1. Outer face level vent
2. Left hand tell tale cluster
3. Tachometer
4. Centre tell tale cluster
5. Speedometer
6. Water temperature gauge
7. Right hand tell tale cluster
8. Windscreen wiper/washer control
9. Master lighting switch
10. Sidelamps/parking lamps switch
11. Hazard warning lamps switch
12. Security alarm tell tale
13. Front fog lamps switch
14. Rear fog lamps switch
15. Headlamp dipswitch/flasher/turn indicators control
16. Fuel gauge
17. Front bonnet release handle
18. Horn button (non-S.I.R. type)
19. Distance recorder
20. Trip reset button
21. Ignition/starter switch/steering lock
22. Horn button (S.I.R. type)
23. Interior climate controls
24. Left hand door window switch
25. Heated rear screen switch
26. Re-circulation switch
27. Right hand door window switch
28. Cigarette lighter



TELL TALE LAMPS

Parking Brake Tell Tale

This tell tale may display as script or as a symbol dependent on market. The lamp will glow red with the ignition switched on whenever the parking brake is applied. Driving the car with the brake not fully released will cause overheat damage to the rear brakes. Each time the parking brake is released, check that the tell tale is extinguished.

Brakes Tell Tale

This tell tale may display as script or as a symbol dependent on market, and is linked to a level sensor in the brake master cylinder hydraulic reservoir.

As a lamp test function, this lamp will glow red with the ignition switched on, together with the parking brake tell tale. If the lamp fails to go out when the parking brake is released, or comes on whilst driving, stop immediately as the brake fluid level may be dangerously low. A possible hydraulic leak is indicated, together with the potential for air to enter the system. Refer to 'Brake Fluid Reservoir' .

Low Fuel Level Tell Tale

This lamp is calibrated to light up amber when the level of fuel in the combined tanks falls to approximately 10 litres (2.2 imp. gal; 2.6 US gal). Note that the fuel gauge will be reading zero at this time.

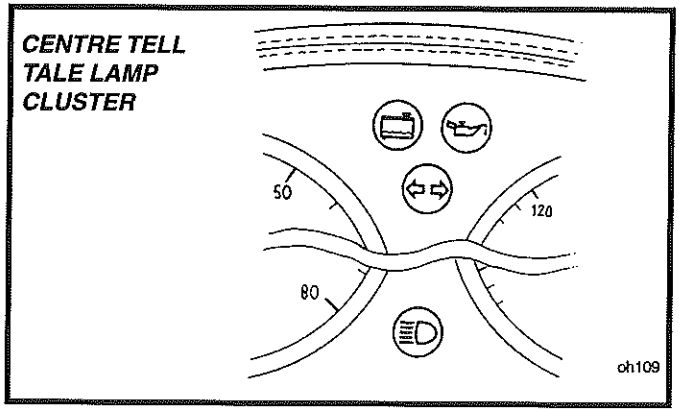
Seatbelt Tell Tale

Non-USA cars:

This will glow red when the ignition is switched on, and go out when the driver's seatbelt is fastened.

USA market cars:

When the ignition key is turned to start the engine, this red lamp will flash for approximately eight seconds. If the driver's seat belt is not fastened, this light will be accompanied by a warning chime.



Engine Coolant Tell Tale

This multi-function tell tale warns of:

i) Low coolant level;
ii) Excessive engine coolant temperature;
iii) V8 only - excessive engine oil temperature.

If the lamp glows red at any time with the ignition switched on, a loss of coolant or excessively high coolant or oil temperature is indicated. Do not proceed until the cause has been diagnosed and rectified. See "Cooling System".

Note that on V8 models, a high temperature warning is indicated by a flashing tell tale rather than the steady lighting of a low coolant level indication.

Oil Pressure Tell Tale

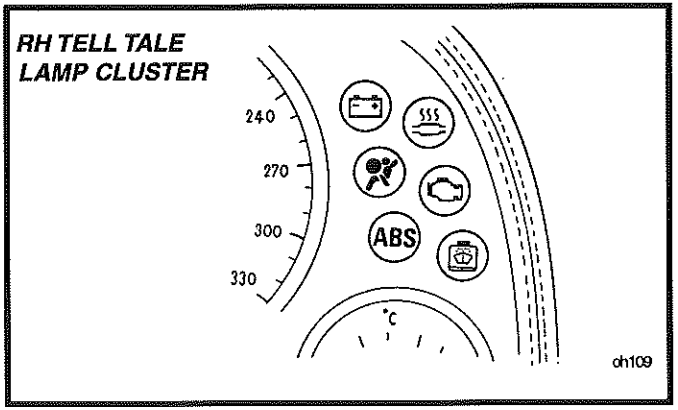
This red tell tale is provided to warn of dangerously low engine oil pressure. Check that the lamp lights up when the ignition is switched on.

When the engine is started, the lamp should go out. If the lamp lights at any time when the engine is running, it is an indication that the oil pressure has fallen below 1.4 bar (20 lb/in^2), which is the minimum pressure necessary to ensure proper lubrication of the engine. Stop the engine as soon as it is safe to do so and do not restart until the fault has been investigated and rectified. Continuing to run the engine with little or no oil pressure could cause major internal damage, possibly resulting in seizure.

Note that on 4-cylinder models, the circuit is only activated at engine speeds over 1600 rpm.

Turn Tell Tale

When the left hand or right hand turn indicators are operating, this green tell tale flashes in unison. If the tell tale fails to light, or flashes at an unusual rate, check the operation of the turn indicator lamps immediately.



Main Beam Tell Tale

This lamp glows blue whenever the headlamp main beams are operating.

Battery Non-Charging Tell Tale

This will glow red when the ignition is switched on and will normally go out when the engine is started.

Although the lamp may glow when the engine is idling, if it lights at engine speeds above idle, a fault in the charging circuit, or a broken alternator belt is indicated. The car should not be driven until the fault has been rectified.

Catalyst Overheat Tell Tale (Japan only)

This tell tale will glow yellow if an engine fault occurs which results in the temperature of the catalytic converter rising to a level liable to cause damage to the converter and/or engine. Stop the vehicle in an area free of combustible materials (dry grass, leaves etc.) and allow the converter to cool for several minutes before proceeding with caution. Have the fault investigated by your dealer without delay.

Supplementary Inflatable Restraint (S.I.R.) Tell Tale (if fitted)

The S.I.R. system has a self-diagnostic facility which lights the red tell tale if a fault is detected.

As a bulb and circuit check, the tell tale should flash for about eight seconds when the ignition is switched on, and then go out. When the engine is cranked, the lamp will come on steady, and then flash for another eight seconds after the engine has started.

WARNING: If the S.I.R. tell tale lamp does not come on with the ignition, and follow the sequence detailed above (bulb and circuit check), or if it lights at any other time, a fault in the S.I.R. system is indicated. Have the fault investigated immediately as the S.I.R may not function correctly.

Check Engine Tell Tale

The check engine tell tale (also known as the 'Malfunction Indicator Lamp', or MIL) is provided to:

i) Inform the driver that the engine management self diagnostic system has detected a fault;
ii) Assist the technician with fault diagnosis.

4-Cylinder Cars

As a bulb and system check, the lamp will light with the ignition on, and should go out when the engine is started. If, however, the lamp remains lit, or comes on whilst driving, this indicates that the self diagnostic system has detected a problem, information on which is stored in the system memory. The vehicle should be taken for check/repair as soon as is practicable. If the fault corrects itself, or is no longer detected, the lamp will go out in most cases after about 10 seconds, but information on the fault will remain stored in the memory for the next 50 engine start ups to indicate to the technician that an intermittent fault has been detected. If no recurrence is recorded during this period, the stored information will be erased from the memory.

Certain types of detected fault will result in the system limiting engine speed to 4,000 rpm in order to protect the engine from damage.

V8 Models

As a bulb and system check, the lamp will light with the ignition on, and should go out when the engine is started. On USA market cars, if the lamp remains lit, flashes, or comes on whilst driving:

Steady lamp: This indicates that the self diagnostic system has detected a problem, information on which is stored in the system memory. The vehicle should be taken for check/repair as soon as is practicable. If the fault corrects itself, or is no longer detected, the lamp will go out after three engine start ups with no fault present. Information on the fault will remain stored in the memory for the next 40 engine warm up cycles, to indicate to the technician that an intermittent fault has been detected. If no recurrence is recorded during this period, the stored information will be erased from the memory.

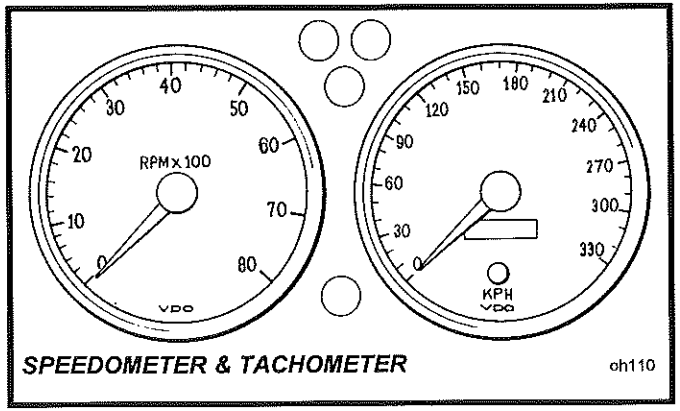
Flashing Lamp: This indicates that a severe engine misfire has been detected, with the potential for heat damage to the catalytic converters. The fault should be repaired with the utmost urgency.

ABS Tell Tale

This yellow tall tale should light for about four seconds following ignition switch on, and then go out. If the lamp remains lit, or comes on whilst driving, a fault in the ABS is indicated. The base brake system will continue to operate normally, but without ABS regulation. The car can be driven but should be checked and repaired at the earliest opportunity.

Low Screenwash Level Tell Tale

If the fluid in the screenwash reservoir needs replenishing, this yellow tell tale will glow when the washer is operated.



SPEEDOMETER & TACHOMETER oh110

INSTRUMENTS

Speedometer

This instrument displays road speed in either MPH with a secondary scale in km/h, or solely in km/h according to market, and is supplied with an electronic signal from a wheel speed sensor. Incorporated into the instrument is a digital (LCD) display for distance travelled, which may be switched between total distance and trip distance. This feature will display with the ignition switched on and is backlit green when the sidelights are lit.

Total Distance

The normal display is calibrated in the same units as the speedometer primary scale, and reads up to 999,999 miles or kilometres, plus an additional digit displaying tenths.

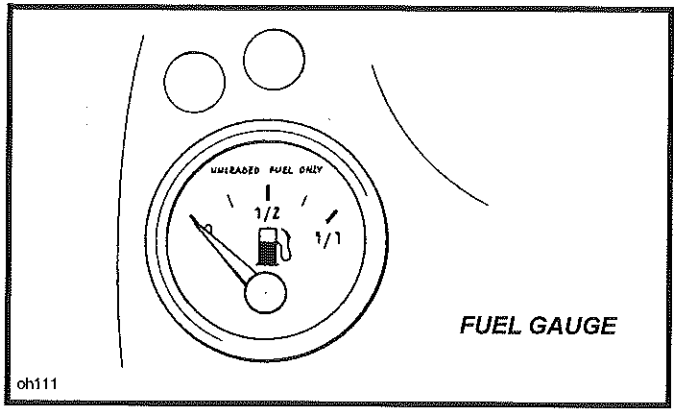
Trip Distance

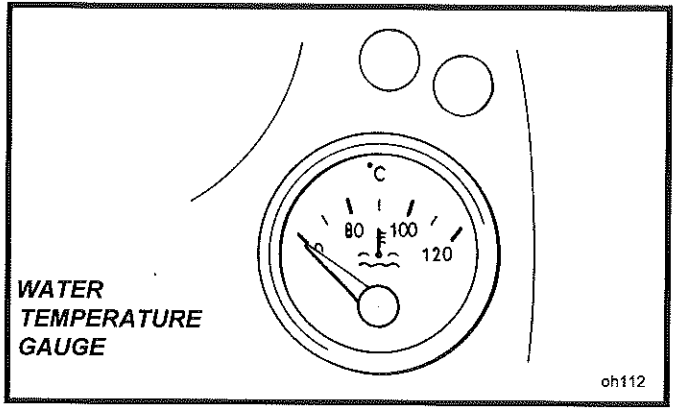
To display trip distance, press once the small button protruding through the bottom of the instrument glass; the display will change to a 4 digit display plus a tenths digit, with a 't' prefix identifying the trip mode. This display may be zeroed by pressing the button for 2 seconds. Take care when changing mode not to inadvertently zero the trip.

Tachometer

The tachometer indicates engine speed in revolutions per minute. Maximum safe continuous engine speed is 7,000 rpm (4-cylinder) or 6,500 rpm (V8), with the engine management system operating to cut off the fuel supply at 7,450 rpm (4-cylinder) 7,000 rpm (V8), 7,400 rpm (V8GT & Sport 350). Maximum power is produced at 6250 - 6500 rpm, and it is not desirable or necessary when seeking full performance to cause the rev limiter to be activated when accelerating through the gears.

Do not run the engine continuously at its maximum speed, or allow overspeeding to occur on the overrun by changing down through the gears too early, as this imposes very high loads on the engine, resulting in accelerated wear and the possibility of major failure.





Fuel Gauge

The fuel gauge is operative with the ignition switched on, and provides a proportional display of fuel quantity held in the 70 litre (15.4 imp.gall; 18.5 US gall) tank. When the gauge reading falls to zero, the low fuel tell tale will light to indicate that there is approximately 10 litres (2.2 imp.gall; 2.6 US gall) remaining.

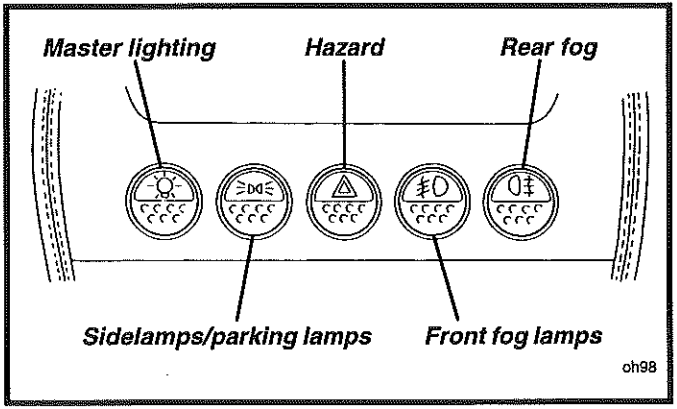
The total fuel tankage is divided between two interconnected tanks, one mounted ahead of each rear wheelarch, with a single filler in the left hand side (see 'Fuel Filling').

Water Temperature Gauge

This instrument registers engine coolant temperature, which will fluctuate a certain amount as the operating conditions change and the radiator cooling fans switch in and out. During periods of idling or in heavy traffic, the temperature may rise to over 100°C, but need not be of concern since the pressurised system raises the coolant boiling point to over 120°C.

If a system malfunction should occur, and the temperature rises to a dangerously high level (over 120°C), the engine coolant tell tale will light. Stop the engine and refer to 'Cooling System'.

Note that the minimum temperature displayed by the gauge is 40°C.



FASCIA SWITCHES

Master Lighting Switch

The switch motif is back lit green with the ignition switched on to help locate the switch. Pressing the switch, which operates with or without ignition, raises the headlamp pods with the headlamps lit, in addition to switching on the sidelamps (or side marker lamps) and panel illumination. The switch motif also lights up to indicate that the circuit is active.

Press the button a second time to switch off the lights and lower the headlamp pods. Note that if the headlamp main beams are operating when the switch is pressed 'off', the dropping of the headlamp pods will be delayed for a moment.

Sidelamps/Parking Lamps Switch

The switch motif is back lit green with the ignition switched on to help locate the switch. Pressing the switch, which operates with or without the ignition, switches on the front and rear side/parking lamps, side marker lamps (USA models) and instrument panel illumination. The switch motif also lights up to indicate that the circuit is active.

The switch is used only when lights are required *without* the headlamps (see above). Press the button a second time to switch off.

Lights On Reminder

With the ignition switched off; if the driver's door is opened when the lights are switched on, an audible warning will sound:
Non-USA cars - continuous buzzer;
USA cars - chime for about five seconds.

Hazard Warning Lamps Switch

This push switch, which is operative at all times, causes all the turn indicators to flash in unison. The switch motif is backlit red when the lights are switched on, and lights up when the switch is pressed.

This facility should be used when the vehicle has to be stopped on the highway in abnormal circumstances, when a

warning to other traffic would be prudent. Use of the hazard warning lamps may be subject to local traffic laws, with which drivers should familiarise themselves. Press a second time to switch off.

Front Fog Lamps Switch

Two fog lamps are mounted in the front spoiler, and are controlled by a single 'push' switch in the centre console. The switch motif is backlit green when the lights are switched on, and lights up when the circuit is active.

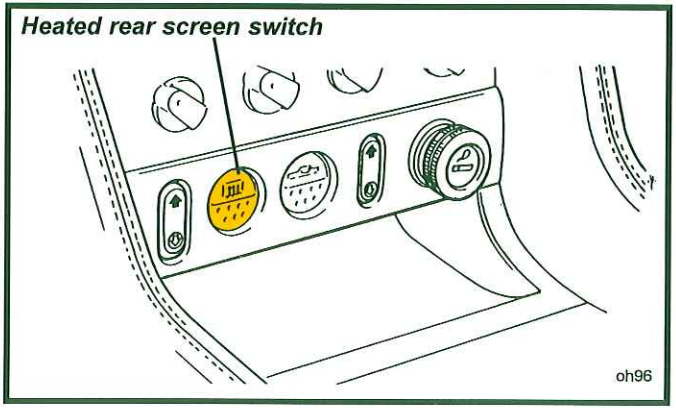
The fog lamps are operative only in conjunction with the side/parking lamps or headlamps. Press a second time to switch off.

In certain territories, the fog lamps may only legally be used in conditions of 'seriously reduced visibility'.

Rear Fog Lamps Switch (if fitted)

Rear fog lamps, on cars so equipped, are incorporated into the rear lamp clusters, and are controlled by a 'push' switch in the centre console. The switch motif is backlit green when the lights are switched on, and lights up when the circuit is active.

The rear fog lamps are operative only in conjunction with the headlamps, and in some territories may only legally be used in conditions of 'seriously reduced visibility'. Be aware that indiscriminate use of rear fog lamps can cause distraction and discomfort to following traffic. In order to minimise any unintended nuisance, the rear fog circuit is designed to switch off automatically whenever the headlamps are next turned off, regardless of the rear fog switch position. In order to reactivate the rear fog lamps, the switch must first be pressed 'off' before pressing 'on' once again. Note that the switch tell tale lights up only when the fog circuit is active.



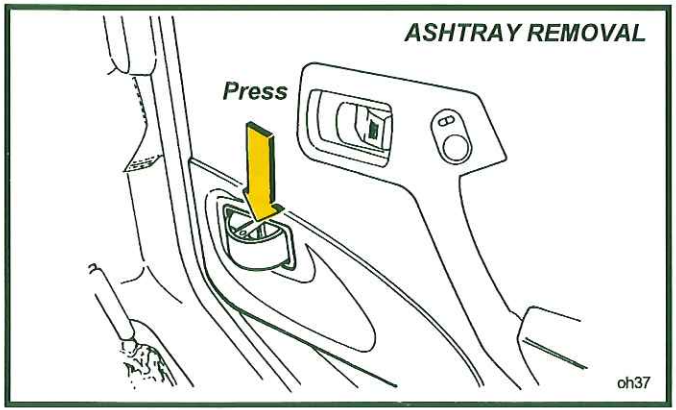
Heated Rear Screen Switch

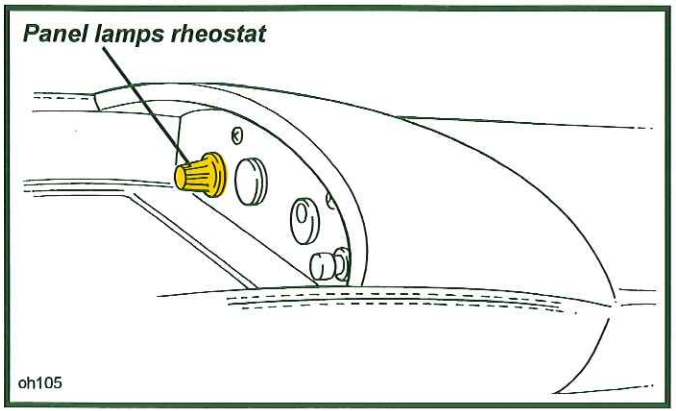
This push switch, sited at the bottom of the centre console, (at right hand end of upper row of switches on Sport 350) operates only with ignition, and energises the heating elements in the tailgate window and the two door mirror glasses. The switch motif is backlit yellow when the lights are switched on, and lights up when the circuit is operating. Press a second time to switch off.

The heated glass elements place a high demand on the electrical supply and should be used only for as long as is necessary.

Cigarette Lighter

A cigarette lighter is located at the bottom of the centre console, and is operative only with the ignition. To use the lighter, press the centre button of the knob to activate the heating circuit. When the element has been sufficiently heated, which takes only a few moments, the button will spring back out. The lighter may then be withdrawn for use.





Care should be taken when handling the hot lighter to avoid contact other than with its target.

An illumination ring around the lighter is backlit green when the lights are switched on.

WARNING: Do not leave small children unattended in the car since careless use of the cigarette lighter could be dangerous.

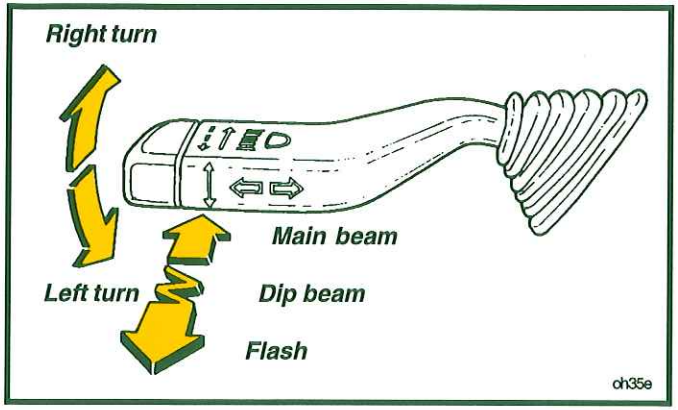
Ashtrays

An ashtray is provided at the lower front of each door panel, and is opened by pressing the rear edge of the tray.

To empty the ashtray, press the stubber strip, and lift out the tray. To refit, engage the front end of the tray into the recess before pressing down the stubber strip and engaging the pivot.

Panel Lights Rheostat (if fitted)

On models so equipped, the brightness of the instrument and switch illumination may be controlled by a rheostat knob on the gear lever tray switch panel. Turn the knob clockwise to increase the brightness, and counterclockwise to decrease illumination.



COLUMN SWITCHES & HORN

Headlamp Dipswitch/Flasher/Turn Indicators

The steering column left hand lever switch controls the headlamp dipswitch, headlamp flasher and turn indicators.

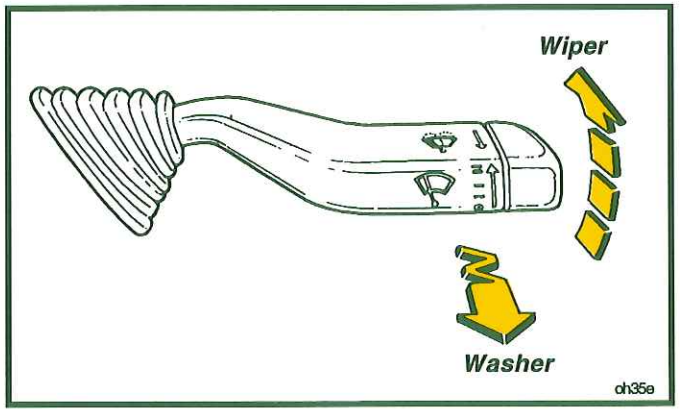
Headlamp Dipswitch: The headlamps must be selected via the master lighting switch before the pods will rise with the headlamps lit. The left hand lever switch is then used to select main or dip beam. Main beam is obtained with the lever furthest forward, away from the steering wheel, and dip beam with the lever moved back towards the wheel. The main beam tell tale lamp in the instrument panel lights when main beam is operating.

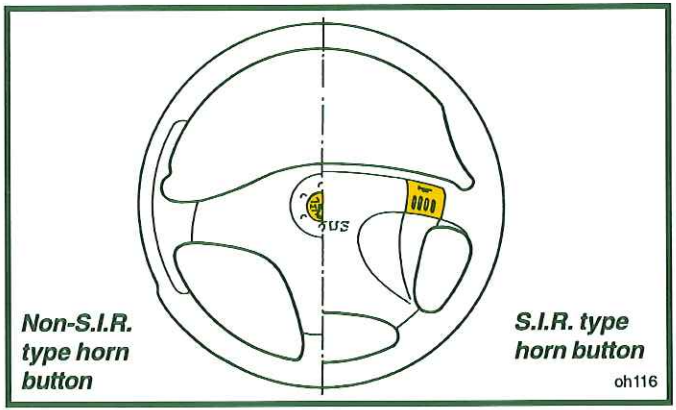
Note that on non-USA cars, the outer pair of headlamps provide the dip beams, and go out when main beam, provided by the inner pair of headlamps, is selected. USA specification vehicles use sealed beam headlamp units, with the outer headlamps providing the dip beams, and all four headlamps the main beams.

Headlamp Flasher: The headlamp flasher is operative at all times. If the lever is pulled towards the steering wheel against spring pressure, the headlamp pods will rise with the main beams lit. The headlamps go out when the lever is released, but the pods remain raised for a few seconds in order to avoid unnecessary oscillations if the lights are repeatedly flashed.

Turn Indicators: The turn indicators operate only with the ignition switched on. Move the lever down to indicate a left hand turn, and up for a right hand turn. The switch will be cancelled when the steering wheel is returned to the straight ahead position.

If the switch is pressed up or down only lightly, the switch will return under spring pressure for convenience when signalling a lane change.





Windscreen Wiper/Washers

The steering column right hand lever switch controls the windscreen wiper and washers, and is operative only with the ignition switched on. Never use the wiper on a dry screen.

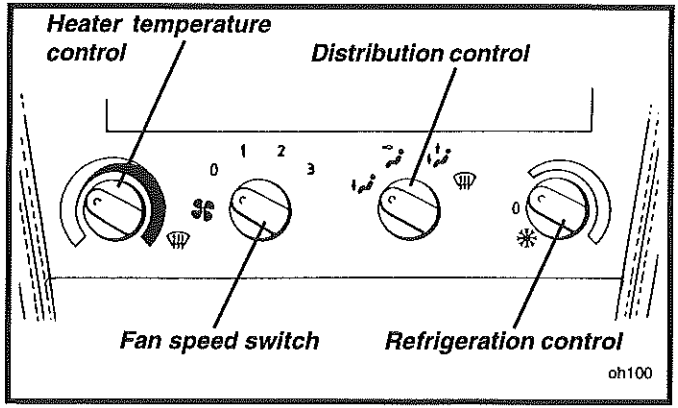
Windscreen Wiper: The wiper is controlled by the up/down position of the lever switch, which operates as follows:

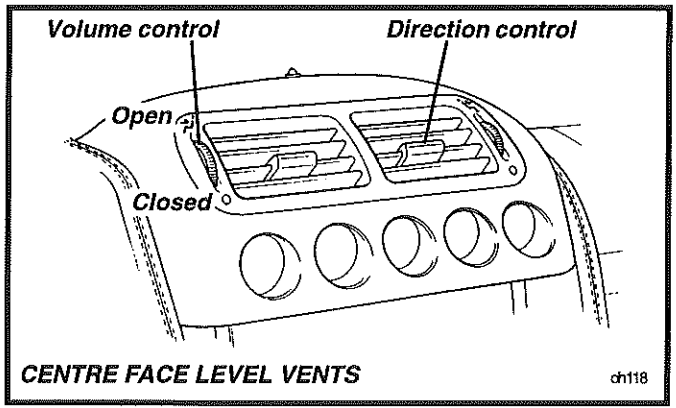
- ◎ Moved fully down, the wiper is switched off.
- ▫▫ Move up to the first position for intermittent wipe. The wiper will make one sweep about every five seconds.
- ▭ Select the next position for normal wiper operation.
- ▭ Move fully upwards for high speed wipe, for use only in heavy rain.

Windscreen Washers: Pulling the lever towards the steering wheel will operate both the washers and the wiper. When the switch is released, the wiper will continue for a further four sweeps.

Horn

The two tone horns, which function at all times, are operated on cars without a supplementary inflatable restraint (S.I.R.) by a button in the steering wheel centre boss. On S.I.R. equipped cars, two horn buttons are provided on the steering wheel spokes.





INTERIOR CLIMATE CONTROLS

The interior climate controls are located in the centre console, and comprise four rotary controls for heater temperature, fan speed, air distribution and (if fitted) refrigeration temperature. The engine must be running for either the heater or air conditioning to operate.

Face Level Vents

Four face level vents are fitted in the fascia, with the airflow from each individually controllable for volume and direction. The thumbwheel alongside the vent controls the volume of air, with maximum airflow available with the wheel turned fully upwards, and the vent shut off when turned fully downwards.

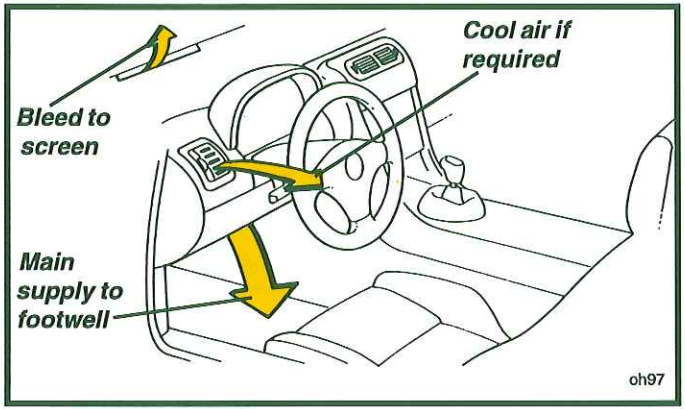
The directional vanes may be adjusted using the central knob.

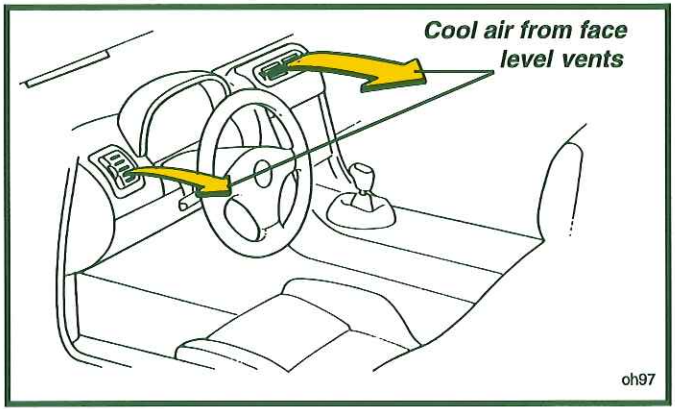
Air is available from the outer face level vents at all distribution control positions, but from the centre vents only with the distribution control at the face level setting. Air temperature from the vents may by ambient or (with a.c.) refrigerated, but the setting of the heater control has no effect on the face level vent air supply.

Heater Temperature: The left hand knob controls the heater temperature. With the knob turned fully counterclockwise to the blue sector, the heater is turned off. Turning the control progressively clockwise heats the air increasingly until at the fully counterclockwise ' ' position, maximum heat is available.

Fan Speed: The second knob from the left, controls the interior fan speed. With the knob turned fully counterclockwise, the fan is switched off, and air is supplied only by 'ram' effect which is dependent on vehicle speed. Turning the knob clockwise provides three increasing fan speeds to boost air circulation.

Air Distribution: The third knob from the left controls air distribution:





Footwell:

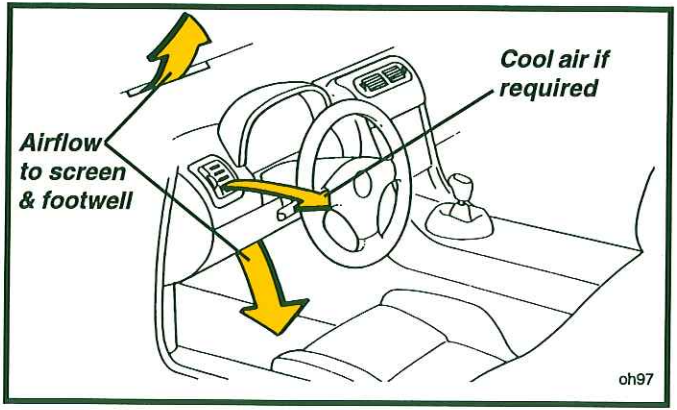
With the knob turned fully counterclockwise to the footwell symbol, airflow is directed to the driver's and passenger's footwells, with a small bleed to the windscreen demist vents. This position is normally used with a warm temperature setting, but dependent on the position of the heater and (if fitted) a.c. controls, the air may be heated, ambient or refrigerated.

Ambient or refrigerated air is available from the outer face level vents if desired.

Face Level

At this setting, all airflow is directed to the four face level vent outlets. This airflow may be ambient, or cooled by switching on the air conditioning (see later), but is unaffected by the heater temperature control.

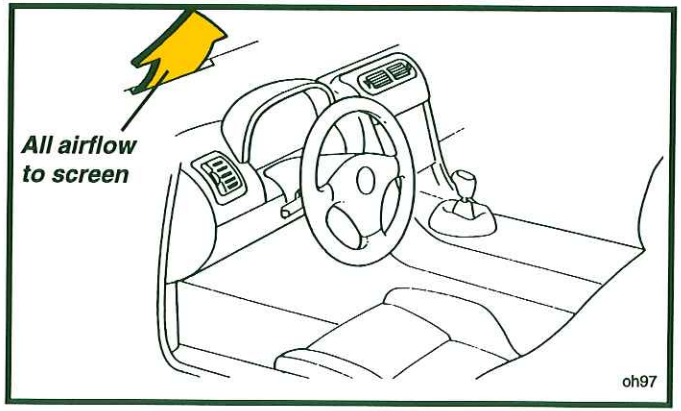
Each of the face level vents may be individually adjusted for airflow volume and direction (see earlier).



Screen & Footwell

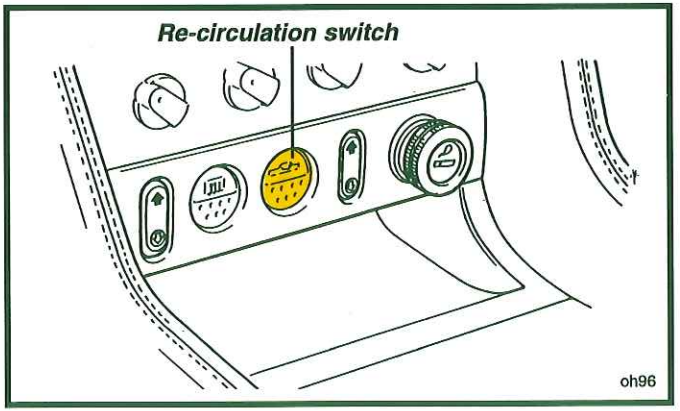
With the distribution knob at this position, airflow is directed to both the windscreen and footwell vents, and is normally used with a warm temperature selection. Ambient air is available from the outer face level vents if desired.

On a.c. cars, this setting may by used to provide dehumidified air by selecting both refrigeration and a warm temperature setting.



Defrost

At this setting, all the airflow is directed to the windscreen vents for demist/defrosting. For maximum defrost performance, select full hot heater temperature with fan speed 3, and close the outer face level vents.



Re-circulation Switch: This push button switch is positioned below the climate control panel, and has a motif backlit orange when the lights are switched on. Press the button to select re-circulation mode, which closes the fresh air intake and opens a re-circulation port, so that air within the cabin is continuously recycled through the climate control unit. The switch motif lights up when the switch is pressed.

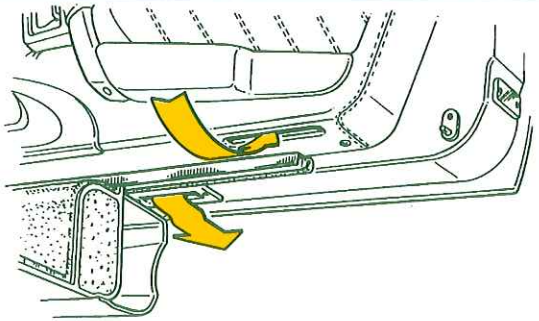
Use this mode in heavy traffic to avoid drawing fumes into the car. With air conditioning, maximum refrigeration is achieved with cooled air being re-circulated within the car through the face level vents. Close the windows for optimum performance and comfort.

Press the switch a second time to switch off and open the fresh air intake.

Refrigeration Temperature (cars fitted with air conditioning): The right hand knob controls the air conditioning. To operate the a.c., turn the heater temperature to cold, *select a fan speed,* and turn the refrigeration control fully clockwise. The smoothest and most efficient operation of the air conditioning system is obtained with the control in this position, when the refrigerant compressor will run continuously. If, however, too much cooling is produced, turning the control progressively counter-clockwise will reduce the cooling effect by cycling the compressor in and out.

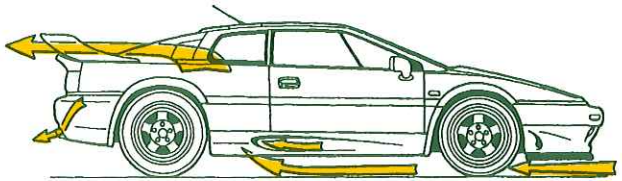
Important Notes on Use of Air Conditioning

1. A fan speed must be selected before the a.c. will operate.
2. It is not recommended that the airflow from the face level vents be aimed directly at persons during maximum refrigeration, as this can cause discomfort (e.g. cramp).
3. Under certain ambient conditions (especially high humidity) a white vapour may issue intermittently from the face level vents. This is quite normal and should cause no concern.
4. To ensure that the internal components of the air conditioning compressor are kept adequately lubricated, the air conditioning should be switched on for at least a few minutes every week to permit the oil to circulate.
5. Some extreme conditions of engine operation (e.g. full throttle) will override the air conditioning, and switch off the system until normal conditions are resumed.
6. When air conditioning is selected, the radiator cooling fans will cycle on and off even at low engine temperatures.
7. If, with the air conditioning switched on (engine running, fan speed selected), no cooling effect is apparent, switch off to prevent the possibility of causing further damage to the system, and have the fault investigated by your dealer before further use.
8. The system uses a 'CFC free' refrigerant known as R134a, which should be used in any servicing operation.



CABIN VENTILATION p44

ENGINE BAY VENTILATION



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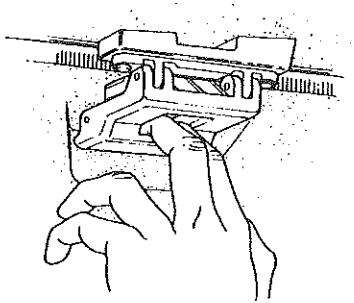
Ventilation

Cabin ventilation is provided via both doors: A draught preventing flap valve in the underside of each door shell allows air to be extracted from within the door into a low pressure area generated when driving. Air is drawn from the cabin into the doors via a slot in the underside of each door trim panel. Extra cabin ventilation is available by opening the roof panel.

The engine bay is ventilated from beneath the car, and by intake ducts in each sill feeding air into the bottom of the engine bay. Air is extracted from the top of the engine bay via grilles in the engine cover lid and tailgate. Air scoops behind each rear quarter window supply air directly to the engine air cleaner housings.

The rear luggage compartment is sealed off from the engine bay and is provided with an outlet vent which exhausts behind the right hand side of the rear bumper.



RELEASING CATCH HANDLE

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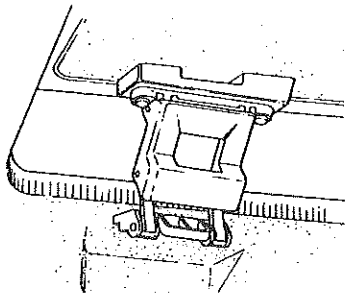

FULLY OPEN POSITION

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Audio Equipment (if fitted)

The audio equipment is operative only with the key inserted into the ignition switch, but at all key positions. Always withdraw the key when leaving the car as a small battery drain occurs through the radio feed relay even when the set is switched off. Full operating instructions for the particular set fitted are provided in a separate booklet.

TILTING ROOF PANEL

Two types of tilting roof panel are available; tinted glass, and glass fibre composite. The following description applies to both roof types.

The roof panel may be either closed, or raised at the rear edge for ventilation.

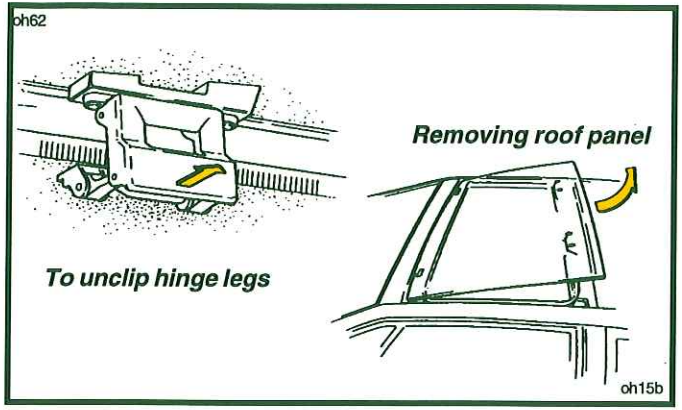
WARNING: Do not attempt to open or close the roof panel whilst driving.

To Open: Two catch handles are provided at the rear edge of the roof. To open, carefully pull down each catch handle and swing both handles together forwards and upwards to raise the rear of the roof, finally pushing both handles fully rearwards to their 'overcentre' position. Avoid unclipping the hinge legs during this operation by maintaining a slight rearward pressure on the handles as they are swung upwards.

CAUTION: Close the roof panel before opening the tailgate, or damage may be caused to the tailgate paintwork.

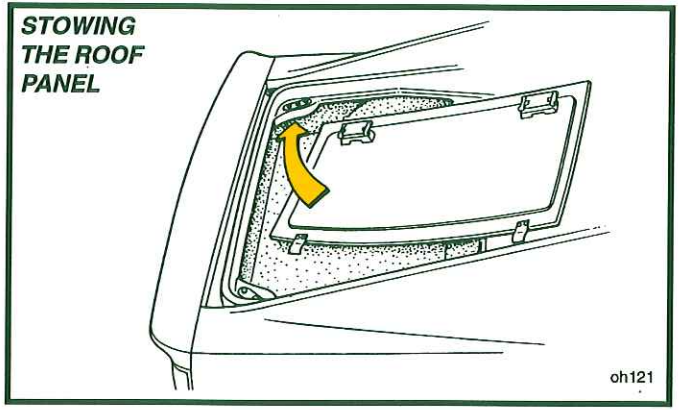
To Close: Keep fingers well clear. Gently pull both catch handles forwards and downwards before pressing rearwards to lock.

Note; pages 41, 42 deleted.

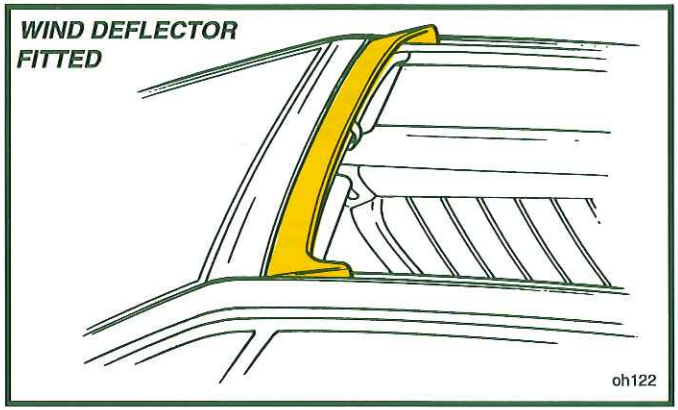


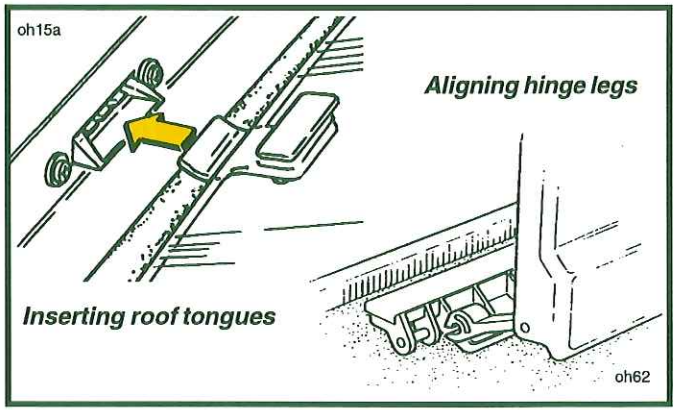
To Remove: Swing each catch handle down and forwards until the hinge legs are horizontal, before pulling sharply forwards to unclip the hinge legs from their body pivots. **Note**: It is not possible to unclip the hinge legs with the roof in the fully raised position.

With the legs unclipped, and from outside the car, raise the rear of the roof and pull the panel rearwards to disengage the front edge retaining tongues.



To Stow: Place the panel in the protective bag provided, and stow in the rear luggage compartment, feeding into the left hand side first as shown.





Wind Deflector

In order to reduce wind noise and turbulence when driving with the roof panel removed, a wind deflector is provided and is normally stored in the roof panel protective bag.

When the roof panel has been removed, the wind deflector may be fitted by engaging its tongues into the slots at the front of the roof aperture and fastening the 'Velcro' strap to the windscreen header rail.

To Replace Roof Panel

With the tailgate closed, fit the roof panel tongues into the slots at the front of the roof aperture and rest the roof panel in position.

From inside the car, at each catch handle, position the two hinge legs horizontally and clip onto their body pivot pins. **Note:** *It is not possible to engage the hinge legs in the fully open (legs vertical) position.*

With the roof panel shut, press both catch handles rearwards to lock.

Foot Pedals

The clutch pedal, brake pedal and accelerator pedal are arranged in the orthodox positions, and are grouped closely together for ready access and refined driving technique. Drivers should avoid wearing heavy boots, high heels or other unsuitable footwear.

Clutch Pedal

The practice of driving with the left foot resting on the clutch pedal should be avoided, as rapid wear of the clutch components will result. Similarly avoid 'holding' the car on a slope for more than a few moments by slipping the clutch; apply the parking brake until ready to drive off.

Accelerator Pedal

It is most important to be aware of the dangers of fitting loose mats in the driver's footwell; these can foul the accelerator pedal and cause a sticking throttle. Use only approved Lotus accessories sold and fitted by a Lotus dealer.

Footbrake

Ventilated disc brakes are used at the front and rear, operated by independent hydraulic circuits from a tandem master cylinder with vacuum servo. Anti-lock control is provided by a Kelsey-Hayes microprocessor based unit, integrated into the base braking system.

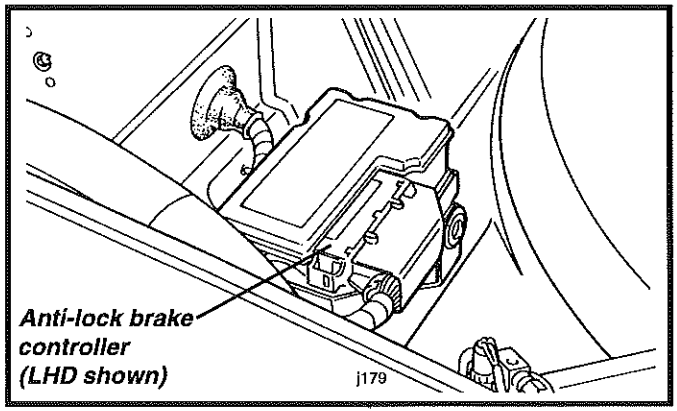
The braking system is designed to enhance brake performance during high speed driving, with good fade and pad wear characteristics. However, as is usual with high performance brake pad materials, the brakes do require a relatively long bedding-in period, and have a higher friction level when heated to normal working temperature, than when cold. Consequently, the brake pedal effort may feel higher during the running-in period (up to 1,000 miles) and when the brakes are cold. The hard grade pad material may also give rise to a certain amount of brake 'squeal', which is not harmful and does not affect the life or efficiency of the brakes.

After negotiating a stream crossing, or when driving on flooded roads, the brakes should be dried out using light applications as necessary until normal braking power is restored.

The brake assistance servo uses vacuum supplied from an electric pump (4-cylinder) or engine intake plenum (V8), such that assistance is available only when the ignition is switched on and/or the engine is running. Never coast downhill in neutral with the engine stopped, but if this situation should arise, avoid repeated application of the brakes, or the stored vacuum supply will be rapidly used up, after which time much greater pedal pressures will be required.

Antilock Brake System

The Kelsey-Hayes Antilock Brake System (ABS) is used to optimise brake performance in extreme conditions and reduce the tendency of any wheel to lock up. Under most conditions, the maximum braking force is provided by a wheel which is on the point of lock up but is still rotating. Apart from the likelihood of increasing the stopping distance, a locked wheel provides no steering force, such that with both front wheels locked, movement of the steering wheel has no effect on vehicle direction. With the antilock system, even panic braking results in controlled deceleration and the retention of steering response. ABS is especially advantageous when braking on slippery road surfaces and in bad driving conditions, but it is important to realise that the ABS cannot increase the friction level at the road surface, but can only make optimum use of the grip available. When driving in adverse weather, or on poor road surfaces, always be alert to the possibility of slippery conditions and



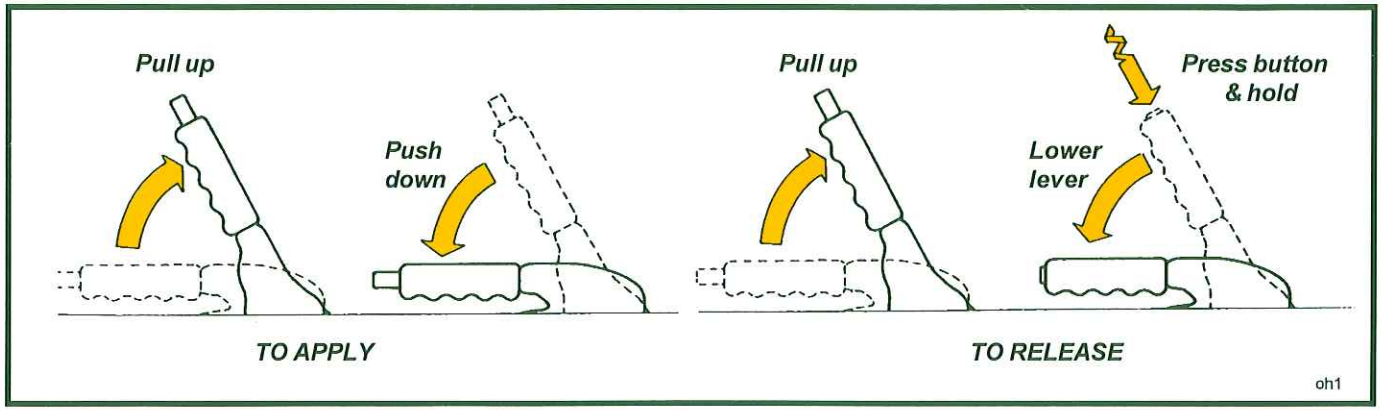
make the necessary allowance for increased stopping distances.

Normal braking, controlled by the pressure applied to the brake pedal, occurs when the road conditions allow for the required deceleration to be achieved without danger of wheel lock. The relative speeds of the four wheels are continuously monitored by the ABS when the brakes are applied, and if one or more wheels begin to lock, the brake pressure to that wheel(s) is modulated by the ABS to help keep the wheel rotating and provide the maximum controlled braking force. The wheels may appear to lock momentarily as the wheel speed rapidly changes, and some tyre noise (intermittent screeching) may be heard which is normal and will vary with road and tyre conditions. Note that the ABS does not function at speeds below 5 mph (7 km/h).

When the ABS is activated, indication to the driver is provided by a 'pulsing' sensation felt at the brake pedal as the fluid pressure is modulated, and also by audible clicking of the solenoids and switches. These signals indicate to the driver that maximum retardation is being approached, and that driving style should be modified to suit the conditions.

The minimum stopping distance is achieved using the ABS by applying the brakes firmly and steadily, and allowing the system to modulate hydraulic pressure. The driver should not attempt to emulate this process by 'pumping' the brake pedal.

An ABS tell tale lamp in the instrument binnacle is provided to warn of any problems in the system and to indicate that the integral self diagnostics have switched out the anti-lock function. See 'ABS tell tale lamp'.



Parking Brake

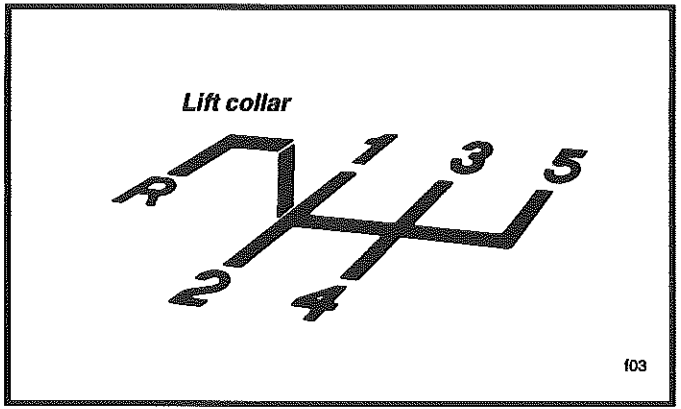
The parking brake is mounted in the driver's door sill and is designed to 'fold down' after application to minimise any obstruction to the driver when entering or exiting the car. The brake should be applied by pulling upwards **firmly and fully** until held securely by the ratchet mechanism. If the ratchet is heard to click more than 5 times, have the parking brake adjusted by your dealer.

When parking the car on a slope, the additional precaution should be taken, as recommended by the U.K. Department of Transport Driver's Manual and other driver's guidelines, of leaving the transmission in first or reverse gear and steering the wheels towards the kerb. If the parking brake is applied when the brakes are hot (e.g. after prolonged or vigorous braking), special care should be taken to ensure that the parking brake is securely engaged in order to allow for any potential affect on brake performance due to temperature change.

After applying the parking brake, the lever may be pushed down again (**without** pressing the release button in the end of the handgrip) to improve cabin access. The fascia tell tale lamp warns of parking brake application (see 'Tell Tale Lamps').

To release the brake, pull up the lever, press the release button in the end of the handgrip, and HOLDING THE BUTTON PRESSED IN, lower the lever fully. Before driving off, always check that the parking brake has been fully released and the tell tale lamp has gone out, or damage to the brake system may be caused.

Note that the parking brake operates only on the rear wheels, and uses a cable mechanism to apply the rear brake calipers independently of the footbrake hydraulic circuit.



Gear Lever

The gear lever is spring biased towards the 3rd/4th gear plane, and must be moved against light spring pressure to the left before selecting first or second gear, or against similar pressure to the right before selecting 5th speed. To select reverse gear, lift the collar beneath the gear knob with the fingers, and move the lever to the extreme left, and rearwards. Do not attempt to engage reverse gear until the vehicle is at a complete standstill. The reversing lights are switched on automatically when reverse gear is engaged.

When changing gear, it is essential that the transmission is not abused by 'power shifting'; the clutch pedal must be fully depressed during each gear shift, and the throttle pedal eased during upshifts. Gearshifting without correct operation of the clutch and throttle controls can result in severe damage to the transmission and engine.

STARTING PROCEDURE & RUNNING IN

WARNING: CARBON MONOXIDE - Be aware of the danger of carbon monoxide! Never run the engine in an enclosed space. The exhaust gases contain carbon monoxide, a deadly gas which is particularly dangerous, as being colourless odourless and tasteless, its presence is very difficult to detect.

Before starting the engine, always check that the parking brake is firmly applied, the transmission is in neutral, and as an extra precaution, depress the clutch pedal.

Starting a Cold or Warm Engine
(Ambient temperature above -20°C; 0°F)

The fuel injection and engine management system controls fuel delivery and engine settings under all operating conditions. When starting the engine, do NOT depress the accelerator. Switch on the ignition and pause for a moment before turning the key against spring pressure to operate the starter. Release the key as soon as the engine starts and runs continuously. The engine idle speed will be raised automatically at low ambient temperatures.

Starting the Engine in Extremely Cold Conditions
(Below -20°C; 0°F)

Operate the starter as above without depressing the accelerator pedal. If, after five seconds, the engine does not start and continue to run, depress the accelerator pedal 12 - 20mm (1/2 - 3/4 in.) and operate the starter again.

Note:

i) If the engine fails to start at the first attempt, avoid risk of damage to the starter mechanism, by always ensuring that both the engine and starter motor have come to rest (pause one or two seconds) before operating the starter again.

ii) If the accelerator is pressed fully to the floor whilst the starter

is operated, fuel delivery to the engine is completely cut off. This feature is provided to help clear a fuel flooded engine.

iii) The use of wide throttle openings and/or high rpm before the engine has reached normal running temperature will result in premature wear, and should be avoided.

Idle Speed

4-Cylinder Models: Engine idle speed is controlled electronically by the engine management computer, and is normally about 1000 rpm. An uprated idle speed is required under certain operating conditions including starting from cold. Within a particular temperature range, the idle speed will be increased significantly in order to speed the time taken for the catalytic converter to reach operating temperature, as well as to aid rapid demisting, and inhibit stalling. Idle speed will return to normal automatically when the engine has warmed sufficiently.

A raised idle speed is also set when air conditioning is operating, and a feature of the emission control system is that a slightly faster idle speed may be noticed after starting a warm engine. The latter may be cancelled after the car is driven, or if the throttle is 'blipped'.

V8 Models: Engine idle speed is controlled electronically by the engine management computer, and is normally about 850 rpm, although on initial return to idle, an engine speed of 1100 rpm will be maintained for 20 seconds before slowly decaying to 850 rpm. If the idle is disturbed by throttle pedal movement, the raised idle and decay sequence will be re-applied.

An uprated idle speed is required under certain operating conditions including when the a.c. is operating, and during the engine warm up phase, when the raised idle helps to speed the time taken for the catalytic converter to reach operating temperature, as well as to aid rapid demisting, and inhibit stalling. Idle speed will return to normal automatically when the engine has warmed sufficiently.

Stopping the Engine

Before switching off the engine after a spell of fast driving, allow the engine to idle for 2 to 3 minutes in order to allow the turbochargers to cool off and reduce the possibility of oil within them from carbonising. Do **not** 'rev' the engine and immediately switch off, as premature wear of the turbocharger bearings will result.

After stopping a warm engine, the radiator cooling fans, and on V8 models a coolant circulation electric pump, may be heard running or in certain conditions start running a few minutes after engine switch off. This feature helps control engine temperature and prevents coolant loss in conditions of 'heat soak'. The fans and pump will switch off when coolant temperature has fallen to a specified level.

Running In

Although it is not necessary to follow a formal 'running in' schedule, the progressive running in of a new car will ensure the most efficient operation and promote the attainment of smooth and reliable performance with economy and durability, throughout the life of the vehicle.

During the engine's early life, do not use high rpm for long periods or allow the engine to labour by using wide throttle openings at low engine speeds. Vary the operating conditions rather than maintain a steady cruising speed, and make full use of the gearbox. It is recommended to restrict sustained operation at full throttle and rpm until after the first service has been performed at 1,500 - 2,000 miles (2,500 - 3,000 km).

Maximum braking efficiency will be achieved if, for the first few hundred miles, needless heavy braking is avoided, and the brake pads are allowed to 'bed-in' fully before being used to their full potential.

EXTERNAL OPERATIONS

Fuel Requirement - Non USA markets

4-Cylinder Models:

95 RON UNLEADED ('Premium Unleaded' in U.K.):

V8 Models:

98 RON UNLEADED ('Super Unleaded' in U.K.): This is the recommended fuel for optimum performance and economy.

95 RON UNLEADED ('Premium Unleaded' in U.K.): If 98 RON unleaded fuel is unavailable, 95 RON unleaded may be used, but maximum power will be slightly reduced.

Note that the filler neck is restricted in size so that only the smaller diameter nozzle used on **unleaded** petrol pumps may be inserted. The use of as little as one tankful of leaded fuel would cause irreparable contamination of the precious metal catalysts and the exhaust gas sensor used by the computer controlled engine management system.

Fuel Requirement - USA market

USE UNLEADED PREMIUM GRADE GASOLINE.

Use only unleaded gasoline meeting ASTM specifications. Use of fuels not meeting ASTM specifications could cause poor performance and increase emissions.

For optimum vehicle performance and fuel economy, the use of super or premium unleaded gasoline, with a minimum octane rating of 93 (RON+MON)/2 is recommended. Where super or premium fuel is not available, the 4-cylinder Lotus Esprit will operate satisfactorily on unleaded gasoline having a minimum rating of 87 (RON+MON)/2, and the V8 model on 91 (RON+MON)/2, but vehicle performance and economy will be reduced. The use of good quality fuels containing proper detergent additives is advised for good performance and emission control.

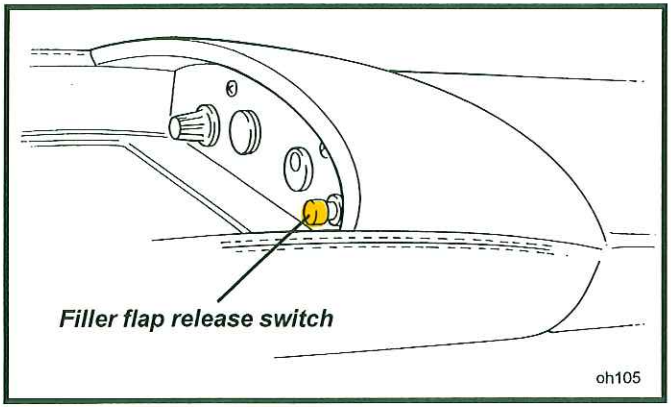
Do NOT use leaded fuel: damage caused by the use of leaded or other improper fuel is not covered by the New Vehicle or Emission Control System Warranty. The effectiveness of the catalytic converter decreases after as little as one tankful of leaded fuel. Also, the car is fitted with a fuel injection system which includes an oxygen sensor. Leaded fuel will damage the sensor, and cause emission control to deteriorate.

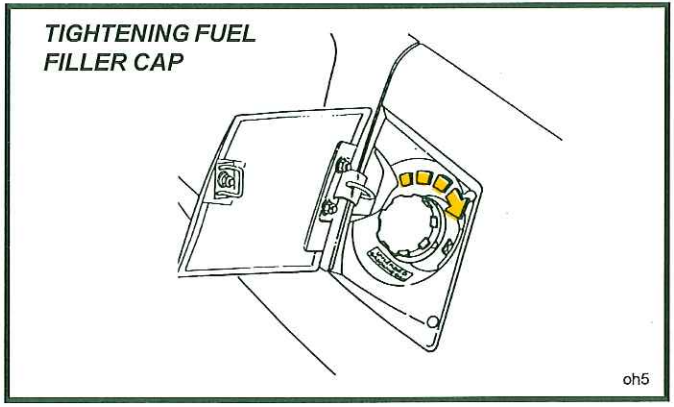
Gasolines Containing Alcohol - Some gasolines sold at service stations contain alcohol although they may not be so identified. Use of fuels containing alcohol is not recommended, unless the nature of the blend can be determined as being satisfactory.

Gasohol - A mixture of 10% ethanol (grain alcohol) and 90% unleaded gasoline may be used in the Lotus Esprit. If driveability problems are experienced as a result of using gasohol, it is recommended that the vehicle is operated on gasoline.

Methanol - Do not use gasolines containing methanol (wood alcohol). Use of this type of alcohol can result in vehicle performance deterioration and damage to critical parts in the fuel system. Fuel system damage and vehicle performance problems, resulting from the use of gasolines containing methanol, may not be covered by your vehicle warranty.

Diesel - The Lotus Esprit will not operate on diesel fuel.





Fuel Filling

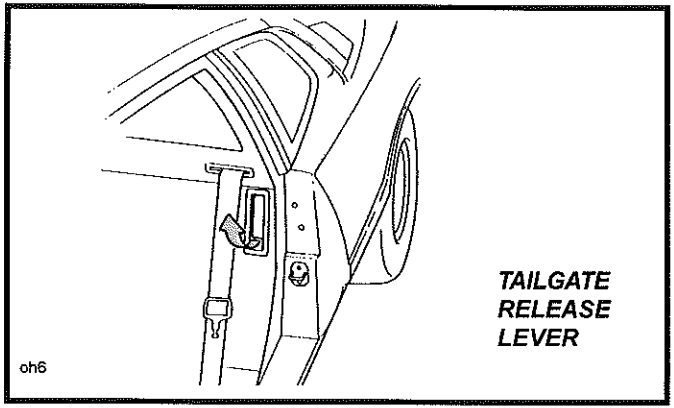
WARNING: Be aware of the danger of explosion when dealing with petrol and its attendant fumes. Before stopping at a filling station, ensure that all cigarettes are extinguished, and that no naked flames or other potential ignition sources are present. Switch off the engine before refuelling.

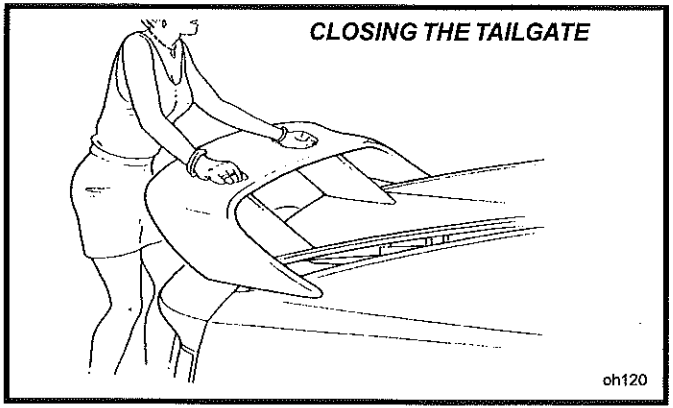
The twin, interconnected fuel tanks are located one each side, forward of the rear wheels. A single filler is provided in the left hand rear quarter panel, concealed by a flush fitting hinged flap, equipped with an electrically operated release catch. The switch controlling the release catch operates with or without ignition and is mounted at the left hand end of the gear lever tray switch panel. Press the switch to release the catch before raising the flap fully, and turning the filler cap counterclockwise to remove.

Insert the pump nozzle fully into the filler neck which is restricted to permit only the smaller diameter nozzle used on UNLEADED petrol pumps to be used. The two tanks are interconnected by a balance pipe and provide a total fuel tank capacity of 64.5 litres (17.0 US gall). When filling to maximum capacity, time should be allowed for the levels in the two tanks to stabilise.**Tailgate**

Refit the filler cap and turn clockwise until the torque limiting ratchet mechanism is heard to 'click', indicating that the cap is fully tightened. Press the filler flap shut.

Note: Never 'brim' the tanks to the top of the filler neck, as expansion of the fuel due to temperature change (especially in hot weather - the temperature in underground storage tanks is significantly colder) may cause flooding of the evaporative emission control charcoal canister.





Tailgate

For maximum security and driver convenience, the tailgate catches may be released only from the vehicle interior. To open, pull the release lever located outboard of the driver's seat, in the cabin rear bulkhead. Raising of the tailgate is assisted by two gas struts, which will support the panel in the fully open position. On models fitted with a tailgate mounted aerofoil, the left hand strut incorporates a locking mechanism activated when fully extended, to provide fully secure support.

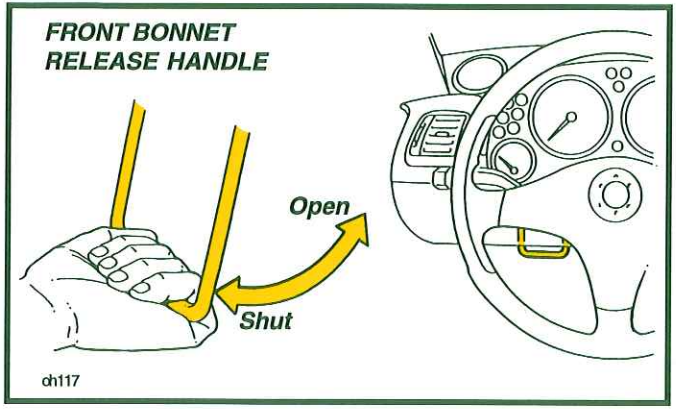
A pair of luggage compartment lamps are incorporated in the rear lamp cluster covers, and light automatically whenever the tailgate is opened. Leaving the car for an extended period with the tailgate open may result in a drained battery.

WARNING: When using the rear luggage compartment, beware of any hot engine surfaces exposed by the engine cover ventilation holes. Take care also to avoid the ends of the rear spoiler overhanging the tailgate sides.

When closing the tailgate, ensure that any obstruction is removed, and that fingers are kept well clear.

Models without tailgate mounted aerofoil: Pull down the tailgate, and press firmly over each rear corner to fully engage both catches.

Models with tailgate mounted aerofoil: First push ***up*** the panel to disengage the locking strut, before pulling down and pressing firmly immediately over the supporting struts of the aerofoil, to fully engage both catches.



Front Bonnet

To open the front bonnet, release the catches by pushing forwards the steel wire 'U' handle located beneath the fascia outboard of the steering column. Lift the rear edge of the bonnet to the fully open position where it will be supported by a gas strut.

A front compartment lamp, mounted in the front edge of the bonnet panel underside, lights automatically when the bonnet is open. Leaving the car for an extended period with the bonnet open may result in a drained battery.

Before closing the bonnet, check that obstructions are removed, and keep fingers well clear. Lower the bonnet fully, and pull rearwards the handle beneath the fascia to engage the catches.

BODYCARE

Body Features

Lotus are acknowledged leaders in the field of composite moulding design and manufacturing techniques, having developed methods which are now used under licence throughout the world. Composite materials have major advantages for specialist vehicle bodies, and these brief notes introduce some features of the construction and service properties of composites as applied to this field.

The manufacturing process enables the thickness of composite mouldings to be varied throughout the bodyshell and components to provide efficient structures of high strength and low weight. Composites will not corrode, so the strength of composite components is retained regardless of age, unless physical damage is sustained. The passenger compartment of the Esprit is enclosed by protective structural beams, using steel, timber and composite materials to provide maximum occupant protection. In combination with a steel box section

backbone chassis to which the body is bolted, an exceptionally stiff structure is produced.

Composite structures have the ability to absorb high impact loads by progressive collapse, with impact damage being localised. In vehicle accidents this feature helps protect the occupants from injurious shock loads and greatly reduces the danger of entrapment by deformation of body panels. This behaviour also facilitates repair by enabling replacement body sections to be integrated with the undamaged structure, using recognised approved methods which restore the body to its original condition, without residual strain or distortion.

The outer surface of a composite panel is sealed by a thin layer of 'gel coat'. If the panel is deflected beyond its designed level of flexibility, the gel coat will be overstressed and cracks result, although the panel will return to its original shape. A steel panel similarly treated would become permanently dented. The cracking may be confined to the surface gel coat, with no reduction in panel strength, but if damage is more severe the composite structure below the gel coat may be weakened. Localised repairs can be made in either case. Gel cracks may not appear immediately after over-stressing because the effect can be masked by the flexibility of the paint finish which covers the gel coat. In some instances gel cracks can take as long as three months to appear.

Causes of gel cracks include:

- Vehicle collision;
- Sitting or leaning heavily on the bonnet or any other flexible panel;
- Knocking doors against obstructions when opening;
- Dropping objects onto a panel;
- Allowing unsecured items to slide around in the luggage compartment;
- Closing the bonnet or tailgate onto projecting objects, e.g. luggage or tools;
- Applying excessive force to parts attached to composite panels e.g. mirrors, locks, aerial etc., (action by vandals);
- Incorrect use of a vehicle jack.

Note that the bumpers are sacrificial members constructed on some models from elastomeric materials, and are designed to protect against minor knock damage to the body by absorbing light shock loads. Exceeding the bumper design loads however may cause gel crazing of the body panels.

Paint Care

The acrylic enamel finish of the Lotus Esprit is extremely resistant to all normal forms of atmospheric attack. Following the simple maintenance procedure summarised below will help retain the gloss, colour and protective properties of the paint throughout the life of the vehicle. However, car finishes are not chemically resistant and amongst the more common contaminants are:

- Atmospheric contaminants; dust, soot, ash, and acidic or alkaline aerosol mist can chemically attack paint.
- Abrasion; blowing sand and dust, or a dirty washing cloth.
- Tree sap and insect fluids; can form a water-insoluble polymer that adheres to the paint.
- Bird droppings; highly acidic or alkaline, they can chemically etch the paint.
- Leaves; contain tannic acid which can stain light finishes.
- Impact damage; granite chippings thrown up from poor or recently dressed road surfaces can subject the body to severe localised impact, and result in paint chips, especially around the vulnerable frontal panels. Do not follow other vehicles too closely in such circumstances.

Washing

Lotus recommends that the car be hand washed, using the following instructions:

Many contaminants are water soluble and can be removed before any harm occurs by thorough washing with plenty of lukewarm water, together with a proprietary **car wash** additive (household detergent and washing up liquid can remove wax and accelerate oxidation). Frequent washing is the best safeguard against unseen contaminants; at the same time ensuring the regular removal of dirt, dust and traffic film.

Wash in the shade, and use a cotton chenille wash mitt or a sponge rinsed frequently to minimise entrapment of dirt particles. Use a straight back and forth washing motion to avoid swirled micro scratches and rinse thoroughly.

If the headlamp pods are raised in order to wash the headlamps, take care not to crack a hot lens by using cold water.

Polishing

Eventually some loss of gloss, and an accumulation of traffic film, will occur. At this stage, after normal washing, the application of a good quality liquid polish will restore the original lustre of the paint film.

Higher gloss of the paint finish, and added protection against contamination, can be obtained by the use of a wax polish. However, this can only be used successfully on a clean surface, from which the previous application has been removed with white spirit or a liquid polish cleaner.

Ventilation

Water lying on the paint surface for a lengthy period will eventually penetrate the paint film. Although the effects will not be visible immediately, a deterioration in the protective properties of the paint film will ultimately result.

It is not recommended to store a wet car in a poorly ventilated garage. If good ventilation cannot be provided, storage outside on a hard standing or under a carport is to be preferred.

Windscreen Cleaning

When washing the windscreen, take care to lift the wiper blade only a small distance from the glass in order not to damage the wiper pantograph mechanism. Wash the wiper blade with clean water.

Alloy Wheels Cleaning

It is recommended that these are washed with the preparation as is used to wash the bodywork. Use a brush having only nylon bristles. During the winter months, particularly when salt has been used on the roads for the dispersal of snow and ice, remove all the wheels, and wash thoroughly to remove all accumulated road filth from the wheels and tyres.

Upholstery Cleaning

Normal cleaning consists of an occasional light wipe over with a cloth dampened in a mild soap and water solution; it is important that the cloth is only dampened, not soaked.

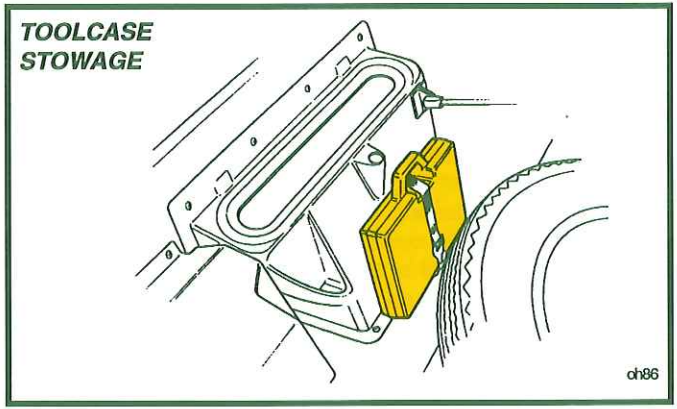
Leather Upholstery

The leather should be wiped over occasionally with a cloth dampened in warm soapy water. Use a mild, non-caustic toilet soap or soap flakes. Repeat the operation using a fresh cloth and water only, but avoid flooding the leather. Finish by drying and polishing with a soft dry cloth.

The manufacturers of the leather do not recommend the use of any hide 'food', and prohibit the use of petrol or detergents, furniture creams and polishes.

Seat Belts Cleaning

The seat belt should be sponged with warm water and allowed to air dry naturally before use. Do not use chemical cleaners and never attempt to bleach or dye the webbing.

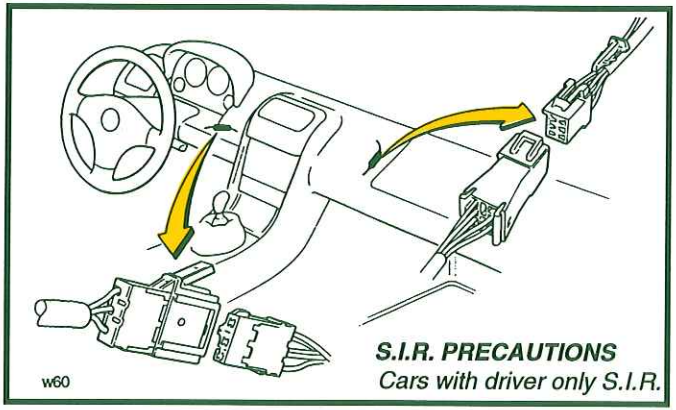


OWNER MAINTENANCE

Remember that fuel consumption and wear and tear of the vehicle are affected considerably by the way the car is driven and maintained. Be sure to have your car serviced regularly by your Lotus dealer, in order to ensure maximum safety, reliability, longevity and pleasure of ownership. Personal injury or vehicle damage can result from attempts at servicing with inadequate knowledge, tools or equipment. Consult your Lotus dealer in all cases of doubt.

Tool Kit

A toolcase containing some basic handtools, is strapped to the heater plenum in the front luggage compartment. Always re-stow correctly to prevent the unrestrained case or tools from causing damage to other luggage, or to the body.



S.I.R. PRECAUTIONS
Cars with driver only S.I.R.

Vehicle Servicing with S.I.R. (if fitted)

The Supplementary Inflatable Restraint (S.I.R.) system requires no routine maintenance, but whenever electrical work is to be carried out on the car, it is recommended to disable the S.I.R. system to guard against the possibility of accidental deployment.

WARNING: Injury can be caused to a person who is not correctly seated and is close to the S.I.R. when triggered. The system has a reserve power supply and can deploy for up to ten minutes after the ignition has been turned off and the battery disconnected. Let only qualified technicians work on the S.I.R. system. Improper service can mean that the S.I.R. may not function correctly. See your Lotus Dealer for service.

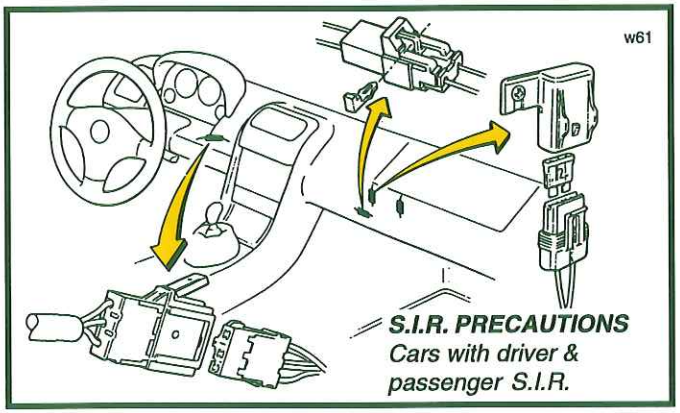
Cars with driver only S.I.R.

Before carrying out any electrical work on the vehicle:

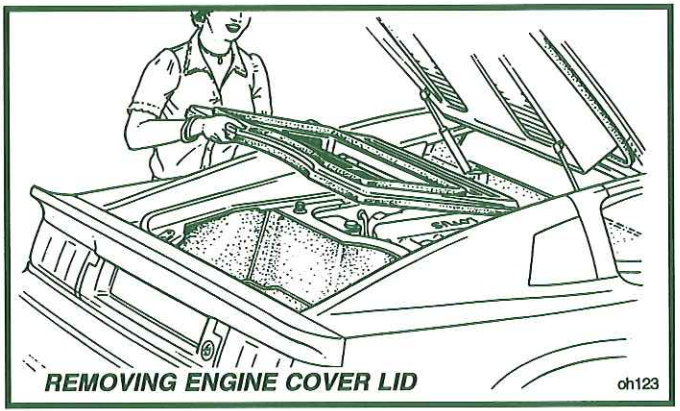
i) Turn off the ignition;
ii) From beneath the passenger side fascia, locate and disconnect the six-way S.I.R. fascia harness connector block;
iii) Unplug the orange three way connector to the inflator module alongside the steering column.

When all service work is completed, ensure that the S.I.R. system is reconnected:

i) Reconnect the orange three way connector alongside the steering column;
ii) Plug in the six-way S.I.R. fascia harness connector block;
iii) Turn on the ignition, and check that the S.I.R. tell tale lamp flashes for about eight seconds, and then goes out.



S.I.R. PRECAUTIONS
Cars with driver & passenger S.I.R.



REMOVING ENGINE COVER LID oh123

Cars with driver & passenger S.I.R.

Before carrying out any electrical work on the vehicle:

i) Turn off the ignition;

ii) From beneath the passenger side fascia, locate the two S.I.R. fuse holders secured to the back of the scuttle beam. Withdraw the INBOARD fuse from its holder, and remove the 15A 'run' fuse (the outboard 'crank' fuse is 5A).

iii) Unplug the orange 3-way connector to the driver's inflator module alongside the steering column.

iv) Locate the yellow 2-way connector to the passenger's inflator module beneath the passenger side knee bolster, withdraw the locking key, and unplug the connector.

When all service work is completed, ensure that the S.I.R. system is reconnected:

i) Reconnect the orange 3-way and yellow 2-way connectors to the driver and passenger inflator modules. Ensure that the locking key is used to secure the 2-way connector.

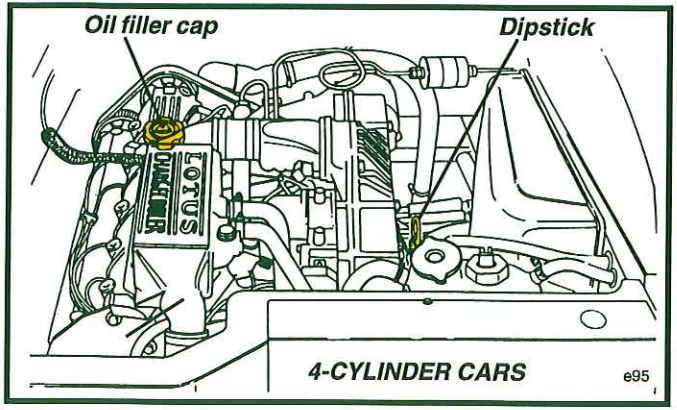
ii) Refit the 15A run fuse and insert into the fuse holder beneath the fascia.

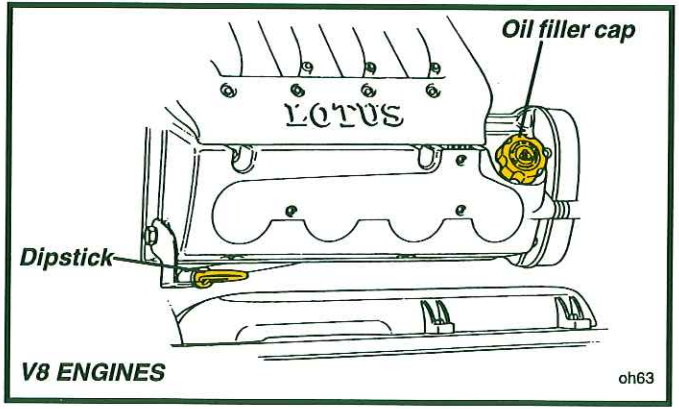
iii) Turn on the ignition, and check that the S.I.R. tell tale lamp flashes for about eight seconds, and then goes out.

Engine Cover

For access to the engine for maintenance, open the tailgate, and lift out the engine cover. When refitting, ensure that the cover is located correctly over the corner buffers before closing the tailgate.

WARNING: Beware of hot surfaces! Serious burns could result from unknowledgeable handling of a hot engine.





Engine Oil Level Check

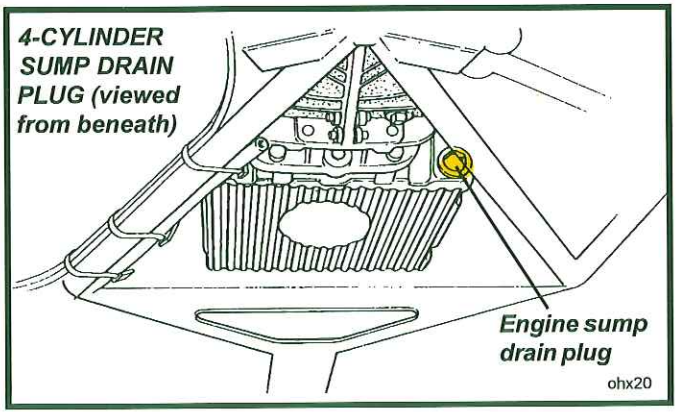
The engine oil level should be checked regularly, such as every two or three fuel stops, and the oil level maintained near the top mark on the dipstick. It is especially important to keep a check on the oil level during the vehicle's first 1,000 miles (1,700 km), as both the fuel and oil consumption will be prone to some variance until the engine components have bedded in.

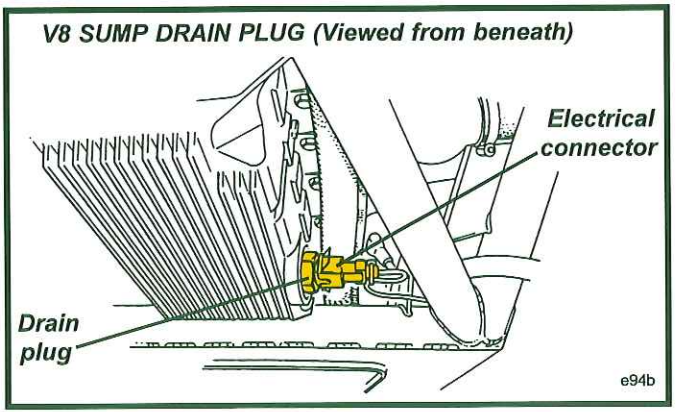
The best time to check the level is when the oil is warm, such as during a fuel stop. Ensure that the car is parked on a level surface and that a few minutes have elapsed since stopping the engine to allow oil to drain back into the sump. If the engine is stopped before reaching normal running temperature, the oil will not drain back to the sump so readily, and the dipstick will display an artificially low reading.

Dipstick: The dipstick is located at the right hand rear of the engine, adjacent to the intake plenum chamber. Withdraw the dipstick, and wipe with a paper towel. Replace the dipstick, pressing firmly to make sure it is fully seated, and withdraw again to inspect the oil level. The correct level is to the upper mark on the dipstick.

Topping Up: If topping up is necessary, remove the oil filler cap at the front of the right hand cam cover, and add a suitable quantity of a recommended engine oil (see 'Recommended Lubricants'). Take care not to spill any oil onto the drive belts at the front of the engine, or onto any electrical components; use a funnel if necessary.

The difference between high and low dipstick marks is equivalent to: *4-cylinder;* 0.85 litre (1.5 imp.pt; 1.8 US pt). *V8;* 1.0 litre (1.8 imp.pt; 1.0 US qt). Allow several minutes for the oil to drain through to the sump before rechecking the oil level. Do NOT overfill, or the oil will become aerated and its lubricating properties degraded. Refit the filler cap and turn clockwise until the ratchet mechanism is heard to 'click' indicating that the cap is fully tightened.





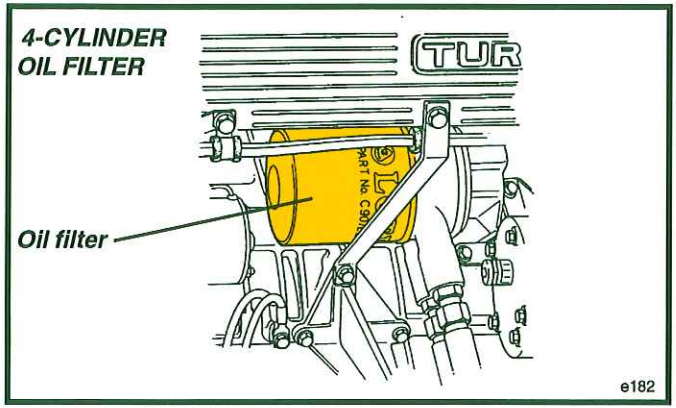
properties degraded. Refit the filler cap and turn clockwise until the ratchet mechanism is heard to 'click' indicating that the cap is fully tightened.

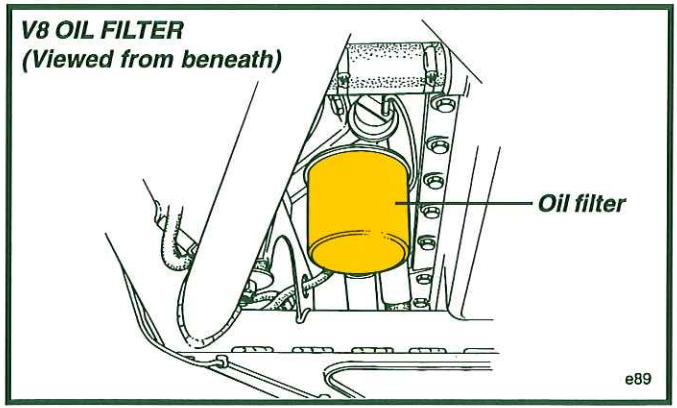
Engine Oil Change

Regular oil changes are the key to engine longevity and sustained performance. Adhere strictly to the engine oil and filter change intervals specified in the Maintenance Schedule.
4-cylinder: The socket head sump plug is located at the right hand rear of the sump.
V8: The sump plug is located at the right hand front of the sump, and is fitted with an oil temperature sensor. To drain the sump, release the electrical connector from the sensor and remove the drain plug complete; do not unscrew the sensor from the drain plug.

The sump should be drained immediately after a run, when the oil is warm and the impurities are still held in suspension. Allow to drain thoroughly before cleaning the drain plug, fitting a new sealing 'O' ring, and refitting the plug to a torque of 34 Nm (25 lbf.ft).

Fill with a recommended lubricant via the oil filler on the camshaft cover, to the top mark on the dipstick. Be sure to allow several minutes for the oil to drain through to the sump before checking on the dipstick, and take care not to overfill. Refit the oil filler cap securely, and check the oil level again when the engine is fully warm (see above).



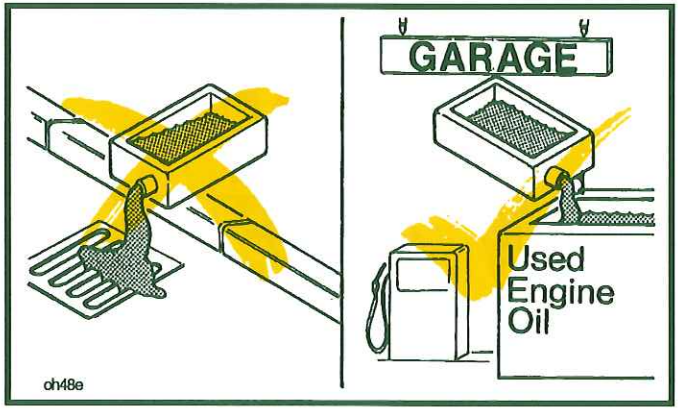


Oil Filter

The oil filter is a disposable canister type, and should be renewed at intervals specified in the Maintenance Schedule. On 4-cylinder cars it is horizontally mounted on the right hand side of the engine, beneath the inlet manifold, and on V8 models, is vertically mounted on the left hand side of the engine, accessible from beneath.

To renew the canister type filter, turn in a counterclockwise direction using an oil filter wrench if necessary. Discard the filter after removal (see 'Used Engine Oil'). Before fitting a new filter, clean the mating face on the engine, pour some new oil into the filter canister, and smear the sealing ring on the filter with oil. Screw the filter onto its spigot and tighten BY HAND just sufficiently to make a firm seal, typically 2/3 to 3/4 of a turn after the filter sealing ring has made contact.

Start the engine and check for oil leaks. Recheck the security of the filter, further tightening by hand if necessary. Check the oil level (see above) when the engine is fully warm.



Used Engine Oil

WARNING: - Prolonged and repeated contact with used engine oil may cause serious skin disorders, including dermatitis and cancer.
- Avoid contact with skin as far as possible and wash thoroughly after any contact.
- Keep out of reach of children.

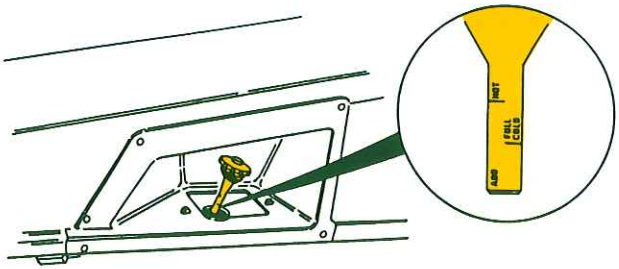
PROTECT THE ENVIRONMENT: It is illegal to pollute drains, water courses and soil. Use authorised waste collection facilities, including civic amenity sites and garages providing facilities for disposal of used oil and used oil filters. If in doubt, contact your local authority for advice on disposal.

'Severe Service' Conditions

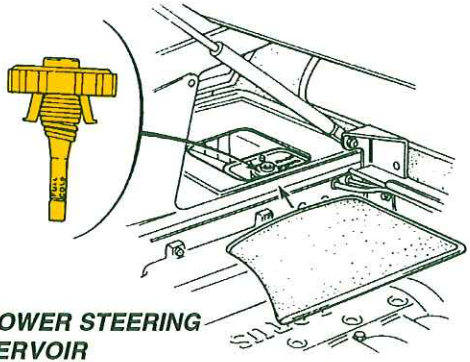
Certain operating conditions can cause rapid degradation of the oil quality, either by the accumulation of dirt particles, or by the absorption of water from condensation. If either of the 'severe service' conditions described below apply, it is recommended that the oil and filter be changed twice as frequently as is listed in the Maintenance Schedule.

Driving in dusty areas (e.g. on unmetalled roads);
Stop/start city driving with frequent short trips where the engine rarely warms up thoroughly (especially in cold weather); and/or frequent or prolonged idling.

Change the oil and filter as soon as possible after driving in a dust storm.



4-CYLINDER POWER STEERING RESERVOIR h35



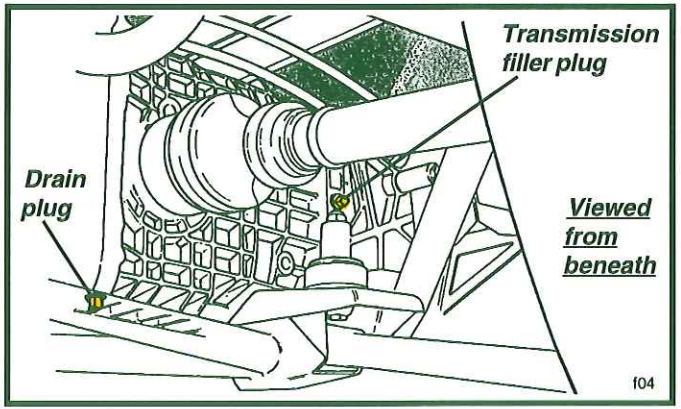
V8 POWER STEERING RESERVOIR h46

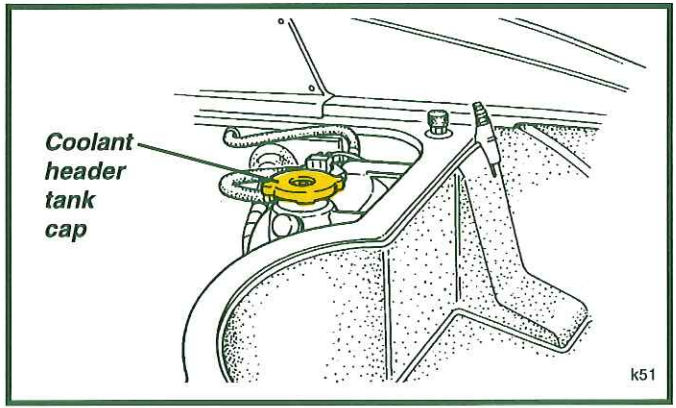
Power Steering Fluid

The power assisted steering (PAS) fluid level should be checked every 6,000 miles (10,000 km). The reservoir is located at the left hand side of the engine bay beneath a carpeted access panel by the rear quarter window. The level of fluid in the reservoir will rise as it warms up during normal operation, and the best time to check the level is with the engine warm, during a fuel stop, or after a run. Unscrew the reservoir cap, and inspect the oil level indication on the integral dipstick.

With a warm engine, the level should be close to the 'HOT' mark, and if cold, close to the 'FULL COLD' mark on the dipstick. Under normal circumstances, the PAS fluid should not require any topping up, and a drop in level is likely to be an indication of a leak, which should be attended to without delay by your Lotus dealer.

If topping up is required, use only an approved fluid - see 'Recommended Lubricants', and do not overfill. Refit the reservoir cap securely.





Transmission

The transmission oil should be renewed at intervals specified in the Maintenance Schedule. The square headed filler/level plug is located in the left hand side of the transmission, ahead of the transmission mounting bracket, and the square headed drain plug in the forward underside of the unit.

Drain the transmission immediately after a run when the oil is warm and the impurities are held in suspension. Ensure the car is parked on a level surface, or service lift. Remove both plugs, and replace the drain plug when the oil has drained thoroughly. Fill only with the correct oil - see 'Recommended Lubricants' - to the level plug hole, and replace the filler/level plug.

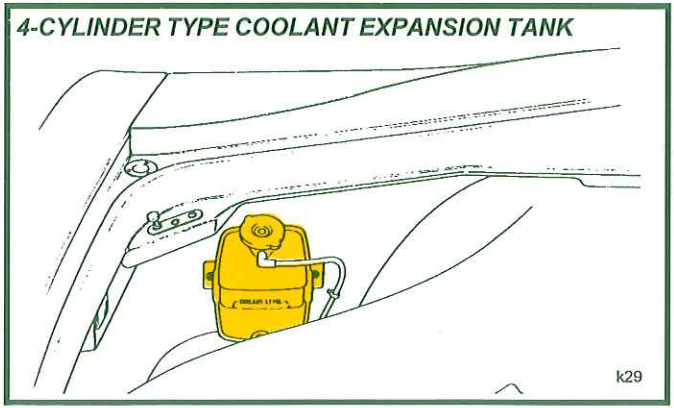
Front Hubs

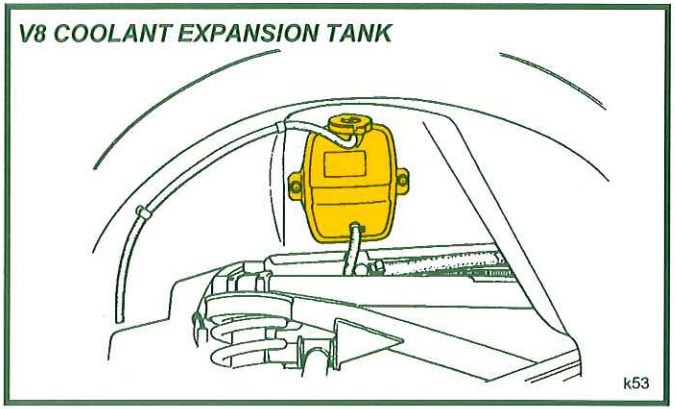
At intervals specified in the Maintenance Schedule, the front hubs should be re-packed with grease by your Lotus dealer.

Cooling System

The engine cooling system uses a water based coolant and provides heat for the interior climate control. A header tank is used to ensure that the system remains completely filled, with an expansion tank accommodating expansion of the coolant with increasing engine temperature. The header tank is mounted at the right hand rear of the engine bay, and is fitted with a 110 kPa;15 psi (4 cylinder) or 145 kPa; 21 psi (V8) pressure cap to raise the boiling point of the coolant to over 100°C. The expansion tank is located at the left hand rear of the rear luggage compartment (4-cylinder models) or within the right hand rear wheelarch (V8 models), and is fitted with a blanking cap.

WARNING: Do NOT remove the cap from either the header tank or expansion tank when the engine is warm as serious scalding could result from boiling water and/or steam.





The level of coolant in the translucent expansion tank will rise as the engine warms up, and fall as it cools down, and under normal circumstances it should not be necessary to add any coolant to the system between services. If overfilled, the excess coolant will be ejected when the engine is warm. If underfilled, overheating may result.

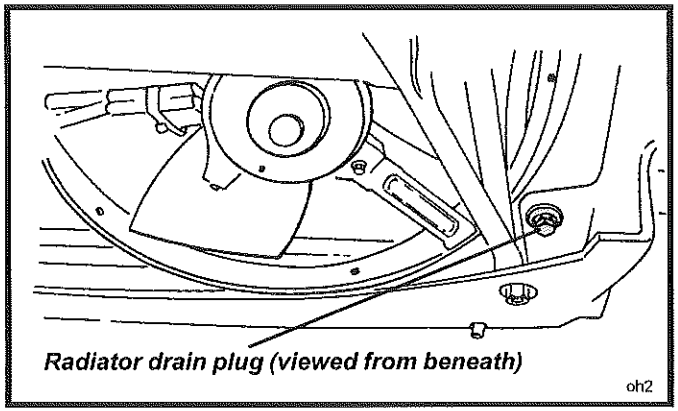
As a precaution, every week when the engine is completely COLD, and without disturbing the filler cap, check that the level of coolant in the translucent header tank at the right hand rear of the engine bay is above the moulded central jointline. If topping up is required, turn the two eared pressure cap counterclockwise to the first detent to relieve any pressure remaining in the system, and then turn further to release the cap. Fill the tank, being sure to use an approved coolant mixture (see below) in order to maintain full protection from freezing damage and corrosion. In areas where the tap water is extremely hard (exceeding 250 parts per million), distilled, de-ionised or filtered rain water should be used. Refit the pressure cap, and turn fully clockwise to its stop position.

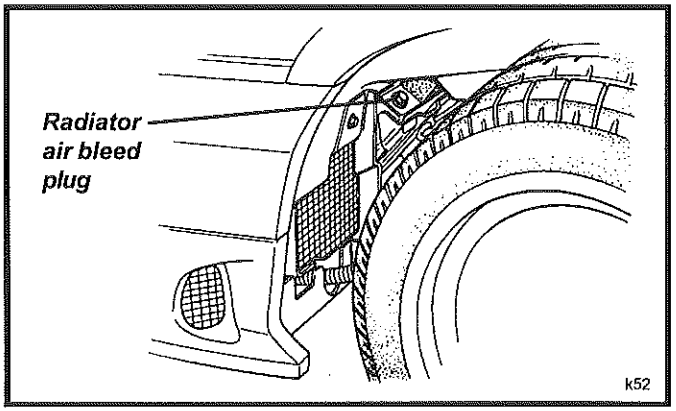
After filling the header tank, coolant is likely to be expelled from the expansion tank when the engine is fully warm, which is of no concern. After several drive cycles, the level of coolant in the header tank when fully cold, should stabilise at between half and three quarters full.

NOTE: If the cap is removed from the header tank when the engine is warm, the pressure balance of the system will be disturbed and a small coolant loss may occur. The completely cold header tank level should be checked at the first subsequent opportunity.

Cooling Fans: The three cooling fans normally operate only when the engine coolant reaches a specified temperature, but will also run when the air conditioning is operating, and may run for a short period after engine switch off in severe heatsoak conditions.

WARNING: Do not encroach into the radiator cooling fan area, as personal injury could result from the fans starting up without warning, even when the engine is stopped.





At service intervals, the air ducts and matrices of all the cooling radiators should be checked externally for clogging by insects, leaves or other debris, and if necessary, a water jet used from behind to clear the finning.

Anti-Freeze/Corrosion Inhibitor

It is most important that the coolant contains an anti-freeze with corrosion inhibitor to protect the engine and heat exchangers from both frost damage, and metal corrosion. Use of a good quality monoethylene glycol anti-freeze, protects against these dangers as well as raising the boiling point of the coolant. The system is factory filled with a 30% anti-freeze concentration, which is suitable for all but the coldest climates (use 50%) and should be maintained throughout the vehicle life.

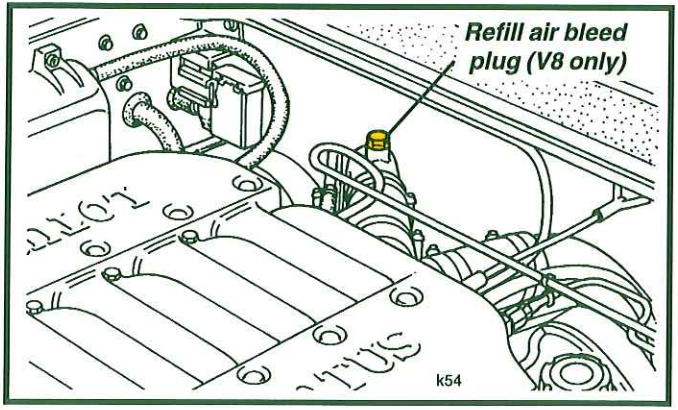
The effective level of monoethylene glycol in the system may be measured using a hydrometer, but the level of corrosion inhibitors, whose effectiveness diminishes over a period of time, can only be assured by the renewal of the coolant mixture every 24 months. For recommended anti-freeze products/specification, see 'Technical Data'.

Coolant Drain/Refill Procedure

It is recommended to entrust this operation to your Lotus dealer, but guidance is provided below.

To drain the engine cooling system, set the heater temperature control to 'hot', release the header tank cap, and remove the radiator drain plug. Also release hose connections in the engine bay as necessary to fully drain the pipework.

To refill the system, refit the hose connections securely, replace the drain plug, and open the radiator bleed plug from inside the left hand front wheelarch. Fill with coolant until a steady stream flows from the bleed. Close the bleed and add coolant until the system is fully filled. On V8 models, remove the air bleed plug from the coolant return pipe at the front of the engine bay, and replace when all air has escaped. Run the engine up to operating temperature whilst topping up the header tank and refitting the cap when necessary to prevent coolant overflow. After normal running temperature has been



reached and the cooling fans have cut in for the second time, loosen the radiator bleed plug again.

WARNING: Wear protective gloves and take precautions as necessary to prevent scalding from the hot coolant.

Close the bleed when all air has escaped, and a steady stream of coolant flows out. Allow the engine to cool fully, completely fill the header tank, and replace the pressure cap securely.

Washer Reservoir

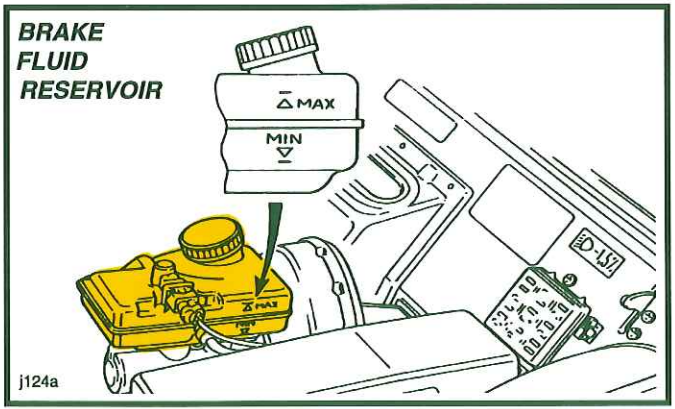
The windscreen washer reservoir is situated at the passenger side of the front luggage compartment, and should be kept topped up with clean water and a suitable proprietary solvent. Do NOT use radiator anti-freeze in the reservoir as this could seriously damage the paintwork.

If the washer fluid level becomes low, and needs replenishing, an amber tell tale reminder in the instrument panel will glow when the washer control is operated.

Brake Fluid Reservoir

Under normal circumstances, there is no requirement for routine 'topping up' of the brake master cylinder reservoir. A visual safety check is all that is required.

Every week, check the level of fluid in the brake fluid reservoir located at the driver's side of the front luggage compartment: Without disturbing the filler cap, check that the level lies between the 'MAX' and 'DANGER' marks moulded on the translucent reservoir body. As the brake pads wear, the level will



drop gradually from the 'max' mark towards the 'min', but if the level drops rapidly over a short period, have your Lotus dealer investigate without delay. If the level is found to be below the 'min' mark, it is likely there has been some fluid loss, and that air will have entered the hydraulic system. The car should not be driven until the fault has been investigated and rectified.

If any fluid is to be added, clean around the surrounding area to guard against dirt ingress before unscrewing the reservoir cap. Be aware of the damaging effect that brake fluid can have on paintwork, and take suitable precautions to avoid any such contact.

Use only a non-mineral type DOT 4 brake fluid from a sealed container marked with a yellow and black (non-mineral) symbol. Do not use DOT 5 silicone fluid, or any fluid which has been exposed to the atmosphere for more than a brief period, or any fluid suspected of being wet, dirty or contaminated. Do not overfill, and replace the cap securely.

Brake fluid, being hygroscopic, absorbs water from the atmosphere over a period of time, resulting in a lowering of the boiling point of the fluid, and corrosion of the hydraulic system. For optimum safety and brake performance, the brake fluid should be renewed every twelve months by your Lotus Dealer.

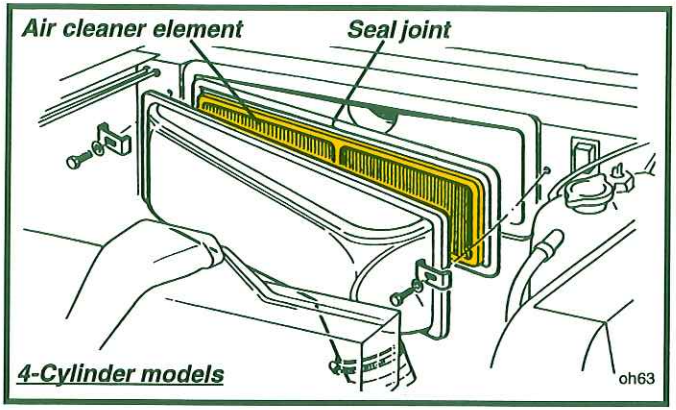
Brake Pads

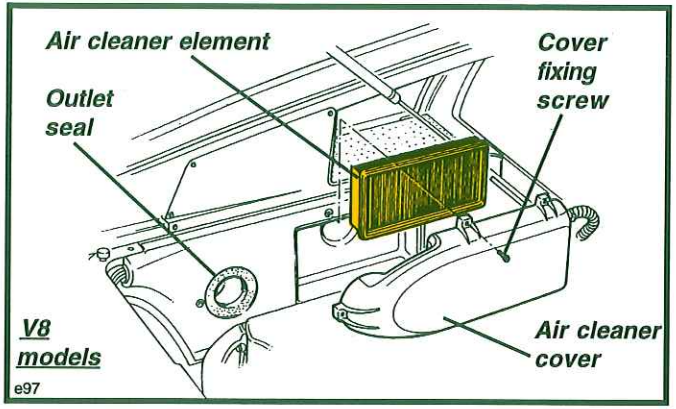
The thickness of the brake pad lining material should be checked at every service, and under no circumstances be allowed to fall below 2.5 mm (0.1 in). If the brakes are in very frequent or arduous use, as when driving in mountainous terrain, it is recommended that they be examined more frequently. The pads should be renewed, using genuine Lotus parts, if of insufficient thickness to ensure safe braking until the next service interval.

In the interests of safety, brake pad renewal should be entrusted to your Lotus dealer.

Brake Pipes & Hoses

At the recommended service intervals, the brake pipes and flexible hoses should be carefully examined for signs of dam-





age, corrosion or perishing, especially in territories where salt is used on the road surface in the winter months.

Air Cleaner Elements

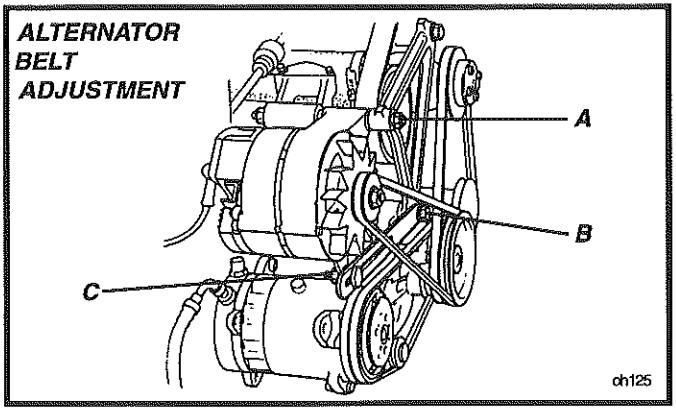
Disposable folded paper type air cleaner elements are fitted (one on 4-cylinder models, two on V8), each housed within an engine bay sidewall. The filters should be inspected at intervals dependent on the operating conditions. When the vehicle is operated in a relatively clean environment, the element should be renewed at intervals specified in the Maintenance Schedule, but where a dusty or smog laden atmosphere prevails, more frequent replacement will be required dependent on the level of pollution.

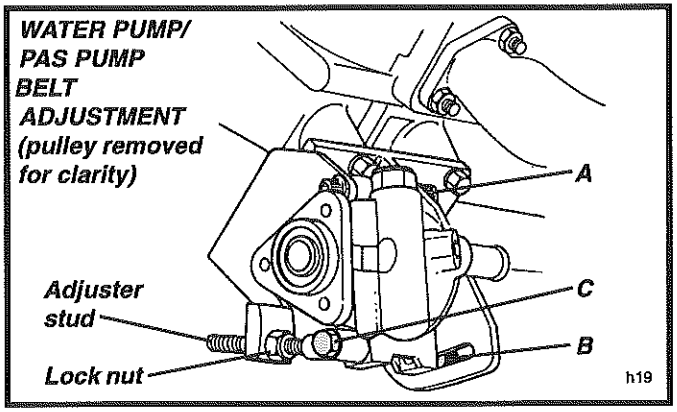
To renew a filter element: 4-cylinder models:

Release the two clamp bolts securing the air filter cover to the engine bay sidewall and, leaving the intake hose attached, 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 with the seal joint positioned at the centre top. Clean the inside of the air cleaner body and cover, keeping dust out of the intake trunking. Fit the new element with its metal face towards the engine, and replace the cover.

V8 models:

Remove the four screws retaining the cleaner cover to the sidewall, and pull open, leaving the breather hose attached. Withdraw and dispose of the paper element. Clean any dirt from the inlet housing, but take care to prevent debris entering the 'clean' duct. Inspect the condition of the outlet seal and replace if necessary. Fit a new element with the flatter side towards the engine, and refit the cover.





Engine Auxiliary Drive Belts
4-Cylinder Models:

The water pump, alternator, power steering pump and a.c. compressor are all driven from the front end of the crankshaft by 'V' belts. These synthetic rubber belts should be inspected at intervals specified in the maintenance schedule, for correct tension, and must be free from all signs of cracking, perishing, abrasion, fraying or other deterioration. The belts are correctly tensioned when, on the longest run of the belt, the following measure of total deflection can be obtained using only light to moderate finger pressure:

Alternator;	12 mm (1/2")
Water pump/PAS pump;	9 mm (3/8")
A.C. compressor;	9 mm (3/8")

The 'V' belt tension is adjusted as follows:

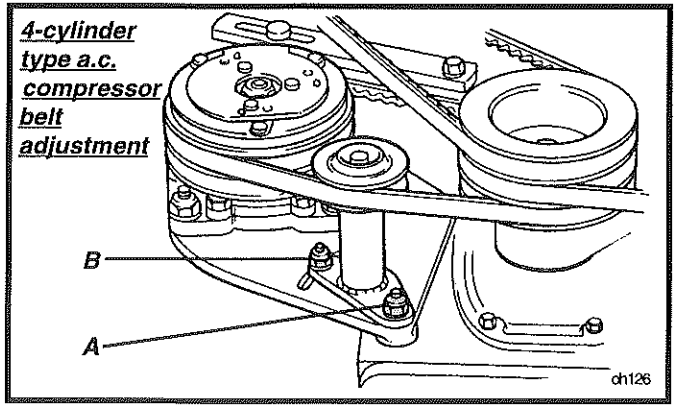
Alternator Belt Adjustment (4-cylinder)

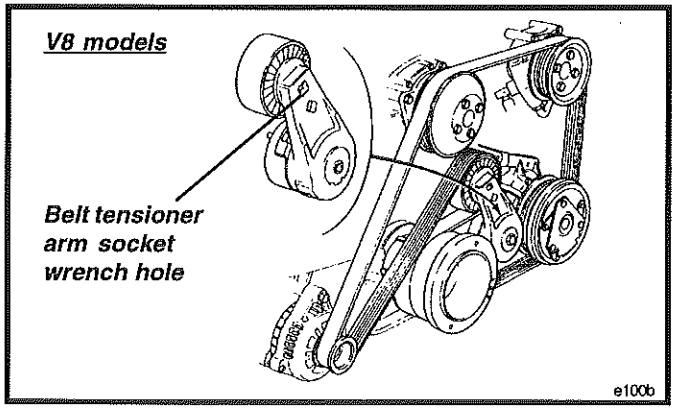
Slacken the alternator pivot bolt (A), strap anchor bolt (B) and adjuster bolt (C). Move the alternator to achieve the correct tension, and tighten all bolts. Run the engine briefly, switch off, and re-check the belt tension.

Water Pump/PAS Pump Belt Adjustment (4-cylinder)

This belt is adjusted by pivoting the PAS pump.

- Slacken the top rear caphead setscrew (B) securing the bottom rear of the pump to the adjustment slot in the bracket.
- Slacken the adjuster stud anchor bolt (C) at the front of the pump, and turn the self locking nut on the adjuster stud as necessary to achieve the correct belt tension.
- Tighten all fixings, run the engine briefly, and re-check tension.





A.C. compressor belt adjustment (4-cylinder)

Slacken the jockey wheel assembly pivot bolt (A) and adjuster bolt (B). Move the jockey wheel to achieve the correct tension, and tighten all bolts. Run the engine briefly, switch off and re-check the tension.

V8 Auxiliary Drive Belt

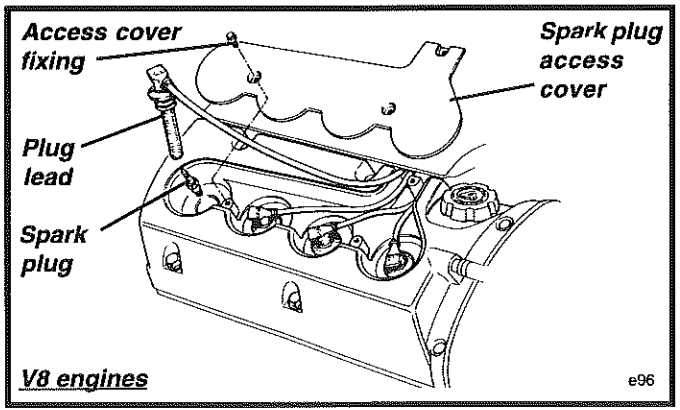
A single multi-rib type belt is used to transmit drive from the crankshaft nose to the following auxiliaries:

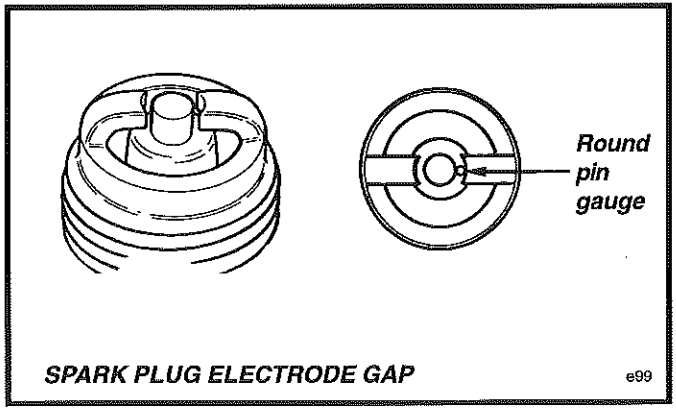
- water pump;
- alternator;
- a.c. compressor;
- power steering pump.

A spring loaded temperature compensated tensioner ensures that the belt requires no periodic maintenance other than a visual check of its condition. If the belt exhibits any evidence of physical damage, cracking, fraying, perishing, abrasion or contamination, it should be replaced. In the case of oil contamination, the cause must be identified and rectified, and each of the pulleys must be thoroughly degreased before the new belt is fitted.

To replace the belt:

- Use a ½ in. square drive wrench in the hole provided in the tensioner arm, and turn counterclockwise to relieve the belt tension.
- Remove the belt from the pulleys.
- Hook the smooth side of the new belt over the tensioner pulley, and engage the ribbed side around the crankshaft, a.c. compressor, PAS pump and water pump pulleys. Relieve the tension (as above) before fitting around the alternator pulley.





Sparking Plugs

Renew the sparking plugs in accordance with the Maintenance Schedule. On V8 engines, the spark plug access covers must first be removed from the cam covers by releasing the three cover screws. Pull off the HT lead from each spark plug and use an airline or vacuum cleaner to remove any loose dirt from the plug wells before unscrewing the spark plugs. Take precautions to prevent debris falling into the open plug hole.

Note that the special type of NGK plugs fitted require the use of a round pin gauge to set the electrode gaps to 0.9mm (0.035 in).

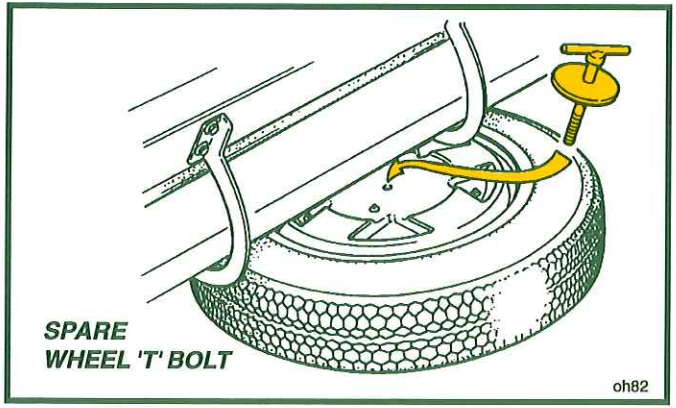
Tighten the new spark plugs to 20 - 22 Nm (15 - 16 lbf.ft), and refit the plug leads, pressing firmly and ensuring that the plug wells are properly sealed. Refit the access cover taking care not to trap or pinch a plug lead.

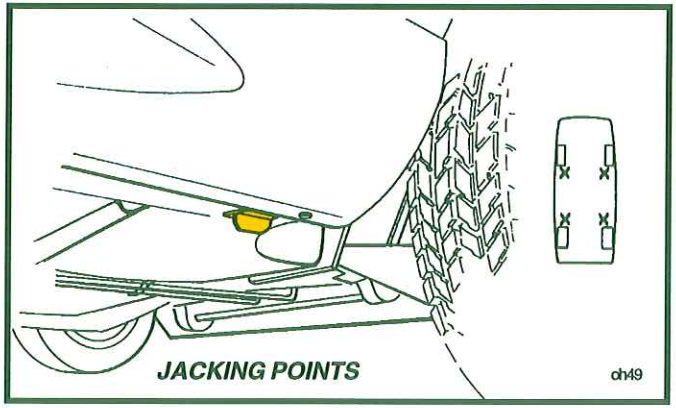
Clutch Adjustment

The clutch is self adjusting and requires no regular service.

Ignition Timing

The ignition timing is controlled electronically with no manual adjustment being necessary.





WHEEL CHANGING

Because of the different size wheels used on the front and rear of the Esprit, and to maximise the luggage space available, a compact spare wheel is supplied (when specified) and can be fitted to the front or rear of the car in the event of a puncture **for emergency use only**, to enable the car to be driven to the nearest tyre depot.

To fit the spare wheel, proceed as follows:

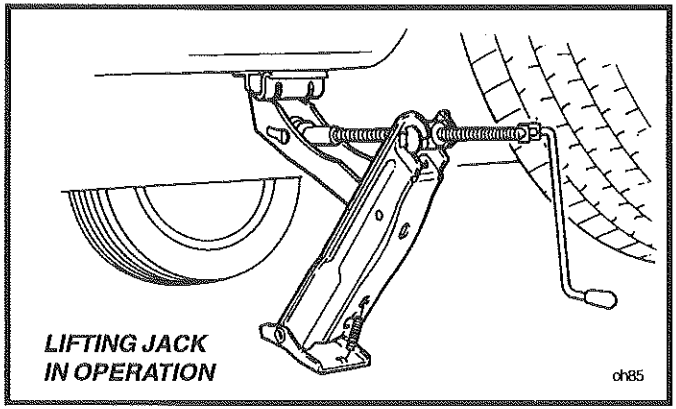
1. Ensure that the vehicle is parked on a firm level surface. Firmly apply the parking brake, engage first or reverse gear, and chock both wheels at the end of the car opposite to the wheel being changed.

2. The wheel changing equipment is stowed beneath the spare wheel retaining tray in the front luggage compartment: Unscrew the 'T' bolt securing the tray and spare wheel, and lift out the tray. Unhook the rubber strap and remove the jack and wheelbrace from the tray. Lift out the spare wheel taking care not to disturb any electrical components or brake pipes in the front luggage compartment.

3. Before positioning the jack, use the wheelbrace to slacken the five wheel bolts half a turn counter-clockwise.

4. Jacking points are provided ahead of the rear wheels, and behind the front wheelarches. Do not jack the body at any other point, or damage may be caused to the vehicle, and safety jeopardised. Turn the jack handle clockwise to open up the jack, and take care to position the jack so that with its foot sitting firmly on the road surface, the cradle on the cantilever arm engages with the tongue on the body at the jacking point. Check that the tongue and cradle are centralised.

5. Continue to turn the jack handle clockwise to raise the car. Continually monitor the security and stability of the jack,



LIFTING JACK IN OPERATION

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and stop as soon as the tyre is clear of the ground.

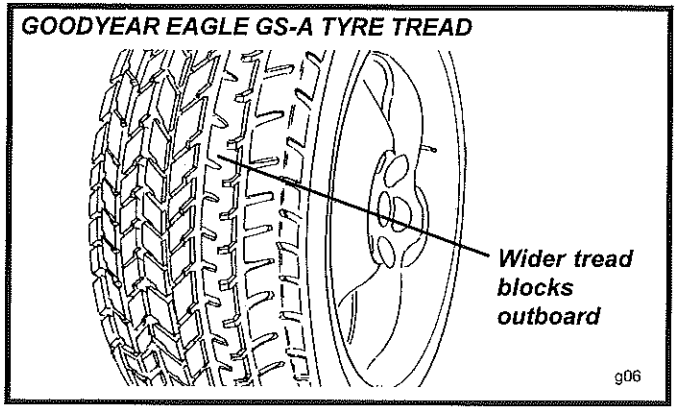
WARNING: Do not get into the vehicle or run the engine whilst the car is supported only by the jack. Under no circumstances must ANY work be carried out under the car when it is raised on the jack unless a chassis stand is used to support the car.

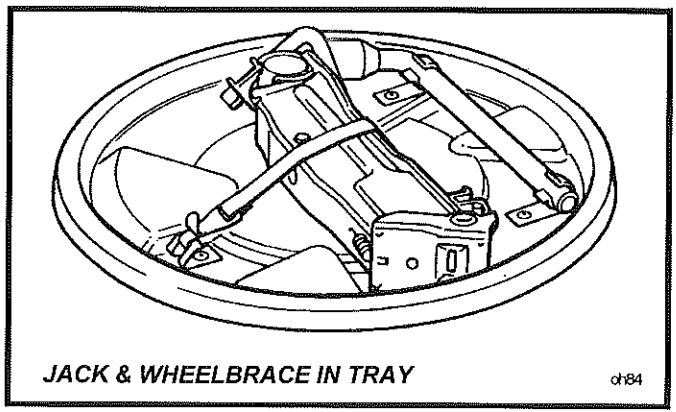
6. Remove the wheelbolts and withdraw the wheel from the hub. Fit the spare wheel onto the hub and secure with the wheelbolts, turning in a clockwise direction. Tighten the bolts lightly using the wheelbrace.

7. Wind down the jack, and remove from under the car. Tighten the wheelbolts securely in a diagonal sequence. Transport the damaged wheel and tyre in the rear luggage compartment, and re-stow the wheel changing equipment (see below).

IMPORTANT - USE OF SPARE TYRE: The spare wheel supplied is for EMERGENCY USE ONLY, and must be replaced with the normal wheel and tyre equipment as soon as possible. Only one spare wheel may be used on the vehicle at any one time. When the spare wheel is in use, differential tyre wear will be experienced and the handling characteristics of the car modified. It is therefore necessary to observe the following recommendations:

- Less than moderate speeds and cornering loads should be employed, i.e. no more than half the car's potential relative to the pertaining road conditions subject to a recommended maximum speed of 50 mph (80 km/h) under the most favourable conditions.
- When following other vehicles, Lotus recommend that you observe the U.K. Highway Code, the American Safety Council guidelines, or local regulations for vehicle spacing; this advice applies equally to spare wheel usage as to all other motoring situations.





- Spare wheel tyre pressure: 4.2 bar (60 lb/in²).

Before re-fitting the standard wheel, ensure that the mating face on both the wheel and hub is clean, and free from corrosion; otherwise a wheel vibration and/or loosening of the wheel bolts may occur. A smear of copper based grease on the centre spigot of the hub will help prevent corrosion, and aid subsequent wheel removal, but do not allow the threads or seats of the wheel bolts to become contaminated with grease, or the bolts may loosen in service.

As soon as possible after re-fitting the standard wheel, have the wheel bolt torque set at 10 daNm (74 lbf.ft), and check the tyre pressure (see Technical Data).

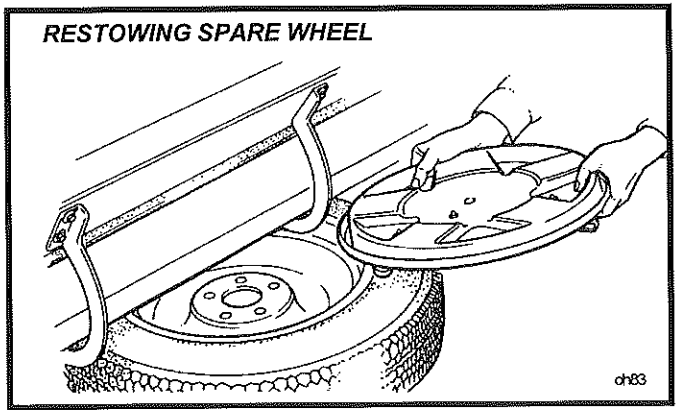
Asymmetric Tread

The Goodyear Eagle GS-A, and Pirelli P Zero tyres fitted to some models, have asymmetric tread patterns. Each of the tyre sidewalls is marked 'Side Facing Inwards' or 'Side Facing Outwards', and it is important to ensure that any replacement tyre is correctly fitted. With Pirelli tyres, correct fitment will result in part of the tread pattern, which is directional in appearance, rotating in opposite directions on right and left hand sides - this is of no consequence.

Stowing Wheel Changing Equipment

Always re-stow the spare wheel and wheel changing equipment in their correct locations to prevent insecure items causing damage to other components or to the body:

- Place the spare wheel into the front luggage compartment with the outside of the wheel downmost, taking care not to disturb other components;
- Fit the wheelbrace into its retaining clips on the spare wheel tray.
- Fully close the jack, lay on its side in the tray, and retain with the rubber strap.
- Invert the tray and fit into the spare wheel. Retain the tray and spare wheel with the 'T' bolt.



Tyres

The original equipment Goodyear Eagle GS-A, Michelin Pilot SX MXX3, or Pirelli P Zero tyres fitted to the car from new, are engineered to provide the optimum balance of ride and handling characteristics, and are the ONLY tyres approved by Lotus for use on the vehicle. The tyres should be inspected regularly for signs of cuts, abrasions or other damage, and for any uneven tread wear patterns. Uneven treadwear may indicate that the suspension geometry or dampers require attention from your dealer. Take care when parking to avoid tyre contact with high or sharp edged curbs, as mistreatment of this nature can cause internal damage to the tyre structure which may not be readily apparent. The alloy wheel rims may also be distorted or damaged by careless parking, and result in wheel imbalance or loss of tyre pressure. Safety considerations should always be paramount when assessing tyre condition and serviceability, and the tyres replaced if any doubt exists, or if the legal tread depth limits are approached.

When driving on wet roads, surface water is squeezed out from between the tyre and road, but excessive speed or water depth can overwhelm the water clearing capability and lead to a condition called 'aquaplaning' where the tyre rides on a film of water and provides little or no grip on the road surface, leading to an inevitable loss of control. This condition is more likely to occur with worn tyres having little depth of tread, or with incorrect tyre pressures. Drivers should keep a vigilant check on tyre wear and condition, and moderate their speed in adverse weather conditions.

The cold tyre pressures should be checked every week, or every 1,000 miles (1,700 km), whichever is the sooner, and corrections made as necessary. The spare tyre pressure should also be checked occasionally. See 'Technical Data' at the back of the handbook for tyre pressures. Under-inflation will cause excessive wear, rapid deterioration of the tyre sidewalls, and poor handling, whereas overinflation results in a hard ride and increased susceptibility to tyre damage. It is important that the tyre pressures are adjusted only when the tyres are cold (driven less than one mile), as the pressures may increase by 0.3 - 0.5 bar (4 - 8 lb/in^2) when the tyres are warmed to normal running temperature. Always replace the tyre valve dust cap to prevent the ingress of dirt and moisture into the valve, which could cause leakage.

When balancing the wheel and tyre assemblies, the wheels should be located by the centre spigot - NOT by the wheel bolt holes. In order to maintain the correct handling feel and minimum steering wheel shake, it is very important that the radial and lateral run out of the tyres are to the high standard required by Lotus Cars. If any difficulty is experienced with replacement tyres, refer to the tyre manufacturer.

Winter Tyres & Snow Chains

Michelin X M+S 330 tyres are approved for use on the vehicle in snowy conditions, in conjunction with special wheels - see your Lotus dealer. Winter tyre sizes are: front; 205/45 R16 83H, rear: 235/45 R17 93H. When winter tyres are fitted, a maximum speed of 130 mph (210 km/h) must be observed.

Snow chains may by used in extreme conditions only in conjunction with winter tyres and fitted only on the rear wheels. Lotus approves the fitment of Pewag XMR 73 Brenta 'C' snow chains. Close attention should be paid to the fitting and tensioning instructions supplied with the chains, and an appropriate driving style adopted. The chains should be removed as soon as road conditions allow.

USA CONSUMER INFORMATION

Uniform Tire Quality Grading Standards

The following information relates to the system developed by the United States National Traffic Safety Administration which grades tires by treadwear, traction and temperature performance. (This applies only to cars sold in the United States.)

Treadwear: The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire rated 150 would wear one and a half (1½) times as well on the government course as a tire graded 100. The relative performance of tires depends on the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climates.

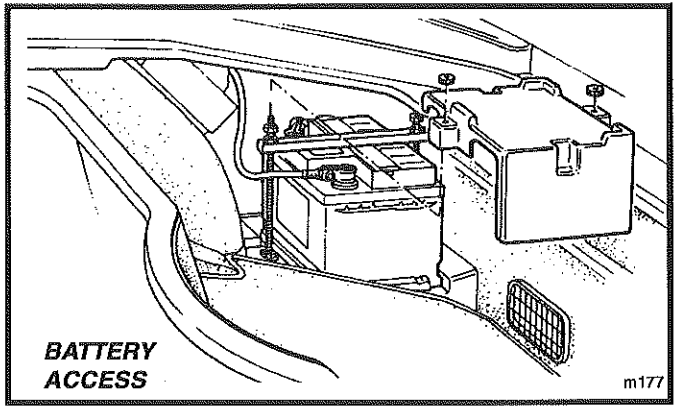
Traction - A, B, C: The traction grades, from highest to lowest are: A, B, and C. They represent the tires ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked 'C' may have poor traction performance.

WARNING: The traction grade assigned to this tyre is based on braking (straight ahead) traction tests and does not include cornering (turning) traction.

Temperature - A, B, C: The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade 'C' corresponds to a level of performance which all passenger car tires must meet under Federal Motor Vehicle Safety Standard No. 109. Grades 'B' and 'A' represent higher levels of performance on the laboratory test wheel than the minimum required by law.

WARNING: The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

These grades are moulded onto the sidewalls of passenger car tires. All passenger car tires must conform to Federal safety requirements in addition to these grades.



BATTERY

WARNING: POISON/DANGER - CAUSES SEVERE BURNS - KEEP OUT OF REACH OF CHILDREN.
Contains sulphuric acid - avoid contact with skin, eyes or clothing. Antidote: External - flush with water; Internal - drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately; Eyes - flush with water for 15 minutes and get prompt medical attention. Batteries produce explosive gases. Keep sparks, flames and cigarettes away. Ventilate when charging or using in enclosed space. Always shield eyes when working near batteries.

Battery Access

The 'maintenance free' battery is located behind the right hand rear wheelarch in the rear luggage compartment and requires no routine topping up of the electrolyte. However, at intervals specified in the Maintenance Schedule, the battery terminals should be checked for security and condition, and protected with petroleum jelly.

For access to the battery, release the two fingernuts, and lift off the battery cover. To remove the battery, disconnect both terminals (see below), remove the two nuts securing the clamping channel, and slide out the battery.

Disconnecting the Battery

If the battery is to be disconnected, the following precautions should be taken:

i) Wait for at least ten seconds after switching off the ignition to allow the engine management system to adjust the setting of some components ready for re-starting.
ii) Ensure that all electrical loads (e.g. lights) are switched off.
iii) Immediately before disconnection, mobilise the engine using the transmitter or touch key with ignition ***off***, and disconnect the battery within one minute. If disconnected after this time, or when immobilisation is in effect, the siren will sound for 30 seconds.

iv) Disconnect the **negative** (earth; black; '-') battery cable first, and re-connect last. If the battery positive terminal is inadvertently earthed (e.g. when using a spanner) whilst the negative terminal is still connected, the resultant short circuit with heavy sparking and current flow could cause serious burns.

Battery reconnection:

i) Check again that all electrical loads are switched off.
ii) Beware that on reconnection, the headlamp pods will cycle once up and down.
iii) Whenever the battery is re-connected, or a 'jump' start attempted, first ensure that the keys are removed from the vehicle, since under certain circumstances the central door locking may operate and lock both doors.
iv) Connect the positive battery cable first, followed by the negative (earth) cable.
v) After reconnection, a change in the engine performance characteristics may be noted for a period whilst the computer controlled engine management system 're-learns' some of its settings. The duration of this period will depend on driving style, but may be shortened by steady cruising in 4th gear at about 40 mph.
vi) On non-USA cars, re-programme the window switches: Lower a window fully and keep the switch pressed for 5 to 10 seconds until a 'click' is heard. Then raise the window fully and keep the switch pressed until a 'click' is heard. Repeat the procedure for the opposite window. Failure to re-programme the switches will result in neither the 'one touch' nor obstruction sensing features operating.

Battery Charging

If the state of charge of the battery is in doubt, the specific gravity (s.g.) of the electrolyte should be checked using a hydrometer. An s.g. of 1.22 is typical of a 65% state of charge, considered to be the minimum serviceable condition.

If the hydrometer indicates that the battery needs recharging, the battery should first be removed to a well ventilated area to avoid a build up of fumes in the luggage compartment and to prevent damage to the car's electrical system. Observe the safety precautions listed above when removing the battery. Take care when handling the battery to avoid sharp knocks or shocks, and keep as upright as possible. Beware of the considerable weight of a battery, and take necessary precautions against personal injury.

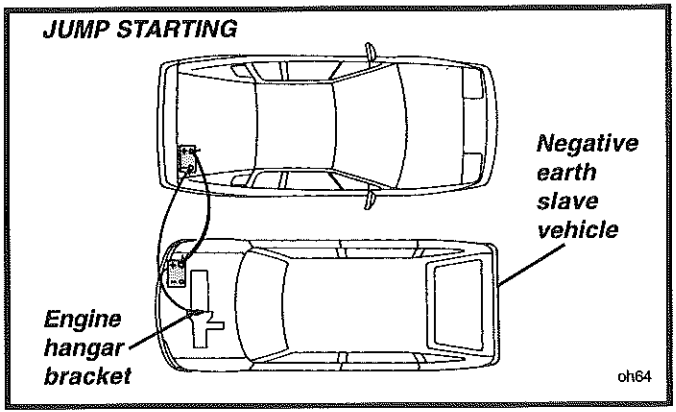
Charge the battery following the charger manufacturers instructions while observing these basic rules:

- If the specific gravity is over 1.22, there is no need to charge the battery and charging attempts will only increase the possibility of undesirable overcharge effects.
- Check that the electrolyte level is between the upper and lower markers on the battery case, and if necessary add distilled water.
- Depending on state of charge, temperature and charger capacity, the battery will accept a charging rate of between 3 and 50 amps. However, at high rates the battery may eject electrolyte through the vents, and/or become hot; over 52°C (125°F). Reduce the charging rate and/or stop for a time to allow the battery to cool.

When the battery is fully charged (s.g. approx. 1.28), refit into the battery tray and secure with the clamp channel. Re-connect the positive lead first and the negative last.

Electrical Accessories

If fitting electrical accessories of any description, note that these also must be of **negative earth** polarity.



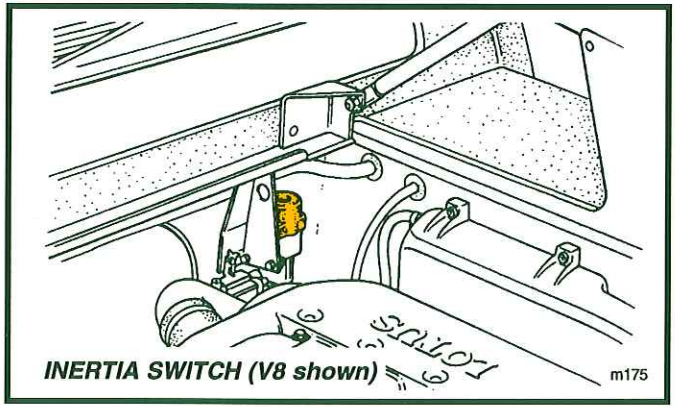
Owners should note that the only approved extras and conversions are those which are specified by the Factory and carried out by the Factory or by an authorised dealer. Lotus Cars Ltd. does not accept any liability whatsoever for defects which arise from extras or conversions which are not factory approved. Inexpert modifications or additions to the electrical system could jeopardise safety.

'Jump' Starting

If the battery becomes discharged to the extent that the engine cannot be started, proprietary good quality 'jumper cables' may be used to connect with the battery of a second vehicle in order to provide the energy necessary for starting.

WARNING: It is most important that the correct procedure is followed in order to avoid damage to either car's electrical system, and most importantly, to minimise the danger of a spark induced battery explosion. Check that the slave vehicle also has a NEGATIVE EARTH electrical system.

i) With the engine of the slave vehicle running at a fast idle, use one jumper cable (red) to connect the positive (+) terminals of both batteries.
ii) Connect one end of the other jumper cable (black) to the negative (-) terminal of the discharged battery.
iii) A spark will occur when the other end of this cable (the final connection) is connected to an earth on the slave vehicle. This connection should therefore be made to a point away from the battery, and away from any fuel vapour area or moving parts. An engine hanger bracket is often ideal.
iv) Start the car in the usual way, and run at a fast idle.
v) A spark will occur at the first disconnection of a jumper cable, so it is essential that the first disconnection is made from the slave vehicle earth. Both batteries (especially the discharged one) will be 'gassing' heavily at this time, and if the first disconnection is made at a battery terminal, there is a danger that the hydrogen gas may be ignited by the spark with a resultant explosion.
vi) Have the cause of the flat battery investigated and rectified.



INERTIA SWITCH (V8 shown)

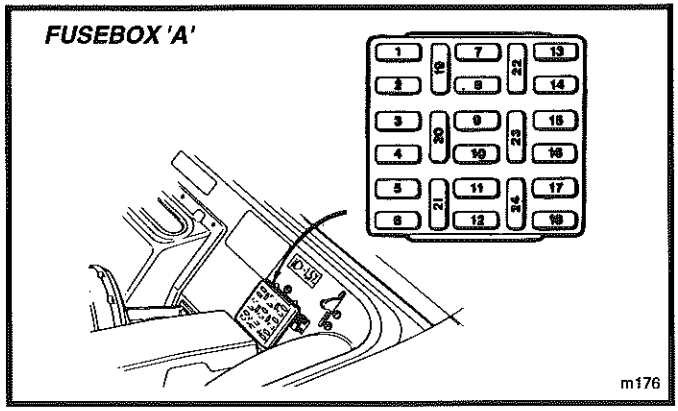
vii) Ensure that on non-USA cars, the window system is re-programmed (see 'Battery Reconnection').

Inertia Switch

The safety inertia switch is designed to operate on impact, such as will occur in an accident, to switch off the fuel pump, and thus minimise any fire hazard.

The inertia switch is mounted at the right hand front corner of the engine bay, beneath the engine cover and is reset by pressing the rubber diaphragm button on the top of the unit.

The control module for the central door locking system also incorporates an inertia switch, which operates on impact to unlock both doors. This switch resets automatically.

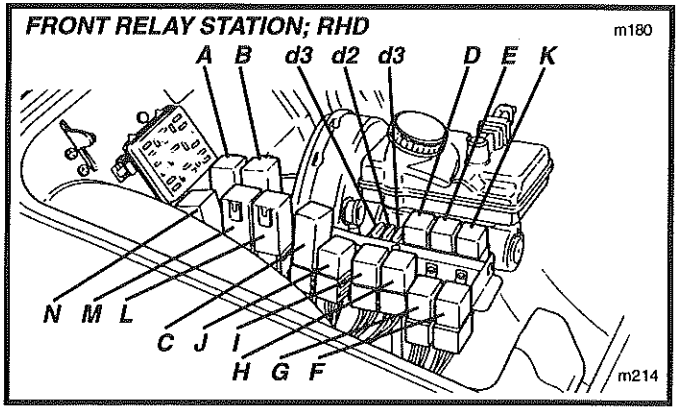


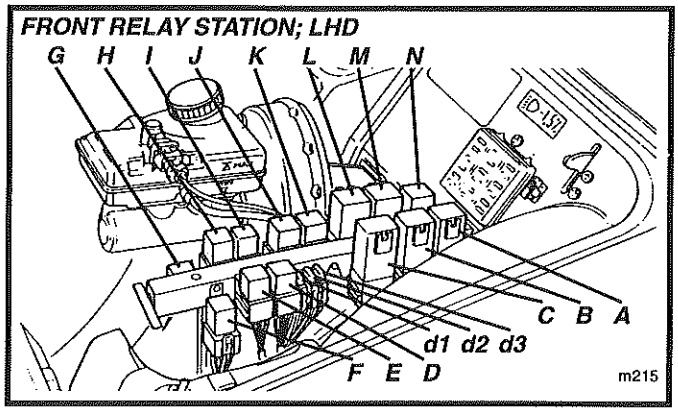
Fuses

The main fusebox is located on the driver's side of the cabin front bulkhead in the front luggage compartment, and is protected by a transparent cover. The fuses are numbered, and coloured according to their amperage rating, and may be pulled out from their slots using the fuse extractor tool stowed in the vehicle tool kit.

Main Fusebox 'A' - front luggage compartment

Slot	*Rating*	*Circuit*
A1	10A	Central door locking
A2	7.5A	Turn indicators
A3	5A	Rear fog lamps
A4	5A	Climate controls
A5	5A	LH side & tail lamps, logic module, radio illumination, cigar lighter illumination, front fog lamp control, centre console illumination
A6	5A	RH side & tail lamps, rheostat module
A7	15A	Cigar lighter
A8	15A	Interior fan
A9	7.5A	Air conditioning control
A10	15A	Headlamp lift motor
A11	15A	Headlamp lift motor
A12	20A	Window lift motor (passenger)
A13	20A	Window lift motor (driver)
A14	5A	Interior lamps, horn control, logic module, headlamp flash control
A15	15A	Hazard & stop lamps
A16	10A	ABS ignition supply
A17	5A	Ignition services, mirrors, alarm controller
A19	10A	Radio, front DLC
A20	15A	Windscreen wash/wipe
A21	5A	Instruments, logic box, lights-on buzzer, low fuel delay module, day lamps control (SWE, CAN)
A22	3A	Heated door mirrors
A23	2A	Window voltage module
A24	15A	Front fog lamps





Relay Station & Fusebox 'D', front luggage compartment

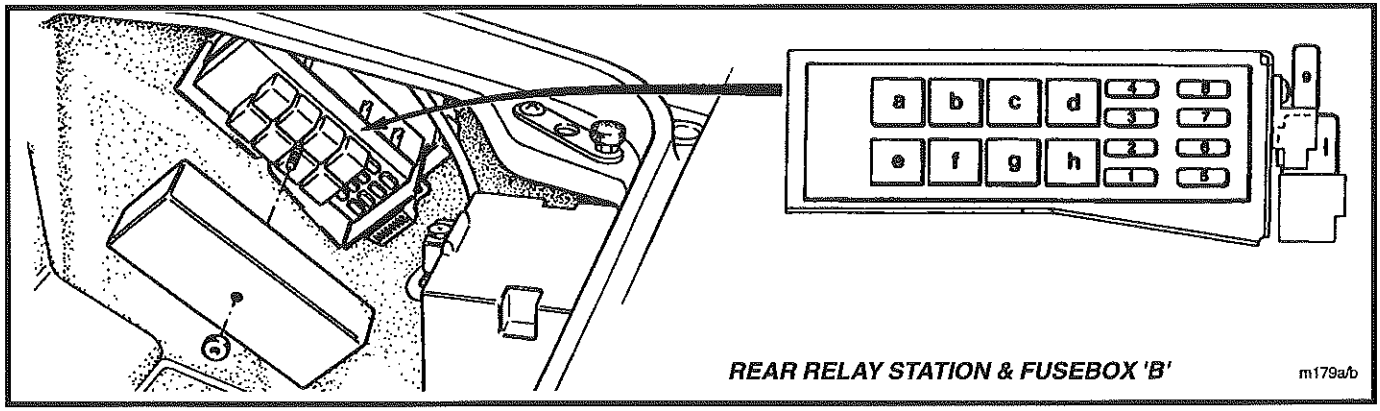
Additional fuses, and many of the relays and delay units are fitted along a relay mounting bracket ahead of the main fusebox. A protective plastic cover, shields this equipment from luggage being loaded into the front compartment. To remove the cover, unscrew the two fingernuts, and withdraw the cover upwards and forwards to unhook from the rear end of the bracket.

Fuses:

Slot	*Rating*	*Circuit*
D1	15A	Radiator fan RH
D2	15A	Radiator fan centre
D3	15A	Radiator fan LH

Relays:

Ref.	*Function*
A	Non-USA cars: Window voltage module USA cars: Bridging link
B	Headlamp pod delay module
C	Rear fog lamp module
D	Front fog lamp relay
E	Horn relay
F	Radiator fans relay
G	Ignition power relay
H	Dip beam relay
I	Main beam relay
J	Start drop out relay
K	Radio 'key-in' relay
L	Rheostat module
M	Low fuel delay module
N	Wash/wipe delay module



Relay Station & Fusebox 'B', rear luggage compartment

Fuses and relays for the engine management system are located in a relay station mounted at the right hand side of the rear luggage compartment, on the rear face of the wheelarch. To access the station, release the finger nut and pull off the protective plastic cover.

Fuses - 4 cylinder models:

Slot	*Rating*	*Circuit*
B1	10A	ECM power
B2	25A	Fuel filler flap
B3	15A	Fuel pump & injection
B4	7.5A	ECM & direct ignition
B5	10A	A.C. compressor
B6	7.5A	Reverse lamps & vacuum pump
B7	10A	Evap. canister purge solenoid., O2 heater, wastegate solenoid
B8	5A	Throttle jack & EBPV solenoids
B9	30A	Vacuum pump

Fuses - V8 models:

Slot	*Rating*	*Circuit*
B1	25A	Fuel filler flaps
B2	5A	ECM & coolant pump
B3	25A	Primary fuel pump & injectors
B4	15A	Secondary fuel pump
B5	15A	Ignition coils
B6	10A	Engine ignition supply
B7	7.5A	Ignition controls
B8	10A	A.C. compressor & reverse lamps
B9	30A	Air pump

Relays - 4 cylinder models:

Ref.	*Function*
a	Oil tell tale rpm relay
b	Throttle jack/EBPV relay
c	Fuel pump & injector relay
d	Ignition relay
e	Secondary injector resistor

f Fuel filler flap relay
g a.c. compressor relay
h Starter motor solenoid relay
i Vacuum pump control module

Relays - V8 models:

Ref. Function

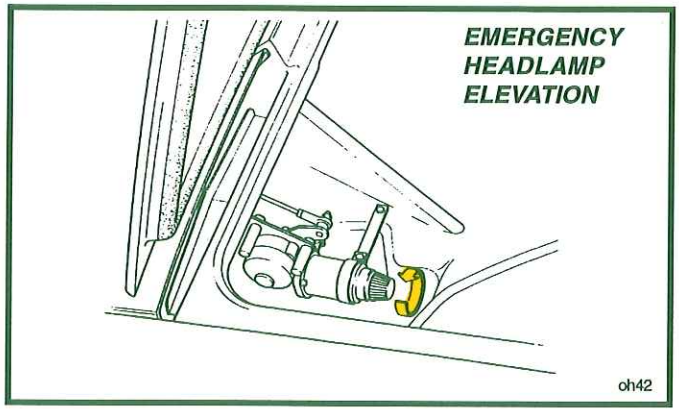
a Coolant pump relay
b Secondary fuel pump
c Primary fuel pump & injectors relay
d Ignition power relay
e Oxygen sensor heater control relay
f Fuel filler flap relay
g A.C. compressor
h Starter motor solenoid relay
i Air pump relay

Fuses for the vehicle alarm system (5 amp) and horn (20 amp) are located beneath the driver's side fascia. Any other electrical equipment not illustrated, should be accessed only by a Lotus dealer with the necessary expertise.

Upgrading a fuse rating, or interchanging any of the relays or modules, could result in permanent damage to a circuit or electrical component. If in doubt, consult your Lotus dealer.

Fuse colours:

2A - Black;
4A - Pink;
7.5A - Brown;
15A - Light Blue;
25A - Clear.
3A - Violet;
5A - Orange;
10A - Red;
20A - Yellow;



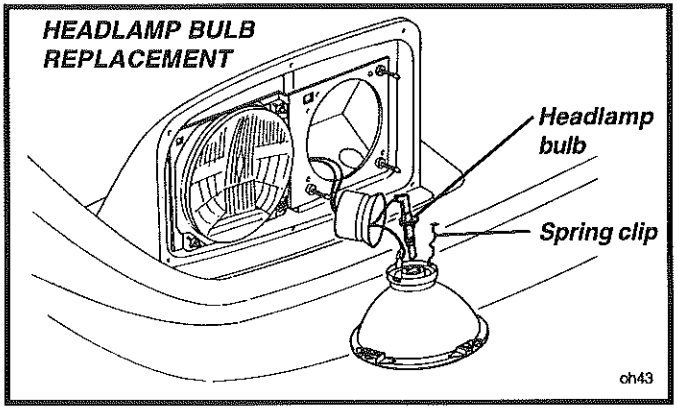
BULB REPLACEMENT

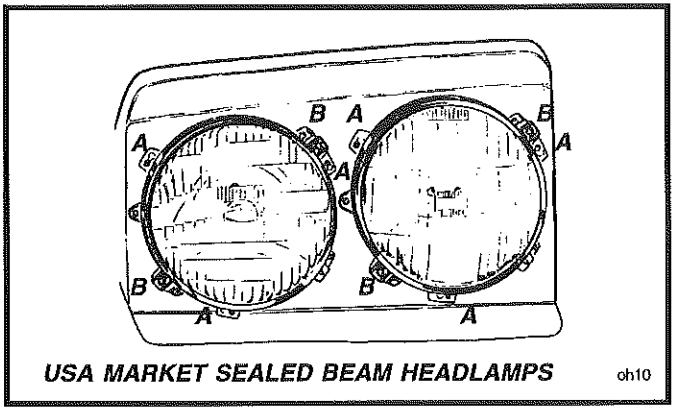
Headlamp Emergency Elevation

Each headlamp pod is raised and lowered by an electric motor located behind the pod in the front luggage compartment. For maintenance, or in an emergency, the pods may be raised manually by turning the motor shaft using the knob at the rear of the motor. If necessary, unplug the electrical connector block.

Headlamp Masking

If a right hand drive car is to be used in a left hand drive territory, or vice-versa, it is necessary to mask certain areas of the dip beam headlamp lenses in order to prevent dazzle. Masking kits using self adhesive film are available from motoring organisations. Note that only the two outboard (dip beam) headlamps need be masked.





Headlamp Bulbs - Non USA cars: Raise the headlamp pods by switching on the headlamps, or winding up manually (see above). Remove the screws securing the plastic headlamp surround, and pull out the headlamp assembly from its three nylon bushes. Unplug the connector block, release the spring clip securing the bulb into the headlamp unit and withdraw the bulb.

NOTE - Do not touch the halogen bulb glass envelope with the fingers, as the greasy deposit left behind will greatly reduce bulb life. Use a paper tissue to handle the bulb.

Fit the new bulb into position, retain with the spring clip, plug in the connector block and snap the headlamp assembly into its three nylon bushes. Replace the headlamp surround.

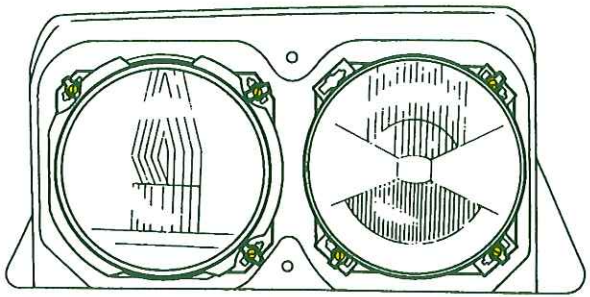
Note that variations to the headlamp specification may apply in different countries.

Headlamp Sealed Beam Unit - USA market cars: Raise the headlamp pods by switching on the headlamps, or winding up manually (see above), and remove the black headlamp surround. Slacken the three small screws securing the chrome rim, and rotate the rim counterclockwise to remove. Withdraw the light unit and disconnect the harness.

Replace in reverse order noting that the outboard lamps contain both main and dip beam filaments, and the inboard lamps main beam only. After renewing a headlamp unit, have the beam alignment checked promptly.

A = Headlamp rim retaining screws
B = Headlamp aiming screws

NON-USA TYPE HEADLAMP AIMING SCREWS



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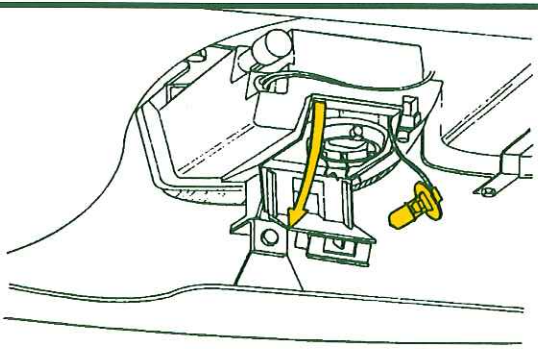
Headlamp Beam Alignment: Switch on the headlamps and remove the black headlamp surround. Bulb type headlamps are provided with three aiming screws, and sealed beam type headlamps with two. The dip beam alignment must comply with legal requirements, and should be adjusted only by competent persons using suitable beam setting equipment.

After adjustment, replace the headlamp surround.



FRONT FOG LAMP BULB

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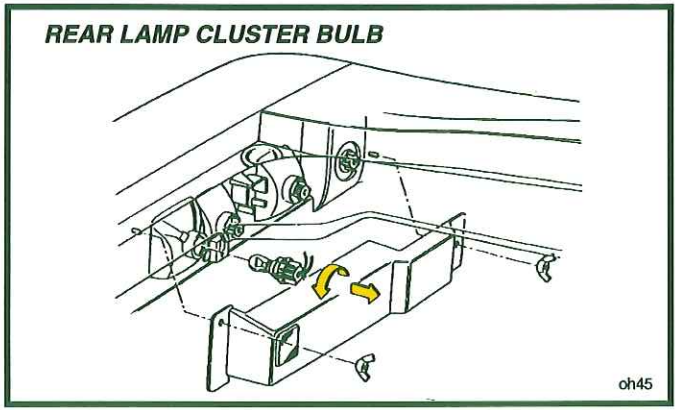
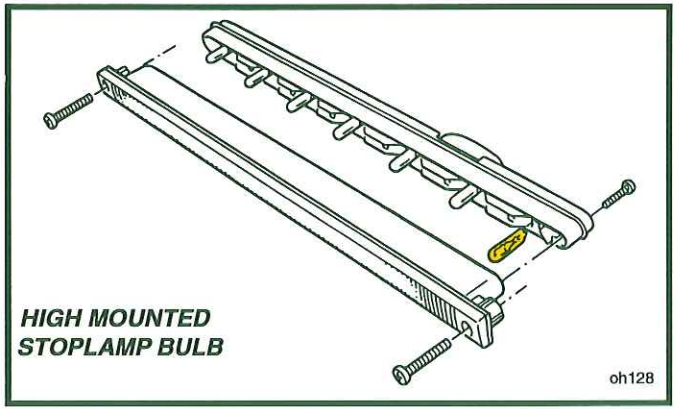
Front Fog Lamp Bulb: For access to a fog lamp bulb, the front side undershield must first be removed. Then hinge down the bulb cover on the lamp body, release the bulb retaining wire clip, and withdraw the bulb with integral lead. Unplug the lead connector.





Rear Lamp Cluster: The rear lamp cluster bulbs are accessible from within the rear luggage compartment. Remove the protective cover from the back of the lamp after releasing the two wing nuts and washers, and the water drain hose. Twist the appropriate bulb holder counter-clockwise to remove from the lamp, replace the bulb, and twist the bulb holder back into position.

Always refit the lamp cover to protect the lamp from damage caused by any luggage.

The festoon bulb in a luggage compartment illumination lamp, may be accessed simply by prising out the lamp from the rear lamp cover.

Front Sidelamp & Turn Indicator: Remove the two screws securing the lens, and push and twist the bayonet fitting bulb.

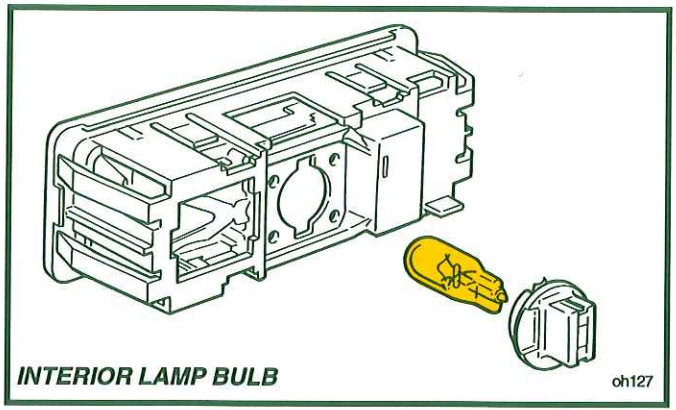
Side Repeater Lamp (non-USA cars): Pull the lamp out from the body aperture to access the bulb.

Side Marker Lamp (USA market cars): Remove the two screws securing the lamp to the bumper, and twist the bulb holder a quarter turn counterclockwise. Pull the capless bulb from the bulbholder.

High Mounted Stop Lamp (if fitted): Remove the two screws securing the lamp to the aerofoil. Remove the five screws, including the sealed centre screw, securing the two parts of the lamp body together. Pull out one of the seven capless bulbs.

Licence Plate Lamp & Door Edge Warning Lamp: Release the two screws and withdraw the lamp sufficiently to enable the festoon type bulb to be replaced. Refit the lamp ensuring that the gasket is correctly seated, and tighten the two screws.

Front Luggage Compartment Lamp: The festoon bulb in the front luggage compartment lamp, may be accessed after prising out the lamp from the bonnet panel.



INTERIOR LAMP BULB oh127

Interior Lamp: Prise the lamp out of the rear window surround, and twist the bulb holder a quarter turn to release from the lamp body. Pull the capless bulb straight out of the holder.

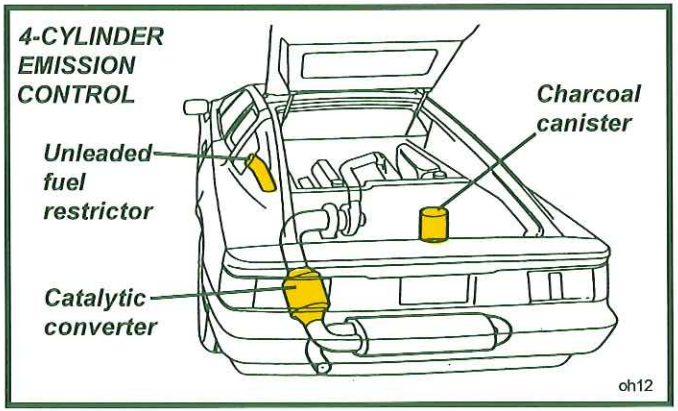
Instrument & Tell Tale Bulbs: The replacement of these bulbs should be entrusted to your dealer.

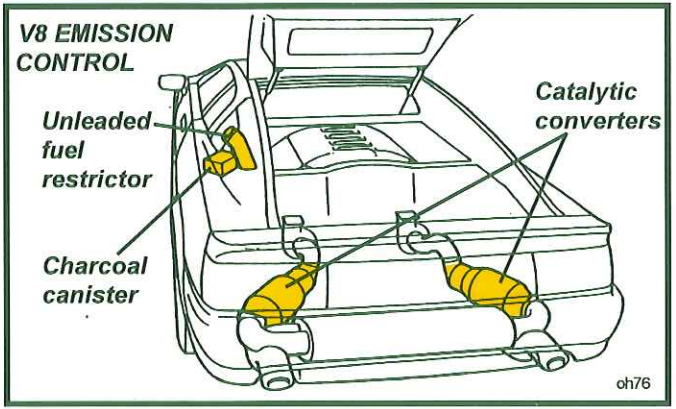
REPORTING SAFETY DEFECTS IN THE USA

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Lotus Cars Limited.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Lotus Cars Ltd.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.





VEHICLE EMISSION CONTROL

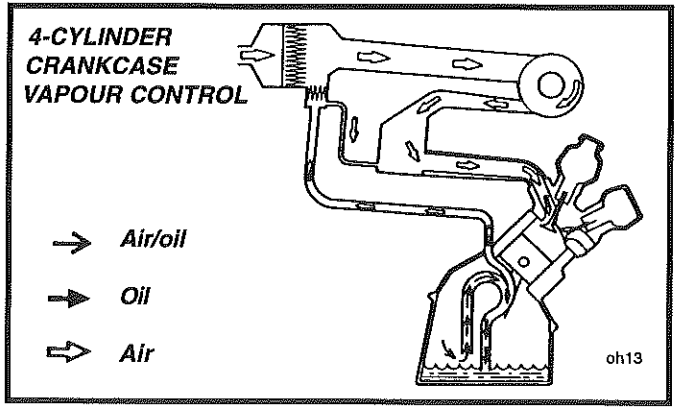
Various systems are used to control vehicle emissions:

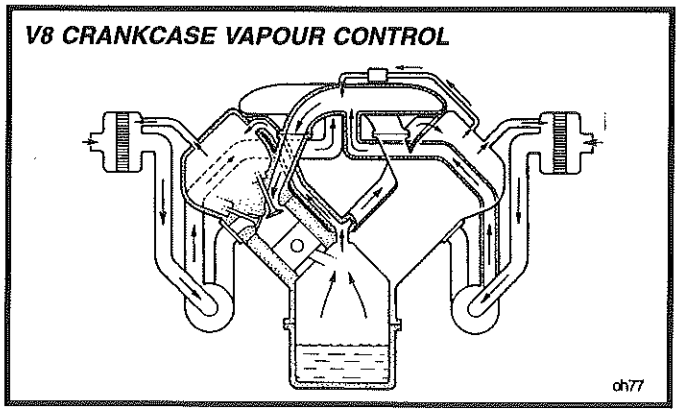
Exhaust Emission Control

Control of exhaust emissions is accomplished by careful engine design and accurate fuel metering. In addition, exhaust system catalytic converters are used in conjunction with oxygen sensor feedback control to reduce the noxious content of the exhaust gas. Complete effectiveness of the system depends on the correct maintenance of the engine management/ fuel injection system, and the use of unleaded fuel.

Evaporation Control

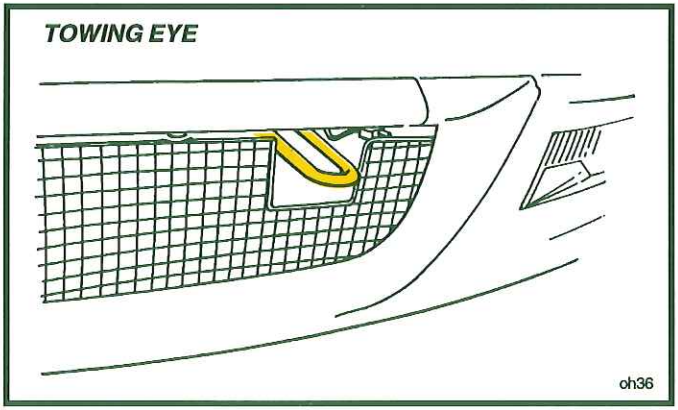
The fuel evaporation control system prevents gasoline vapours in the fuel tank and intake system, from escaping to atmosphere by routing the vapours through a charcoal canister when the engine is stopped. When the engine is running, fresh air is drawn through the canister, purging the gasoline vapours from the charcoal. The air and vapour mixture is then routed to the engine, and burned during engine combustion.





Crankcase Vapour Control

Crankcase vapours are fed into the engine air induction system and burned in the combustion chambers.



Towing Eye

A towing eye is provided in the radiator air intake aperture for vehicle recovery purposes, such as winching onto a car transporter. Only in an emergency should the vehicle be towed, and for the shortest distance necessary, during which time the following precautions must be taken:

WARNING:

- **Use only towing equipment designed specifically for this purpose, or damage to the vehicle may be caused, or safety jeopardised.**
- **Ensure that the key is used to unlock the steering column, the parking brake is released, and the transmission is in neutral.**
- **Be aware that without the engine running, the brake servo will not function, and much higher brake pedal pressures will need to be applied.**
- **Ensure that compliance is made with all local legislation applicable to cars being towed.**

Vehicle Loading

Two labels on the car carry information about the maximum weight that can be carried:

The Tyre Loading Information label is located in the door aperture, and includes information about the weight the car can carry; people, luggage, options.

The Certification label on the bulkhead in the front luggage compartment, states the gross vehicle weight, which is the maximum permissible weight, including the vehicle, people, fuel and luggage. Ensure that the gross weight, total or axle, is never exceeded, or the vehicle or tyres will be overloaded and could result in an accident.

INDEX

Recommended Lubricants & Technical Data

RECOMMENDED LUBRICANTS

Engine

In order to ensure the longevity and reliability of the vehicle, it is most important that only the specified lubricants are used. It is a false economy to use lower quality oils which may degrade significantly before the next change interval and provide inadequate protection before the end of the term. High oil consumption may also result. Synthetic oils, whilst subject to a cost premium, are most resistant to viscosity break down, and promote efficient and durable engine operation.

4-Cylinder

Whenever possible, one of the specific products listed below should be used, at least one of which should be available from most good retail outlets. The listing is alphabetical and is in no order of preference.

Above 0°C	*Viscosity*	*Below 0°C*	*Viscosity*
Agip F1 Super Motor Oil	15W/50	**Agip** Sint 2000	10W.40
Castrol Formula RS	10W/60	**BP** Visco 2000+	10W.40
Elf Competition	20W/50	**Castrol** Formula RS	10W/60
Elf Competition S	15W/50	**Elf** Sporti	15W/40
Mobil 1	0W/40 or 5W/50	**Mobil** 1	0W/40 or 5W/50
Valvoline Racing Oil	20W/50	**Texaco** Havoline X1	10W/40
		Valvoline XLD	15W/40

V8

Lotus specifically recommends the use, in all climatic conditions, of **Mobil 1 0W/40, 5W/50 or 5W/30** engine oil. Otherwise, one of the products in the following alphebetical lists should be used, one of which should be available from most good retail outlets.

Alternative Product to Mobil 1	*Viscosity*
Agip F1 Super Motor Oil	15W/50
Castrol Formula RS	10W/60
Elf Competition	20W/50
Elf Competition S	15W/50

Note that the viscosity rating is made up of two numbers; the first, identified by a 'W' suffix is the winter (or low temperature) viscosity grade, and the second number the summer or high temperature viscosity grade. i.e. a 20W/50 oil performs like an SAE 20 oil at low temperature and an SAE 50 oil at high temperature.

If none of the above named products are available, a good quality oil meeting API SG or SH (printed on the oil container) should be used with the following viscosity grades:
A **maximum** low temperature viscosity grade of **15W**; and a **minimum** high temperature viscosity grade of **40**.
e.g. 15W/40, 10W/60, 5W/50 etc.

Refill capacity, inc. filter	- 4 cylinder;		6.3 litre (11.1 imp.pt; 6.7 US qt)
	-V8		6.5 litre (11.4 imp.pt; 6.9 US qt)
Difference between high & low dipstick marks		- 4 cylinder:	0.85 litre (1.5 imp.pt; 0.9 US qt)
		- V8:	1.0 litre (1.8 imp.pt; 1.0 US qt).

Transmission (gearbox and final drive)

Lotus strongly recommends that for optimum protection under the most arduous conditions, combined with good cold shift performance, only **Castrol TAF-X 75W/90** (Lotus part number A082F6552S) is used in the transmission. If the car is operated in continuously very low ambient temperatures, Mobil SHC 75W/90 may by used.
Capacity: 3.0 litre (5.3 imp.pt; 3.2 US qt)

Power Steering

Automatic Transmission Fluid/Power Steering Fluid: Type Dexron II.

Front Hubs

Lubricant Type: Lithium complex wheel bearing grease. Consistency: NLGI No.2

Brake & Clutch System

Non-mineral type hydraulic fluid meeting DOT 4 **ONLY**
Check that container is marked with yellow and black symbol:

Cooling System Additive

Type:		Mono-ethylene glycol blend
Recommended Product:		Castrol Antifreeze or Shellsafe Plus (do not intermix)
Concentration:		Recommended 50%; minimum 25%;
Quantity Required (@ 50%)	- 4 cylinder;	12 litre (21 imp.pt; 12.7 US qt)
	- V8;	7.5 litre (13 imp.pt; 8 US qt)

Tyres

Type	- GT3			Goodyear Eagle GS-A
	- V8; V8GT			Michelin Pilot SX MXX3
	- Sport 350			Pirelli P Zero
Size	- front	- GT3		215/40 ZR17
		- V8; V8GT; Sport 350		235/40 ZR17
	- rear	- GT3		245/45 ZR17
		- V8; V8GT		285/35 ZR18
		- Sport 350		295/35 ZR18
Pressure (cold)	- GT3	- normal use	- front	2.0 bar (29 lb/in²)
			- rear	2.1 bar (30.5 lb/in²)
	- V8; V8GT	- normal use	- front & rear	2.0 bar (29 lb/in²)
		- sustained speeds over 240 km/h (149 mph)	- front & rear	2.5 bar (36.5 lb/in²)
	- Sport 350	- all usage	- front & rear	2.2 bar (32 lb/in²)
Temporary spare	- size			T125/80 R16
	- pressure			4.2 bar (60 lb/in²)
	- max speed			80 km/h (50 mph)

Wheels

Type	- GT3; V8; V8GT		Light alloy monobloc, 5 bolt fixing
	- Sport 350		Magnesium alloy monobloc, 5 bolt fixing
Size	- front	- GT3	7J x 17 ET23.3
		- V8; V8GT; Sport 350	8.5J x 17 ET19
	- rear	- GT3	8.5J x 17 ET30
		- V8; V8GT; Sport 350	10J x 18 ET17
Wheel bolt torque			10 daNm (74 lbf.ft)

Dimensions

Overall length			4369 mm (172.0 in)
Overall width	- excl. mirrors	- GT3	1867 mm (73.5 in)
		- V8; V8GT; Sport 350	1883 mm (74.1 in)
	- inc. mirrors		1981 mm (78.0 in)

Overall height (at kerb weight)			1150 mm (45.3 in)	
Wheelbase			2420 mm (95.3 in)	
Front track	- front	- GT3	1529 mm (60.2 in)	
		- V8; V8GT; Sport 350	1520 mm (59.8 in)	
	- rear	- GT3	1544 mm (60.8 in)	
		- V8; V8GT; Sport 350	1520 mm (59.8 in)	
Ground clearance (at kerb weight)			105 mm (4.1 in)	
Approach angle			7°	
Departure angle			19°	
Turning circle (between kerbs)			10.6 m (34 ft 9 in)	
Kerb weight	- total	- GT3	1229 kg (2710 lb)	>
		- V8; Sport 350	1380 kg (3043 lb)	>
		- V8GT	1325 kg (2922 lb)	>
	- front	- GT3	522 kg (1150 lb)	>
		- V8; Sport 350	590 kg (1301 lb)	> inc. full fuel tank
		- V8GT	545 kg (1202 lb)	>
	- rear	- GT3	707 kg (1557 lb)	>
		- V8; Sport 350	790 kg (1742 lb)	>
		- V8GT	780 kg (1720 lb)	>
Gross weight	- total	- GT3	1566 kg (3453 lb)	}
		- V8; V8GT; Sport 350	1607 kg (3543 lb)	}
	- max. allowable front	- GT3	680 kg (1499 lb)	} inc. occupants
		- V8; V8GT; Sport 350	675 kg (1488 lb)	} & luggage
	- max. allowable rear	- GT3	896 kg (1976 lb)	}
		- V8; V8GT, Sport 350	942 kg (2077 lb)	}
Trailer towing			Not permissible	

Capacities

Engine refill, inc. filter	- 4 cylinder;	6.3 litre (11.1 imp.pt; 6.7 US qt)
	-V8	6.5 litre (11.4 imp.pt; 6.9 US qt)
Difference between high & low dipstick marks	- 4 cylinder:	0.85 litre (1.5 imp.pt; 0.9 US qt)
	- V8:	1.0 litre (1.8 imp.pt; 1.0 US qt).
Transmission oil		3.0 litre (5.3 imp. pt; 3.2 US qt)

Cooling system	- 4 cylinder	24 litre (5.25 imp.gall; 25 US qt)
	- V8	15 litre (3.25 imp.gall; 16 US qt)
Fuel tanks (combined)		64.5 litre (14.2 imp.gall; 17.0 US gall)
Brake & clutch fluid		3.5 litre (6.2 imp.pt; 3.7 US qt)
Power steering fluid		2.0 litre (3.5 imp.pt; 2.1 US qt)
R134a refrigerant	- GT3	1 kg (2.2 lb)
	- V8	1.2 kg (2.6 lb)

Front Suspension

Type		Independent. Upper and lower wishbone; co-axial coil spring/telescopic damper unit; anti-roll bar.
Mid-laden ride height (driver & passenger + half tank of fuel) for geometry check:		
- front	- GT3	180 mm below chassis front crossmember
	- V8; V8GT; Sport 350	170 mm below chassis front crossmember
- rear	- GT3	174 mm below chassis rear hoop
	- V8; V8GT; Sport 350	164 mm below chassis rear hoop
Camber	- GT3	- 0.9°; ± 0.2° (- 0°54'; ± 12') within 0.2° (0°12') side to side
	- V8; V8GT; Sport 350	- 0.25°; ± 0.25° (- 0°15'; ± 15') within 0.2° (0°12') side to side
Castor		+ 3.2°; ± 0.2° (+ 3°12'; ± 12') within 0.2° (0°12') side to side
Alignment	- GT3	1.0 mm toe **out** overall; ± 0.5 mm (0.14° toe **out** overall; ± 0.07°) {0°8' toe **out** overall; ± 4'}
	- V8; V8GT; Sport 350	1.5 mm toe **out** overall; ± 0.5 mm (0.2° toe out overall; ± 0.07°) {0°12' toe out overall; ± 4'}
Steering axis inclination		9.8° (9°47') nominal
Front hub endfloat		0.05 mm (0.002 in) maximum

Rear Suspension

Type		Independent. Upper and lower transverse link; box section trailing radius arm; co-axial coil spring/telescopic damper.
Mid-laden ride height (driver & passenger + half tank of fuel) for geometry check:		
- front	- GT3	180 mm below chassis front crossmember
	- V8; V8GT; Sport 350	170 mm below chassis front crossmember
- rear	- GT3	174 mm below chassis rear hoop
	- V8; V8GT; Sport 350	164 mm below chassis rear hoop
Camber	- GT3	- 1.0°; ± 0.2° (- 1°0'; ± 12') within 0.2° (0°12') side to side
	- V8; V8GT; Sport 350	- 1.5°; ± 0.25° (- 1°30'; ± 15') within 0.2° (0°12') side to side
Alignment		1.5 mm toe in **each side**; ± 0.5 mm (0.2° toe in **each side**; ± 0.07°) {0°12' toe in **each side**; ± 4'}

Electrical

Light Bulbs			*Wattage*	*Type*
Headlamps	- Dom/Exp	- outer (dip)	60/55	H4 P43t
		- inner (main)	55	H1 P14.5s
	- USA	- outer (dip & main)	37½/60	4002 sealed beam
		- inner (main)	50	4001 sealed beam
Front side/parking lamps			5	W2x4.6d
Side repeater lamps (not USA)			5	W2x4.6d
Front & rear sidemarker lamps (USA)			5	W2x4.6d
Front & rear turn indicators			21	SCC BA15s
Stop/tail lamps			5/21	SBC BAY15d
High mounted stop lamp (USA)			2.3	n6p capless
Rear fog lamps (not USA)			21	SCC BA15s
Reversing lamps			21	382/1156 P25-1
Front fog lamps			55	H3 Pk22s
Licence plate lamps			5	SU 8.5-8
Door edge warning lamps			5	SU 8.5-8
Interior lamp			5	W5W 7E capless
Front & rear luggage compartment lamps			5	SU 8.5-8

System voltage/polarity		12V negative earth
Alternator		90A
Battery	- type	Tungstone 088
	- cranking power	570 amps (SAE)
	- reserve capacity	100 minutes
	- dimensions - length	154 mm
	- width	175 mm
	- height	206 mm

Engine - 4 cylinder

Designation	- Turbocharged 2.0 litre	Lotus type 920
No. of cylinders & configuration		In line 4
Capacity		1973 cm^3 (120.4 in^3)
Bore		95.27 mm (3.751 in)
Stroke		69.20 mm (2.724 in)
Compression ratio		8.0:1
Valves & actuation		4 valves per cylinder, twin overhead cam, direct acting
Camshaft drive		Synthetic toothed belt
Compression pressure		9.5 bar (140 lb/in^2) minimum
Maximum boost pressure		0.97 bar (14 lb/in^2)
Firing Order		1,3,4,2
Spark plugs	- type	NGK BPR6EKN
	- gap	0.9 - 1.0 mm (0.035 - 0.039 in)
Maximum engine speed		7,450 rpm
Belt tension	- toothed timing belt	95 units COLD using Burroughs gauge T000G0025J 100 - 110 Hz using Clavis gauge T000T1398F
	- alternator 'V' belt	12 mm (0.5 in)*
	- a/c compressor 'V' belt	9 mm (0.35in)*
	- PAS/water pump 'V' belt	9 mm (0.35in)*

* total movement using moderate finger pressure on longest belt run

Fuel system	G.M. electronic multi-point injection.
Fuel requirement	Super **Unleaded** (98 RON) or Premium **Unleaded** (95 RON). 91 RON **Unleaded** may be used for short periods but performance & efficiency will be reduced for that period

Idle CO level (hot)	0.3 - 1.2% before catalyst
HC level (as Hexane)	300 ppm max. before catalyst
Max power (80/1269/EEC)	178.8 kW (240 bhp) @ 6,250 rpm
Max torque (80/1269/EEC)	294 Nm (217 lbf.ft) @ 3,750 rpm

Engine - V8

Designation	Lotus type 918
No. of cylinders & configuration	V8
Aspiration	Twin turbocharged
Capacity	3506 cm^3 (213.9 in^3)
Bore	83.0 mm (3.27 in)
Stroke	81.0 mm (3.19 in)
Compression ratio	8.0:1
Valve actuation	4 valves per cylinder, double overhead cams per bank
Camshaft drive - primary stage	Inverted tooth chain
- secondary stage	Synthetic toothed belt for each cylinder bank
Firing order	1,5,3,7,4,8,2,6
Recommended maximum continuous engine speed	6,500 rpm
Fuel shut off engine speed - V8	7,000 rpm
- V8GT; Sport 350	7,400 rpm
Idle speed (hot)	850 rpm
Maximum boost pressure	0.75 bar
Spark plugs - type	NGK BKR6EKC
- gap	0.9 mm (0.035 in)
Fuel injection type	Fully sequential electronic
Fuel requirement (see page 48)	98 RON Unleaded ('Super Unleaded' in U.K.) - recommended fuel for optimum performance and economy 95 RON Unleaded ('Premium Unleaded' in U.K.) - may by used if 98 RON Unleaded is unavailable, but maximum power will be reduced
Minimum oil pressure (hot)	1.4 bar at idle 2.4 bar at 3,500 rpm 3.1 bar at 6,500 rpm

Idle CO level (hot)	0.3 - 1.2%) before
HC level (as Hexane)	300 ppm max.) catalyst
Max. power (89/491/EEC)	260 kW (350 bhp) @ 6,500 rpm
Max. torque	400 Nm (295 lbf.ft) @ 4,250 rpm

Transmission

Type — Transaxle incorporating manual 5 speed & reverse gearbox, with syncromesh on all forward gears, and reverse gear brake. Spiral bevel crownwheel & pinion, and 4 bevel gear differential.

Designation - GT3 — UN1-028
- V8 — UN1-027

Gear	*Internal Ratio*		*Final Drive Ratio*		*mph/1000 rpm*		*km/h/1000 rpm*	
	-027	*-028*	*-027*	*-028*	*-027*	*-028*	*-027*	*-028*
First	3.36:1		3.89:1	4.11:1	5.7	5.4	9.2	8.7
Second	2.06:1		3.89:1	4.11:1	9.4	8.9	15.1	14.3
Third	1.38:1	1.48:1	3.89:1	4.11:1	14.0	13.2	22.5	21.3
Fourth	1.04:1		3.89:1	4.11:1	18.6	17.6	29.9	28.3
Fifth	0.76:1		3.89:1	4.11:1	25.5	24.1	41.0	38.8
Reverse	3.54:1		3.89:1	4.11:1	5.4	5.1	8.8	8.3

Brakes

Type — Ventilated front & rear discs. Four piston front calipers. Single piston sliding rear calipers.

Disc size	- front	- GT3; V8; V8GT — 296 x 28
		- Sport 350 — 320 x 32
	- rear	- GT3, V8, V8GT — 300 x 22
		- Sport 350 — 320 x 26
Operation		Tandem master cylinder with vacuum servo assistance.
Anti-lock control		Kelsey Hayes electro-hydraulic EBC-430.
ABS control logic		4 channel sensing, 3 channel control.
Parking brake		Cable operation of rear calipers, self adjusting for pad wear.

Owner & Maintenance Record

OWNER'S RECORD - P.D.I. & REGISTRATION OF SALE

Pre-Delivery Inspection

V.I.N. | S | C | C | | | | | | | | | | | | | |

Engine No.: .....

Colour: ..... Key No.: .....

Date of P.D.I.: .....

P.D.I. Dealer Stamp:

Registration of Sale

Owner's Name: .....

Address: .....

.....

.....

Date of Purchase: .....

Reg./Licence No.: .....

Selling Dealer Stamp:

P.D.I. & Registration of Sale

PRE-DELIVERY INSPECTION

Body
Wash and polish complete car.
Check all paintwork for condition.
Check operation of doors and locks.
Check bonnet and tailgate release mechanism.
Check interior trim for damage and cleanliness.
Check operation of seat belts.
Check presence of tool kit and literature pack.

Mechanical
Check coolant level and system for leaks.
Check engine and transmission oil levels, and check for leaks.
Check security of engine oil filter.
Check brake fluid system for leaks.
Check clutch pedal adjustment.
Check tightness of wheel bolts.
Check tyre pressures including spare.
Check power steering fluid level and system for leaks.

Electrical
Check security of battery terminals.
Check operation of all lamps.
Check operation of horns and turn indicators.
Check operation and park position of windscreen wiper.
Check operation of windscreen washer.
Check operation of all instruments.
Check operation of headlamps and door windows.
Check operation of audio equipment (if fitted).
Check operation of climate controls and check heater/air conditioning systems.

Road Test
Carry out road test and submit report with details of any additional attention required.

MANUFACTURER'S RECORD - P.D.I. & REGISTRATION OF SALE

Pre-Delivery Inspection

V.I.N. | S | C | C | | | | | | | | | | | | | |

Engine No.: .....

Colour: ..... Key No.: .....

Date of P.D.I.: .....

P.D.I. Dealer Stamp:

Registration of Sale

Owner's Name: .....

Address: .....

.....

.....

Date of Purchase: .....

Reg./Licence No.: .....

Selling Dealer Stamp:

Received the above vehicle, the pre-delivery inspection having been carried out by the Lotus Dealer to my satisfaction.

Owner's Signature: .....

Manufacturer's Record

Return this page to:

Warranty Department,
Lotus Cars Limited,
Hethel,
Norwich,
Norfolk,
NR14 8EZ
ENGLAND

OWNER'S RECORD - CHANGE OF OWNER / WARRANTY TRANSFER

Second Owner's Name:.....

Address: .....

.....

.....

Date of Transfer: .....

Dealer Stamp (if applicable)

Third Owner's Name: .....

Address: .....

.....

.....

Date of Transfer: .....

Dealer Stamp (if applicable)

Retain this page in the Owner's Handbook

Return this page to:

Warranty Department,
Lotus Cars Limited,
Hethel,
Norwich,
Norfolk,
NR14 8EZ
ENGLAND

MANUFACTURER'S RECORD - CHANGE OF OWNER / WARRANTY TRANSFER

V.I.N. | S | C | C | | | | | | | | | | | | | |

Engine No.: .....

Reg./Licence No.: .....

Third Owner's Name: .....

Address: .....

.....

.....

Date of Transfer: .....

Dealer Stamp (if applicable)

Return this page to the address overleaf

Manufacturer's Record

Return this page to:

Warranty Department,
Lotus Cars Limited,
Hethel,
Norwich,
Norfolk,
NR14 8EZ
ENGLAND

MAINTENANCE SCHEDULE - 4 CYLINDER MODELS

Required Maintenance

Correct servicing is essential in order to help ensure proper safety, emissions control, efficient performance and dependability of the vehicle, and is a requirement of continued warranty validation. For convenience, the servicing requirements of different components of the car have been grouped together to create 'A', 'B and 'C' service types, where an 'A' service occurs approximately every 6,000 miles (10,000 km), a 'B' service every 12,000 miles (20,000 km), and a 'C' service every 36,000 miles (60,000 km). Your dealer will be pleased to advise of the current recommended labour times for these services.

An 'X' in the columns below indicates a service operation which must be performed within 1,000 miles (1,600 km) of the relevant service interval. Your Lotus dealer has the necessary expertise, information, training and special tools needed to maintain the car in optimum condition, and it is recommended that servicing appointments are made well ahead of reaching the specified mileage or time. The advice of the dealer should be sought for any service problems and all necessary repairs completed at once.

X~ Recommended Maintenance

Lotus recommends that these operations are performed in addition to the required maintenance in order to help ensure optimum efficiency, economy and dependability, but their performance is not a requirement of either the vehicle or emission system warranties.

Recommended Time Period

Lotus recommends that in the case of low usage vehicles, where a 'B' service is not required in any 12 month period, any outstanding time period operations listed, should be performed within 45 days of the due date, and the Time Period Service recorded in the Maintenance Record section of the Owner's Handbook.

Note:

'Inspect' means assess condition and test for correct operation. Extra time is required to adjust or repair.

'Check' means test and adjust/fill or tighten as necessary.

Maintenance Record

On completion of a service, your dealer will provide you with a completed maintenance schedule, including comments on the road test performance and details of any extra work required. The owner must consent to any additional work being undertaken. In addition, the appropriate maintenance record voucher on the following pages will be signed and stamped to form a continuous service history of the car.

After Sales Service

There is no charge to the vehicle owner for the labour content of the After Sales Service. Only materials used will be charged.

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE				
		TIME PERIOD	AFTER SALES	A	B	C
16	Check cam belt tension				X	
17	Renew cam belt & inspect vaove clearances	36				X
18	Renew fuel filter					X
19	Renew air cleaner element* (refer above)				X	X
20	Renew spark plugs # (refer below)				X	X
	With engine running:					
21	Check cooling system hoses & connections	12	X		X	X
22	Inspect fuel tanks, caps & fuel pipe connections	12	X		X	X
23	Inspect exhaust system & check connections				X	X
	Using 'Tech 1' scanner tool:					
24	Inspect for stored codes		X	X	X	X
25	Check TPS adjustment		X~	X~	X~	X~
	# For peak engine performance the spark plugs should be replaced every 'B' service. However, plug changes at 30,000 miles will not affect or invalidate emission performance of the engine					
	Braking System					
26	Check parking brake adjustment		X	X	X	X
27	Inspect operation of brake tell tales		X	X	X	X
28	Inspect brake pad thicknesss			X	X	X
29	Inspect brake hoses, pipes & hydraulic units	12	X	X	X	X

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE				
		TIME PERIOD	AFTER SALES	A	B	C
30	Renew brake fluid	12			X	X
31	Check brake fluid level	12	X	X	X	X
	Clutch					
32	Check clutch fluid level & inspect for leaks		X	X	X	X
	Steering & Suspension					
33	Inspect condition of driveshaft gaiters	12		X	X	X
34	Inspect steering ball joints & gaiters			X	X	X
35	Inspect PAS pipes & hoses	12		X	X	X
36	Inspect condition of all suspension bushes				X	X
37	Inspect dampers for leaks & performance			X	X	X
38	Check front hub bearing adjustment			X	X	X
39	Inspect rear wheel bearings for play			X	X	X
40	Check security of front & rear suspension			X	X	X
41	Check condition of steering column u/js				X	X
42	Inspect front wheel toe setting			X	X	X
43	Check torque of rear hub nuts (260 - 270 Nm)		X			

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE				
		TIME PERIOD	AFTER SALES	A	B	C
	Wheels & Tyres					
44	Inspect tyre condition & set pressures (inc. spare)	12	X	X	X	X
45	Check wheel nut torque		X	X	X	X
46	Lubricate wheel hub spigots	12		X	X	X
	Electrical					
47	Inspect battery condition	12			X	X
48	Check battery terminals for security & condition	12			X	X
49	Inspect operation of all lights	12		X	X	X
50	Check headlamp beam alignment		X		X	X
51	Inspect operation of all electrical equipment	12		X	X	X
	Body					
52	Check adjustment of hinges & latches				X	X
53	Inspect operation & condition of seat belts			X	X	X
54	Inspect operation of heater/air conditioning				X	X
55	Top up screenwash reservoir		X	X	X	X

FREE LABOUR VOUCHER - AFTER SALES SERVICE

The presentation of this voucher to your Lotus dealer entitles you to FREE labour for the After Sales Service carried out at 1,000 to 1,500 miles (1,500 to 2,500 km) or 12 months from the vehicle date of sale. You pay only for materials used e.g. oil, filters, gaskets etc.

V.I.N. | S | C | C | | | | | | | | | | | | | |

Engine No.: .....

Reg./Licence No.: .....

Date of Purchase: .....

Dealer Stamp:

The After Sales Service has been completed to my satisfaction

Owner's signature: ..... Date: .....

Free Labour Voucher - 4 cyl.

Return this page to:

Warranty Department,
Lotus Cars Limited,
Hethel,
Norwich,
Norfolk,
NR14 8EZ
ENGLAND

AFTER SALES SERVICE

1,000 - 1,500m/
1,500 - 2,500km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

6,000m / 10,000km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

B SERVICE

12,000m / 20,000km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

90,000m / 150,000km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

B SERVICE

96,000m / 160,000km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

102,000m / 170,000km

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

TIME PERIOD SERVICE

12 months from last service

(low usage vehicles)

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

Anti-freeze renewed (24 mths)	YES / NO	Cambelt renewed (36 mths)	YES / NO

MAINTENANCE SCHEDULE - V8

Required Maintenance

Correct servicing is essential in order to help ensure proper safety, emissions control, efficient performance and dependability of the vehicle, and is a requirement of continued warranty validation. For convenience, the servicing requirements of different components of the car have been grouped together to create 'A' and 'B' service types, where an 'A' service occurs approximately every 6,000 miles (10,000 km) and a 'B' service every 36,000 miles (60,000 km). The requirement for many service operations is related to time rather than distance travelled, so that in the case of low usage cars, the next service should be performed 12 months after the previous service.

Your Lotus dealer has the necessary expertise, information, training and special tools needed to maintain the car in optimum condition, and will be pleased to advise of the current recommended labour times for these services. The advice of the dealer should be sought for any service problems and all necessary repairs completed at once. It is recommended that servicing appointments are made well ahead of reaching the specified mileage or time.

Each service should be performed either within 1,000 miles (1,600 km) of the distances stipulated, or within one month of the anniversary of the previous service, whichever first occurs. Any necessary repairs should be completed without delay. A cross (X) in the following table indicates an operation to be performed.

Maintenance Record

On completion of a service, your dealer will provide you with a completed maintenance schedule, including comments on the road test performance and details of any extra work required. The owner must consent to any additional work being undertaken. In addition, the appropriate maintenance record voucher on the following pages will be signed and stamped to form a continuous service history of the car.

After Sales Service

There is no charge to the vehicle owner for the labour content of the After Sales Service. Only materials used will be charged.

Note

'Inspect' means assess condition and test for correct operation. Extra time is required to adjust or repair - the customer should be consulted beforehand when necessary.

'Check' means test and adjust/fill or tighten as necessary. Labour time is included.

Distance Covered		Service Type
1,000 to 1,500 miles (1,500 to 2,500 km)	To be performed within 12 months of vehicle date of sale.	After Sales Service.
6,000 miles (10,000 km)	Or 12 months since last service.	A
12,000 miles (20,000 km)	"	A
18,000 miles (30,000 km)	"	A
24,000 miles (40,000 km)	"	A
30,000 miles (50,000 km)	"	A
36,000 miles (60,000 km)	"	**B**
42,000 miles (70,000 km)	"	A
48,000 miles (80,000 km)	"	A
54,000 miles (90,000 km)	"	A
60,000 miles (100,000 km)	"	A
66,000 miles (110,000 km)	"	A
72,000 miles (120,000 km)	"	**B**
78,000 miles (130,000 km)	"	A
84,000 miles (140,000 km)	"	A
90,000 miles (150,000 km)	"	A
96,000 miles (160,000 km)	"	A
102,000 miles (170,000 km)	"	A

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE			
		AFTER SALES	A	B	Other
1	Fit protective covers to seats, footwells, steering wheel & rear body	X	X	X	
	Lubrication				
2	Renew engine oil*	X	X	X	
3	Renew engine oil filter*	X	X	X	
4	Inspect engine & transmission for oil leaks	X	X	X	
5	Check transmission oil level		X		
6	Renew transmission oil			X	
7	Check PAS fluid level	X	X		
8	Renew PAS fluid			X	
9	Repack front wheel bearings			X	
	*In severe service conditions (dusty areas, or cold, stop/start driving), change twice as frequently or as required.				
	Engine				
10	inspect auxiliary drive belt condition		X	X	
11	Renew cam belt	102,000 miles/8 years			
12	Renew fuel filter				102,000 miles
13	Renew air cleaner element* (refer above)			X	
14	Renew spark plugs			X	

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE			
		AFTER SALES	A	B	Other
	Cooling System				
15	Inspect rediator, oil coolers & pipework for damage /leaks. Clean all radiator finning	X	X	X	
16	Check coolant level	X	X	X	
17	Renew coolant				24 mths
	Braking System				
18	Inspect parking brake adjustment	X	X	X	
19	Inspect operation of brake tell tales	X	X	X	
20	Inspect brake pad thickness & disc condition^		X	X	
	^ In conditions where the brakes are subject to heavy use, inspeciton may be required more frequently				
21	Inspect brake hoses, pipes & hydraulic units		X	X	
22	Check brake/clutch fluid level & inspect for leaks	X	X	X	
23	Renew brake/clutch fluid				12 mths
	Steering & Suspension				
24	Inspect security and condition of front & rear suspension		X	X	
25	Inspect dampers for leaks & performance		X	X	
26	Inspect front & rear wheel bearings for play		X	X	
27	Check torque of rear hub nuts (260 - 270 Nm)	X			

Op. no.	OPERATION DESCRIPTION	SERVICE TYPE			
		AFTER SALES	A	B	Other
28	Inspect condition of driveshaft gaiters		X	X	
29	Inspect steering ball joints & gaiters		X	X	
30	Inspect free play at steering wheel		X	X	
	Wheels & Tyres				
31	Inspect tyre condition & set pressures (inc. spare)	X	X	X	
	Electrical				
32	Check battery terminals for security & condition		X	X	
33	Inspect operation of all lights	X	X	X	
34	Inspect operation of all electrical equipment	X	X	X	
	Body				
35	Check adjustment & lubrication of hinges & latches	X	X	X	
36	Inspect operation & condition of seat belts		X	X	
37	Inspect operation of heater/air conditioning		X	X	
38	Top up screenwash reservoir	X	X	X	

FREE LABOUR VOUCHER - AFTER SALES SERVICE

The presentation of this voucher to your selling Lotus dealer entitles you to FREE labour for the After Sales Service carried out at 1,000 to 1,500 miles (1,500 to 2,500 km) or 12 months from the vehicle date of sale. You pay only for materials used e.g. oil, filters, gaskets etc.

V.I.N. | S | C | C | | | | | | | | | | | | | |

Engine No.: .....

Reg./Licence No.: .....

Date of Purchase: .....

Dealer Stamp:

The After Sales Service has been completed to my satisfaction

Owner's signature: ..... Date: .....

Free Labour Voucher - 2K

A SERVICE

18,000m / 30,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

24,000m / 40,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

30,000m / 50,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

B SERVICE

36,000m / 60,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

42,000m / 70,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

48,000m / 80,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

54,000m / 90,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

60,000m / 100,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

66,000m /110,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

B SERVICE

72,000m / 120,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

78,000m / 130,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

84,000m / 140,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

90,000m / 150,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

96,000m / 160,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

A SERVICE

102,000m / 170,000km or 12 months since last service

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

Dealer's signature: .....

Mileage: .....

Date: .....

Dealer stamp:

U.K. Dealers & Worldwide Distributors/Dealers

UNITED KINGDOM DEALERS

Avon
Williams Automobiles Ltd
St. Phillips Causeway,
Avon Meads,
Bristol.
BS4 3BD
Tel: 01179 719191

Berkshire
S.G.T.
Station Road,
Taplow,
Nr. Maidenhead.
SL6 0NT
Tel: 01628 605353

Cambridgeshire
Haydon-Daytune
Rene Court,
Coldhams Road,
Cambridge.
CB1 3EW
Tel: 01223 211889

Derbyshire
Peter Smith Sports Cars
Station Road,
Hatton.
DE6 5EL
Tel: 01283 813593

Devon
Alan Kerr Ltd
Brixham Road,
Paignton.
TQ4 7BG
Tel: 01803 556234

South Essex
Nelmes
Gallows Corner,
Colchester Road,
Romford.
RM3 0AD
Tel: 01708 386222

Gloucestershire
Oldbury Cars Ltd.
301 Gloucester Rd.
Cheltenham.
GL51 7AP
Tel: 01242 253655

Hertfordshire
London Lotus Centre Ltd.
318 Watford Road,
St.Albans.
AL2 3DP
Tel: 01727 866171

Kent
Motorway Sports Cars Ltd.
224-232 The Street,
Boughton,
Faversham.
ME13 9AL
Tel: 01227 751223

Leicestershire
Storm of Leicester Ltd.
60 Northgate Street,
Leicester.
LE3 5BY
Tel: 01162 539700

Lincolnshire
Kelvedon Motors
Bourne Road,
Spalding.
PE11 3LW
Tel: 01775 725457

Central London
H.R. Owen
49-51 Cheval Place,
London.
SW7 1EW
Tel: 0171 225 2007

European Dealers

EUROPEAN DISTRIBUTORS/ DEALERS

AUSTRIA

De Cillia Renn & Sportwagen
Tobringer Strasse 2,
Landskron
A-9523
Villach.
Tel: (43) 42 42 42 962

BELGIUM

Alvan Motors
Industriepark Gent-West 5A,
Drongen.
B-9031
Gent.
Tel: (32) 92 822453

Lecler & Fils
Rue de l'Yser 65,
B-4430
Liege.
Tel: (32) 42 462338

New Antwerp Car Services
Mar Gerardstraat 6
B-2000
Antwerpen
Tel: (32) 32200390

Garage Baert SA
Rue du Congo 9,
B-7700
Mouscron
Tel: (32) 56 330861

DENMARK

Lotus Automobilier Danmark A/S
Postboks 2630
Bryggervangern 39,
DK-2100
Copenhagen.
Tel: (45) 39 27 22 11

FRANCE

V2000 SA
100 bd de Verdun,
92400 Courbevoie,
PARIS.
Tel: (33)14188 3020

GERMANY

Auto Konig Berlin
Warthestrasse 15
D-1451 Teltow
Berlin
Tel: (49)3328 39970

Autohaus Kappner
Speyerer Strasse 23
D-6737
Dudenhofen-Speyer.
Tel: (49) 6232 6550

Auto Becker
Suitbertusstrasse 150,
D-4022
Dusseldorf
Tel: (49) 2119331-01

Thielert
Helbingtwiete 6
D-2204
Hamburg
Tel: (49) 40 69 69 500

Fritz Schillinger
Geroldsecker Vorstadt 12-20,
D-7793
Lahr/Schwarzwald.
Tel: (49) 7821 8950

Islinger & Umhey
Viehhofstrasse 6-20
D-6816
Mannheim.
Tel:(49)6214455201

Auto-Konig Munchen
Gutensbergstr. 11,
D-8564
Anzing.
Tel: (49) 81214270

Brandes & Dschudow
Altenberger Str. 34,
D-4816
Munster-Nienberge.
Tel: (49) 2533 534

Auto Dohler KG
Pretzfelder Str. 5,
D-9042
Nurnberg.
Tel: (49) 911 348 32

Autohaus Nossmann
Kleine Heeg 36,
D-5335
Rheinbach.
Tel: (49) 222692100

Auto Konig Wiesbaden
Anna-Birle Str. 7
D-5525
Mainz-Kastel,
Wiesbaden.
Tel:(49) 6134 18290

Martin Veyhle Englische Automobile
Berliner Strasse 56,
D-7122 Leonberg.
Stuttgart.
Tel: (49) 7152 9412056

GREECE
Trident Garages Ltd.
Trident House,
Aristotelous and Dekeleias Avenue,
Aharne,
Athens.
Tel: (30) 1 2400650

ITALY
Autochimera S.r.l
Via Augusto Righi 11,
I-52100
Arezzo.
Tel: (39)575 984086

Emmeti S.r.l.
Via Francesco Crispi 190,
I 70123
Bari
Tel: (39)80 5325476

Daytona Motors
Vico 2 Merello 12,
I-09123
Cagliari.
Tel: (39) 70 272473

Giordano Motors Sas
Via Neive 12
Fraz Baraccone,
I-12050
Cuneo-Castagnito
Tel: (39) 173 211870

Autosab S.r.l
V ie Piombino 7,
I-50142
Firenze.
Tel: (39) 557321221

Astrocar S.a.s.
Via Arena 35
I-20100
Milano
Tel: (39) 258102610

Kennedy Center S.r.l
Via Kennedy 92
I-80125
Napoli
Tel: (39)81 5705364

Auto Berton S.r.l
Viale Mazzini 29
I-36100
Vicenza
Tel: (39)444 324614

Autoriparazioni Bassani
V.le Europa
Treviolo (BG)
I-24048
Bergamo
Tel: (39) 35 692370

THAILAND
Nakarin Auto Sales Co. Ltd.
202 Banga-Trad Road, KM28,
Bangpo
Samuthprakran
10560
Tel: (662) 338 1962

TURKEY
Oge Motors Ticaret Ltd.
Nadide Sokak Mavi Palas,
1-3 Londra Astalti,
Merter
34010
Istanbul
Tel: (90) 212 5841567

UNITED ARAB EMIRATES
Ali Gargash & Company
PO Box 1047,
Dubai.
Tel: (971) 4 663 898

USA & CANADA
Lotus Cars USA Inc.
1655 Lakes Parkway,
Lawrenceville,
Georgia 30243.
Tel: (1) 404 822 4566

USA Warranty

USA Warranty

LIMITED WARRANTY

Lotus Cars U.S.A. Inc.; 500 Marathon Parkway, Lawrenceville, Georgia 30045.

LOTUS CARS U.S.A. Inc., (the Company) warrants each new Lotus motor car and each replacement part supplied by it to be free from defects in material and workmanship under normal use and service, and subject to the terms and conditions in this Limited Warranty, for the applicable Warranty Period set forth in Paragraph 1.

1. WARRANTY PERIODS

(a) LIMITED WARRANTY - Vehicles. The Company warrants each new vehicle to be free from defects in material and workmanship for a period of twenty four (24) months, with unlimited mileage, after the first occurring of the following dates:

i) Delivery to the retail original owner;
ii) Registration as a dealer demonstrator;
iii) The vehicle's attainment of 500 miles on the odometer (automatic classification as a 'demonstrator');
iv) The first anniversary of the vehicle's delivery to a dealer.

CONSULT YOUR SALES DOCUMENTS TO DETERMINE THE WARRANTY START DATE ON YOUR VEHICLE; SPEAK TO YOUR DEALER OR LOTUS CARS USA IF YOU ARE IN DOUBT.

(b) LIMITED WARRANTY - Replacement Parts. Genuine Lotus replacement parts are warranted to be free from defects in materials and workmanship for 12 months from the date of their installation or until the expiration of the vehicle's limited warranty term, whichever occurs last.

(c) LIMITED WARRANTY - Corrosion Protection. The Company's Limited Corrosion Protection Warranty (as set forth in Paragraph 3 (c)) runs for a period of 8 years from the commencement of the Vehicle Limited Warranty as specified in paragraph 1(a).

2. LIMITATIONS

THE COMPANY DOES NOT AUTHORIZE ANY PERSON TO CREATE ANY OTHER OBLIGATION IN CONNECTION WITH ITS VEHICLES. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLICABLE TO A VEHICLE OR PART IS LIMITED IN DURATION TO THE TIME PERIODS SET FORTH IN PARAGRAPH 1. THE PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS ARE THE EXCLUSIVE REMEDIES UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE RE-

5. OBLIGATIONS OF OWNERS AS TO PROPER USE AND CARE

The Company has no obligation under this warranty in the following circumstances: If the maintenance services and maintenance instructions specified in the Owner's Handbook are not performed and followed at the prescribed intervals; if the motor car is used for commercial service, or for racing or reliability trials; if the motor car is registered and used outside the Continental United States, Canada, Hawaii, Puerto Rico, Alaska, Guam and the United States Virgin Islands; if failure or malfunction of the motor car or of any warranted part, component or assembly results from an accident; or, if failure or malfunction is caused by misuse, abuse or negligence in use of the motor car, or by performance of service, repair, alteration or modification of the motor other than in accordance with the recommended servicing and repair procedures of the Company, or by fitting of a part, assembly or component not conforming to specifications of the manufacturer of the motor car, or the fitting of any accessory not authorised by the manufacturer of the motor car.

6. EXCLUSIVE WARRANTY

This Limited Warranty and the Emission Control System Warranties are the only express warranties applicable to the vehicle which are given by the Company or the manufacturer of the vehicle. Subject to the provision of Paragraph 2 (Limitations of Warranties), this warranty and the emission control system warranties exclude all other obligations and liabilities of the Company and the manufacturer of the vehicle, whether they arise in contract or tort, or otherwise. Any and all other express warranties, representations, promises or statements shall be of no force or effect as regards the Company, or the manufacturer of the vehicle. If any provision of this warranty is declared or made ineffective or unenforceable by law, adjudication or otherwise, such ineffectiveness or unenforceability shall not affect any of the other terms and conditions of this warranty.

No person is authorised to change or modify this warranty, and under no circumstances may this warranty be changed or modified orally.

7. CUSTOMER ASSISTANCE

In order to obtain performance of any obligation under this Limited Warranty, bring the Lotus vehicle to any of the Lotus Dealers listed in section 'd' of this handbook. Any such dealer is authorized to perform warranty obligations. If you are unhappy with work performed on your Lotus, speak first with the dealer's Service Manager, and then, if necessary, with the General Manager or owner. If you still cannot resolve a problem, contact:

Lotus Cars U.S.A. Inc.
500 Marathon Parkway
Lawrenceville, GA 30045
Tel. 404 822 4566

When contacting Lotus Cars USA, please have the following information available:

- year and model of your Lotus;
- your vehicle's vehicle identification number (viewable through bottom edge of windscreen, driver's side);
- date of purchase of your Lotus;
- name of dealer(s) from whom you purchased your Lotus and where you have it serviced.

State Repair - Replace-Refund Statutes

Each state has a law providing new car purchasers with certain rights for repair, replacement of the vehicle, or refund of the purchase price, under certain circumstances (these laws are commonly called "lemon laws"). These laws vary from state to state. ***To the extent permitted by an applicable state law, Lotus Cars USA requires that, before you seek a remedy under your lemon law, you provide Lotus Cars USA (at the address set forth above) with written notification of the defect or nonconformity.*** In this way, Lotus Cars USA will be afforded an opportunity to perform any necessary repairs. Where appropriate, an additional lemon law information sheet is provided with this owner's manual.

Arbitration Programs

Some states have state-run arbitration programs that you can use to pursue lemon law remedies. These programs are operated by state agencies, and such agencies may be contacted for additional information.

In some states that do not have state-run programs, Lotus Cars USA participates in private arbitration or mediation programs. In these states, additional information will be provided to you separately.

Where either a state-run or private arbitration program is in effect, to the extent allowed be law, Lotus Cars USA requires that your lemon law claim first be brought before such program before you pursue other remedies.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

LOTUS FEDERAL EMISSION CONTROL SYSTEM WARRANTIES

The Lotus Emission Control System Warranties comprise an Emissions Defects Warranty and an Emissions Performance Warranty. In both cases, the warranty period shall begin on the date the vehicle is delivered to its ultimate purchaser, or if the vehicle is first placed in service as a 'demonstrator' or 'company' car prior to delivery, on the date it is first placed into service.

EMISSIONS DEFECTS WARRANTY

Lotus Cars Ltd. (Lotus), warrants to the owner of any 2002 model year Lotus car that:-

1) the vehicle was designed, built and equipped so as to conform at the time of sale, with applicable requirements of the U.S. Environmental Protection Agency; and

2) is free from defects in materials and workmanship in Emission Related Components which could cause the vehicle to fail to conform with these requirements for a period of 2 years or 24,000 miles, whichever first occurs, provided however, that in the case of specified Major Emission Control Components, the warranty period shall be 8 years or 80,000 miles, whichever first occurs.

A list of the Emissions Related Components to which this Defects Warranty applies appears on page 13 to 15 (specified Major Emission Control Components are marked with an asterisk).

This warranty does not cover failures caused by abuse, neglect, collision accidents, improper maintenance, unauthorised modifications; nor does it cover loss of time inconvenience, loss of use of the vehicle or incidental or consequential damages.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLICABLE TO A VEHICLE OR PART IS LIMITED IN DURATION TO THE TIME PERIODS SET FORTH IN THIS WARRANTY. LOTUS SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE BREACH OF ANY WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIES WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

EMISSIONS PERFORMANCE WARRANTY

Some state or local governments require periodic inspection and maintenance programs to ensure that your vehicle's emissions control system functions properly. If an EPA approved program is in force where you are, you are eligible for Performance Warranty coverage.

Lotus warrants to the owner of any 2002 model year Lotus car that if:-

1) the vehicle is maintained and operated in accordance with the written instructions for proper maintenance and use;

2) the vehicle fails to conform to the applicable emission standards as judged by an EPA approved emission test; and

3) such non-conformity results or will result in the vehicle owner having to bear any penalty or other sanction (including denial or the right to use the vehicle) under local, State or Federal law, then Lotus shall remedy the non conformity at no cost to the owner by adjusting, repairing or replacing emissions related components as is necessary in order for the car to conform to the applicable emission standard. This warranty is for a period of 2 years or 24,000 miles, whichever first occurs. However, specified Major Emission Control Components are covered for 8 years or 80,000 miles, whichever first occurs. Covered parts are listed on page 13 to 15 and specified Major Emission Control Components are followed by an asterisk.

Required Maintenance

The operations in the Maintenance Schedule (included in the Owner's Handbook) must be undertaken at the mileages specified to ensure the continued proper functioning of the emission control system, and 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 any time a malfunction is suspected.

MAINTENANCE, REPLACEMENT OR REPAIR OF THE EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY AUTOMOTIVE REPAIR ESTABLISHMENT OR INDIVIDUAL USING ANY CERTIFIED PART.

No emission performance warranty claim will be denied on the basis of the use of a properly certified part in the maintenance or repair of a vehicle.

In no case will Lotus deny an emission performance warranty claim on the basis of:

i) warranty work or pre-delivery service performed by any Lotus Dealer or

ii) work performed in an emergency situation to rectify an unsafe condition, including an unsafe driveability condition attributable to Lotus provided the vehicle owner has taken steps to put the vehicle back in a conforming condition in a timely manner or

iii) the use of any uncertified part or non compliance with the maintenance schedule or instruction for use (Owner's Handbook) which is not relevant to the reason that the vehicle failed to comply with applicable emission standards or

iv) any cause attributable to Lotus.

What Is *Not* Covered

Lotus may deny an emission performance warranty claim on the basis of an uncertified replacement part used in the maintenance or repair of a vehicle if Lotus presents evidence that the uncertified replacement part is either defective in materials or workmanship, or not equivalent from an emission standpoint to the original equipment part, and the owner is unable to rebut the evidence.

A part not required to be replaced at a definite service interval (see Maintenance Schedule) shall be warranted for the applicable warranty period. Instructions to replace a component only if checked and found to be operating below specification shall have no bearing on warranty coverage unless the owner did not follow such an instruction prior to the short test failure and non compliance with that instruction caused the failure of another vehicle component relevant to the non-conformity.

This warranty does not cover failures caused by abuse, neglect, collision, accidents, improper maintenance, unauthorised modification; nor does it cover loss of time, inconvenience, loss of use of the vehicle or incidental or consequential damages.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLICABLE TO A VEHICLE OR PART IS LIMITED IN DURATION TO THE TIME PERIODS SET FORTH IN THIS WARRANTY. LOTUS SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE BREACH OF ANY WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIES WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

Improper Maintenance and Use

a) An emission performance warranty claim may be denied on the basis of non-compliance by a vehicle owner with the Service Schedule or Owner's Handbook instructions for proper use.

b) When determining whether an owner has complied with the written instructions for proper maintenance and use, Lotus may require an owner to submit evidence of compliance with those written maintenance instructions for which Lotus has an objective reason for believing:
   1. were not performed; and
   2. if not performed could be the cause of the particular vehicle's exceeding applicable emission standards.

c) Evidence of compliance with a maintenance instruction may consist of:
   1. a maintenance log book which has been validated at the appropriate time or mileage intervals specified for service by someone who regularly engages in the business of servicing automobiles for the relevant maintenance instruction(s); or
   2. a showing that the vehicle has been submitted for scheduled maintenance servicing at the approximate time or mileage intervals specified for service to someone who regularly engages in the business of servicing automobiles for the purpose of performing the relevant maintenance; or
   3. a statement by the vehicle owner that he or she performed the maintenance at the appropriate time or mileage interval specified, including a showing
      i) that the owner purchased and used proper parts, and
      ii) upon request by Lotus, that the owner is able to perform the maintenance properly.

d) The time/mileage interval for scheduled maintenance services shall be the service interval specified for that part in the Maintenance Schedule or Owner's Handbook.

e) For certified parts having a maintenance or replacement interval different from that specified in the written instructions for proper maintenance and use, the time/mileage interval shall be the service interval for which the part was certified.

f) The owner may perform maintenance or have maintenance performed more frequently than required in the maintenance instructions.

g) Lotus may deny an emission performance warranty claim on the basis of non-compliance with the written instructions for proper maintenance and use only if:
   1. an owner is not able to comply with a request by Lotus for evidence pursuant to paragraph (c) of this section; or
   2. notwithstanding the evidence presented pursuant to paragraph (c) of this section, Lotus is able to prove that the vehicle failed an emission short test because
      i) the vehicle was abused; or
      ii) an instruction for the proper maintenance and use was performed in a manner resulting in a component's being improperly installed or a component or related parameter's being adjusted substantially outside of the manufac turer's specifications; or
      iii) unscheduled maintenance was performed on a vehicle which resulted in the removing or rendering inoperative of any component affecting the vehicle's emissions.

Warranty Claim Procedure

a) A claim under the emission performance warranty may be raised immediately upon the failure of an EPA approved emission short test, if as a result of that failure, an owner is required to take action of any kind in order to avoid imposition of a penalty or sanction. An owner need not suffer the loss of the right to use a vehicle, be fined, incur repair expenses, or actually bear any penalty or sanction to satisfy the requirement (see 'Emissions Performance Warranty' paragraph (3)). That requirement shall be met if a test failure sets a procedure in motion under which the owner will bear a penalty or sanction if a vehicle is not brought into conformity or repaired to some specified extent within some specified period of time.

b) A warranty claim may be submitted by bringing a vehicle and a copy of the EPA approved emission test report to
   1. any repair facility authorized by Lotus to service that model vehicle, or
   2. any repair facility authorized by Lotus to perform emission performance warranty repairs for that model vehicle.

c) To the extent required by any Federal or State Law, whether statutory or common law: if an authorized repair facility is not reasonably available, Lotus will provide means for a suitably competent non-franchised repair facility to perform emission performance warranty repairs.

d) 1. Lotus will make a final decision on an emission performance warranty claim within a maximum time limit of 30 days from the time at which the vehicle is initially presented for repair or within the time during which an owner is required by local, state or federal law to have the vehicle repaired without incurring further penalties or sanctions (whichever is shorter), unless a delay

i) is requested by the vehicle owner, or
ii) is caused by an event not attributable to Lotus or the warranty repair facility.

2. If the facility at which the vehicle is initially presented for repair is unable for any reason to honour the particular claim, then, unless this requirement is waived in writing by the vehicle owner, the repair facility shall forward the claim to; Lotus Cars U.S.A. Inc., 500 Marathon Parkway, Lawrenceville, Georgia, 30045, in order for a decision to be made.

e) Within the time period specified in paragraph (d) of this section, Lotus shall:
   1. notify the owner that it will honour the claim; or
   2. provide the owner, in writing, with an explanation of the basis upon which the claim is being denied.

f) Failure to notify an owner within the required time period (as determined under paragraph (d) of this section) for reasons that are not attributable to the vehicle owner or events which are not beyond the control of Lotus or the repair facility, shall result in Lotus being responsible for repairing the vehicle free of charge to the vehicle owner.

g) Lotus shall incur all costs associated with a determination that an emission performance warranty claim is valid.

FURTHER INFORMATION

Further information concerning the emission performance warranty is available from the Director Field Operation & Support Division (6406 J), Environmental Protection Agency, 401 'M' Street, SW, Washington DC 20460 (attention: Warranty Claim). Violations of the Emission Performance Warranty may also be reported to this office. Also contact Lotus Cars U.S.A. Inc., 500 Marathon Parkway, Lawrenceville, Georgia 30045.

EMISSIONS WARRANTY PARTS LIST

Air Induction System
- air cleaner housing
- air inlet trunking
- turbocharger, wastegate valve and ducting
- intake manifold

Fuel Injection System
- fuel pressure regulator
- fuel injectors
- fuel delivery and return lines
- inertia fuel shut-off switch
- throttle body
- idle air control valve (IACV)
- throttle position sensor (TPS)

Ignition System
- initial timing
- spark plugs and leads
- direct ignition module and H.T. coils
- knock sensor
- crankshaft sensor
- camshaft position sensor

Exhaust Gas Recirculation (EGR) System
- EGR valve assembly
- EGR temperature sensor
- EGR manifold

Positive Crankcase Ventilation System
- non return valve
- oil filler cap

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and Lotus Cars Limited are pleased to explain the emission control system warranty on your 2002 model Lotus Esprit. In California, new motor vehicles must be designed, built and equipped to meet the State's stringent anti-smog standards. Lotus must warrant the emission control system on your Esprit for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your vehicle. Your emission control system may include parts such as the carburettor or fuel injection system, the ignition system, catalytic convertor, and engine computer. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, Lotus will repair your vehicle at no cost to you including diagnosis, parts and labour.

MANUFACTURER'S WARRANTY COVERAGE

- For **3 years or 50,000 miles** (whichever first occurs):
  1) If your vehicle fails a Smog Check inspection, all necessary repairs and adjustments will be made by Lotus to ensure that your vehicle passes the inspection. This is your emission control system **PERFORMANCE WARRANTY.**

  2) If any emission related part on your vehicle is defective, the part will be repaired or replaced by Lotus. This is your short-term emission control system **DEFECTS WARRANTY.**

- For **7 years or 70,000 miles** (whichever first occurs):
  1) If an emission related part listed in this warranty booklet specially noted with coverage for 7 years or 70,000 miles is defective, the part will be repaired or replaced by Lotus. This is your long term emission control system **DEFECTS WARRANTY.**

OWNER'S WARRANTY RESPONSIBILITIES:

- As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Lotus recommends that you retain all receipts covering maintenance on your car, but Lotus cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

- You are responsible for presenting your vehicle to a Lotus dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed **30 days.**

- As the vehicle owner, you should also be aware that Lotus may deny you warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact: Lotus Cars U.S.A. Inc., at 500 Marathon Parkway, Lawrenceville, Georgia 30045, or the California Air Resources Board at 9528 Telstar Avenue, El Monte CA 91731.

LOTUS CALIFORNIA EMISSION CONTROL SYSTEM WARRANTIES

The Lotus California Emission Control System Warranties comprise the California Emissions Performance Warranty, and two levels of the California Emission Control System Defects Warranty.

Your car may also be eligible for additional warranty coverage under the Federal Emissions warranty (see previous section).

2002 CALIFORNIA EMISSION CONTROL SYSTEM DEFECTS WARRANTY

Lotus Cars Ltd. (Lotus) warrants to the owner of any 2002 Lotus car that the vehicle was designed, built and equipped so as to conform with requirements of the California Air Resources Board (CARB), and that if the vehicle is maintained and operated in accordance with the written instructions for proper maintenance and use, then:

i) if, during a period of 3 years or 50,000 miles, whichever first occurs, any part of the vehicle which could affect emissions is broken or does not function as designed (including adjustments), provided the vehicle does not qualify for an exclusion as described on pages 21 to 22, Lotus shall be responsible for repair or replacement of any such part or parts, including diagnosis and labour charges.

ii) if, during a period of 7 years or 70,000 miles, whichever first occurs, one or more of a certain group of emission related parts listed on page 23 is broken or does not function as designed (including adjustments), provided the vehicle does not qualify for an exclusion as described on page 21 to 22, Lotus shall be responsible for repair or replacement of any such part or parts, including diagnosis and labour charges.

The warranty period shall begin on the date the vehicle is delivered to the first retail purchaser, or, if the vehicle is first placed in service as a demonstrator or company vehicle prior to sale at retail, on the date the vehicle is first placed in such service.

The emission control systems of your new 2002 Lotus were designed, built and tested using genuine Lotus Service Parts and the car is certified as being in conformity with Federal and California emission control requirements. Accordingly, it is recommended that any replacement parts used for maintenance, repair or replacement of emission control systems be Lotus Service Parts or Lotus Authorized Remanufactured Parts. The owner may elect to have maintenance, replacement or repair of the emission control devices and systems performed by any automotive repair establishment or individual, and may elect to use parts other than Lotus Service or Authorized Remanufactured Parts for such maintenance, replacement or repair without invalidating this warranty; the cost of such service or parts, however, will not be covered under the warranty, except in emergency situations.

Use of replacement parts which are not of equivalent quality may impair the effectiveness of emission control systems. If other than Lotus Service Parts or Authorised Remanufactured Parts are used for maintenance, replacement or repair of components affecting emission control, the owner should obtain assurances that such parts are warranted by their manufacturer to be equivalent to genuine Lotus parts in performance and durability. Lotus however, assumes no liability under this warranty with respect to failure of such parts other than Lotus Service Parts or Authorized Remanufactured Parts. However, the use of non-Lotus replacement parts does not invalidate the warranty on other components. If a non-Lotus emission related part causes damage to other components, then the liability for the subsequent damage shall not be assumed by Lotus. If however, a Lotus Service Part or Authorised Remanufactured Part causes damage to a non-Lotus part, such non-Lotus part will be repaired.

Repairs and service covered by this warranty will be performed by any authorized Lotus Dealer at his place of business with no charge for parts or labour (including diagnosis), using Lotus Service or Authorized Remanufactured Parts for any part of the emission control system covered by this warranty. In the case of an emergency, where an authorized Lotus dealer is not available, or a Lotus part is not available within 30 days; repairs may be performed at any available service establishment or by any individual using any replacement part. Lotus will reimburse the owner for such repairs (including diagnosis) that are covered under this warranty, but such reimbursement will not exceed the Lotus suggested retail price for all warranted parts replaced, and labour charges based on Lotus's recommended warranty repair times, and the geographically appropriate hourly rate. A repair not being complete within 30 days constitutes an emergency. Replaced parts and paid invoices must be presented at a Lotus dealership as a condition of reimbursement for emergency repairs not performed at a Lotus dealer.

You are advised to perform all recommended maintenance or repairs on your new 2002 Lotus vehicle. You are responsible for the performance of the required maintenance. Lotus will not deny a warranty claim solely because you have no record of maintenance; however, Lotus may deny a warranty claim if your failure to perform required maintenance resulted in the failure of a warranted part. Receipts and maintenance records covering the performance of regular maintenance should be retained in the event questions arise concerning maintenance. The receipts and maintenance records should be transferred to each subsequent owner of this car.

CALIFORNIA EMISSIONS PERFORMANCE WARRANTY

Lotus Cars Ltd. (Lotus) warrants to the owner of any 2002 Lotus car that if, during a period of 3 years or 50,000 miles, whichever first occurs, the vehicle should fail to pass an Inspection/Maintenance test, for reasons other than those detailed on pages 21 to 22 ('What is not covered by the Emission Warranty'), then the vehicle will be repaired at no cost to the owner. The vehicle is to be repaired so that it will pass the I/M test, and these repairs shall include diagnosis, replacement, repair, and adjustment of those defective parts affecting emissions.

The warranty period shall begin on the date the vehicle is delivered to the first retail purchaser, or, if the vehicle is first placed in service as a demonstrator or company vehicle prior to sale at retail, on the date the vehicle is first placed in such service.

If your vehicle fails a Smog Check test or a Federal Emissions Short test, you may choose to have diagnosis of the failure and repairs made at a Lotus dealer or at another service facility. You may take your vehicle to a Lotus dealer for warranty repairs and diagnosis without charge. You will have to pay for diagnostic costs and repairs if performed at another service facility except in the case of emergency repairs (see page e20). If your vehicle fails a Smog Check test or a Federal Emissions Short test after the 3 year/50,000 mile performance warranty period has expired, but before 7 years/70,000 miles is reached, those parts listed on page 23 are still covered by the defects warranty.

If the warranty station demonstrates that the test failure was caused by one or more of the conditions excluded from warranty coverage (see below), the vehicle owner shall be liable for all diagnostic and repair expenses. Such expenses shall not exceed the maximum repair costs permissible under the California Vehicle Inspection Programme. Failure to notify the owner within 30 days that a performance warranty claim is invalid, shall render Lotus liable for the repair costs. If the warranty station identifies that the test failure was caused by one or more defects covered under warranty, and in combination with one or more of the conditions excluded from warranty coverage (see below), then the vehicle owner shall be responsible only for that proportion of the diagnostic and repair costs that is not covered by warranty.

WHAT IS NOT COVERED BY THE CALIFORNIA EMISSION WARRANTIES

The warranty does not cover:

* Malfunctions in any part caused by any of the following: misuse, abuse, neglect, improper modification or alteration, tampering, disconnection, improper or inadequate maintenance, or use of leaded gasoline.

* Damage resulting from accident, acts of nature or other events beyond the control of Lotus.

* The repair or replacement of warranted parts which are scheduled for replacement prior to 50,000 miles (such as spark

plugs, filters) once these parts have been replaced at the first recommended replacement interval as part of required maintenance services.

* Incidental and consequential damages, such as loss of time, inconvenience, loss of use of the vehicle, or commercial loss.

* Any car on which odometer mileage has been changed so that mileage cannot be readily determined.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO A VEHICLE OR PART IS LIMITED IN DURATION TO THE TIME PERIODS SET FORTH IN THIS WARRANTY. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE RESULTING FROM THE BREACH OF ANY WARRANTY.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

CUSTOMER ASSISTANCE

Lotus Cars Ltd. wishes to help assure that the Emission Control Systems Warranty is properly administered. In the event that you do not receive the warranty service to which you believe you are entitled under the Emission Control Systems Warranty, or if you need additional assistance or information concerning this warranty, you should contact: Lotus Cars U.S.A. Inc., 500 Marathon Parkway, Lawrenceville, Georgia 30045.

If you cannot obtain satisfaction, you may contact: Air Resources Board, Mobile Source Division, 9528 Telstar Avenue, El Monte, CA. 91731.

7 YEAR/70,000 MILE EMISSIONS DEFECTS WARRANTY PARTS LIST

- Catalytic Converters
- Engine Management Electronic Control Module
- Turbochargers
- Throttle Body
- Exhaust Manifolds
- Fuel Tanks
- Fuel Pumps Assembly
- EGR Temperature Sensor
- EGR Valve
- Air Pump
- IAC Valve