



## WARRANTY

1. The Company will during the warranty period of 8 years from delivery new to the first retail purchaser, or first registration, whichever is the sooner, and subject to the car being properly submitted for examination to an authorised Lotus Dealer; replace or repair the steel chassis structure or composite body structure in the event of failure due to corrosion PROVIDING THAT the steel structure is inspected/re-treated in accordance with the instructions contained in the separate booklet '8 year Anti-Corrosion Guarantee', and that the car has received normal and reasonable usage.
2. The Company will during the warranty period of 12 months with unlimited mileage from delivery new to the first retail purchaser, or first registration whichever is the sooner and subject to the car being promptly submitted for examination to an authorised Lotus Dealer replace or repair any other part which in their opinion is defective owing to faulty materials or workmanship. No charge will be made for parts supplied under this warranty. Labour charges incurred will be refunded in accordance with the ruling warranty rate and labour time schedule.
3. Within the Warranty period of 12 months the Company will repair or replace on the terms of the foregoing clause any part supplied under that clause which in the Company's opinion is defective owing to faulty workmanship or materials. Any replacement part fitted will be subject to the standard parts warranty which applies for a period of six months, or the remainder of the new car warranty whichever is longer.
4. The Company's undertaking to repair or replace applies only to parts of Lotus design, that is, parts manufactured by or to the specification of Lotus Cars Limited. The Company will be under no legal liability in respect of parts not of Lotus design, but during the Warranty period at the request of the purchaser (who shall reimburse the Company for any expenses) take reasonable steps to secure the repair or replacement by the manufacturer of any parts which may be defective.
5. Tyre, radio/tape player and battery manufacturers operate their own warranty procedures by direct access by owners or dealers. Nevertheless the general conditions of the Company's Warranty will apply.
6. Should the Company in their discretion carry out any extra work or supply any extra parts free of charge, they shall be under no legal liability of any kind in connection therewith and the provision of the Warranty shall not in any way be deemed to have been waived.
7. This Warranty does NOT apply
  - a. If the defect is in any way attributable to fitting parts by way of replacement or addition not approved as direct replacements for those originally specified.
  - b. If the car has been used in connection with motor racing, rallying or any motor competition.
  - c. If the defect is attributable to mishandling or misuse.
  - d. To normal deterioration due to wear and tear.
  - e. If the car has not been properly serviced in accordance with the Company's recommendation.
  - f. If identification numbers have been altered or removed.
8. In the case of alleged defects the Company shall be allowed access to the car.
9. The Company reserves the right to call in for inspection at the Factory any parts alleged to be defective in the event of replacement parts being supplied the replaced parts will become the property of the Company.
10. The Warranty rights set out herein may be transferred to a second or subsequent owner providing that the completed Change of Ownership is despatched to the Company. Transference will not normally be refused. Claims made under Warranty from second or subsequent owners will be accepted on presentation of the Service Voucher/Warranty Book to the Dealer.
11. Persons dealing in the Company's products are not the agents for the Company and have no authority to assume any obligations on its behalf.
12. In the event of any disagreement between the Company and an Owner concerning the application of the Warranty or any claim arising hereunder it shall be referred to a single arbitrator to be agreed between the parties.
13. The Company accepts no responsibility or compensation liabilities other than those mentioned above.
14. This Warranty does not remove the purchaser's rights under statute.

glows when the tank level drops to approximately 9.0 litres (2.0 imp.gall).

Note that the needle will rise and fall from its reading position quite slowly as the ignition is switched on and off.

### Voltmeter

The voltmeter is calibrated from 8 to 16 volts, and indicates battery voltage when the ignition is switched on, and the charge being applied to the battery by the alternator when the engine is running. The normal position of the pointer is between 12 and 14 volts. If the gauge reads excessively high or low for more than a short period, a fault in the charging circuit is indicated which should be investigated by your dealer without delay.

### Oil Pressure Gauge

This gauge registers the pressure of the oil supply in the engine lubrication system, and is calibrated in bar units. Readings will be higher when the engine oil is cold, and at high engine speeds, and there is no cause for alarm if very high readings are indicated when the engine is started in cold conditions.

Under normal running conditions when the engine is warm, oil pressure should be greater than 0.35 bar at idle, and be between 1.4 and 7.0 bar during normal driving, dependent on engine speed.

### Boost Gauge (Turbo models only)

This gauge is marked in bar units, and indicates turbocharger boost pressure. The amount of 'boost' developed by the engine is dependent on engine speed and throttle opening, but is controlled by both mechanical and electronic means to prevent excessive boost pressure causing internal engine damage.

Maximum boost pressure readings will be seen with wide throttle openings at normal running temperature, and will be up to 0.65 bar (9.6 lb/in<sup>2</sup>). The system allows a controlled amount of overboost for short periods only, following rapid accelerator pedal movement. The indicated figures will rise with increasing altitude or where the atmospheric pressure is lower than normal, although the actual pressures applied to the engine remain unaffected.

An electronic safeguard operates to cut out the fuel pump if a boost control system failure occurs, and excessive boost pressure is detected.

### Analogue Time Clock (Naturally Aspirated models only)

The quartz analogue clock is adjusted by pressing in and turning the serrated button at its centre.

Do not attempt to adjust the clock whilst driving.

### Digital Time Clock (Turbo models only)

The digital LCD time clock displays at all times, but is back illuminated for greater clarity when the ignition is switched on. The illumination is dimmed to prevent distraction when the lights are switched on.



Two buttons are provided to adjust the time setting, the upper button for hours, and the lower button for minutes. Use the push key provided on the key ring to gently depress each button in turn. If the battery is disconnected for any reason, the time setting will need adjusting after re-connection.

#### Instrument Illumination

All the instruments, and the analogue time clock (N.A. only), are back illuminated when the vehicle sidelights are switched on.

#### TELL TALE LAMPS

##### Left Hand Tell Tale Bank



##### Low Screenwash Level Tell Tale

This amber tell tale will glow, with the ignition switched on, when the fluid in the screenwash reservoir needs replenishing.

##### Parking Brake Tell Tale (P)

With the ignition switched on, this tell tale will glow red as a reminder that the parking brake is applied. Check that this occurs, and that the light goes out when the brake is released.

##### Brakes Tell Tale

As a lamp test function, this red tell tale will light together with the parking brake tell tale. If this does not occur, see your dealer without delay. If the lamp lights at any other time, or fails to go out when the parking brake is released, stop immediately as a loss of brake fluid is indicated. Do not proceed until the fault has been investigated and rectified.

##### 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.

##### Oil Pressure Tell Tale

This red tell tale is provided to indicate when oil pressure is below a specified level. Check that the lamp lights when the ignition is switched on. The lamp should go out when the engine is started, although it may flicker at idle in very hot conditions.

If however the lamp lights at any other time when the engine is running, stop the engine immediately, and do not restart until the fault has been investigated and rectified. Continuing to run the engine with little or no oil pressure will cause major internal damage, possibly resulting in seizure.

Note: On Japanese market cars, the lighting of this tell tale will be accompanied (as a bulb check function) by the catalyst overheat tell tale.

#### Electrical

Voltage/Polarity

Alternator

Battery – type

– cold start perf. (DIN)

– Euro size code

12V negative earth

Nippondenso 60A

Delco Freedom Maintenance Free 842

255A

L2

#### Light Bulbs

	Wattage	Replacement Bulb Number	Type
Headlamps - outer (dip)	55	448	H1
- inner (main)	60	472	H4
France - outer	55	448	H1
- inner	55	448	H1
Japan - outer	55	472	H4
- inner	60	472	H4
Front Sidelamps	5	501	W10/5
Front Turn Indicators	21	382	P25-1
Stop Lamps	21	382	P25-1
Tail Lamps	5	207	R19/5
Rear Turn Indicators	21	382	P25-1
Rear Fog Lamps	55	453	H3
Reversing Lamps	21	382	P25-1
Side Repeater Lamps	5	501	W10/5
Interior Lamps	5	501	W10/5
Boot Lamp	10	258	SU8.5-8

## Tyres

Type – Standard – N.A.  
– Turbo

- Winter Tyre
- Temporary Spare

Size – Standard – N.A.  
– Turbo

- Winter Tyre
- Temporary Spare

Pressures – Standard – N.A.  
– Turbo

- Winter Tyre
- Temporary Spare

Winter Tyre Speed Limitation

Michelin MXV – 2  
Michelin MXX – 2  
Michelin X M + S with/without studs  
Goodyear space saver  
205/50 VR15  
205/50 ZR15  
185/60 x 14  
T105/70 R14

2.2 bar (32 lb/in<sup>2</sup>) front & rear  
1.8 bar (26.5 lb/in<sup>2</sup>) front & rear  
2.0 bar (29 lb/in<sup>2</sup>) front & rear  
4.0 bar (60 lb/in<sup>2</sup>)  
118 mph (190 km/h)

Limitations on use of **Studded Winter Tyre:**

Country	Period	Maximum Speed mph (km/h)	
		Normal Roads	Motorways
Austria	15th Nov – 7th April	50 (80)	62 (100)
Belgium	1st Nov – 31st March	37 (60)	56 (90)
Denmark	1st Oct – 30th April	50 (80)	62 (100)
Finland	1st Oct – 30th April	50 (80)	75 (120)
France	15th Nov – 15th March	56 (90)	56 (90)
Germany	NOT PERMITTED		
Holland	NOT PERMITTED		
Italy	15th Nov – 15th March	56 (90)	75 (120)
Norway	15th Oct – 30th April	50 (80)	56 (90)
Switzerland	1st Nov – 31st March	50 (80)	NOT PERMITTED
Sweden	1st Oct – 30th April	43 (70)	68 (110)
U.K.	NOT PERMITTED		

## Brakes

Type

Disc Size – Front  
– Rear

Operation

Circuit

Parking Brake

Ventilated front discs,  
solid rear discs  
256 mm  
236 mm  
Tandem master cylinder with  
direct acting vacuum servo  
Diagonal split  
Cable operation of rear calipers  
Self adjusting

## Right Hand Tell Tale Bank



### 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, and the car should not be driven until the fault has been rectified.

### Main Beam Tell Tale

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

### Sidelamps Tell Tale

This green tell tale is provided to indicate when the sidelamps have been selected.

### Seatbelt Tell Tale

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

### Catalyst Overheat Tell Tale (Japan only)

This tell tale will glow red 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.

As a bulb check function, this lamp will light in conjunction with the low oil pressure tell tale when the ignition is switched on. Only if the catalyst lamp comes on separately to the oil lamp is there an indication of catalyst overheat.

### Check Engine Tell Tale

The check engine tell tale is provided to:

- inform the driver that the engine management self diagnostic system has detected a fault;
- assist the technician with fault diagnosis.

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 on, 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 cures itself, or is no longer detected, the lamp will go out in most cases after about 10 seconds, but the fault





information will remain stored in the memory for the next 50 starts 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.

## FASCIA SWITCHES

### Lights Switch

This three position rotary/pull switch controls sidelamps, headlamps, panel lamps and interior lamps with or without the ignition key in position.

- turned fully counterclockwise to 'O', all lights are off.
- turn to  to switch on the side/parking lamps and instrument /switch illumination.
- turn fully clockwise to  to raise the headlamp pods and switch on the headlamps.
- In any of the three rotary positions, the knob may be pulled outwards to switch on the interior lamps.

The three rotary switch positions are illuminated when the lights are switched on.

### Panel Lights Control

This rotary rheostat controls the brightness of the instrument and switch symbol illumination. Turned fully counterclockwise, the illumination is switched off. Turn clockwise to progressively increase the brightness.

### Air Conditioning Switch (if fitted)

This rocker switch controls the air conditioning, which functions only whilst the engine is running. The switch symbol is illuminated with the lights switched on, and the adjacent amber tell tale indicates when the circuit is operating. For further information, see 'Interior Climate Control'.

### Hazard Lamps Switch

This push switch operates with or without the ignition key, and causes all turn indicator lamps to flash in unison. The switch symbol is illuminated with the lights switched on. The red tell tale in the switch button is backlit with the ignition switched on, and flashes when the circuit is operating.

### Rear Fog Lamps Switch

The rear fog lamps, incorporated into the rear lamp clusters, operate only in conjunction with the headlamps, and should be used only in conditions of seriously

Track – Front  
– Rear  
Ground Clearance  
Kerb Weight – N.A.  
– Turbo  
Gross Weight – N.A.  
– Turbo  
Maximum Luggage Capacity

### Capacities

Engine – Refill – Inc. Filter  
– Without Filter  
– Dry  
Add/Full Dipstick Mark Difference  
Transmission  
Engine Cooling System  
Fuel Tank

### Front Suspension

Ride Height (for geometry check)

Camber  
Castor  
Steering Axis Inclination  
Scrub Radius  
Toe-out

### Rear Suspension

Ride Height (for geometry check)

Camber  
Toe-in

### Wheels

Type – Standard  
– For Winter Tyre  
– Temporary Spare  
Size – Standard  
– For Winter Tyre  
– Temporary Spare  
Wheel Bolt Torque\*

1486 mm (58.5 in)  
1486 mm (58.5 in)  
130 mm (5.1 in)  
997 kg (2198 lb) full fuel tank  
1020 kg (2249 lb)  
1215 kg (2679 lb) inc occupants  
1238 kg (2730 lb) & luggage  
40 kg (88 lb)

3.5 litre (6.2 imp. pt)  
3.3 litre (5.8 imp. pt)  
4.75 litre (8.4 imp. pt)  
1.1 litre (1.9 imp. pt)  
1.9 litre (3.35 imp. pt)  
6.25 litre (11.0 imp. pt)  
46 litre (10.2 imp. gall)

165 mm (forward inboard pivot of lower wishbone)  
– 0.25°; ± 0.25°  
+ 1°; + 0.5°, – 0  
10.5°  
– 3mm  
0° to 0.25° total

174 mm (rear inboard pivot of rear wishbone)  
– 0.5°; ± 0.25°  
+ 2.0mm each side; ± 1 mm

Light alloy, 4 bolt fixing  
Steel, 4 bolt fixing  
'Compact' steel, 4 bolt fixing  
6½J x 15 H2E 60  
6J x 14  
3.5J x 14 H2  
80 – 88 Nm (59 – 65 lbf.ft)

\* Note that the wheel bolts for the winter steel wheels are shorter than those for the standard alloy wheels. Torque remains unchanged.



# TECHNICAL DATA

## Engine

Type	4 cylinder, in line
Designation – N.A.	4XE1 – M
– Turbo	4XE1 – MT
Capacity	1588 cm <sup>3</sup> (96.9 in <sup>3</sup> )
Bore	80.00 mm (3.145 in)
Stroke	79.00 mm (3.110 in)
Compression Ratio – N.A.	9.8:1
– Turbo	8.5:1
Valve Actuation	DOHC with hydraulic tappets
Firing Order	1,3,4,2
Maximum Engine Speed – N.A.	7,700 rpm
– Turbo	7,200 rpm
Idle Speed – N.A.	900 rpm
– Turbo	950 rpm
Spark Plugs – Type – N.A.	NGK BKR6E-11 or ND K20PR-U11
– Turbo – recommended	NGK BKR6E or ND K20PR-U
– alternative	NGK BKR7E-11 or ND K22PR-U11
– Gap – suffix '11' or 'U11'	1.1mm (0.043 in)
– others	0.8mm (0.031 in)
Fuel Injection Type	Electronic Multi-Point
Injection Timing – N.A.	Simultaneous double fire
– Turbo	Semi-sequential double fire
Oil Pressure – Minimum	0.35 bar at warm idle

## Transmission

Type	Manual, 5 speed + reverse						
Gear	Internal ratio	Final Drive		mph/1000 rpm		km/h/1000 rpm	
		N.A.	Turbo	N.A.	Turbo	N.A.	Turbo
First	3.333 : 1	4.177	3.833	4.84	5.20	7.78	8.35
Second	1.916 : 1	4.177	3.833	8.41	9.04	13.5	14.5
Third	1.333 : 1	4.177	3.833	12.1	13.0	19.5	20.9
Fourth	1.027 : 1	4.177	3.833	15.7	16.9	25.3	27.2
Fifth	0.829 : 1	4.177	3.833	19.4	20.9	31.3	33.6
Reverse	3.583 : 1	4.177	3.833	4.50	4.85	7.24	7.78

## Dimensions

Overall Length	3803 mm (149.7 in)
Overall Width – excl. mirrors	1734 mm (68.3 in)
– inc. mirrors	1885 mm (74.3 in)
Overall Height (roof erected)	1230 mm (48.4 in)
Wheelbase	2250 mm (88.6 in)

reduced visibility. The fog lights symbol for this rocker switch is illuminated with the lights switched on, and an adjacent amber tell tale lights when the circuit is operating.

Be aware that indiscriminate use of rear fog lamps can cause distraction to following traffic.

## Cigar Lighter

The cigar lighter, which functions only with the ignition switched on, is operated by pressing in fully. When the element has been sufficiently heated, the lighter will spring outwards ready to be withdrawn for use.

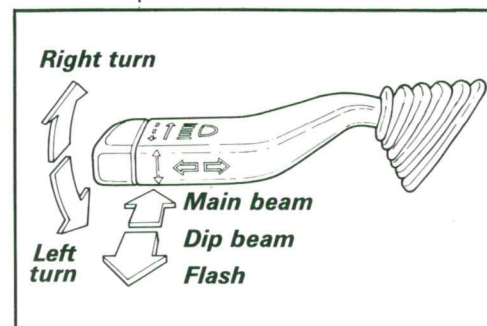
Care should be taken when handling the hot lighter to avoid accidental damage or burns.

**WARNING:** Do not leave small children unattended in the car since careless cigar lighter operation could be dangerous.

## COLUMN SWITCHES & HORN

### Headlamp Dipswitch/Flasher/Turn Indicators

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



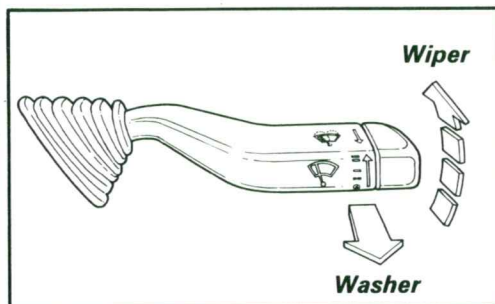
**Headlamp Dipswitch:** The headlamps must be selected via the master lighting switch before the pods will rise with the headlamps lit. The left hand lever switch is then used to select main or dip beam. Main beam is obtained with the lever furthest forward, away from the steering wheel, and dip beam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

Note that the outer pair of headlamps supply the dip beams, and remain lit when the inner pair of main beam headlamps are operating.

**Headlamp Flasher:** The headlamp flasher is operative at all times. If the lever is briefly pulled towards the steering wheel against spring pressure, the headlamp pods will rise and the dip beams light for a few seconds before the pods descend. If however the lever is held pulled towards the steering wheel, the pods will rise and the main and dip beams operate until the lever is released and the pods descend.

**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 after executing the turn. 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 Wipers/Washers

The steering column right hand lever switch controls the windscreen wipers and washer, and is operative only with the ignition switched on.

Windscreen Wipers: The wipers are controlled by the up/down position of the lever switch, which operates as follows:

- ⊙ moved fully down, the wipers are switched off.
  - ▢ move up to the first position for intermittent wipe. The wipers will make one sweep about every five seconds.
  - ▢ move to the next position to select normal wiper operation.
  - ▢ move fully upwards for high speed wipe, for use only in heavy rain.
- Do NOT at any time use the wipers on a dry screen.

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

### Horn

The horn button is located in the steering wheel centre boss, and is operative at all times.

## INTERIOR CLIMATE CONTROLS

The interior climate controls are located in the centre console, and comprise two rotary controls for heater temperature and air distribution, and a horizontal slider for fan speed. Cars with air conditioning have an additional rocker switch controlling this function, alongside the rotary controls. The engine must be running for either the heater or air conditioning to operate.

### Fan Speed Control

Fan speed is controlled by a horizontal slider between the two rotary controls. With the lever fully to the left, the fan is switched off, and only minimal airflow will be obtained from the vents. Moving the slider to the right, provides four increasing fan speeds to boost air circulation.

### Heater Temperature

The heater temperature control is the lower of the two rotary controls in the centre console. For ambient (unheated) air, turn the control knob counterclockwise. As the knob is turned clockwise, the temperature of the air supplied is progressively increased, until at the fully clockwise setting, maximum heat is available.

Oil change – distance	)	whichever	6,000 miles (10,000 km)
interval* – time	)	sooner	12 months (NA) 6 months (Turbo)
Filter change interval*	–	N.A.	At 6,000 miles then every
			12,000 miles (20,000 km) or
			12 months (whichever sooner)
		– Turbo	6,000 miles (10,000 km) or
			12 months (whichever sooner)

\* In severe service conditions (dusty areas, or cold, stop/start driving), change twice as frequently.

Capacity – refill including filter	3.5 litre (6.2 imp. pt.)
– refill without filter change	3.3 litre (5.8 imp. pt.)

### Transmission (Gearbox & Final Drive Assembly)

Only approved product

Mobil 1 RTS 9775 Fully Synthetic Motor Oil

Viscosity

SAE 5W/30

Lotus part number

A100F6036V

Oil change interval

30,000 miles (50,000 km)

Capacity – refill

1.8 litre (3.2 imp.pt)

### Steering

Only approved product

Nippon Oils 'Besco A.T.F. Dexron'

Lotus part number

A100E6088V

### Rear Hubs

Lubricant type

Lithium Complex type wheel bearing grease

Consistency

NLGI No. 2

### Brake System

Hydraulic fluid

DOT 3 or DOT 4

### Engine Coolant Additive

Type

Ethylene Glycol blend

Concentration – recommended

40%

– minimum

25%

– maximum (severe climates)

60%

Quantity (at 40% concentration)

2.5 litre (4.4 imp. pt.)



### Export Territories:

In order to give an expeditious service allied to local conditions, Lotus Cars Ltd., sell cars to Lotus Dealers/Importers who make and administer their own Warranty with their Dealer Network, which may well be in accordance with some, or all, of the foregoing. Owners of cars in Export Territories are therefore recommended to familiarise themselves with the procedure as it applies when purchasing the car.

Where an owner removes his place of residence to another Territory, while the car is still within the Warranty, he should apply to the selling Dealer/Importer for the recommended Warranty procedure.

### Personal Export:

Where an owner purchases a car under this scheme, for delivery in the United Kingdom, the United Kingdom Warranty shall apply only while the owner is resident in the United Kingdom. If the owner removes the car to his country of residence (named at time of purchase) or some other Territory during the Warranty period, he shall notify the Distributor/Importer for that Territory. The remainder of the Warranty period will be covered by the said Distributor/Importer, only after such notification.

This explanation is a guide to the Warranty procedure. For full details of the vehicle Warranty, refer to the Warranty Certificate.

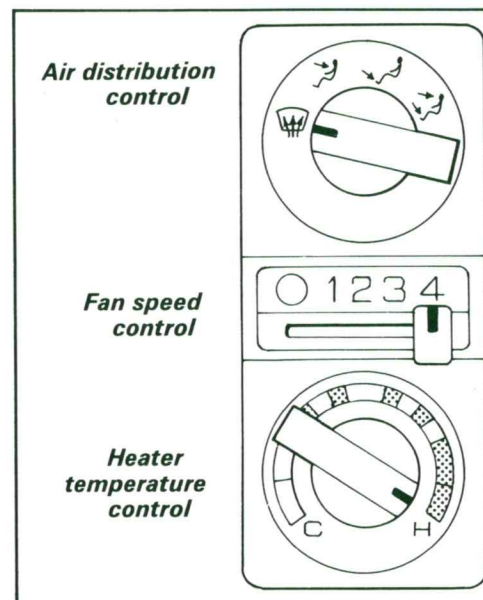
## RECOMMENDED LUBRICANTS

### Engine

In order to ensure the longevity and reliability of the vehicle, it is most important that only the specified lubricants are used. Adhere strictly to both the quality standard and viscosity rating, for the temperature range in which the vehicle will operate before the next service. The two most common oil quality classifications to be found labelled on oil containers, are API (American Petroleum Institute) and CCMC (Committee of Common Market Constructors). If neither of these classifications, with the specified standard is quoted, do not use the oil.

Manufacturer	SAE Viscosity		API	CCMC
	Above -20°C	Below -20°C		
<i>Preferred</i> Various	10W/30	5W/30	SF/CD or SG	G2 or G3
<i>Alternatives</i> Various	15W/40	5W/30	SF/CD or SG	G2 or G3
Mobil 1 Rally Formula	5W/50	5W/50	SG	G3

Recirculation – air conditioned cars only: On cars fitted with a.c., if the temperature control is turned fully counterclockwise, the air intake flap will close off the fresh air intake, and open the recirculation vent. This position should be used with the air conditioning operating for maximum cooling, or in heavy traffic to avoid drawing fumes into the car. As the control is turned away from the fully cold setting, the fresh air intake will open.



### Air Distribution

The air distribution control is the upper of the two rotary controls in the centre console. Four basic positions are marked by symbols on the control panel, and the knob is provided with detents at these positions in order that settings may be selected by 'feel'.



**Defrost:** With the knob turned fully counterclockwise, airflow is directed to the windscreen. For optimum defrost performance, select maximum heat and fan speed. On cars with air conditioning, it may be beneficial under certain ambient conditions, to switch on the a.c. to help de-humidify the air and speed demisting.



**Face Level Vents:** At this position, air is directed to the four face level vents,

each of which is provided with its own volume and direction controls (see later). Use this position with a cool temperature selection and fan speed as desired.



**Footwell:** At this setting, the face level vents are shut off, and air flow is directed to the footwells with a small amount to the screen. Use with a warm temperature setting and fan speed as desired.



**Bi-Level:** With the control turned fully clockwise, temperature stratification is provided, so that cool air may be obtained through the face level vents, with warmer air supplied to the footwells. Use a central temperature control setting, and fan speed as desired.

### Air Conditioning (if fitted)

Cars fitted with air conditioning, are provided with a rocker switch on the centre console, and an adjacent amber tell tale to indicate when the circuit is operating.

To select refrigerated air, press the rocker switch, turn the temperature control to cold for normal cooling, or fully counterclockwise (recirculate) for maximum cooling. Turn the distribution control to face level vents, and for maximum cooling efficiency



keep the windows closed. Note that the slow fan speed will be activated automatically when the a.c. rocker switch is pressed, but a faster speed may be selected if desired.

#### De-Humidified Heating (cars with a.c.)

To supply de-humidified warm air to the footwells, press the air conditioning rocker switch and select a warm temperature setting. Switch the fan to a high speed and turn the distribution control to the footwell setting.

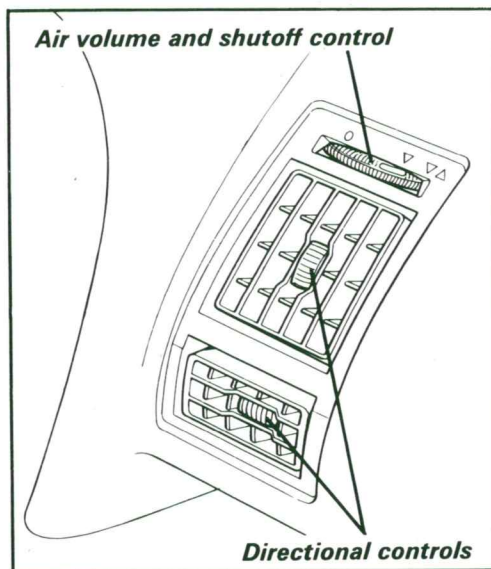
#### Important Notes on Use of Air Conditioning

1. It is not recommended that the airflow from the face level vents be directed at persons during maximum refrigeration, as this can cause discomfort (e.g. cramp).
2. 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.
3. 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.
4. Some extreme conditions of engine operation (e.g. full throttle) will automatically switch off the air conditioning for as long as those conditions apply.
5. When air conditioning is selected, the radiator cooling fans will cycle on and off even at low engine temperatures.

#### Face Level Vents

Four face level vents are fitted: two in the centre console, and one at each end of the fascia. The central vents, and on left hand drive cars, the outer vents, are fitted with a volume control thumbwheel, the turning of which opens or closes the vent, and a centre knob by which the direction of airflow may be aimed.

On right hand drive cars, each of the two outer vents comprises of separate upper and lower outlets, each with its own directional control knob. A thumbwheel above the vents enables the airflow from both upper and lower outlets to be shut off ('O'), or opens the lower vent only (▽), or opens both vents (▽△).



#### VEHICLE WARRANTY

United Kingdom:

Should you find it necessary to have repairs carried out under the terms of the Warranty, wherever possible return your car to the Lotus Car Dealer from whom it was purchased. If this is not practicable, any other Lotus Dealer can undertake Warranty Service if you provide proof of the car's Warranty, a convenient method being the presentation of the Owner's Handbook.

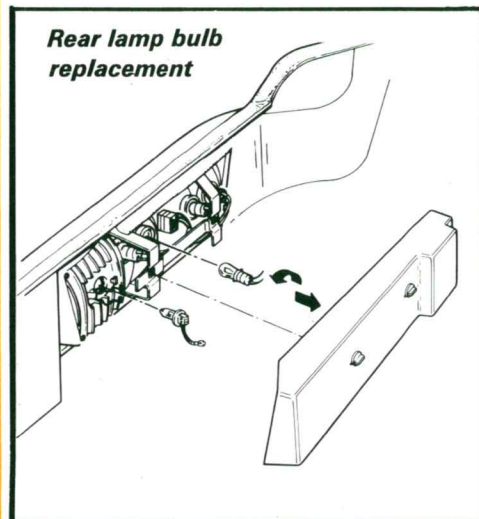
By observing the following points, you should not find any difficulty in having your claim handled.

1. Explain the nature of your concern to the Lotus Dealer and make it clear that the car is within the Warranty period, evidence of this being provided by the Registration of Sale page at the back of this handbook. At the same time it is necessary to show that the recommended routine services have been carried out at the specified intervals by a Lotus approved dealer – which is, in fact, a requirement of the Warranty.
2. The Warranty covers only defects of material or workmanship; normal maintenance adjustments or replacements are excluded. Examples of normal maintenance, which are carried out during routine servicing are, adjustments to drive belts, wheel bearings, body locks and catches, steering or headlamp alignment, tightening of nuts, bolts or hose clips, wheel balancing, rectification of interior or exterior finish due to wear and exposure, replacement of bulbs, sparking plugs, filters, etc., or replacement of broken glass. Please note that the tyres, battery and radio are proprietary parts and are warranted separately by the individual manufacturers; however, Lotus Dealers will assist in making a claim if required.
3. Lotus Dealers can settle most claims including labour charges without prior reference to the Factory. In some cases it is necessary for the dealer to obtain authority from Lotus before proceeding with the repair. However, your Dealer will handle such matters for you with the minimum delay. Where the Dealer is not satisfied that the claim is due either to faulty material and/or workmanship, a charge may be made in respect of repairs. The claim will then be submitted to Lotus Cars Ltd. for adjudication and will be dealt with as quickly as possible, if accepted you will be reimbursed by the Dealer.
4. Should it be necessary to have repairs carried out whilst the car is abroad, the services of a Lotus Dealer should be sought. However, Lotus Dealers in Export Territories are not obligated under the United Kingdom Warranty scheme and may make a charge for the repairs. In cases of this nature, retain your invoice for presentation to your own Lotus Dealer on your return, who will arrange any reimbursement consideration to be made. If a reimbursement is made it will be at the current United Kingdom rate only.



unhook the wire spring clip securing the halogen bulb. **NOTE** – Do not touch any part of a halogen bulb glass envelope with the fingers, as the greasy deposit left behind will drastically shorten the bulb's life.

Fit the new bulb into position, retain with the spring clip, fit the protective boot and connect the electrical plug.



**Rear Lamp Cluster:** The rear lamp cluster bulbs are accessible from within the boot after removing the protective cover secured by two quarter turn fasteners. With the exception of the rear fog lamps, all the bulb holders may be twisted and pulled out from the lamp body, and the bayonet fitting bulbs removed. The rear fog lamps use halogen H3 bulbs retained by a spring wire clip. **NOTE** – Do not touch any part of a halogen bulb glass envelope with the fingers, as the greasy deposit left behind will drastically shorten the bulb's life.

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

**Side Repeater Lamp:** Access to the back of the lamp is provided via the space ahead of the open door. Twist the bulbholder counterclockwise to remove, and pull out the capless bulb.

**Interior Lamp:** Prise out the lamp from the interior mirror body using the slot at the outer edge of the lamp. Pull out the bulb holder and the capless bulb.

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

## Ventilation

When the soft top is raised, air is able to vent from the cabin interior via one way flap valves in the rear bulkhead hinge recesses, into the boot. Ventilation of the boot is achieved by ducting air through the boot lid reinforcing channels to outlets over the rear number plate. Take care not to obstruct the ventilation system with luggage or clothing.

## DRIVING CONTROLS

### Foot Pedals

The clutch pedal, brake pedal and accelerator pedal are arranged in the orthodox position, and are grouped closely together for ready access and refined driving technique. Drivers are recommended not to wear heavy boots, high heels or other unsuitable footwear.

After negotiating a ford, or when driving on flooded roads, it may be necessary to dry out the brakes to restore full braking power by a few light applications of the brake pedal. It is also advisable to do this after or during prolonged driving in wet weather, under circumstances where the brakes are rarely used, such as may occur on motorways, etc.

The practice of driving with the left foot resting on the clutch pedal should be avoided, as rapid clutch release bearing wear will result. Also, never 'hold' the car on a slope by slipping the clutch, but apply the parking brake.

### Parking Brake

The parking brake is mounted on the centre tunnel and should be applied by pulling upwards **firmly and fully** to engage the maximum number of ratchet 'clicks'. 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.

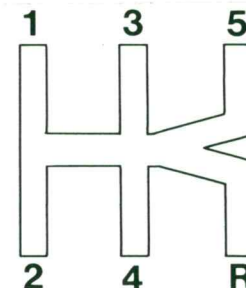
To release the parking brake, pull the lever slightly upwards, press and hold in the button at the end of the hand grip with the thumb, and lower the lever.

The parking brake operates by mechanical means, only on the rear brake calipers, and is totally independent of the hydraulic footbrake system.

When the ignition is switched on, a parking brake tell tale lamp on the fascia will glow red, as a reminder that the parking brake is applied. Check that the light goes out when the brake is released.

### 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 or reverse. Note that a safety feature prevents reverse gear being selected directly from 5th, by requiring that the





lever is first moved across the gate to release an interlock. 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.

### Starting Engine 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. Operate the starter until the engine starts and runs continuously. The engine idle speed will be raised automatically at low ambient temperatures.

### Starting Engine Below -20°C (0°F)

Operate the starter without depressing the accelerator pedal. If, after five seconds, the engine does not start and continue to run, depress the accelerator pedal 12–20mm (½–¾ 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, a lean air/fuel mixture is provided to help clear a fuel flooded engine.
- iii) The use of wide throttle openings and/or high boost levels before the engine has reached normal running temperature will result in premature wear, and should be avoided.

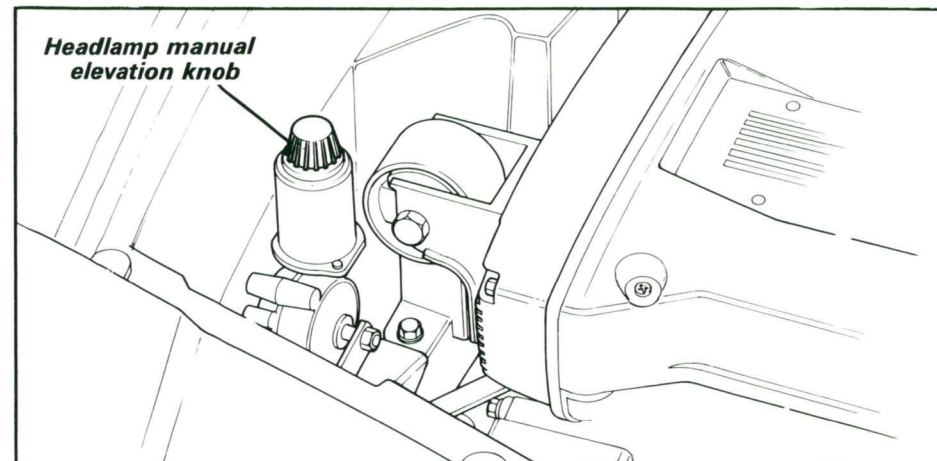
### Stopping Engine

On Turbo engines, before switching off after fast driving, allow the engine to idle for 2 – 3 minutes in order to allow the turbocharger to cool off and prevent the oil in it 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, 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

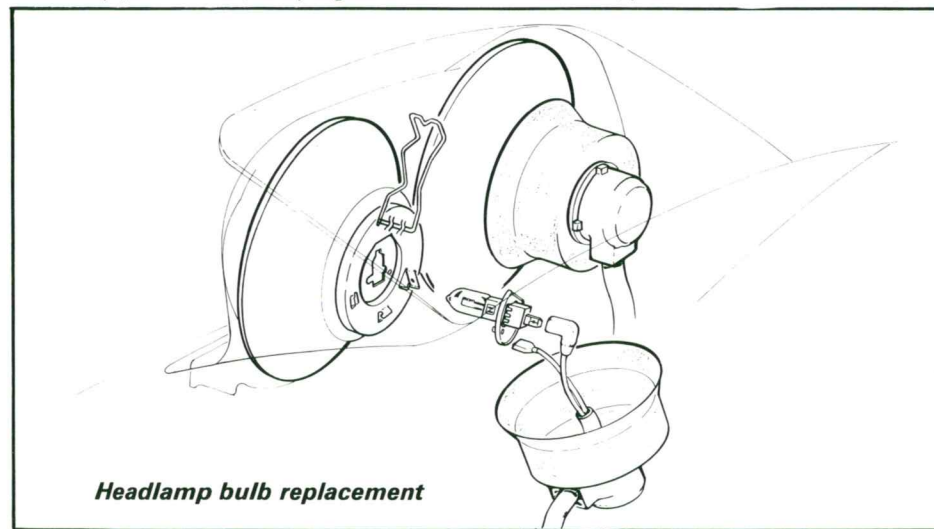
## Emergency Headlamp Elevation

Each headlamp pod is raised and lowered by an electric motor located behind the pod in the engine bay. For maintenance, or in an emergency, the pods may be raised manually by turning the motor shaft using the knob on top of the motor body. If necessary, unplug the electrical connector block.



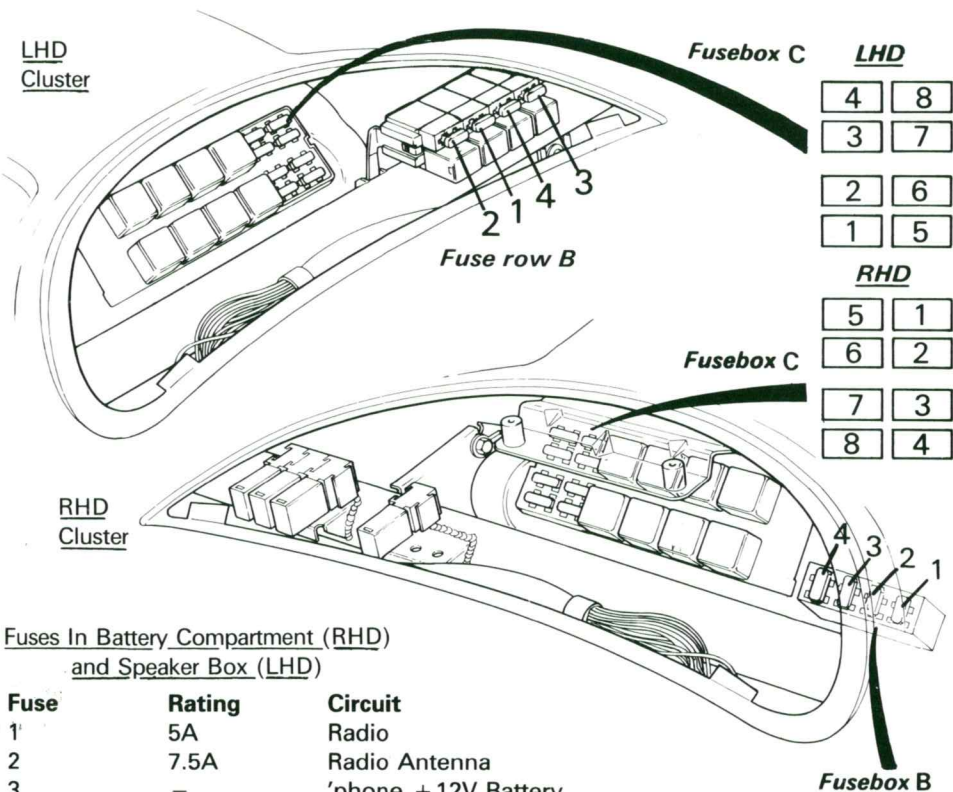
## Bulb Replacement

Headlamps: Raise the headlamp pods by switching on the headlamps, or winding up manually (see above). Unplug the electrical connector, pull off the rubber boot, and





LHD  
Cluster

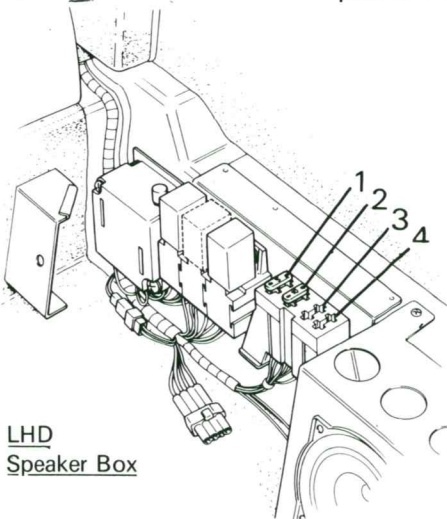


LHD	4	8
	3	7
	2	6
	1	5
RHD	5	1
	6	2
	7	3
	8	4

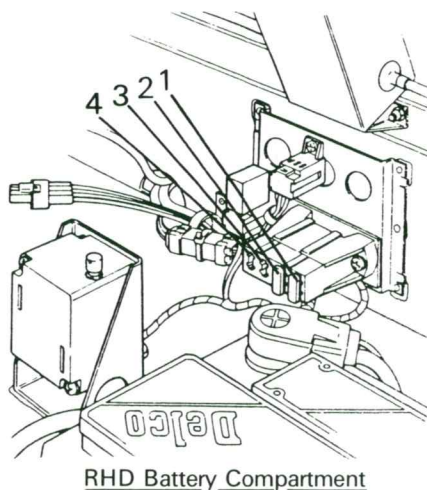
RHD  
Cluster

Fuses In Battery Compartment (RHD)  
and Speaker Box (LHD)

Fuse	Rating	Circuit
1	5A	Radio
2	7.5A	Radio Antenna
3	—	'phone + 12V Battery
4	—	'phone + 12V Ignition



LHD  
Speaker Box



RHD Battery Compartment

conditions of 'heat soak'. The pump will switch off when coolant temperature has fallen to a specified level.

### Running In

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

It is important during the engine's early life, to limit the amount of engine heat generated, which is dependent on throttle opening and engine speed. For the first 600 miles (1000 km) the car should be driven gently with only moderate throttle openings and a maximum engine speed of 4,500 rpm, making full use of the gearbox to avoid labouring the engine. Thereafter, the engine speed and throttle opening may be gradually increased, and higher engine work loads used for longer periods. Vary the operating conditions rather than maintain a steady cruising speed. In the interests of optimum performance, it is recommended to restrict operation at full throttle and rpm until after 1,000 miles (1,700 km) have been covered.

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

##### Cars without catalytic converter:

Unleaded Fuel — minimum octane rating 95 RON

Leaded Fuel — minimum octane rating 97 RON (4 star)

The engine has been designed to run on 95 RON unleaded fuel, but if necessary 97 RON leaded fuel may be used without any adjustments to the engine being required.

##### Cars with catalytic converter:

Use only **UNLEADED** fuel. Where available, **unleaded** fuel with a minimum octane rating of 97 RON ('Super Unleaded') should be used for optimum performance and economy, but the vehicle will operate perfectly satisfactorily on 95 RON **unleaded** (regular unleaded in U.K.).

If 95 RON or higher rated fuel is not available, 91 RON **unleaded** fuel may be used, but vehicle performance and economy will be reduced.

#### 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.

A single fuel tank is fitted ahead of the left hand rear wheel, with a filler concealed by a flush fitting flap, in the left hand rear wing. To release the filler flap, open the left hand door, and pull the release handle in the door jamb; the flap will



spring ajar. Open the flap fully, and turn the filler cap counterclockwise to remove.

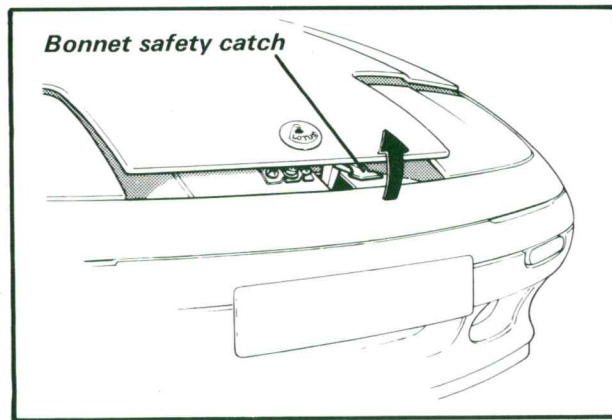
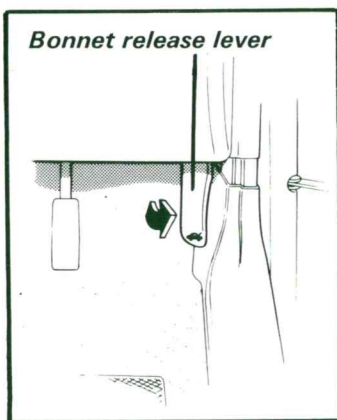
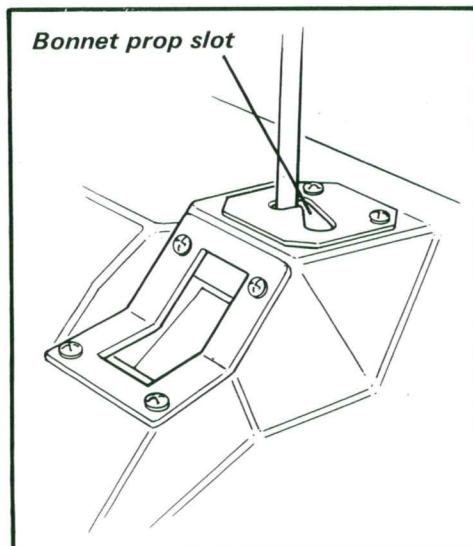
Select the correct fuel grade before inserting the pump nozzle fully into the filler neck. The fuel tank capacity is 46 litres (10.2 imp. gall). Note that cars equipped with a catalytic converter are fitted with a restricted filler neck so that only the smaller diameter nozzle used on an UNLEADED petrol pump may be inserted.

After filling, replace 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.

### Bonnet

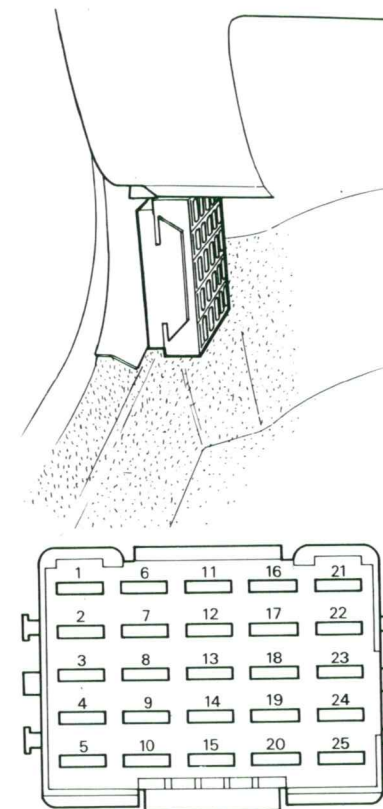
To open the bonnet, pull the release lever located in the driver's footwell, just ahead of the door hinge post. The rear hinged bonnet will spring ajar, with a safety catch preventing it opening further in case of accidental release. Release the safety catch by squeezing upwards a tab located to the left of the central catch (note: this is to the right when standing in front of the car). Raise the bonnet fully, unclip the prop from the bonnet underside, and fit the end of the prop into the slot provided adjacent to the bonnet catch.

To close the bonnet, unhook the prop and fit into its retaining clip. Lower the bonnet, keeping fingers well clear of entrapment, and press firmly over the catch to ensure it is fully engaged.



### Main Fusebox (A) — ahead of passenger door hinge post

Fuse	Rating	Circuit
1	15A	Horns
2	7.5A	Air Cond.
3	7.5A	Fuel Pump
4	10A	RHD Lighting
	7.5A	LHD CDL
5	10A	ECM
6	5A	LH Sidelamps
7	5A	RH Sidelamps
8	3A	Radio Relay Logic (USA)
9	—	
10	3A	VSV
11	10A	Hazard
12	3A	Batt Services
13	5A	Stoplamps
14	5A	Int. Lamps
15	15A	Rear Fog
16	10A	DI & Reverse
17	15A	Wash/wipe
18	3A	Ignition I
19	3A	Mirror Timer
20	3A	Ign. Relay
21	5A	Mirrors
22	3A	Window Switch
23	20A	Heater Blower
24	15A	Cigar Lighter
25	—	



### Fuses Above Instrument Cluster

Fuse	Rating	Circuit
Fusebox/Row B		
1	20A	RH Window Lift
2	20A	LH Window Lift
3	15A	RH Cooling Fan
4	15A	LH Cooling Fan

Fuse	Rating	Circuit
Fusebox C		
1	15A	LH H/L Motor
2	15A	RH H/L Motor
3	7.5A	RHD CDL
	10A	LHD Lighting
4	5A	Coolant Pump
5	7.5A	LH Dip Beam
6	7.5A	RH Dip Beam
7	7.5A	LH Main Beam
8	7.5A	RH Main Beam