

# 400

S E R I E S



## *Owner's Handbook*

*Instruktieboekje*

*Manuel du Conducteur*

*Betriebsanleitung*

*Manuale di Istruzioni*

*Manual del Conductor*

*Manual do Proprietário*



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***In addition to this handbook, your literature pack contains the following documents:***

- **Service Portfolio**
  - this book includes important information about Rover warranty and vehicle maintenance requirements, as well as containing a unique record of your own car's service history. Ensure that your Rover dealer completes the appropriate service record slip after every service.
  
- **Security Information Card**
  - Your Rover dealer should have filled in all the relevant serial numbers concerning your car before delivery. These are important aids to vehicle security; keep the card in a safe place - NOT IN THE CAR.

***The literature pack is an important part of the car.  
Keep it in the glovebox where it is easy to find.***



As part of Rover Cars environmental policy, this publication is printed on paper made from chlorine free pulp.

## Introduction

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Welcome to your new Rover. This handbook, together with the other publications in the literature pack, provides all the information you need to gain maximum pleasure from owning and driving your new car.

For your convenience, the handbook is divided into the following sections, each dealing with a particular aspect of driving or caring for the car. You will find it worthwhile to take a little time to read each one, and get to know your new Rover as soon as you possibly can.

**'Before you drive'** - this section covers seat adjustment, seat belts and heating controls and deals with everything you need to know to settle comfortably into the car before you drive.

**'Driving controls'** - here the functions and operation of the switches, instruments and driving controls are explained.

**'Maintenance'** - this part includes information about the maintenance checks that you, the owner, should carry out on a daily or weekly basis.

**'Emergency information'** - this section will help to solve those unavoidable little emergencies that occur from time to time; like replacing bulbs and fuses, or changing a wheel.

**'Technical data'** - here you will find the technical specification for your car.

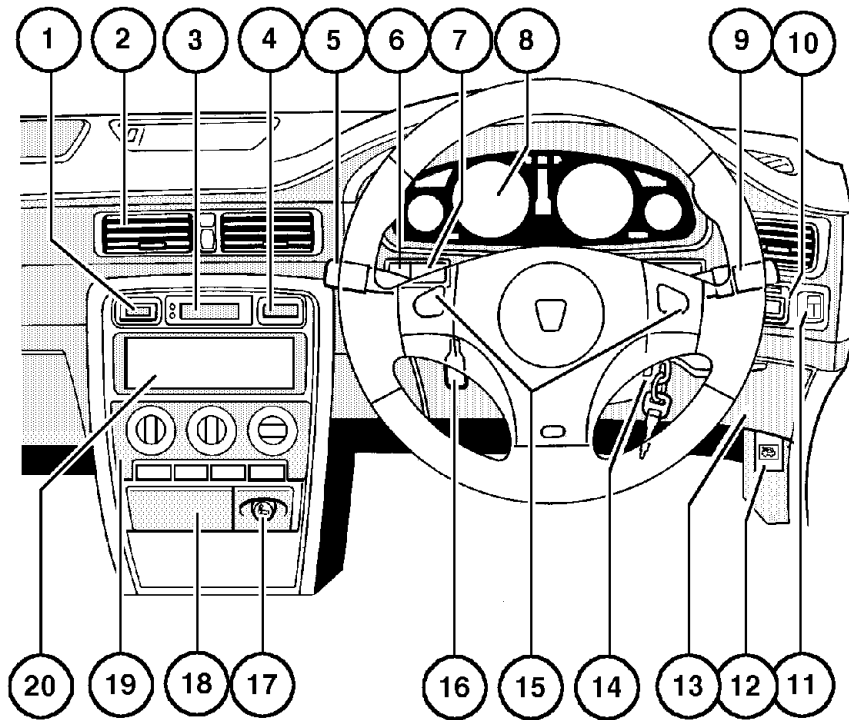
### **WARNING!**

*Safety warnings are included in this handbook. These indicate either a procedure which must be followed precisely, or information that should be considered with great care in order to avoid the possibility of personal injury or serious damage to the vehicle.*

**The specification of each Rover vehicle will vary according to territorial requirements and also from model to model within the vehicle range. Some of the information published in this handbook, therefore, may not apply to your car. If you are in any doubt, then contact your dealer.**

Rover operate a policy of constant product improvement and therefore reserve the right to change specifications without notice at any time. Whilst every effort is made to ensure complete accuracy of the information in this handbook, no liabilities for inaccuracies or the consequences thereof, including loss or damage to property, or injury to persons, can be accepted by the manufacturer or the dealer who supplied the handbook, except in respect of personal injury caused by the negligence of the manufacturer or the dealer.

## Controls



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- |  |                                      |
|--|--------------------------------------|
| 1. Hazard warning light switch               | 11. Headlight beam height control    |
| 2. Fresh air vents (4)                       | 12. Bonnet release                   |
| 3. Clock/radio display                       | 13. Driver's storage compartment     |
| 4. Rear screen demister switch               | 14. Starter switch                   |
| 5. Lighting and direction indicator controls | 15. Horn switches                    |
| 6. Front fog lights switch                   | 16. Steering column height adjuster  |
| 7. Rear fog guard lights switch              | 17. Cigar lighter                    |
| 8. Instrument and warning light panel        | 18. Ashtray                          |
| 9. Windscreen wiper/washer controls          | 19. Heating and ventilation controls |
| 10. Exterior mirror control                  | 20. Radio/cassette player            |

## Locks & Alarm

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### ANTI-THEFT SECURITY PRECAUTIONS

**Always adopt this simple "five point" drill whenever you leave your car - even for just a few minutes:**

- Fully close all windows (and sunroof).
- Remove any valuables (or hide them in the luggage compartment).
- Remove the starter key and handset.
- Engage the steering lock (by slightly turning the steering wheel until it locks).
- Lock all the doors and activate the alarm.

Even when you have done all these things, there is still much you can do to make your car a less inviting target for the thief.

### BE SAFE, NOT SORRY!

- Try to park where your car can be seen by householders or passers-by.
- At night always park in well lit areas and try to avoid dimly lit side streets.
- Never leave vehicle documents in the car - these are a real bonus for the thief.
- If you have a garage, use it - and don't risk leaving the key and handset in the starter switch.

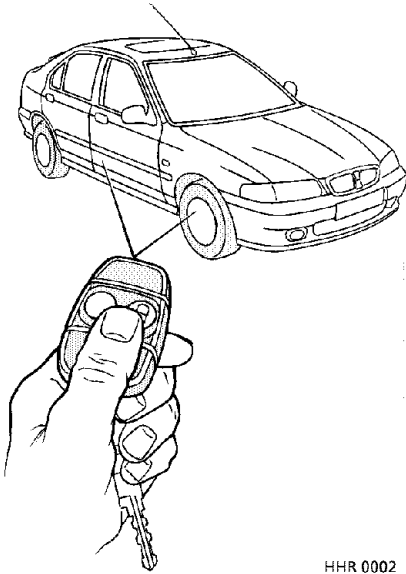
### ALARM SYSTEM

Your car is fitted with a sophisticated electronic anti-theft alarm and engine immobilisation system. In order to ensure maximum security and minimum inconvenience, you are strongly advised to gain a full understanding of the alarm system by thoroughly reading this section of the handbook.

### FOR MAXIMUM SECURITY ALWAYS USE THE HANDSET TO LOCK AND UNLOCK THE CAR

(except when the car is to be locked with passengers or animals inside, or with a window or sunroof open  
- see 'Locking using the key').

## Locks & Alarm



HHR 0002

### LOCKING THE CAR AND ARMING THE ALARM

Before locking the car and arming the alarm, ensure all doors, windows, sunroof, bonnet and luggage compartment apertures are securely closed.

#### Locking with the handset

Aim the handset at the car and briefly press the lock button (PADLOCK SYMBOL). If the doors lock correctly, the hazard warning lights will flash three times and the alarm system indicator light (on the instrument panel) starts to flash.

Each time the car is locked using the handset, a coded signal is transmitted to a receiver inside the car, which activates the following security features:

- the central door locking system (all the door locks are activated).
- the perimeter alarm (protects the door, bonnet and luggage compartment apertures).
- ultrasonic space protection (protects the space inside the passenger compartment).
- engine immobilisation.

Once armed, the alarm will sound if any door or other aperture is opened, or if (after a checking period of 15 seconds) any movement is detected inside the passenger compartment (see '*Ultrasonic space protection*').

If the hazard warning lights fail to flash when the handset is used to lock the car, this indicates that either the bonnet, luggage compartment or a door is not fully closed, in which case the alarm will still be armed and the engine immobilised, but ultrasonic space protection will not have been activated.

Once the open door or aperture is closed, the hazard warning lights will flash three times and the alarm system will arm itself as described previously.

#### Unlocking with the handset

Aim the handset at the car and briefly press the PLAIN button; the interior light illuminates, the hazard warning lights flash once, the alarm is disarmed immediately and the engine re-mobilised.

If the handset fails to unlock the car, use the key and resynchronise the handset (see item 6 under '*Handset battery*').

#### If the alarm sounds

To silence the alarm, press either handset button, or operate the door locks using the key. Once activated the alarm will sound for approximately 30 seconds before switching itself off, and can be triggered up to three times in total before needing to be reset.

## Locks & Alarm

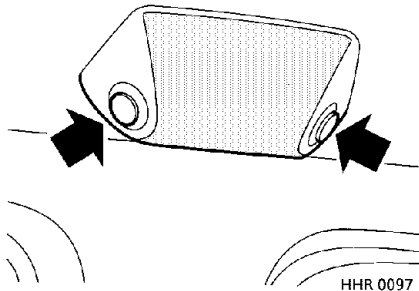
### Anti-theft alarm indicator lights

After locking, the RED indicator light on the instrument panel flashes rapidly while the alarm system is arming itself.

After 10 seconds, the indicator light adjusts to a slower frequency, and continues flashing as an anti-theft deterrent until such time as the alarm is disarmed.

### Ultrasonic space protection

Ultrasonic space protection is only activated when the alarm is armed using the handset. Twin sensors situated at the top of the right hand door pillar, monitor the interior space and activate the alarm if an intrusion into the passenger compartment is detected (entry gained through a window or sunroof, for example).



### ENGINE IMMOBILISATION

Engine immobilisation is an important aspect of the security system and includes a feature known as passive immobilisation. This ensures that the engine is immobilised whenever any of the following conditions occur:

1. When the car is locked (with handset or key).
2. Thirty seconds after the starter switch is turned off AND the driver's door opened (even if the alarm is not armed and the car locked).
3. Thirty seconds after the car is unlocked (provided the doors have not been opened).

The engine is re-mobilised by a signal transmitted from the handset to the starter switch. This occurs automatically whenever the key is inserted into the starter switch and turned to position II, provided the handset is in close proximity to the switch.

**For this reason, it is important that the handset is kept on the same ring as the starter key.** If the handset has become detached, the re-mobilisation signal can only be transmitted by pressing the smooth (unlock) button on the handset.

### WARNING!

*DO NOT keep both handsets on the same keyring. If both handsets are close to each other, the engine will not re-mobilise automatically.*

### Warning bleep

If the starter switch is turned on and the engine fails to re-mobilise, a warning bleep will sound. To re-mobilise the engine, press the smooth (unlock) button on the handset.

If the handset is lost or damaged, use the door key to enter the Emergency Key Access code (see 'Engine immobilisation override' on the next page).



## Locks & Alarm

### Engine immobilisation override

If the handset is lost or fails to operate, engine re-mobilisation can be achieved by using the key to enter the four digit key access code (recorded on the Security Information card).

With the car locked, proceed as follows:



1. Insert the key into the driver's door lock, turn to the locked position and hold for 5 seconds before releasing.



2. Turn the key to the UNLOCK position the required number of times to enter the first digit of the code (if the first digit is 4, turn the key to the unlock position four times).



3. Turn the key to the LOCK position the required number of times to enter the second digit of the code.



4. Turn the key to the UNLOCK position the required number of times to enter the third digit of the code.



5. Turn the key to the LOCK position the required number of times to enter the fourth digit of the code.



6. Finally, turn the key once more to the UNLOCK position to unlock the door.

If the code has been entered successfully, the anti-theft indicator lights will stop flashing and the engine can be started.

### ***If an incorrect code has been entered:***

If the code has been entered incorrectly, a warning bleep will sound when the key is turned to the unlocked position. In this case:

- open and close the door (this will cancel the error).

- enter the code again.

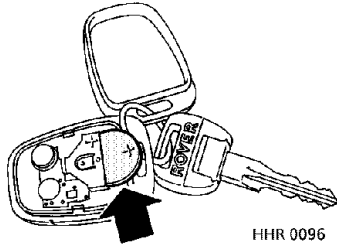
After three failed entry attempts, the security system invokes a delay period of ten minutes during which the system will not accept any further attempts to enter a code.

Once deactivated, the engine immobiliser will remain inactive until the handset is next used to lock the car.

### **WARNING!**

- *NEVER leave the Security Information card in the car.*
- *Memorise the key access code or keep the Security Information card on your person in case of emergencies (a damaged handset for example).*

## Locks & Alarm



### HANDSET BATTERY

The handset battery should last for approximately three years dependent upon use. When the battery needs replacing it will be apparent from the following symptoms:

- Each time the handset is operated, the indicator light in the instrument panel flashes rapidly until the door is opened.
- The operating range of the handset will reduce.

Always fit a Rover YWK10003 or a Panasonic CR2032 replacement battery (available from a Rover dealer) and adopt the following replacement procedure:

- 1) Carefully prise the handset apart, start from the keyring end using a coin or small screwdriver. Avoid damaging the seal between the two halves of the case and DO NOT allow dirt or moisture to get inside the handset.
- 2) Slide the battery out of its clip, taking care to avoid touching the circuit board or the contact surfaces of the clip.
- 3) Press and hold each button in turn for at least five seconds (this will drain any residual power from the handset).

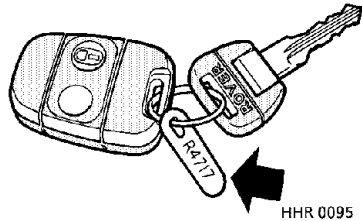
- 4) Fit the new battery, ensuring that correct polarity is maintained (positive ('+') side facing up). Finger marks will adversely affect battery life; if possible, avoid touching the flat surfaces of the battery and wipe them clean before fitting.
- 5) Reassemble the two halves of the handset.
- 6) Unlock the car using the key.
- 7) Operate the handset lock button at least four times. This will resynchronise the handset to the car.

The handset is now ready for use.

### WARNING!

*The handset contains delicate electronic circuits and must be protected from impact and water damage, high temperatures and humidity, direct sunlight and the effects of solvents, waxes and abrasive cleaners.*

## Locks & Alarm



### KEY AND HANDSET NUMBERS

You have been supplied with two remote control handsets and a pair of identical keys.

The key number is stamped on a tag (arrowed in illustration) attached to the key ring. Check that the key number has been entered in the space provided on your Security Information card.

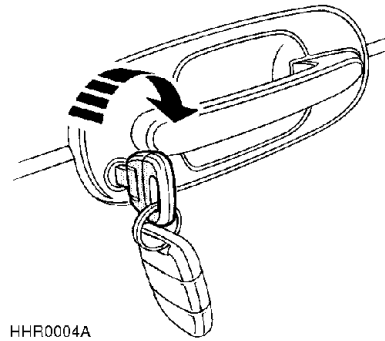
### WARNING!

- Keep the Security Information card, key tag, spare key and handset in a safe place - NOT IN THE CAR!
- DO NOT keep both handsets on the same keyring. If both handsets are close to each other, the engine will not re-mobilise automatically.

If the key or handset is lost, contact a Rover dealer, who can supply replacement or additional keys and handsets.

### Locking using the key

The two identical keys operate all locks, including the luggage compartment and glovebox. To operate the driver's door lock, turn the key towards the front of the car to lock.



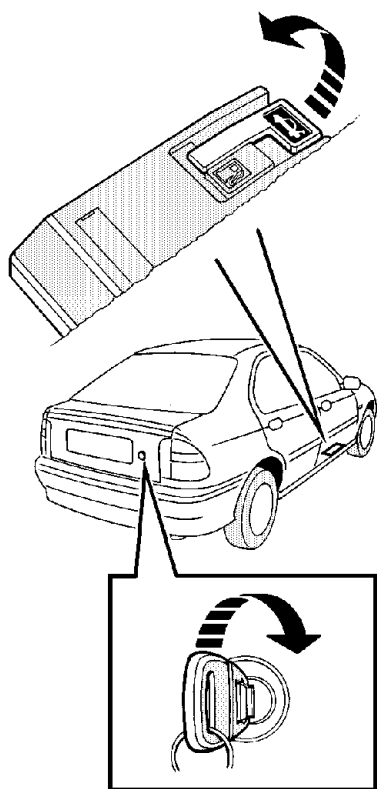
Locking the car with the key instead of the handset restricts security protection to the perimeter alarm (doors, bonnet and luggage compartment) and engine immobilisation only. Ultrasonic space protection will not be activated!

### Door sill locking buttons

All doors can be individually locked from inside the car by pushing down the locking button on each door sill.

**NOTE:** *When the driver's door locking button is operated, the central locking system operates all four door locks together.*

## Locks & Alarm



HHR 0005

### LUGGAGE COMPARTMENT

To open, use the key in the lock or, from inside the car, lift the release lever adjacent to the driver's seat. The luggage compartment light switches on automatically when the taildoor (or boot lid) is opened.

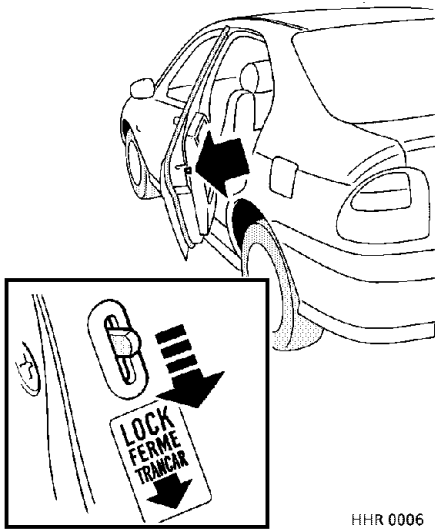
The luggage compartment is automatically locked when the taildoor (or boot lid) is closed.

For convenience, with the alarm system armed, the luggage compartment can be unlocked and opened USING THE KEY without activating the alarm (the rest of the car will remain protected and the engine immobilised during this process). The alarm will automatically rearm as soon as the luggage compartment is closed.

### WARNING!

*Do not drive with the luggage compartment open as poisonous exhaust gases will enter the car.*

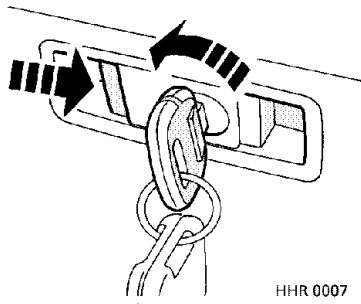
## Locks & Alarm



### Child-proof door locks

Move the lever down to engage the child-proof door locks (rear doors only).

With the child-proof locks engaged, the rear doors cannot be opened from inside the vehicle, thereby avoiding the risk of a door being opened accidentally while the vehicle is moving.



### Glovebox lock

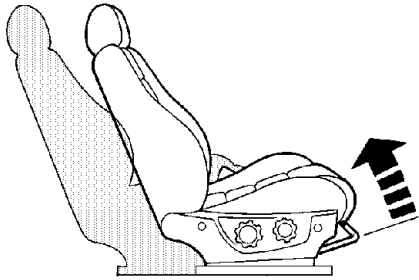
Turn the key anti-clockwise to unlock the glovebox. Squeeze the catch to the left of the lock to open (see illustration).

To lock the glovebox, turn the key clockwise.

### **WARNING!**

*DO NOT drive with the glovebox open.  
An open glovebox could cause injury  
to a front seat passenger in the event of  
a collision.*

## Seats

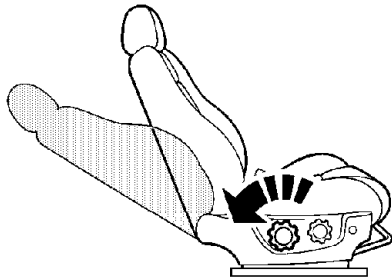


### **WARNING!**

*DO NOT adjust the seats while the car is in motion.*

### **Forward/backward adjustment**

Lift the bar to slide the seat forward or back. Ensure that the seat is locked in position before driving.

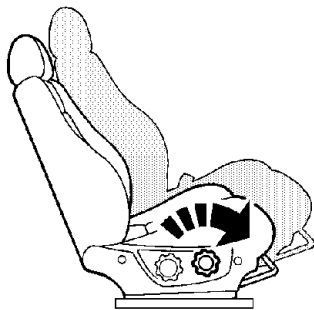


### **Backrest adjustment**

Rotate the handwheel to adjust the backrest to the required angle.

### **WARNING!**

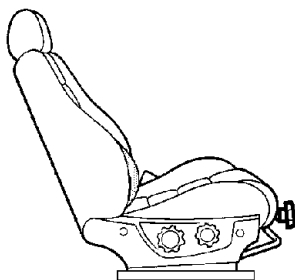
*DO NOT travel with the seat backs reclined steeply rearwards. Optimum benefit is obtained from the seat belt, with the seat back angle set to 25 degrees from the upright (vertical).*



### **Height adjustment**

(if fitted)

Rotate the handwheel to raise or lower the seat cushion.



### **Lumbar support adjustment**

(if fitted)

Rotate the handwheel on the front of the seat to adjust support to the lumbar region of your back.

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## Seats

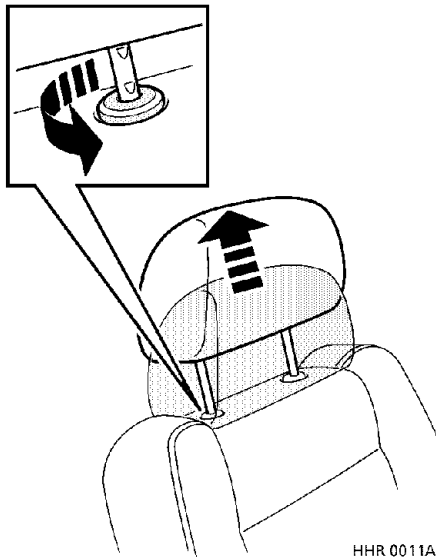
### HEAD RESTRAINTS

Head restraints are designed to restrain rearward movement of the head in the event of an accident or sudden stop - a properly adjusted head restraint can considerably reduce the risk of neck and head injuries.

#### Front head restraints

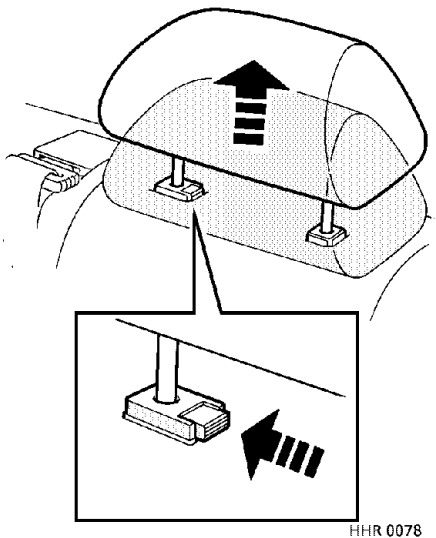
Lift or push down on the padded cushion to adjust the height of a restraint, so that the padded cushion is level with the back of the head.

Turn the right hand bevelled mounting a quarter turn anti-clockwise to unlock the head restraint and enable it to be removed from the seat. After replacement, turn the mounting clockwise to lock the head restraint to the seat.



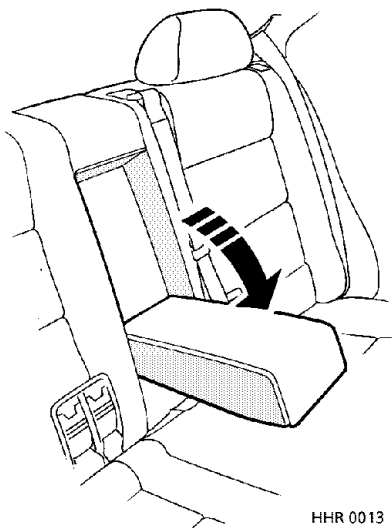
#### Rear head restraints

Depress the button to raise or lower, and also to remove, a head restraint.



## Seats

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**Rear seat armrest**  
(if fitted)

**Rear seats**  
For information on folding the rear seats, refer to '*Load Carrying*'.



## Seat Belts

### SEAT BELT SAFETY

The seat belts supplied with your car are intended for use by adult sized occupants, and must be used by one occupant ONLY. Seat belts are life saving equipment. In a collision unrestrained passengers can be thrown around inside, or possibly thrown out of the car, resulting in injury to themselves and to other occupants as well.

#### **ENSURE that ALL passengers are securely strapped in at all times.**

- ALWAYS adjust seat belts to eliminate any slack in the webbing. DO NOT slacken the webbing by pulling the belt away from the body - to be fully effective, the seat belt must remain in full contact with the body at all times.
- ALWAYS fit the lap strap across the pelvis (never across the abdomen), and ensure that the diagonal strap passes across the chest without slipping off the shoulder or pressing against the neck.
- DO NOT fit more than one person into a belt, or use a seat belt that is twisted or obstructed in any way that could impede its smooth operation.
- DO NOT allow occupants to travel with the seat backs reclined steeply rearwards. Optimum benefit is obtained from the seat belt, with the seat back angle set to 25 degrees from the upright (vertical) position.
- DO NOT allow a baby or infant to be carried on the lap. The force of a crash can increase effective body weight by as much as 30 times, making it impossible to hold on to the child.
- DO NOT allow foreign matter (particularly sugary food and drink particles) to enter the seat belt buckles - such substances can render the buckles inoperative.
- Always replace a seat belt assembly that has withstood the strain of a severe vehicle impact, or one where the webbing shows signs of fraying.
- DO use the seat belts to secure large items of luggage that are to be carried on the seats - in the event of an accident, insecure items become flying missiles capable of causing serious injury.
- Pregnant women should ask their doctor for advice about the safest way to wear seat belts.

## Seat Belts

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### **WARNING!**

*The airbag supplementary restraint system (SRS) is designed to add to the overall effectiveness of the seat belts, it DOES NOT replace them. SEAT BELTS MUST ALWAYS BE WORN!*

*Ensure that all seat belts are worn correctly - an improperly worn seat belt increases the risk of death or serious injury in the event of a collision.*

### **CHILD SEATS**

The seat belts fitted to the car are designed for adults and larger children. For safety, it is very important that all infants and young children are restrained in a child safety seat appropriate to their age and size. A range of suitable safety seats approved for use in Rover cars is available from your dealer.



The above symbol affixed to the fascia panel of your car, warns against the use of a REAR FACING child seat in the front passenger seat, when a passenger airbag is fitted. This type of child seat could cause serious injury to your child in the event of an airbag deployment.

If a front passenger airbag is fitted and it is necessary for a child to travel in the front, set the seat fully rearward and use ONLY an approved, FORWARD FACING, child restraint. DO NOT use a rear facing child seat.

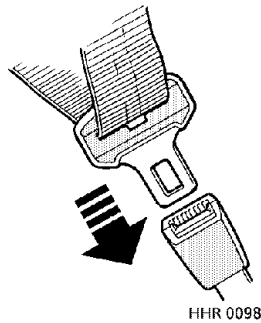
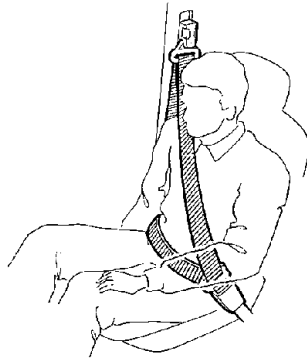
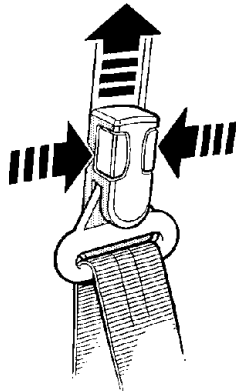
### **WARNING!**

*Accident statistics show that children are safer when properly restrained in the rear seating positions than in the front.*

*DO NOT install a rearward facing child seat in the front passenger seat if a passenger airbag is fitted.*

*NEVER leave a child unattended in the car.*

## Seat Belts



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**To minimise injury in the event of an accident, it is important that seat belts are worn correctly. Read the instructions below and the advice contained under the heading 'Seat belt safety' on a previous page.**

### **Fastening the belt**

Pull the seat belt steadily across the body and, ensuring the webbing is not twisted, insert the metal tongue plate into the buckle nearest the wearer - a 'click' indicates that the belt is securely locked.

Seat belts are designed to bear upon the bony structure of the body (pelvis, chest and shoulders) and can only be worn safely with the seats in the normal UPRIGHT position.

Position the lap belt as low as possible across the hips, ensuring it does NOT cross the abdomen.

### **Adjusting the upper anchorage (front seat belts only)**

To reduce the likelihood of injury in an accident, the seat belt upper anchorage point should be adjusted so that the belt webbing crosses the shoulder MIDWAY BETWEEN THE NECK AND THE EDGE OF THE SHOULDER.

Adjust the height of the front seat anchorage point by squeezing the buttons (arrowed in illustration) and sliding the anchor up or down.

**NOTE:** Where possible, rear seat passengers should adjust their position (moving nearer to or further away from the centre of the car) to enable the seat belt webbing to cross the shoulder without pressing on the neck.

### **Releasing the belt**

Press the RED button attached to the seat belt buckle to release the belt.

## Seat Belts

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### SEAT BELT PRE-TENSIONERS

The front seat belts are fitted with pre-tensioners that, in the event of a severe frontal impact, automatically retract to reduce any slack in both the lap and diagonal belts.

**NOTE:** *The seat belt pre-tensioners will NOT be activated by impacts to the side or rear of the car, nor by minor frontal impacts.*

### CARING FOR SEAT BELTS

Regularly inspect the belt webbing for signs of fraying, cuts and wear, also paying particular attention to the condition of the fixing points and adjusters.

Care should be taken to avoid contamination of the webbing from the affects of polish, oil and chemicals (see 'Cleaning & car care').

### Three tests for checking seat belts

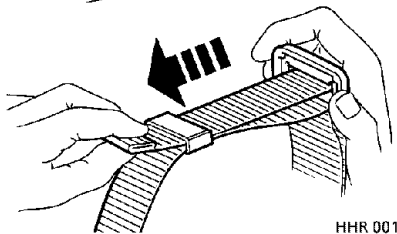
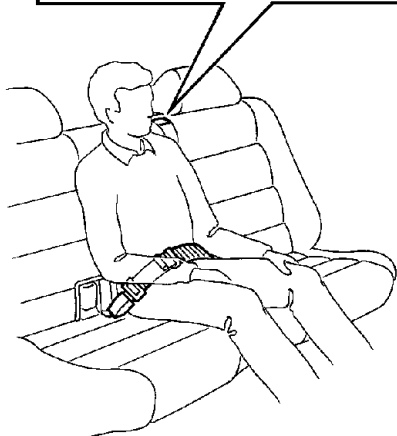
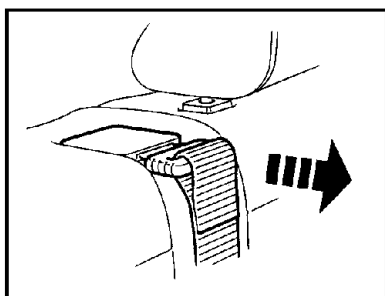
- 1) With the seat belt fastened, give the webbing near the buckle a quick upward pull - the buckle should remain securely locked!
- 2) With the seat belt unfastened, unreel the webbing to the limit of its travel. Check that unreeling is free from snatches and snags.
- 3) With the webbing half unreeled, hold the tongue plate and give it a quick forward pull - the mechanism must lock automatically and prevent any further unreeling!

If a seat belt should fail any of these tests, contact your dealer immediately.

### WARNING!

- The pre-tensioners will only operate once, after which THEY MUST BE REPLACED by a Rover dealer. Failure to replace the pre-tensioners will reduce the effectiveness of the car's restraint system.
- After any frontal impact, the seat belts and pre-tensioners MUST be checked and, if necessary, replaced by a Rover dealer.
- In the interests of safety, the seats and seat belt assemblies must only be removed or replaced by a Rover dealer as they are sensitive to physical interference.
- If you sell your car, be sure to inform the new owner that the car is fitted with pre-tensioners and make the new owner aware that the pre-tensioners must be replaced after 15 years by a Rover dealer.
- If the car is to be scrapped, unactivated pre-tensioners are potentially very dangerous. They must be safely deployed by a Rover dealer in a controlled environment BEFORE the vehicle is scrapped.

## Seat Belts



HHR 0014

### **CENTRE REAR BELT**

(5 door models)

The central rear seating position is fitted with a lap belt only. It is essential that all slack is removed from the webbing and that the belt fits snugly AS LOW ON THE HIPS AS POSSIBLE. Fit the tongue plate into the buckle (marked 'CENTRE') nearest the centre of the seat.

**NOTE:** *The centre belt tongue plate will not latch into either of the outer seating position buckles.*

To unfasten the belt, press the RED button attached to the seat belt buckle. When not in use, the tongue plate should be clipped into the socket at the top of the seat (see inset).

### **Adjusting the belt**

To adjust the length of the belt, turn the adjuster at right angles to the webbing (as shown in illustration) and then pull the webbing through the adjuster to the required length.

Once the belt is fastened, the webbing will be 'locked' to the length that has been set.

### **CENTRE REAR BELT**

(4 door models)

The central rear seating position is fitted with a three point shoulder/lap belt similar to the belts fitted to the other seating positions. Ensure that the shoulder belt passes across the left shoulder and that the metal tongue plate is inserted into the buckle nearest the wearer.

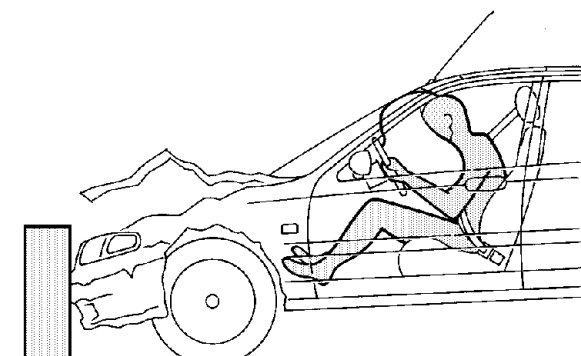
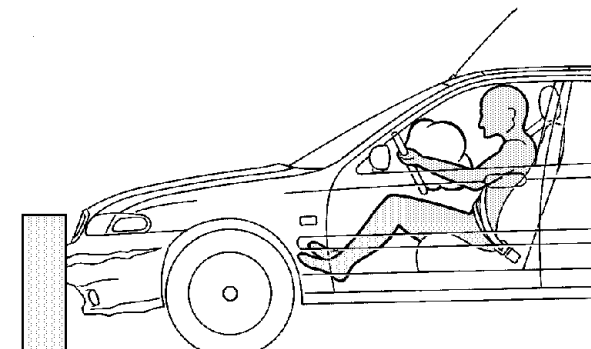
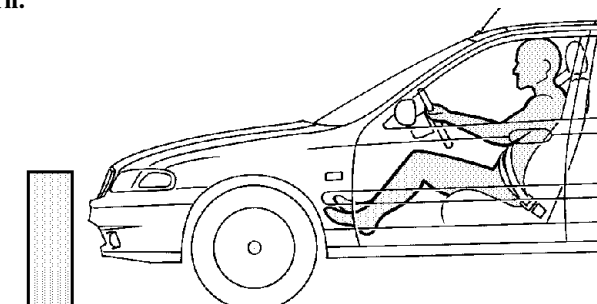
## Airbag SRS

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The airbag supplementary restraint system (SRS) provides additional protection for either the driver, or the driver and front seat passenger, in the event of a severe frontal impact on the vehicle.

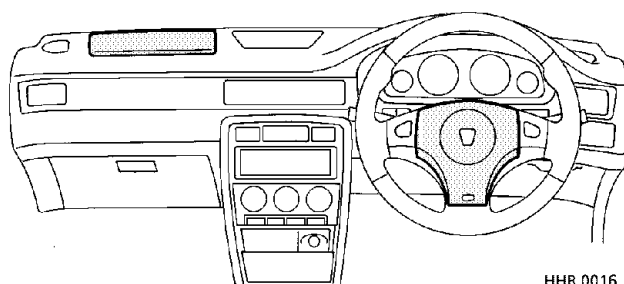
**Always remember; the airbag is a supplementary restraint system that provides ADDITIONAL protection in a frontal impact only; it does not replace the need to wear a seat belt. For maximum safety protection in all crash situations, a seat belt MUST be worn.**



HHR 0015

## Airbag SRS

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HHR 0016

### How the airbag SRS works

The airbag supplementary restraint system includes either; a single airbag module (mounted in the steering wheel centre pad) for the driver, or twin airbag modules (where shown in illustration) for both the driver and the front seat passenger.

In the event of a collision involving a frontal impact, a sensor monitors the force of the impact to determine whether the airbag(s) should be inflated. Airbags will only inflate in severe frontal collisions and will not inflate at all in the event of side or rear impacts, roll over accidents, or minor frontal impacts.

Inflation is instantaneous and accompanied by a loud noise. Also evident may be traces of smoke and powder, neither of which are injurious or indicative of a malfunction of the airbag system.

After inflation an airbag module will deflate immediately, thereby ensuring that the driver's visibility is not impaired.

### WARNING!

*After inflation some airbag components are hot - DO NOT touch until they have cooled.*

*An airbag inflates with considerable force and can cause facial abrasions and other injuries. The injurious affects of airbag inflation can be minimised by ensuring driver and passenger are seated correctly with the seat moved back as far as is practical, and wearing seat belts correctly.*

*NEVER attach accessory items to an airbag module cover (steering wheel centre pad or fascia panel) which could interfere with the inflation of the airbag or, if the airbag inflates, be propelled inside the car causing injury to the occupants.*

## Airbag SRS

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### Safety information

Even with an airbag SRS, the driver must ALWAYS wear a seat belt, because:

- Inflation and deflation take place very quickly and will not provide protection against the effects of secondary impacts that can sometimes occur during multiple collisions.

In addition:

- DO NOT allow a front seat passenger to obstruct the operation of the airbag by placing feet, knees or any other part of their person in contact with, or in close proximity to the airbag module.
- For optimum safety, children should travel in the rear of the car at all times. However, if a passenger airbag is fitted and it is essential that a child travel in the front, set the seat fully rearward and seat the child in an approved, FORWARD FACING, child seat. DO NOT use a rear facing child seat - an inflating airbag could impact with the seat and cause serious injury to the child!



### Airbag SRS warning light

The warning light, mounted either on the instrument panel, in the case of a twin airbag system, or in the steering wheel centre pad for a single airbag system, will alert you to any malfunction of the airbag SRS. The system should be checked by your Rover dealer if:

- The warning light fails to illuminate when the starter switch is turned to position 'II'.
- The warning light fails to extinguish after approximately six seconds.
- The warning light flashes or illuminates continuously while the car is being driven.

### Service information

After a period of 10 years from the date of registration (or date of installation of a replacement airbag SRS), some components will need to be replaced (*see the airbag modules replacement date shown on page 2 of the Service Portfolio book*). To ensure absolute safety, this work must ONLY be carried out by a Rover dealer who should stamp and sign the appropriate page of the Service Portfolio once the work is complete.

In addition, ALWAYS contact your Rover dealer if:

- an airbag module inflates.
- the front of the car is damaged (even if the airbag has not inflated).
- any part of an airbag module cover (the steering wheel pad or fascia panel) shows signs of cracking or damage.



## Airbag SRS

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### **WARNING!**

*DO NOT attempt to service, repair, replace or modify any part of the airbag SRS; tampering with any airbag component or wiring in the vicinity of an airbag component could cause inadvertent activation of the system resulting in personal injury.*

### **IMPORTANT**

*The components that make up the airbag SRS are sensitive to electrical or physical interference either of which could easily damage the system, causing inadvertent operation or malfunction of the airbag.*

*ALWAYS seek the assistance of a Rover dealer to carry out any of the following:*

- *Removal or repair of any wiring or component in the vicinity of the airbag SRS components (yellow wiring harness), including; the steering wheel, steering column, instrument and fascia panels.*
- *Installation of electronic equipment such as; a mobile telephone, two-way radio or in-car entertainment system.*
- *Attachment of accessories to, or modification of, the front of the car.*

*In addition:*

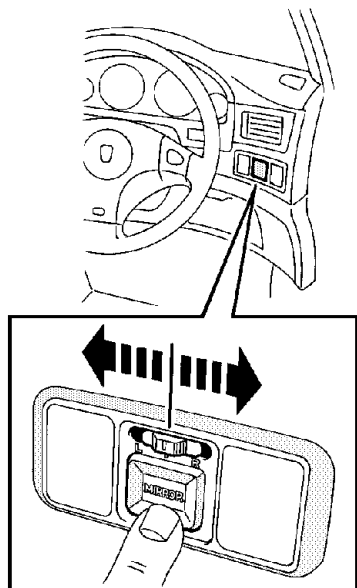
*If you sell your car, be sure to inform the new owner that the car has an airbag SRS system, and make the new owner aware of the airbag module replacement date shown in the Service Portfolio.*

*If the car is to be scrapped; uninflated airbags are potentially very dangerous and must be safely deployed in a controlled environment before a vehicle is scrapped.*

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## Mirrors

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HHR 0017A

### EXTERIOR MIRRORS

(Electrical operation)

#### **Adjustment:**

- 1) Move the mirror selector switch to the 'L' or 'R' position (to adjust either the left or right mirror).
- 2) With the starter switch turned to position 'II', press the appropriate side of the rocker switch to tilt the mirror glass up/down/left or right.
- 3) When adjustment is complete, return the selector switch to the OFF position (midway between 'L' and 'R').

#### **Heating elements**

Electrically controlled exterior mirrors have integral heating elements for dispersing ice and mist. These operate automatically whenever the starter switch is turned to position II.

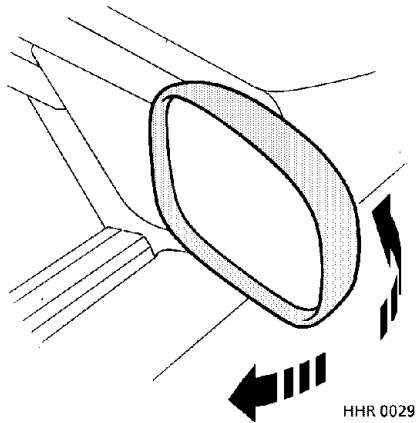
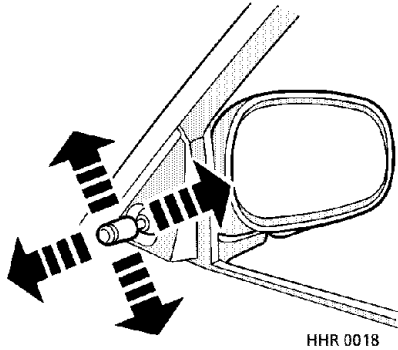
## Mirrors

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### EXTERIOR MIRRORS

(Manual operation)

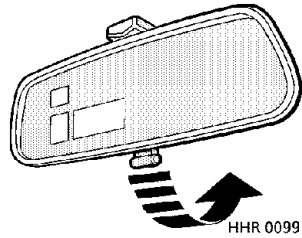
Manually operated mirrors are adjusted by moving the lever as shown in the illustration.



The mirror body is designed to fold rearwards or forwards on impact, and can also be moved manually in order to negotiate narrow openings.

## Mirrors

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### INTERIOR MIRROR

The interior mirror can be dipped to reduce glare from following vehicles. At night, move the lever at the base of the mirror forward to 'dip' the mirror. Normal visibility is restored by pulling the lever back to its original position.

### WARNING!

*In some circumstances the view reflected in a 'dipped' mirror can confuse the driver as to the precise position of following vehicles. Remember to take additional care!*

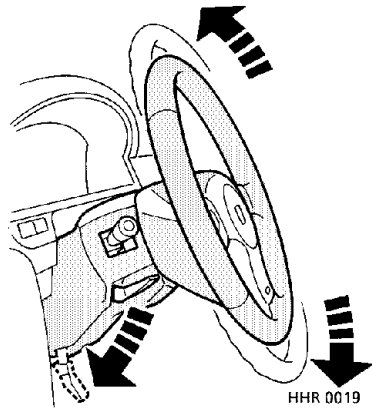
### VANITY MIRROR

To use the vanity mirror, pull down the passenger's sun visor.

To avoid possible scorching of the seats by the sun reflected in the vanity mirror, always return the visor to its stowed position when not in use.

## Steering Column

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### **STEERING COLUMN ADJUSTMENT**

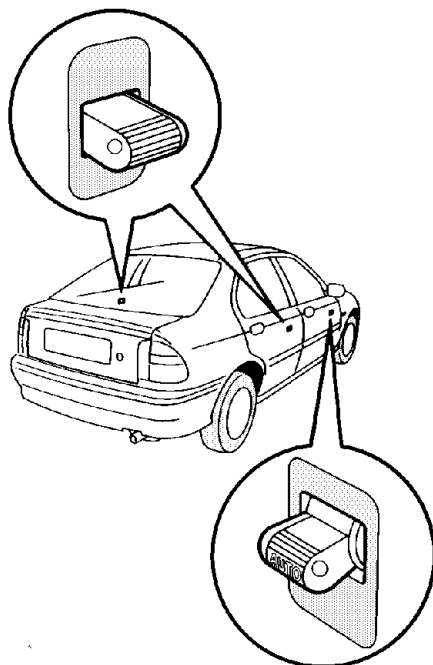
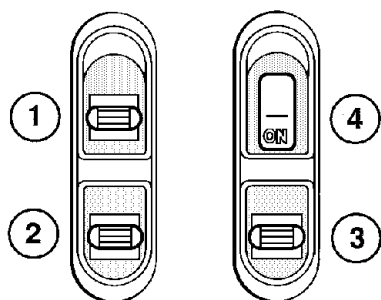
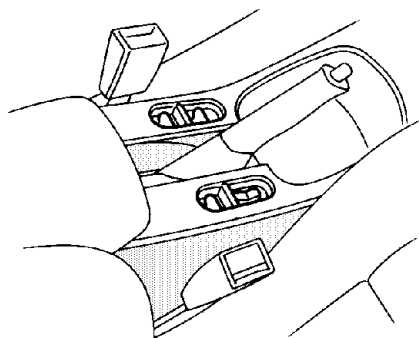
The angle of the steering column can be adjusted to suit your driving position:

- 1) With the car stationary, push the locking lever fully down to free the steering column.
- 2) Move the steering wheel (up or down) into a position which is comfortable, making sure the instrument panel is clearly visible.
- 3) When adjustment is complete, pull the locking lever fully up to lock the steering column in position.

### **WARNING!**

*DO NOT adjust the angle of the steering column while the car is in motion. This is extremely dangerous!*

## Windows



HHR 0020

28

### **WARNING!**

*Accidental closing of an electrically operated window on fingers, hands or on any other vulnerable parts of the body, can result in serious injury!*

*Always heed the following precautions:*

- *ISOLATE the rear window switches when carrying children.*
- *ENSURE children are kept clear whilst raising or lowering windows.*
- *DO NOT leave children alone in the car.*
- *ENSURE that all adult passengers are familiar with the controls and the potential dangers of electrically operated windows.*

### **ELECTRIC WINDOW CONTROLS**

(if fitted)

- 1. Front passenger window**
- 2. Left hand rear window**
- 3. Right hand rear window**
- 4. Isolation switch**

The driver's window is operated from a switch on the driver's door marked 'AUTO'.

The rear windows can also be operated from individual switches mounted on each rear door (see illustration).

## Windows

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### **OPERATING THE WINDOWS**

The electric windows can only be operated when the starter switch is at position 'II'.

#### **Driver's window**

To partially open the driver's window, push the 'AUTO' switch down LIGHTLY - the window will stop opening as soon as the switch is released.

To fully open the driver's window, press the 'AUTO' switch down FIRMLY and release it - the window will continue opening until either it is fully open or until motion is stopped by pulling the switch up.

To close the driver's window, pull the switch up - the window will stop moving as soon as the switch is released.

#### **Passenger windows**

All of the passenger windows can be operated from the central control panel.

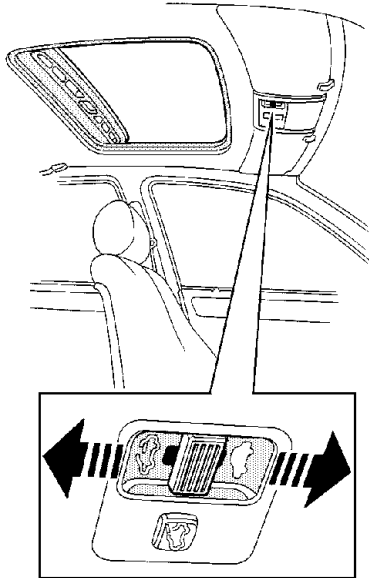
Push the appropriate switch down to open and pull up to close - the window will stop moving as soon as the switch is released. In addition, the rear windows can also be controlled by the individual switches mounted on each rear door.

#### **Isolation switch**

The isolation switch (marked 'ON') controls power to the front passenger and rear window switches.

When carrying children isolate the rear windows by pressing the isolation switch down to the OFF position. This will prevent any possibility of injury through unintentional operation of the windows.

# Sunroof



HHR 0143

## SUNROOF OPERATION

(if fitted)

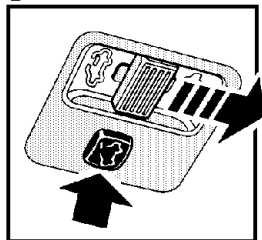
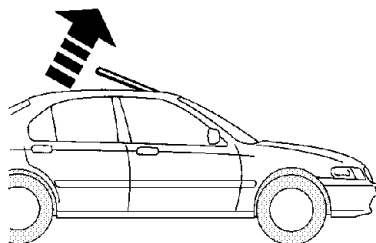
In order to operate the sunroof, the starter switch must be turned to position 'II'.

### Opening and closing

To open the roof, pull the switch to the rear.

To close the roof, push the switch forward.

**NOTE:** The sunroof visor slides open automatically when the sunroof is opened, but must be closed manually. Rear edge tilt ventilation will be increased by opening the visor.



HHR 0021

### Tilting the rear edge

To raise the rear edge of the roof, press the button (arrowed in illustration).

To return the tilted roof to the closed position, push the OPEN/CLOSE switch forward.

## WARNING!

DO NOT open or close the sunroof in sub-zero temperatures or when the roof is covered with snow or ice - damage to the motor or roof panel could occur.



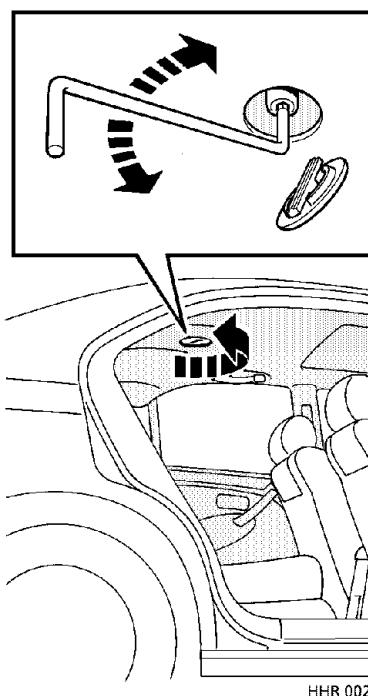
## Sunroof

### **WARNING!**

*Accidental closing of the sunroof on fingers, hands or on any other vulnerable part of the body can result in very serious injury.*

*Always heed the following precautions:*

- *ENSURE passengers are kept clear whilst closing the roof.*
- *DO NOT leave children alone in the car.*
- *ENSURE that all adult passengers are familiar with the controls and the potential dangers of operating the sunroof.*
- *DO NOT allow passengers to extend any part of their bodies through the sunroof while the car is moving.*



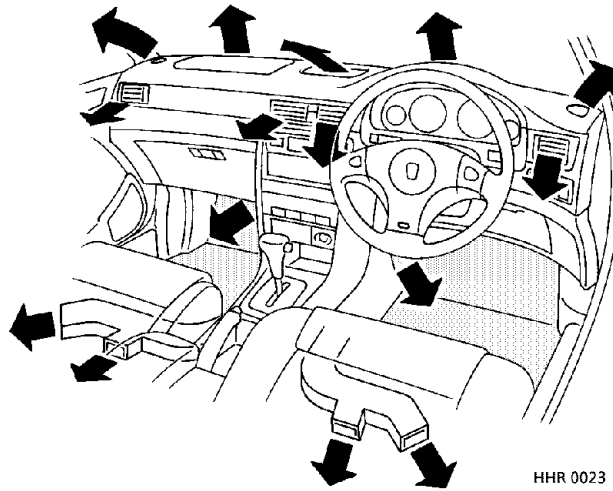
### **EMERGENCY OPERATION**

If the electric motor will not close the sunroof, follow the procedure below:

- 1) Check the fuse for the sunroof motor (see 'Fuses'), and replace if necessary.
- 2) If the sunroof motor still does not operate, the roof may be closed manually using the cranked key (located in the tool kit in the luggage compartment) as follows:
- 3) Use a screwdriver to remove the round plug in the centre of the roof lining (above the rear seats).
- 4) Fit the cranked key into the drive spindle and turn until the roof is fully closed.

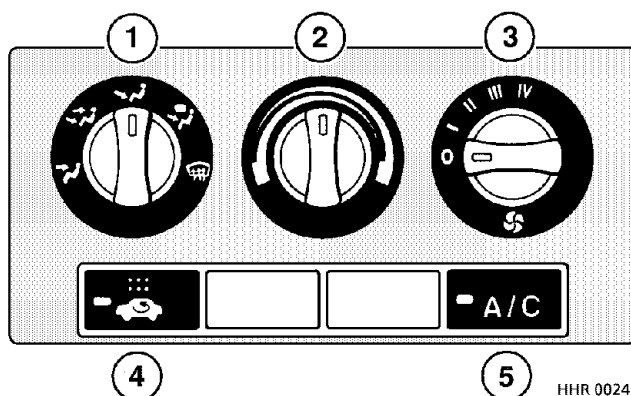
## *Heating & Ventilation*

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The heating and ventilation system provides fresh or heated air to the interior of the car. Air outlets are provided to the windscreen, face and feet - the location of the vents is shown in the illustration above. Information concerning the operation of the heating and ventilation system, as well as the air conditioning, appears on the pages that follow.

## Heating & Ventilation



### 1. Air distribution control

-  Face level vents only.
-  Foot and face level vents.
-  Foot level vents.
-  Foot level, windscreen and side window vents.
-  Windscreen and side window vents.

**NOTE:** Air flow from foot and screen vents can be varied by positioning the control between the distribution settings.

### 2. Air temperature control

- BLUE: Unheated air
- RED: Heated air

### 3. Blower switch

Turn the switch clockwise to increase the blower speed.

### 4. Recirculated air supply button

With this button pressed, the heater recirculates the air already inside the car, preventing the entry of traffic fumes.

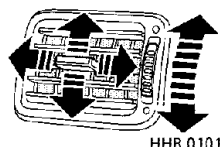
**NOTE:** Leaving the system in recirculation mode can cause the windscreen to mist. If this happens, switch off recirculation immediately.

### 5. Air conditioning switch

Press to operate. The indicator light in the switch illuminates when the air conditioning is switched on. Note that the air conditioning will not operate if the blower switch is turned to '0'.

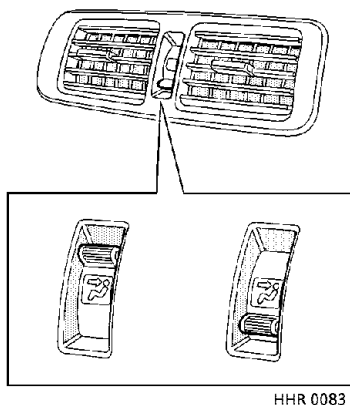
## Heating & Ventilation

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### Side face level vents

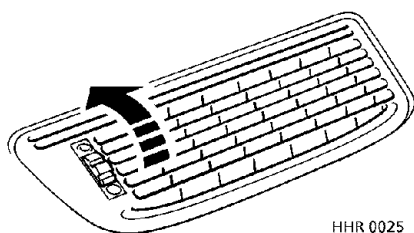
Rotate the thumbwheel up to open or down to close the vents. Direct the air flow by moving the control in the centre of the louvres either up or down or from side to side.



### Centre face level vents

Air will flow from the centre vents when face level, or foot and face level air distribution is selected. With the air flow lever set at the lower position (white arrow showing), air temperature will vary according to the position of the air temperature control.

With the air flow lever moved to the upper position (blue arrow showing), a small quantity of unheated air is drawn from outside the car and blended with air from the heater unit, independent of the air distribution setting. Dependent on the position of the temperature control, this will result in a slight reduction in air temperature, enabling slightly cooler air to be directed towards the face.



### Upper vent

The upper vent is operational only when face level, or foot and face level vents have been selected using the air distribution control. Rotate the thumb wheel forwards to open, or rearwards to close the vent.

### Pollen filter

A pollen filter, located behind the glovebox, will help to keep the car interior free from pollen and dust. To remain fully effective the filter should be replaced at least every 12 months or 12,000 miles (20,000 km), preferably at the time of a main service.

## Heating & Ventilation

### USING YOUR HEATER

Fresh air enters the heater through the air intake grille in front of the windscreen and is extracted through vents at the rear of the car. The air intake grille must always be kept clear of obstructions, including leaves, snow and ice.

The heating system uses heat from the engine to warm the air inside the car. For this reason the heater unit will not operate unless the engine is running, and full heating is not available until the engine has reached its normal operating temperature.

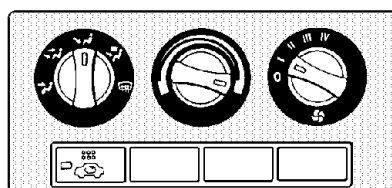
The following examples show some basic heating and ventilation settings. Further adjustment of the controls will result in a wider range of options, enabling you to obtain the most suitable output from the heater at all times.

Remember; with the blower switched off, the volume of air entering the car is dependent on driving speed alone.

**NOTE:** Footwell ducts beneath the front seats provide heating for rear passengers. Do not obstruct them by placing luggage under the seats.

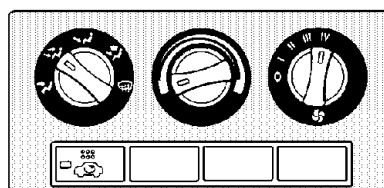
#### Heating

Set the controls as shown. Increase the blower speed as required and adjust the centre face level vents to emit heated air only.



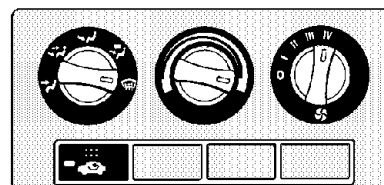
#### Maximum ventilation

Set the controls as shown. Open all the face level vents and adjust the centre vents to deliver fresh, unheated air. When the car interior reaches a satisfactory temperature, adjust the blower speed to the most comfortable setting.



#### Defrost windscreen

Set the controls as shown. To obtain maximum heated air flow from windscreen and side window vents, keep the face level vents closed.



## Heating & Ventilation

### AIR CONDITIONING

The air conditioner provides additional cooling and also reduces moisture from the air.

#### Using the air conditioning

The air conditioning can only be used when the engine is running. It is also important to keep the windows and sunroof closed.

**NOTE:** *The air conditioner will only operate when the blower is switched on. It will not operate with the blower switched off, nor when the temperature is near freezing point.*

In conditions of high humidity, slight screen misting may be experienced when the air conditioning system is turned on. This is a natural occurrence on most automotive air conditioning systems. It is not a fault; misting will clear after a few seconds once the air conditioning system is operating.

Operation of the air conditioning system places an extra load on the engine. In very hot conditions or when the engine is required to work unusually hard (climbing long hills or driving in congested traffic, for example), this could result in high engine temperatures. If the pointer nears the RED zone of the temperature gauge, the air conditioning system may switch off automatically. Full air conditioning will return when the engine temperature returns to normal.

**NOTE:** *On cars fitted with an 'after market' air conditioning unit, it is essential that you consult a Rover dealer before using your car for towing.*

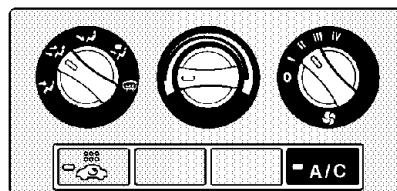
#### Maintaining the air conditioning

The air conditioning system is sealed and major maintenance should only be carried out by a qualified technician. To maintain the system in peak condition, however, owners should ensure that the system is operated for a short period every week (even during the cold winter months); with the engine at its normal operating temperature, run the air conditioning for at least ten minutes whilst driving at a steady speed.

Surplus water produced by the dehumidifying process is expelled from the system via drain tubes beneath the car. This may result in a small pool of water forming on the road when the car is stationary and is not a cause for concern.

#### Cooling

After starting the engine, press the 'A/C' switch to operate the air conditioner. Set the blower speed, air distribution and temperature controls to suit your requirements.



HHR 0074

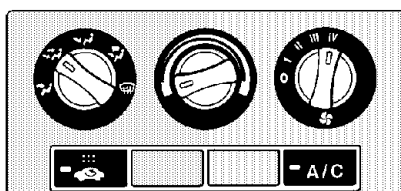
## Heating & Ventilation

### Rapid cooling

Start the engine and switch on the air conditioning.

Set the blower to maximum speed and press the recirculated air supply button (this will prevent warm air being drawn into the car from outside).

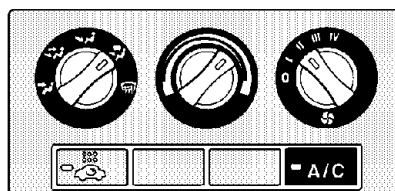
Once the interior is cool, switch off the recirculated air supply and then reset the blower as required.



### Reducing humidity

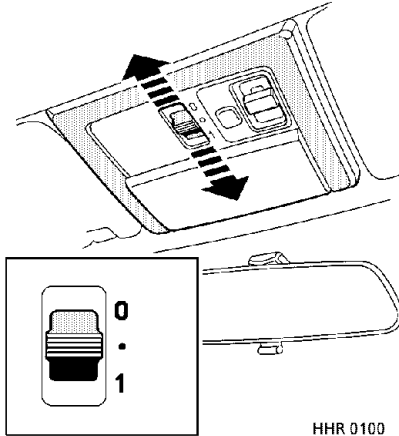
Air conditioning reduces moisture from the air and can be used to demist windows quickly in damp weather. Used in conjunction with the heater, it also makes the interior of the car warm and dry.

This setting is ideal for most driving conditions when the outside temperature is above freezing point. After switching on the air conditioner, initially set the controls as shown, and progressively adjust the temperature control and blower speed to suit your requirements.



**NOTE:** If the car interior is particularly hot when you start the engine, it will take time for the air conditioner to become fully effective. Before switching on the air conditioning, it is best to ventilate the car for a short while by operating the blower at a fast speed, with windows and sunroof open. Remember to close the windows and sunroof before you operate the air conditioner.

## Interior Equipment



### INTERIOR LIGHT

#### Switch positions:

- '0' - Light permanently off
- - Light illuminates automatically when the doors are unlocked
- '1' - Light illuminates continuously

With the switch in the centre position, the interior light illuminates automatically when the doors are unlocked, and remains illuminated for 16 seconds after all the doors are closed, or until the starter switch is turned on.

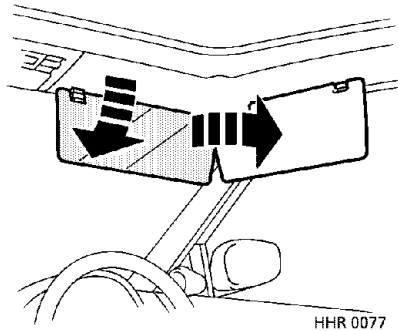
### LUGGAGE COMPARTMENT LIGHT

Illuminates automatically when the luggage compartment is opened.

### GLOVEBOX LIGHT

(if fitted)

Operates automatically when the exterior lights are switched on and the glovebox lid is opened.



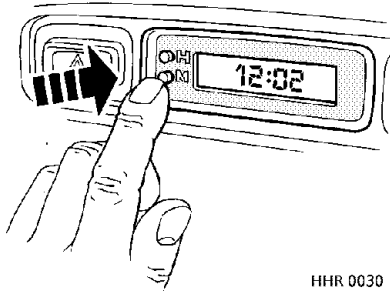
### SUN VISOR

To shield your eyes from the sun, pull the visor down from the roof; the visor can be used to shield the upper part of the windscreen or the side window as required.

**NOTE:** The passenger's sun visor is fitted with a vanity mirror on the underside.



## Interior Equipment



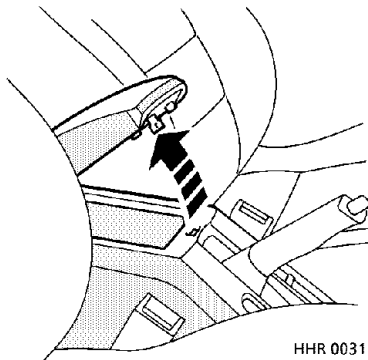
### CLOCK

The digital clock display illuminates when the starter switch is turned on and dims for night viewing when the side lights are switched on.

Press the hour ('H') and minute ('M') buttons to set the time. If both buttons are pressed together, the display will change between 24 hour and 12 hour displays.

The clock also displays information about the operation of the audio unit fitted to your car (see the '*In-car Entertainment*' book for details).

**NOTE:** If the battery is disconnected, the clock will need to be reset.

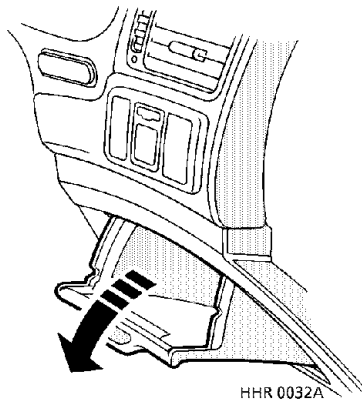


### CUBBY BOX

(if fitted)

Lift the front edge of the lid to open.

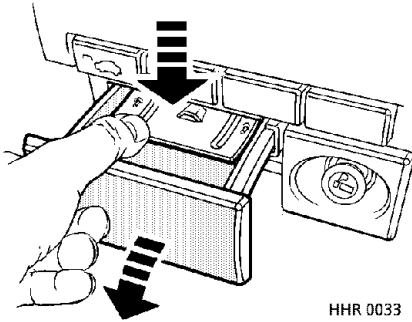
**NOTE:** The recess in the underside of the lid can be used to hold cards.



### DRIVER'S PERSONAL STORAGE

Pull down to open (for instructions showing removal and replacement of the storage container, see '*Fuses*').

## Interior Equipment

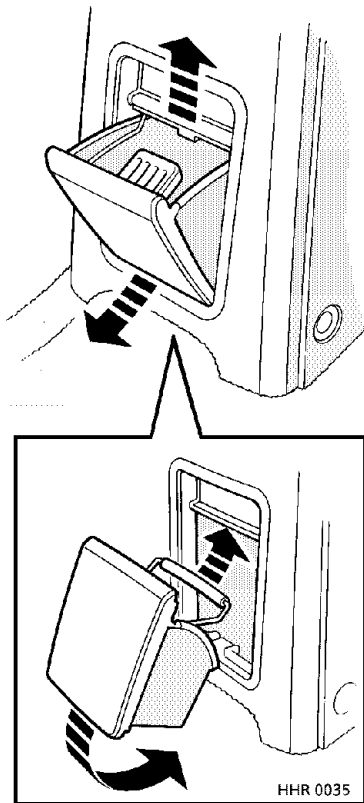


### FRONT ASHTRAY

Pull front of ashtray to open. To remove for emptying, depress the release plate (arrowed in illustration) and pull out the drawer as shown.

### WARNING!

*Ashtrays are fire hazards - DO NOT use for waste paper or other combustible material.*



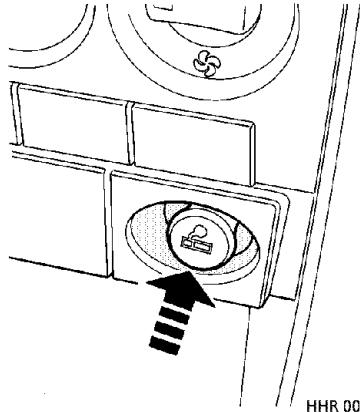
### REAR ASHTRAY

Pull out to open. To remove for emptying, open the ashtray fully and then lift the base up and outwards.

Replace as shown in inset, ensuring that the retaining spring is inserted first before the base of the ashtray is eased into the aperture.

## Interior Equipment

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### **CIGAR LIGHTER**

With the starter switch turned to position 'I' or 'II', push the lighter in to heat up. When ready, the lighter will partially eject and can then be withdrawn for use. **DO NOT** hold the lighter in while it is heating - this could cause it to overheat.

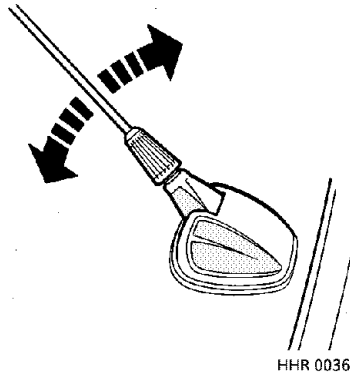
### **WARNING!**

*Hold the cigar lighter by the handle ONLY!*

*DO NOT plug accessories into the cigar socket unless they are approved for this use by Rover.*

## *In-Car Entertainment*

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### **RADIO AERIAL**

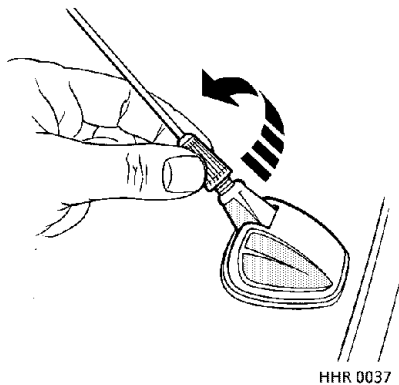
Your car is equipped with a detachable mast aerial mounted on the roof.

#### **Aerial height**

Always check the available headroom and, if necessary, adjust the angle of the aerial (see illustration) before entering or leaving a garage or car park with restricted headroom.

### **WARNING!**

*ALWAYS unscrew and remove the aerial before entering an automatic car wash.*



### **RADIO/CASSETTE PLAYER**

Full operating instructions for any audio equipment fitted as standard to your car, are contained in the 'In-car Entertainment' book in the vehicle literature pack.

#### **Radio display**

The digital display is housed in a separate unit remote from the audio unit - sharing a dual function with the digital clock.

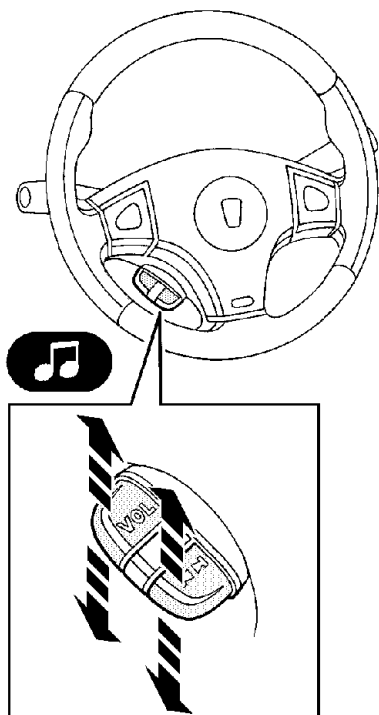
#### **CD autochanger**

(if fitted)

The CD autochanger is fixed to the left side of the luggage compartment.

## *In-Car Entertainment*

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HHR 0174

### **REMOTE RADIO CONTROLS** (if fitted)

**VOL.**

#### **Volume control**

Lift or press the switch to increase or decrease volume. The switch can also be used to adjust bass, treble, balance and fader levels, when used in conjunction with the audio select button on the radio cassette player.



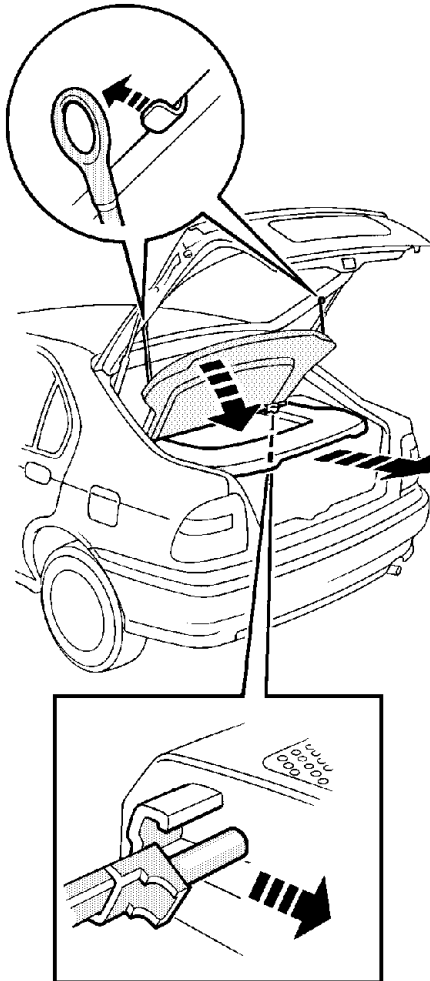
#### **Search/select control**

Lift or press the switch to search forwards or backwards through the frequency range.

On cars fitted with a CD autochanger, lift the switch to advance to the next track, or press to return to the beginning of the current track.

Operate the control repeatedly to move forward or back through several tracks at a time.

## Load Carrying



HHR 0038

### REAR WINDOW SHELF

(5 door models only)

The rear window shelf can be removed to increase the height of the luggage area, as follows:

Release the lifting straps. Then, with the shelf horizontal, hold the front edge and pull smartly to the rear to disengage the shelf from the retaining clips on each side.

To refit, position the shelf with the two locating pins set into the retaining clips on both sides. Then push the shelf firmly towards the front of the car, making sure it is securely clipped in position before closing the taildoor.

### WARNING!

*DO NOT carry hard, heavy or sharply pointed objects on the rear window shelf - they could damage the rear window demisting elements or become dangerous projectiles in the event of an accident or emergency braking.*

## Load Carrying

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HHR 0088

### TOW BARS & ROOF RACKS

Only fit accessories that have been designed and approved for your car. Your Rover dealer can provide details of all Rover approved tow bars and roof racks.

#### Tow bars

The permissible maximum towing weight, maximum rear axle weight and towing hitch load are shown under 'Weights' in the 'Technical Data' section of this handbook. In the interest of safety, these must not be exceeded!

#### WARNING!

*When towing, speed should be restricted to a maximum of 60 mph (100 km/h).*

**NOTE:** On cars fitted with an 'after market' air conditioning unit, it is essential that you consult a Rover dealer before using your car for towing.

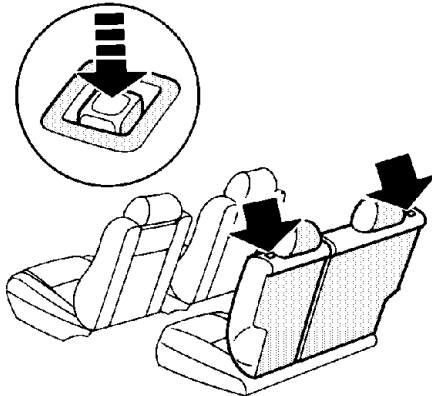
#### Roof racks

The total roof rack load, which must include the weight of the roof rack, must NEVER exceed that shown under 'Weights' in the 'Technical Data' section.

#### WARNING!

- *A loaded roof rack can reduce the stability of your car, particularly when cornering and encountering crosswinds.*
- *All loads should be evenly distributed, and secured within the periphery of the rack.*
- *Only fit a roof rack that has been designed for your car. If in doubt, consult your dealer.*

## Load Carrying

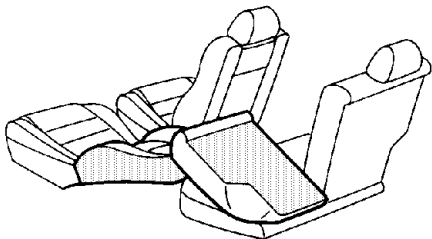


### FOLDING THE REAR SEATS

The backrest is divided into two parts, either or both of which can be folded forward to increase the luggage space. Press the backrest release buttons (arrowed in illustration) to release the backrest.

### Accommodating long loads

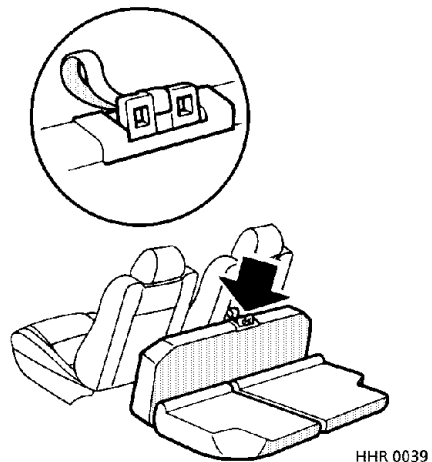
Remove the head restraints from the front passenger and rear seats (see 'Seats'), move the front passenger seat forwards as far as possible and fully recline the backrest. Finally, fold the appropriate part of the rear seat backrest fully forward as shown.



### Maximum luggage space

(5 door models only)

To create an extra large luggage area; pull the lifting strap (highlighted in illustration) and tip the rear seat cushion forwards. Remove both rear head restraints, then release both parts of the backrest and fold them forwards as shown.



### WARNING!

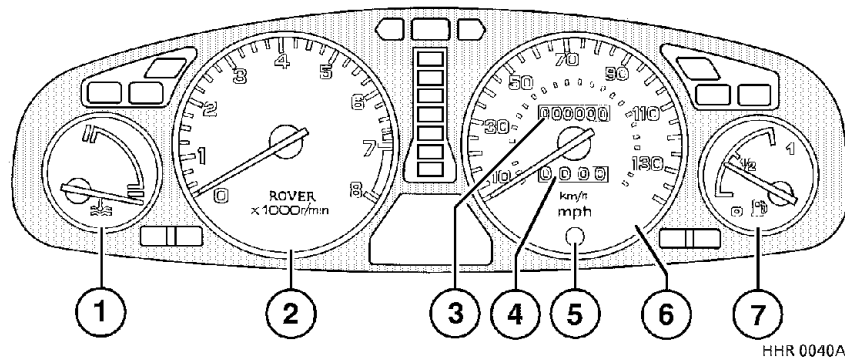
*Ensure the rear seat backrest is securely latched in the upright position when the seat is in use and when loads are carried in the luggage area behind.*

*DO NOT carry unsecured equipment, tools or luggage that could move, causing personal injury in the event of an accident or emergency manoeuvre.*

*DO NOT carry long loads which require driving with the taildoor open - poisonous fumes will be drawn into the interior of the car!*



## Instruments



### INSTRUMENTS

#### 1. Temperature gauge

This gauge indicates the temperature of the engine coolant. During normal operation, the pointer will rise from the lower (cold) mark to the middle part of the gauge, where it will remain while the engine is operating at its normal temperature.

In severe driving conditions, such as very hot weather or extended hill climbing, the pointer may reach the upper part of the gauge. If the pointer rises to the RED mark, the coolant is too hot and severe engine damage could result; stop the car as soon as safety permits and seek qualified assistance before continuing.

#### 2. Tachometer (petrol model illustrated)

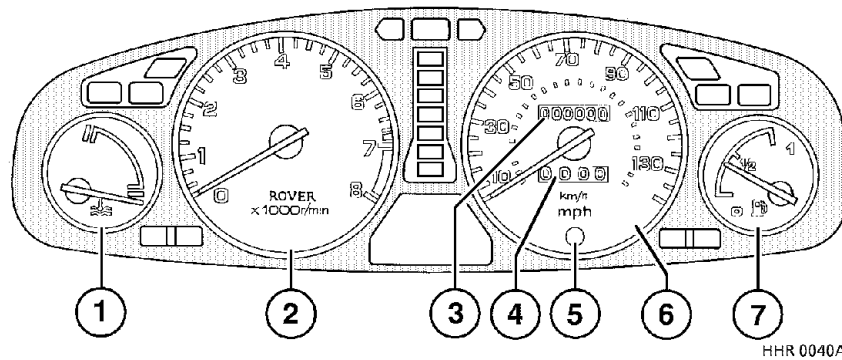
Indicates engine speed in revolutions per minute. To protect the engine from damage, on petrol engine models NEVER allow the tachometer pointer to enter the RED sector.

**NOTE:** Speed restriction limiters will prevent engine speed rising above a pre-determined level.

#### 3. Total distance recorder

Indicates the total distance travelled by the car.

## Instruments



HHR 0040A

### INSTRUMENTS

#### 4. Trip recorder

Records individual journey distances. Before starting a journey, press the trip recorder reset button to 'zero' the reading.

#### 5. Trip recorder reset button

Press to return the trip recorder to zero.

#### 6. Speedometer

Indicates road speed in miles per hour and/or kilometres per hour.

#### 7. Fuel gauge

The pointer indicates the fuel level, even when the starter switch is turned off. After refuelling, the gauge slowly rises to the new level after the starter switch is turned on.

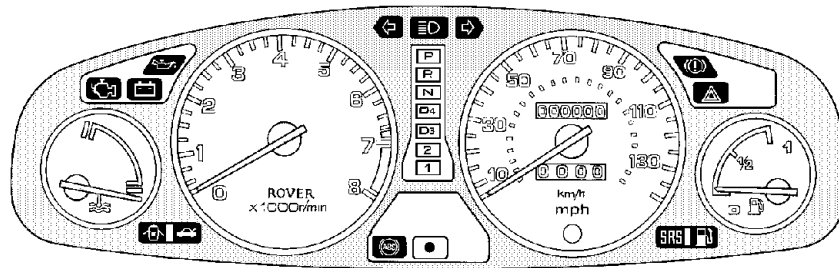
**NOTE:** *Driving on twisting or hilly roads may disturb the accuracy of the gauge. It is advisable to check the fuel level when the car is on level ground.*

#### **WARNING!**

*NEVER allow the car to run out of fuel (the resultant misfire could destroy the catalytic converter).*

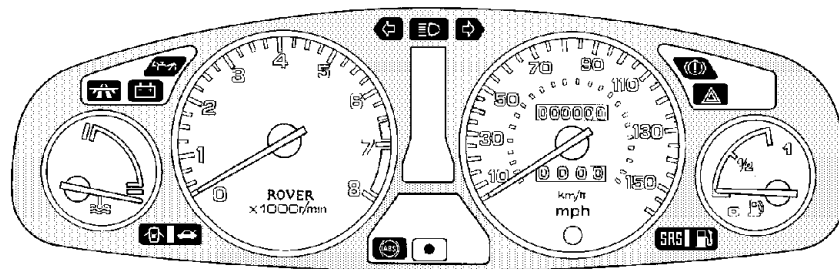
## Warning Lights

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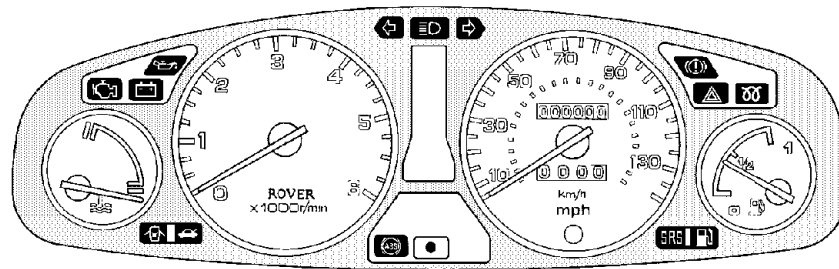
HHR0041A

*414 & 416 petrol engine models*



HHR0159A

*420 petrol engine models*



HHR0149A

*diesel engine models*

## Warning Lights

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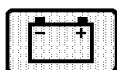


### Check engine - AMBER

(416 auto & diesel models)

The light illuminates briefly

when the starter switch is turned on. If it remains on or illuminates at any other time, the engine's emission control system requires attention. Stop the car and switch off the engine for at least thirty seconds; if the light illuminates again after the engine is restarted, it is permissible to continue driving, but qualified assistance must be sought as soon as possible, to prevent potential engine damage.



### Battery charging - RED

The light illuminates as a bulb

check when the starter switch is

turned to position 'II' and extinguishes as soon as the engine is running. If it remains on, or illuminates whilst driving, a fault with the battery charging system is indicated. Seek qualified assistance urgently.



### Low oil pressure - RED

Illuminates as a bulb check when the starter switch is turned to

position 'II' and extinguishes when the engine is started. If the light remains on, flashes on and off or illuminates continuously whilst driving, serious engine damage could occur; stop the car as soon as safety permits and SWITCH OFF THE ENGINE IMMEDIATELY. Seek qualified assistance before driving.



### Door open - RED

Illuminates when any of the

doors are open. DO NOT drive the car with the light illuminated.



### Luggage compartment open - RED

Illuminates if the taildoor is

open. DO NOT drive the car with the light illuminated - poisonous exhaust fumes will enter the car.



### Direction indicators - GREEN

The left or right warning light

flashes in time with the left or right direction indicator lights whenever they are operated. If either warning light fails to illuminate or flashes very rapidly, this means that one of the indicator lights is not operating.

**NOTE:** If the hazard warning lights are operated, both direction indicator warning lights will flash together.



### Headlight main beam - BLUE

Illuminates when the headlights

are switched to main beam.



### Cruise control - AMBER

(420 petrol models only)

The light illuminates when the

cruise control master switch is switched on, and extinguishes when it is switched off.



### Glow plugs - AMBER

(Diesel models only)

Illuminates when the starter

switch is turned to position 'II'. When the engine is cold, wait for the light to extinguish before starting.

## Warning Lights

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### Handbrake & brake system - RED

The light illuminates when the handbrake is applied and extinguishes when it is fully released. If the light illuminates while the handbrake is released, a fault with the braking system is indicated. You should stop the car and seek qualified assistance before continuing.



### Hazard warning lights - RED

Illuminates in conjunction with the direction indicator warning lights when the hazard warning lights are operated.



### Low fuel - AMBER

The low fuel warning light illuminates when the fuel remaining is 8 litres (1.8 gallons) or less - you should refuel at the first opportunity.



### Anti-lock braking system - AMBER

The warning light illuminates briefly when the starter switch is turned on. If the light fails to extinguish, or illuminates at any other time, there is a fault with the ABS system; on completion of your journey seek advice from your dealer before further vehicle use.



### Anti-theft alarm - RED

The light flashes rapidly while the alarm is arming itself. Slow flashing indicates that the alarm system is active and/or the engine is immobilised.



### Airbag supplementary restraint system - RED

The light illuminates when the starter switch is turned on and extinguishes within approximately six seconds. If the light fails to illuminate or illuminates once the engine is started, the system is faulty - seek qualified assistance urgently.

**NOTE:** Where a driver's airbag only is fitted, the warning light is located in the centre of the steering wheel. For driver and passenger twin airbag installations, the warning light is located on the instrument panel.

### Automatic gearbox selector lever positions

On automatic gearbox vehicles, the display located between the tachometer and the speedometer indicates which position the selector lever is in.

**P** - Park

**R** - Reverse

**N** - Neutral

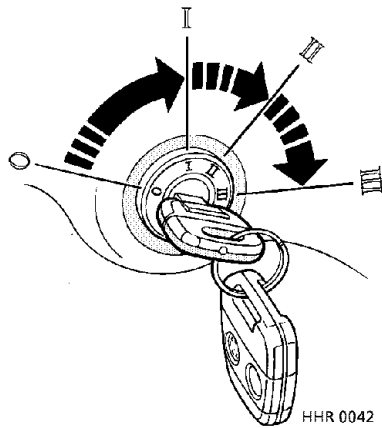
**D4** - Drive (4 speed)

**D3** - Drive (3 speed)

**2** - 2nd speed only

**1** - 1st gear only

## Starting & Driving



### STARTER SWITCH & STEERING LOCK

The starter switch uses the following sequence of key positions to operate the steering lock, electrical circuits and starter motor:

#### 'O' - Steering locked

With the key removed the steering column will be locked, and most electrical circuits are non-operational.

#### 'I' - Steering unlocked

Turn the switch to position 'I' to unlock the steering. The radio/cassette player and cigar lighter can now be operated.

#### 'II' - Electrical circuits on

With the switch in position 'II', all instruments, lights and electrical circuits are operational.

#### 'III' - Starter motor operates

Turn the switch to position 'III' to operate the starter motor; release the key as soon as the engine starts (the key will automatically return to position 'II').

### STEERING LOCK

#### **To unlock the steering:**

Insert the key FULLY and turn the starter switch to position 'I' - a small movement of the steering wheel may be necessary to disengage the lock.

#### **To lock the steering:**

With the starter switch turned to position 'O', remove the key and turn the steering wheel until the lock engages.

### WARNING!

*Once the steering lock is engaged, it is impossible to steer the car.*

*DO NOT remove the key or turn the starter switch to position 'O' while the car is in motion.*

## Starting & Driving

---

### PETROL MODELS

#### WARNING!

*Before starting the engine ENSURE you are familiar with the procedures below.*

*Catalytic converters are easily damaged through improper use, particularly if the wrong fuel is used, or if an engine misfire occurs - before starting the engine you should be aware of the precautions detailed in the 'Catalytic converter' section.*

*Never start or leave the engine running in an unventilated building - exhaust gases are poisonous and contain carbon monoxide, which can cause unconsciousness and may even be fatal.*

#### Starting the engine

- 1) Check that the handbrake is on and that the gear lever is in neutral ('P' for automatic transmission).
- 2) Switch off all unnecessary electrical equipment (including the air conditioning).
- 3) Turn the starter switch to position 'III' and release the key as soon as the engine has started.

DO NOT press the accelerator pedal while starting and DO NOT operate the starter for more than 15 seconds at a time. If the engine fails to start, switch off and wait for at least 10 seconds before trying again.

**NOTE:** *When the battery is in a low state of charge, on manual gearbox cars depress the clutch before starting and hold it down until the engine is running.*

#### What to do if the engine fails to start or starts but will not continue running:

- Press the accelerator pedal half way down while operating the starter. DO NOT operate the starter for more than 15 seconds and release the accelerator as soon as the engine fires.
- If the engine still fails to start, operate the starter again, this time FULLY depressing the accelerator pedal to clear the engine of excess fuel. Ensure the starter motor is not operated for more than 15 seconds and release the accelerator as soon as the engine has started.
- DO NOT pump the the accelerator pedal during starting.

**NOTE:** *If starting the car in cold weather at high altitudes (above 8,000 ft or 2,400 m), adopt the above procedure as normal practice.*

#### Starting in cold climates

In freezing conditions, fully depress the clutch pedal while starting and hold it down until the engine is running. Note that engine cranking times will increase and that the battery charging and oil pressure warning lights may take several seconds to extinguish.

#### Warming up

In the interest of fuel economy, it is advisable to drive the car soon after starting, remembering that harsh acceleration or labouring the engine before the normal operating temperature has been reached can damage the engine.

## Starting & Driving

### DIESEL MODELS

#### WARNING!

*Before starting the engine ENSURE you are familiar with the precautions shown below.*

*Catalytic converters are easily damaged through improper use, particularly if the wrong fuel is used, or if an engine misfire occurs - before starting the engine you should be aware of the precautions detailed in the 'Catalytic converter' section.*

*Never start or leave the engine running in an unventilated building - exhaust gases are poisonous and contain carbon monoxide, which can cause unconsciousness and may even be fatal.*

#### Starting the engine

- 1) Check that the handbrake is applied and that the gear lever is in neutral.
- 2) Switch off all unnecessary electrical equipment.
- 3) Insert the key and turn the starter switch to position 'II'. Wait until the glow plug warning light extinguishes.
- 4) Turn the key to position 'III' to operate the starter motor; DO NOT press the accelerator pedal during starting, and RELEASE THE KEY as soon as the engine is running. If the engine stalls you MUST return the starter switch to position 'O', then turn the starter switch to position 'II' and wait until the glow plug warning light goes out before attempting to restart; the engine will not start by turning the starter switch from position 'II'.

**NOTE:** *In freezing conditions or when the battery is in a low state of charge, depress the clutch pedal while starting and hold it down until the engine is running.*

In temperate climates DO NOT operate the starter for longer than 10 seconds; if the engine fails to start, switch off and wait for 10 seconds before re-using the starter.

#### Starting in cold climates

In temperatures of -10° C (14° F) and below, partially depress the accelerator pedal and fully depress the clutch pedal while starting. Keep the pedals in this position until the engine is running. Note that engine cranking times will increase - but must not exceed 15 seconds - and that the battery charging and oil pressure warning lights may take several seconds to extinguish.

#### Warming up

In the interests of fuel economy, it is advisable to drive the car soon after starting, remembering that harsh acceleration, or labouring the engine before the normal operating temperature has been reached, can damage the engine.

#### WARNING!

*The engine must not be run above fast idle speed until the oil pressure warning light extinguishes. This will ensure that the engine and turbocharger bearings are properly lubricated before being run at normal driving speeds.*

#### Switching off

To avoid the possibility of damaging the turbocharger bearings through inadequate lubrication, ALWAYS allow the engine to idle for 10 seconds before switching off.



## Starting & Driving

### ALL MODELS

#### Parking

After bringing the car to a stop, ALWAYS apply the handbrake and select neutral ('P' for automatic gearbox cars), before releasing the footbrake and switching off the engine.

#### WARNING!

*After switching off, cooling fans may continue rotating for several minutes to prevent the engine from overheating. In some circumstances, cooling fans may commence operating up to 4 minutes after the engine is switched off. If the bonnet is opened keep clear of fans whenever the engine is warm.*

#### RUNNING-IN

The engine, gearbox, brakes and tyres need time to 'bed-in' and adjust to the demands of everyday motoring. During the first 600 miles (1,000 km) it is essential that you drive with consideration for the running-in process and heed the following advice:

- DO NOT allow the engine to exceed 3,000 rev/min in any gear.
- DO NOT operate at full throttle in any gear.
- DO NOT allow the engine to labour in any gear.
- AVOID heavy braking.

After the running-in distance has been completed, engine speeds may be gradually increased.

#### FUEL ECONOMY

Fuel consumption is influenced by two major factors:

- How your car is maintained.
- How you drive.

To obtain optimum fuel economy, it is essential that your car is maintained in accordance with the manufacturers recommendations.

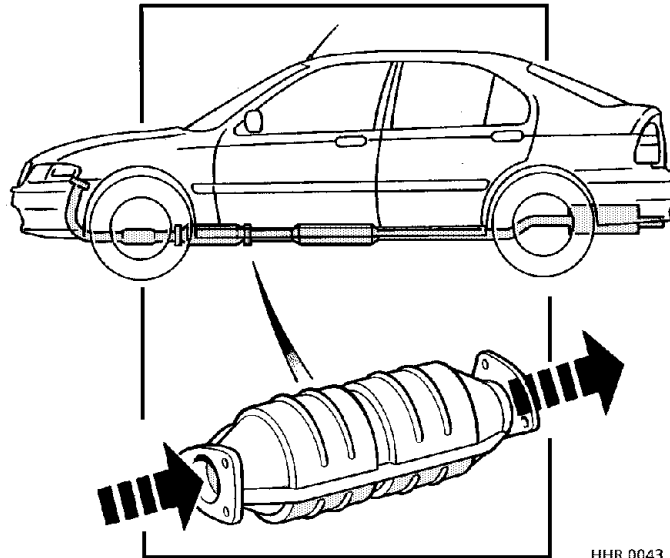
On automatic gearbox models, driving with the gearshift in 'D4' will provide the best fuel economy.

Items such as, the condition of the air cleaner element, tyre pressures and wheel alignment can have a significant effect on fuel consumption. But above all, the way in which you drive is most important. The following hints may help you to obtain even better value from your motoring:

- Avoid unnecessary short, start-stop journeys.
- Avoid fast starts by accelerating gently and smoothly from rest.
- Do not drive in the lower gears for longer than necessary.
- Decelerate gently and avoid sudden and heavy braking.
- Anticipate obstructions and adjust your speed accordingly well in advance.

**Always remember;  
driving gently saves fuel!**

## Catalytic Converter



HHR 0043

The exhaust system on your car incorporates a catalytic converter which converts poisonous exhaust emissions from the engine into environmentally less harmful gases, thereby reducing atmospheric pollution.

### **WARNING!**

*The catalytic converter can be easily damaged through improper use, particularly if the wrong fuel is used. For this reason it is VERY IMPORTANT that you heed the following precautions:*

### **Filling up with fuel:**

- Use ONLY fuel recommended for your car (see 'Fuel system').

### **Starting the engine:**

- DO NOT continue operating the starter if the engine fails to start after a few attempts (unburnt fuel may be drawn into the exhaust system, thereby damaging the catalyst) - seek qualified assistance.
- If a misfire is suspected when starting, DO NOT drive the car, or attempt to clear the misfire by pressing the accelerator pedal.
- DO NOT attempt to push or tow start the car. Instead, switch off immediately and seek qualified assistance.

## Catalytic Converter

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### **Driving the car:**

- Provided the engine has reached its normal operating temperature, if a misfire is suspected or the car lacks power while driving, it may be driven SLOWLY (at risk of catalyst damage) to a Rover dealer for assistance.
- NEVER allow the car to run out of fuel (the resultant misfire could destroy the catalyst).
- An engine burning excessive oil (blue smoke from the exhaust) will progressively reduce catalyst efficiency.
- On rough terrain, DO NOT allow the underside of the car to be subjected to heavy impacts which could damage the catalytic converter.
- Do not overload or excessively 'rev' the engine.

### **Switching off:**

- DO NOT switch off the engine whilst the car is in motion with a forward or reverse drive gear selected.

### **Vehicle maintenance:**

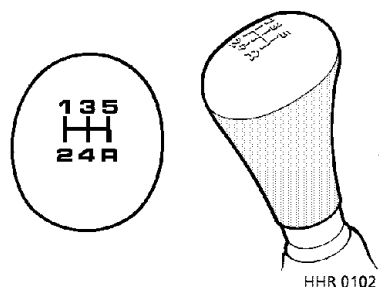
- Any engine misfire, loss of engine performance or engine run-on, could seriously damage the catalytic converter. For this reason, it is vital that unqualified persons do not tamper with the engine, and that regular maintenance is carried out by a Rover dealer in accordance with the service interval plan included in the Service Portfolio book.
- DO NOT run the engine with a spark plug or lead removed, or use any device that requires an insert into a spark plug.

### **WARNING!**

*Exhaust temperatures can be extremely high; DO NOT park on ground where combustible materials such as dry grass or leaves could come in contact with the exhaust system - in dry weather a fire could result.*

## Manual Gearbox

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### MANUAL GEARBOX

The gear positions are indicated on the gear lever knob.

Synchromesh engagement is provided on all forward gears, and in the neutral position the gear lever is spring loaded to rest naturally between 3rd and 4th gears.

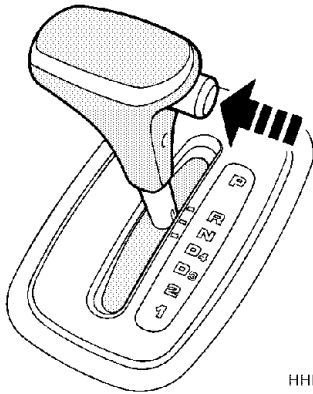
#### Selecting reverse gear

Before selecting reverse gear, ENSURE THE CAR IS STATIONARY; then fully depress the clutch pedal and pause briefly before moving the gear lever into position.

#### Precautions while driving

- DO NOT rest your hand on the gear lever while driving; pressure transmitted from your hand may cause premature wear to the gear selector mechanism.
- DO NOT rest your foot on the clutch pedal whilst driving; excessive wear to the clutch will result!

## Automatic Gearbox



### GEAR SELECTOR

#### Selector release button

The automatic gearbox is fitted with a locking mechanism designed to minimise the possibility of accidental selection of the 'P' (Park), 'R' (Reverse) and '1' positions, and also the downward selection of the '2' position.

The selector release button (arrowed in illustration) must be pressed in order to select or release the lever from any of these positions.

#### Selector lever positions

The display in the centre of the instrument panel indicates the position of the selector lever. There are seven positions as follows:

##### **'P' - Park:**

This position mechanically locks the transmission, and should be selected before starting the engine and before switching the engine off. To avoid transmission damage, ensure the car is completely stationary (preferably with the handbrake applied) before selecting 'P'.

The selector release button MUST be pressed in order to move the selector lever into or out of the Park position.

##### **'R' - Reverse:**

Before selecting reverse, ENSURE the car is stationary, with the brakes applied.

Press the selector release button in order to move the selector lever into or out of Reverse.

##### **'N' - Neutral:**

Select neutral when the car is stationary and the engine is required to idle for a brief period (at traffic lights for example).

##### **'D4' - Drive:**

Select this position for all your normal driving; fully automatic gear changes will occur throughout all forward gears according to vehicle speed and accelerator position. Be aware that engine braking in the lowest gear ratio will not occur whilst in 'D4'.

##### **'D3' - Drive:**

This position is similar to 'D4', except that gear selection is confined to the first three gear ratios only. Use 'D3' when towing in hilly terrain, or to provide engine braking when descending inclines.

## Automatic Gearbox

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### **'2' - 2nd gear:**

This position locks the transmission in second gear. Use when engine braking is required to descend steep hills, or for moving the car from rest on loose or slippery surfaces.

To select '2' from any other selector position (except '1'), it will be necessary to press the selector release button. Be aware that with the selector in position '2', the transmission will not automatically downshift to the lowest ratio when the car is brought to a halt.

### **'1' - 1st gear:**

With the selector in this position, the transmission is locked in first gear. By manually changing through positions '1', '2', 'D3' and 'D4', the transmission can be operated in a similar manner to a manual gearbox, but without the need for a clutch.

The selector release button **MUST** always be pressed in order to move the selector lever into position '1'.

#### **WARNING!**

*DO NOT select 'P' or 'R' unless the car is stationary.*

*DO NOT select 'D3', 'D4', '2' or '1' when the car is still moving backwards.*

*DO NOT press the selector release button while selecting 'N' from a forward or reverse drive position.*

### **USING THE AUTOMATIC GEARBOX**

The following information is particularly important for drivers who are not familiar with the techniques required to drive cars with automatic transmission.

#### **Starting**

The engine can only be started with the selector lever in the 'N' or 'P' positions.

- ALWAYS apply the handbrake and footbrake before starting the engine.
- KEEP BOTH BRAKES APPLIED while moving the selector to a drive gear position.
- DO NOT 'rev' the engine while selecting a forward or reverse gear, or while the car is stationary with a drive gear selected.
- ALWAYS keep the brakes applied until you are ready to move off - remember, once a drive gear has been selected, an 'automatic' will tend to creep forward (or backward).

#### **Driving**

The road speeds at which gear changes take place will vary according to the position of the accelerator; minimum acceleration will result in gear changes at low road speeds, while greater throttle openings will cause the gearbox to delay gear changes until faster road speeds have been reached.

With practice, gear changes can be made to occur at a wide range of different road speeds depending on accelerator pedal pressure.

## Automatic Gearbox

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### **Climbing long inclines**

On long inclines, an automatic gearbox will sometimes change back and forth between gears. This occurs because the gearbox ratios are not precisely suitable for a particular incline. Excessive gear changing is wasteful of fuel and also results in a loss of momentum. In some circumstances it can be prevented by selecting the 'D3' position, thereby confining the gearbox to the three lower gears.

### **Rapid acceleration (in 'D3' & 'D4' positions)**

To obtain rapid acceleration for overtaking, or for maintaining speed on an incline, 'kick' the accelerator pedal down to the full extent of its travel in a single quick movement. Up to certain speeds, this will cause an immediate down change to the lowest appropriate gear, followed by rapid acceleration. Full depression of the accelerator will also delay up-changes, similarly resulting in more rapid acceleration.

Once the pedal is relaxed, normal gear change speeds will resume.

### **Maximum speeds**

The maximum road speeds for the forward drive gears are shown below. If these are exceeded, the engine speed will enter the red zone of the tachometer and a computer controlled limiter will automatically cause the engine to cut in and out. The engine will run normally once speeds have been reduced.

'1' - 35 mph (57 km/h)

'2' - 66 mph (106 km/h)

'D3' - 96 mph (155 km/h)

'D4' - Top Speed

### **Parking**

After bringing the car to a stop, ALWAYS apply the handbrake and select 'P' before releasing the footbrake and switching off the engine.

### **Freeing the car from snow or mud**

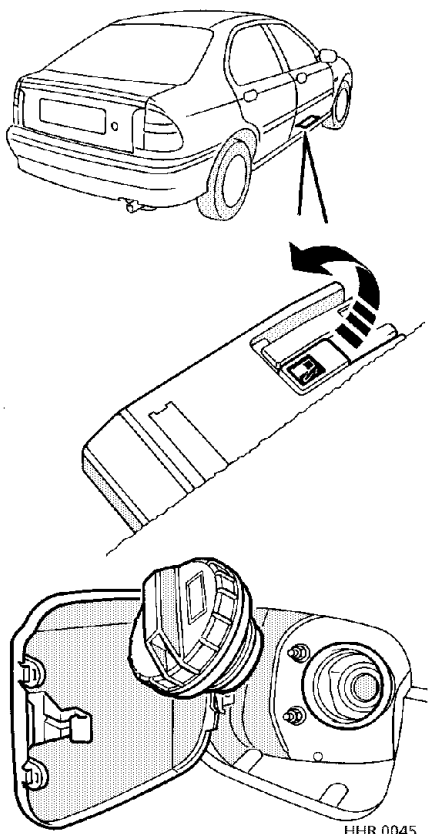
Attempt to drive the car forwards and then backwards (selecting 'D4' and 'R' alternately) in order to 'rock' the car free. Use light throttle ONLY and ALWAYS apply the footbrake between gear selections.

### **TOWING!**

Extensive use of the 'D3' selector position is recommended when towing trailers, particularly for the following conditions:

- Driving up long hills.
- Negotiating twisting roads.
- Driving in congested traffic at low speeds.

## Fuel System



### FUEL FILLER

The fuel filler is located in the rear left-hand wing. Pull the floor mounted lever adjacent to the driver's seat to release the fuel filler flap.

#### Fuel filler cap

Unscrew slowly to remove. When replacing, tighten clockwise until the fuel cap ratchet clicks at least three times.

Remember to close the filler flap after refuelling.

### TYPE OF FUEL

#### **Petrol engines:**

The RON value (octane rating) of petroleum commonly available at garage forecourts will vary in different countries. The RON value quoted below is a MINIMUM requirement and can be safely exceeded.

#### **USE ONLY UNLEADED PETROL to EN 228 specification**

*All models:*

#### **95 RON minimum**

IN AN EMERGENCY (and only if the correct fuel is unavailable), lower octane rated fuel can be used for very limited periods of moderate or low speed motoring, provided engine 'knocking' does not occur.

#### **WARNING!**

*USE ONLY UNLEADED PETROL*

*Serious damage to the catalytic converter will occur if incorrect fuel is used.*

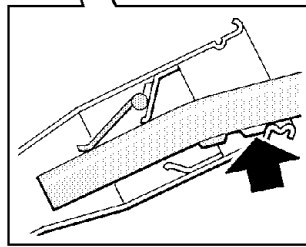
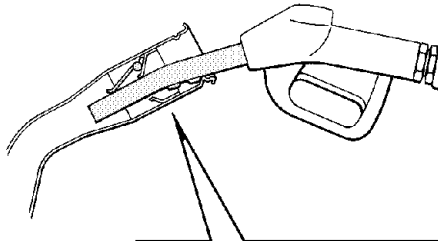
#### **Diesel engines:**

The quality of diesel fuel can vary in different countries and only clean, good quality fuel should be used. It is important that the sulphur content of diesel fuel does not exceed 0.3%. In Europe all supplies should be within this limit, but in other parts of the world you should check with your supplier. Ensure that the fuel filter element is changed at the recommended service intervals.

#### **USE ONLY DIESEL FUEL to EN 590 specification**



## Fuel System



HHR 0107

### FUEL FILLING

Always fill the tank SLOWLY until the filler nozzle automatically cuts-off the fuel supply. DO NOT attempt to fill the tank beyond this point or spillage could result due to expansion of the fuel.

#### **Petrol engines:**

The filler tube is designed to accept a narrow filler nozzle of the type found on pumps that deliver ONLY unleaded fuel. A flap lies across the filler neck; insert the filler nozzle sufficiently to fully open the flap before filling (see illustration).

#### **Diesel engines:**

The fuel filling system used for car commercial pumps, is designed to fill at a maximum of 45 litres per minute. Use of pumps with a higher fill rate, will result in premature pump cut-off and fuel spillage.

### WARNING!

DO NOT fully fill the tank if the car is to be parked on a slope in direct sunlight or high ambient temperature - expansion of the fuel could cause spillage.

### Filling difficulties

The fuel delivery rate of filling station pumps can vary significantly from one garage forecourt to another. This, coupled with the fact that modern pumps are equipped with a sensor which automatically cuts off the supply as soon as turbulence is detected in the upper part of the car's filler neck, could result in isolated fuel filling problems.

If individual owners experience difficulty, the following advice may be useful:

- Fully insert the filler gun, then withdraw the gun up to the first ridge on the underside of the nozzle (see illustration).
- Hold the filler gun with the trigger directly below the nozzle (at right angles to the ground). Twisting the gun to either side is unlikely to ease the filling process.
- Fill the tank slowly - DO NOT fully squeeze the trigger.

## Fuel System

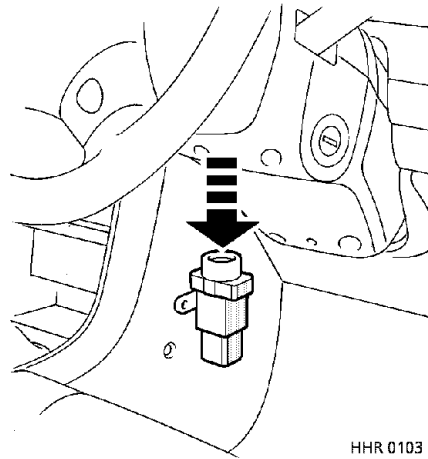
### Empty fuel tank

NEVER allow the car to run out of fuel - the resultant misfire may destroy the catalytic converter. In the event of the fuel tank running dry contact your Rover dealer before attempting to start the engine.

#### SAFETY ON THE FORECOURT

Petroleum gases are highly inflammable and, in confined spaces, are also extremely explosive. Always take sensible precautions when refuelling:

- Switch off the engine.
- Do not smoke or use a naked flame or light.
- Do not overfill the tank.



#### FUEL CUT-OFF SWITCH

The fuel cut-off switch is a safety device which, in the event of a collision or sudden impact, automatically cuts off the fuel supply.

The switch is located behind the front ashtray on the drivers side of the centre console. After the switch has been activated, it must be reset by pressing the rubber top (arrowed in illustration) before the engine can be restarted.

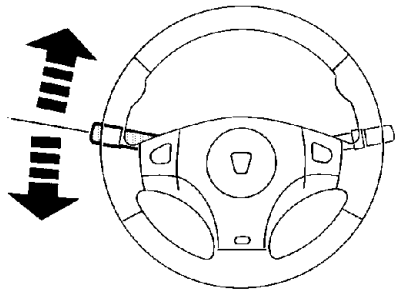
#### WARNING!

*ALWAYS check for fuel leaks before resetting the fuel cut-off switch!*

**NOTE:** *On diesel engine models, the fuel cut-off system resets automatically and, therefore, does not need to be activated manually.*

## Lights & Indicators

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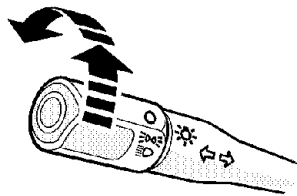


### **DIRECTION INDICATORS**

Move the lever down to indicate a LEFT turn, or up to indicate a RIGHT turn. The indicators will cancel automatically once a turn has been completed.

Hold the lever half-way up or down against spring pressure to indicate a lane change.

The appropriate GREEN warning light on the instrument panel will flash in time with the direction indicators.

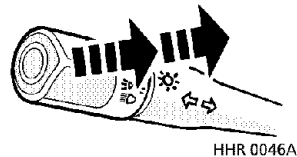


### **SIDE AND HEADLIGHTS**

Turn the control to the first position to illuminate the side, tail and instrument panel lights.

#### **Headlights**

Turn the control to the second position to illuminate the headlights.

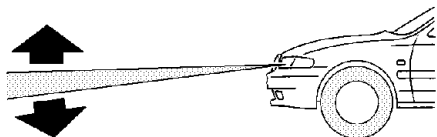


#### **Headlight main and dipped beams**

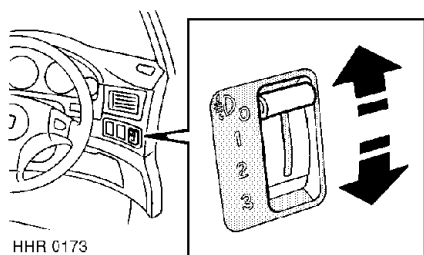
Pull the lever fully towards the steering wheel to change headlight beams (the BLUE warning light on the instrument panel will illuminate when the headlights are on main beam).

To briefly flash the main beams on and off, pull the lever part way towards the steering wheel and then release.

## Lights & Indicators



**NOTE:** These loading definitions assume that all loads will be within the limits of the maximum permissible axle and vehicle weights.



### 'Lights on' warning buzzer

If the exterior lights are left on after the starter switch is turned off, a warning buzzer will sound as soon as the driver's door is opened. The buzzer will cease as soon as the lights are switched off or the door is closed.

### Headlight beam height adjuster

The angle of the dipped headlight beams is affected by the distribution of passenger and luggage weight within the car. It is important that the headlights are adjusted to ensure that the point at which they meet the road surface provides adequate illumination ahead of the car without dazzling other road users.

Using the following load conditions as a guide, adjust the height of the headlight beams by moving the control (arrowed in inset).

#### **Position 0:**

Driver, or driver and front seat passenger only (no luggage).

#### **Position 1:**

Driver and four passengers (no luggage).

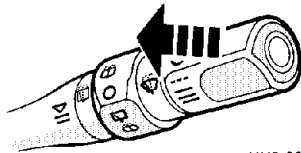
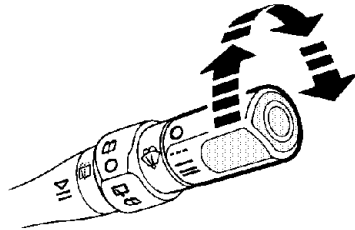
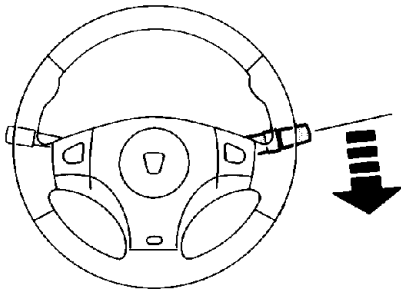
#### **Position 2:**

Driver, four passengers and FULL luggage compartment.

#### **Position 3:**

Driver, NO passengers and FULL luggage compartment.

## Wipers & Washers



HHR 0047A

**NOTE:** On some cars the symbols on the wiper switch may differ slightly from those depicted above.

### WIPER CONTROLS

The wipers and washers will only operate when the starter switch is turned to position 'II'.

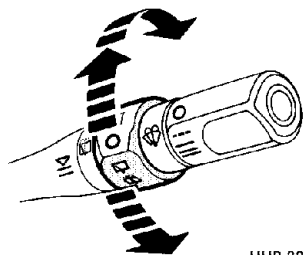
- **Single wipe**  
Pull the lever down and release immediately.  
**NOTE:** With the lever held down, the wipers will operate at high speed until it is released.
- **Intermittent wipe**  
Turn switch to first position.
- **Normal speed wipe**  
Turn switch to second position.
- **Fast speed wipe**  
Turn switch to third position.

**NOTE:** If reverse gear is selected while the front wipers are operating (at any speed setting), the rear screen wiper will operate automatically for three wipes.

- **Windscreen washer**  
Pull the lever towards the steering wheel. The windscreen washers will operate for as long as the lever is held in this position.  
**NOTE:** The wipers operate automatically during windscreen washing.

## Wipers & Washers

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HHR 0064A

- **Rear window wash/wipe**  
(5 door models only)

- 1) Rotate the switch clockwise to the first position to operate the rear wiper. After wiping continuously four times, the wiper continues intermittently until switched off.
- 2) Rotate the switch further clockwise, to the second position, to operate the rear screen washer AND wiper. Hold in this position for the required duration of the wash.
- 3) Rotate the switch anti-clockwise to operate the rear screen washer and wiper. The wiper will operate for the duration of the wash and continue wiping a further three or four times once the switch is released.

**NOTE:** *If reverse gear is selected while the front wipers are operating (at any speed setting), the rear screen wiper will operate automatically for three wipes.*

<b>IMPORTANT</b>
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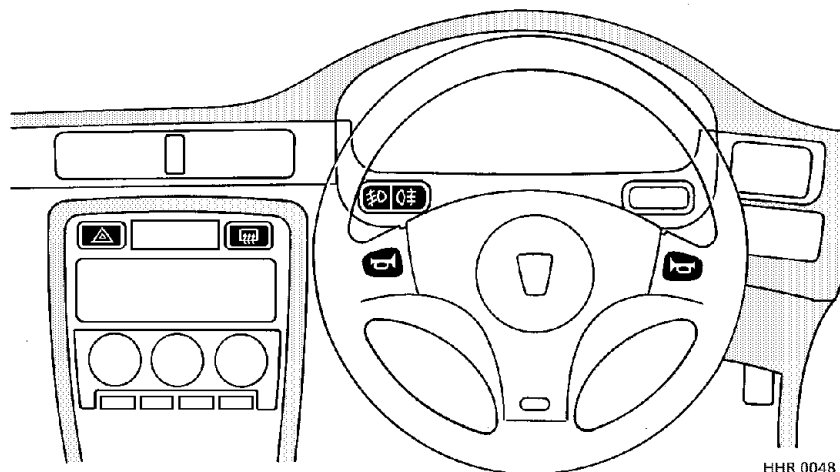
*DO NOT operate the wipers on a dry screen.*

*In freezing or very hot conditions, ensure that the blades are not frozen or stuck to the glass before being operated.*

*In winter, remove snow or ice from around the arms and blades, including the wiped area of the windscreen and the heater air intakes.*

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## Fascia Switches



### Hazard warning lights

Press to operate. All the direction indicators will flash together. Use ONLY in an emergency to warn other road users when your vehicle is causing an obstruction or is in a hazardous situation. Remember to switch off before driving away.



### Rear screen demister

Press to operate; the indicator light in the switch illuminates whenever the demister is on, and extinguishes when the demister is turned off.

**NOTE:** *The rear screen demister will operate only when the engine is running and will switch off automatically after approximately 15 minutes.*

### WARNING!

*The heating elements on the inside of the rear screen are easily damaged. DO NOT scrape or scratch the glass.*

*DO NOT stick labels over the rear screen demister heating elements and take note of advice given in 'Cleaning & car care'.*

## Fascia Switches

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### Front fog lights (if fitted)

Press to operate; the indicator light in the switch illuminates when the fog lights are on and extinguishes when they are switched off. The fog lights operate ONLY with the side or headlights switched on.

**NOTE:** *The front fog lights extinguish automatically when the side lights are turned off. However, they will illuminate again automatically when the lights are next switched on unless switched off manually.*



### Rear fog guard lights

Press to operate; the indicator light in the switch illuminates when the rear fog guard lights are on, and extinguishes when they are switched off. The rear fog guard lights operate ONLY when the starter switch is at position 'II' and when the headlights or front fog lights are switched on.

**NOTE:** *The rear fog guard lights extinguish automatically when the headlights are switched off and will need to be reselected manually.*



### Horn

To operate, press either of the switches set into the steering wheel centre pad.

### WARNING!

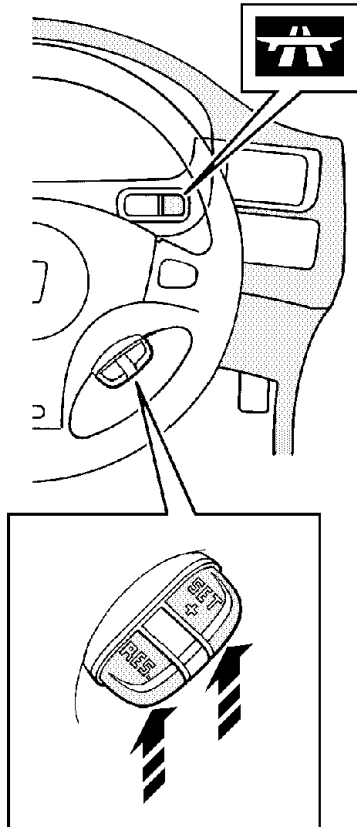
*The front or rear fog lights can ONLY legally be used when visibility is severely restricted - other road users could be dazzled in clear conditions!*



## Cruise Control

### WARNING!

- *DO NOT use cruise control on winding or slippery roads, or in traffic conditions where a constant speed cannot easily be maintained.*
- *ALWAYS switch off the master switch when you no longer intend to use cruise control.*
- *DO NOT rest your foot under the accelerator pedal while cruise control is engaged - your foot could be trapped.*



HHR 0158

### CRUISE CONTROL

(if fitted)

Cruise control enables the driver to maintain a constant road speed without using the accelerator pedal. This is particularly useful for motorway cruising, or for any journey where a constant speed can be maintained for a lengthy period.

The cruise control system has three switches; a master switch on the fascia panel (highlighted in illustration) and two control switches, marked 'SET+' and 'RES', mounted on the steering wheel.

#### To operate:

- 1) Press the master switch (the warning light in the instrument panel illuminates).
- 2) Accelerate until the desired speed is reached (this must be above the system's minimum operational speed of 28 mph (45 km/h)).
- 3) Press the 'SET+' switch to set the road speed in the cruise control system's memory. Cruise control will now maintain that road speed automatically.

With cruise control operating, speed can be increased temporarily, eg. for overtaking, by normal use of the accelerator. When the accelerator is released, road speed will return to the selected cruising speed.

## Cruise Control

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### To increase cruising speed

Press and hold the 'SET+' switch; the car will accelerate automatically. Release the switch when the desired speed has been reached.

Alternatively, the speed can be increased incrementally by slowly tapping the 'SET+' switch. For each tap the speed will increase by 1 mph (1.6 km/h).

### To reduce cruising speed

Use one of the following methods:

- 1) Use the brake pedal to slow the car until the required speed has been reached, then press the 'SET+' switch to establish a new cruising speed (remember that cruise control will not operate at speeds below 28 mph (45 km/h)).
- 2) Alternatively, press the 'RES' switch once. This will cut off cruise control and, provided the brake pedal is not used, the car will slow down gradually. When the desired speed has been reached, press the 'SET+' switch to establish the new cruising speed.

### Disengaging cruise control

Cruise control will disengage, without cancelling the speed held in its memory, when:

- The brake or clutch pedal is pressed.
- Your road speed falls to less than 75% of the set speed (this could occur when climbing hills or when towing).
- The 'RES' switch is pressed.

To re-engage cruise control at the previously set speed, press the 'RES' switch.

**NOTE:** *The speed held in the cruise control memory will be cancelled when either the cruise control master switch, or the starter switch are turned off.*

## Brakes

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### **BRAKING SYSTEM**

The hydraulic braking system operates through dual circuits; if one circuit should fail, the other will continue to function. However, in the event of a brake failure where only one circuit is operational, the car should ONLY be driven at slow speed to the nearest Rover dealer. In these circumstances, exercise EXTREME CAUTION and be aware that much greater pedal effort and longer stopping distances will be required.

The braking system is servo assisted. This means that if the engine stops running, all servo assistance will be lost, requiring greater pedal effort and resulting in longer stopping distances.

### **Brake pads**

Brake pads and linings require a period of bedding in. For the first 200 miles (300 km), avoid situations where heavy braking is required.

Remember that regular servicing is vital to ensure that the brake components are examined for wear at the correct intervals and changed whenever necessary to ensure optimum safety and performance.

### **Brake warning light**

If the warning light on the instrument panel illuminates while driving, and the handbrake is fully released, a fault with the braking system is indicated. This is most likely to be caused by low fluid level; stop the car and seek qualified assistance before continuing.

### **Brake wear indicators**

All disc brakes are fitted with audible brake wear indicators. When the brake pads need replacing, a distinctive metallic 'screeching' sound will be heard (this is not to be confused with the sound of brakes squeaking which sometimes occurs during light braking and is usually caused by dust on the braking surfaces).

### **WARNING!**

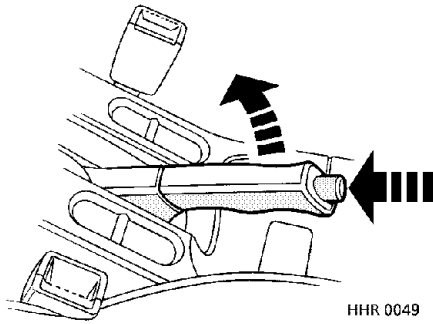
*DO NOT rest your foot on the brake pedal while driving; this may overheat the brakes reducing their efficiency and causing excessive wear.*

*If the brake warning light illuminates while driving, stop the car as soon as safety permits and seek qualified assistance before continuing.*

*NEVER move the car without the engine running; servo assistance may not be available. The brakes will still function, but greater pedal pressure will be required.*

## Brakes

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HHR 0049

### **HANDBRAKE**

The handbrake operates on the rear wheels only and should not require adjustment. To apply the handbrake, pull the lever up. Always apply the handbrake **FULLY** whenever you park the car.

To release, pull the lever up slightly, depress the button (arrowed in illustration) and fully lower the lever (the warning light on the instrument panel will extinguish when the handbrake is fully released).

### **WARNING!**

*DO NOT drive with the handbrake applied; this could damage the rear brakes and axles, and will also prevent the anti-lock braking system from functioning correctly.*

## *Brakes*

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### **ANTI-LOCK BRAKING SYSTEM**

(where fitted)

The anti-lock braking system prevents the wheels from locking, thereby helping to maintain steering control. No special driving techniques or effort is required from the driver.

Under normal braking (where sufficient road surface friction exists to reliably bring the car to a halt without the wheels locking), the anti-lock braking system will not be activated. However, if the force of your braking should exceed the available adhesion between the tyres and the road, causing one or more wheels to lock, then the anti-lock braking system will automatically come into operation. This will be recognised by a rapid pulsation felt through the brake pedal.

### **Anti-lock braking in action**

In an emergency situation, full braking effort should ALWAYS be applied, even when the road surface is slippery. The anti-lock braking system constantly monitors the speed of each wheel and varies braking pressure to each according to the amount of traction available, thereby ensuring that the wheels do not lock.

Always remember, no matter how hard you brake, STEERING CONTROL WILL ALWAYS BE MAINTAINED!

On soft surfaces such as powdery snow, sand or gravel, braking distances may be greater than those achievable on a car without anti-lock braking. This is because the action of locked wheels on soft surfaces is to build up a wedge of material in front of the wheels which assists in bringing the car to a halt. However, even in these circumstances, the anti-lock braking system will provide better stability and steering control.

## Brakes

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### Warning light

The anti-lock braking system incorporates a monitoring system which checks that all the electrical components are in working order as soon as the engine is started and also at frequent intervals during your journey.

The warning light on the instrument panel is an important part of this system. The warning light should illuminate when the starter switch is turned on. If the light fails to extinguish or illuminates again whilst driving, there is a fault in the system. On completion of your journey, seek advice from your dealer before further vehicle use.

In addition, when starting the engine, a single 'knock' may be heard coming from the engine compartment. Very slight movement may also be felt at the brake pedal. Both are normal symptoms of the anti-lock braking system self checking process.

**NOTE:** *Even if the anti-lock braking system is faulty, normal braking performance will still be available.*

### WARNING!

*The anti-lock braking system cannot overcome the physical limitations of stopping the car in too short a distance, cornering at high speed, or aquaplaning, i.e. where a layer of water prevents adequate contact between the tyres and the road surface.*

*The fact that the car is equipped with anti-lock braking must never tempt the driver into taking risks that could affect his/her safety or that of other road users. Drivers still have a duty to drive within normal safety margins, having due consideration for the prevailing road surface, weather and traffic conditions.*

## Maintenance

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The safe, reliable, and economical performance of your car will depend largely on how well it is maintained.

Maintenance is the owner's responsibility, and you should ensure that all routine services and warranty inspections are carried out by a Rover dealer at the recommended intervals. These are shown in the Service Portfolio book included in the literature pack. This book also provides a complete record of the services and inspections carried out on your car - ensure your Rover dealer has correctly endorsed the appropriate page at the conclusion of each service.

### OWNER MAINTENANCE

In addition to the routine services and inspections described in the Service Portfolio book, the following simple checks must be carried out more frequently. You can do these yourself and advice is given on the pages that follow.

#### Daily checks:

- Operation of lights, horn, direction indicators, wipers, washers and warning lights.
- Operation of seat belts and brakes.
- Look for fluid deposits on the floor beneath the car which may indicate a fluid leak.

#### Weekly checks:

- Engine oil level.
- Cooling system level.
- Operate air conditioning (see '*Heating & ventilation*').
- Condition and pressure of tyres.
- Brake and power steering fluid levels.
- Screen washer reservoir level.

#### Monthly checks:

- Automatic gearbox oil level.

**NOTE:** Any significant or sudden drop in fluid levels, or uneven tyre wear should be reported to your dealer without delay.

#### Emission control

Your car is fitted with emission and evaporative control equipment designed to meet specific territorial and legal requirements. You should be aware that unauthorised replacement, modification or tampering with this equipment by an owner or motor vehicle repairer could be unlawful and subject to legal penalties.

In addition, engine settings must not be tampered with. These have been established to ensure that your car complies with stringent exhaust emission regulations. Incorrect engine settings may adversely affect exhaust emissions, engine performance and fuel consumption, as well as causing high temperatures, which could result in damage to the catalytic converter and the car.

## Maintenance

### SAFETY IN THE GARAGE

**If you need to carry out maintenance on your vehicle, observe the following safety precautions at all times:**

- ALWAYS keep hands, tools and items of clothing clear of all drive belts and pulleys (see 'Warning' below).
- DO NOT touch exhaust or cooling system components until they are cool.
- DO NOT touch electrical leads or components with the starter switch turned on.
- NEVER leave the engine running in an unventilated area - exhaust gases are poisonous and extremely dangerous.
- **DO NOT work beneath the car with a vehicle lifting jack as the only means of support.**
- Ensure sparks and naked lights are kept away from the engine compartment.
- Remove all metal wrist bands and jewellery, before working in the engine compartment and NEVER allow the battery terminals or leads to make contact with tools or other metal parts of the car.

#### Poisonous liquids

Most liquids used in motor vehicles are poisonous and should not be consumed or brought into contact with open wounds (these substances include; battery acid, anti-freeze, brake and power steering fluid, petrol, diesel, oil and windscreen washer additives).

Obey all instructions printed on labels and containers!

#### Used engine oil

Prolonged contact with engine oil may cause serious skin disorders, including dermatitis and cancer of the skin. Wash thoroughly after contact.

#### PROTECT THE ENVIRONMENT!

It is illegal to pollute drains, water courses or soil. Use authorised waste disposal sites and garages which provide facilities for the receipt of discarded batteries, used oil and toxic chemicals. If in doubt contact your Local Authority for advice.

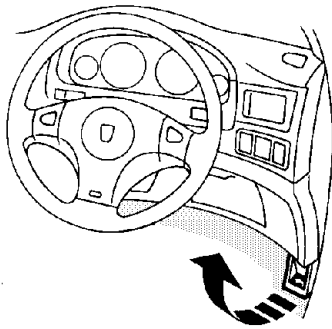
#### WARNING!

*Cooling fans may commence operating up to 4 minutes after the engine is switched off and continue operating for up to 8 minutes. Keep clear of all fans while working in the engine compartment.*

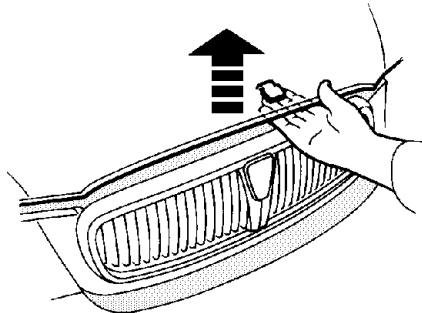


## Bonnet Opening

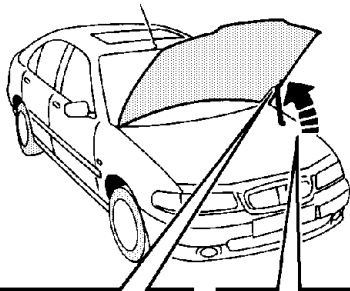
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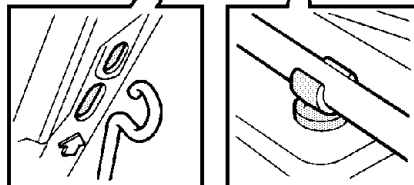
Pull the bonnet release handle.



Lift the bonnet safety catch lever.



Raise the bonnet and then fit the support stay into the 'arrowed' cut-outs in the underside of the bonnet.



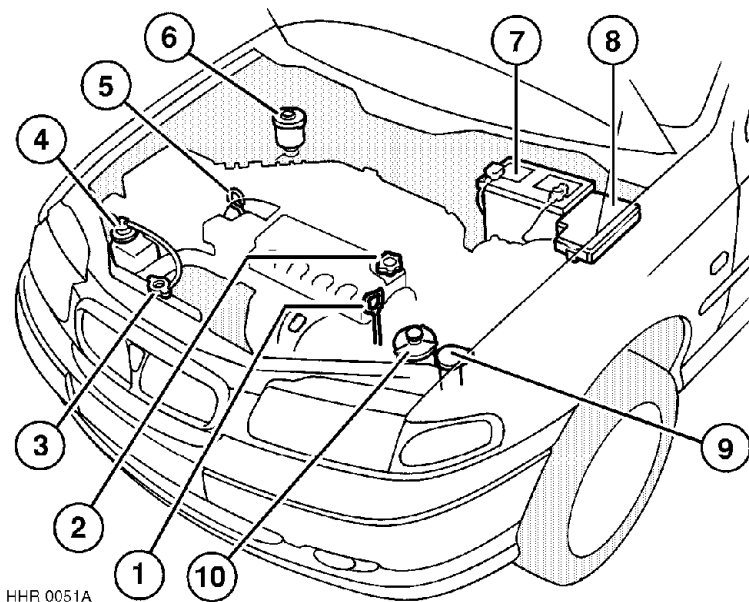
FHR 0052

### **Closing the bonnet**

Replace the support stay in its retaining clip, then lower the bonnet, allowing it to drop for the last 6 inches (18 centimetres) approx.

Check that the lock is **FULLY** engaged by attempting to lift the front edge of the bonnet. This should be free from all movement.

## Engine Compartment



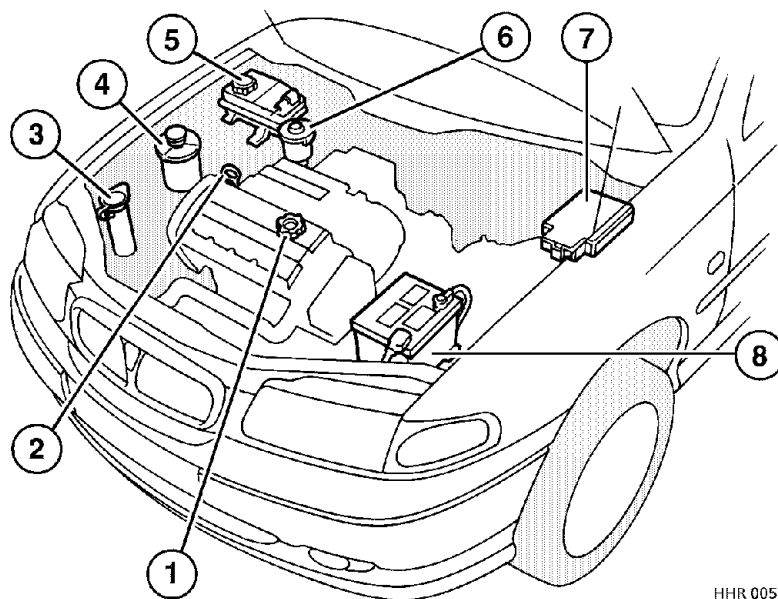
### 416 automatic gearbox models

1. Engine oil dipstick (orange)
2. Engine oil filler cap
3. Radiator filler cap
4. Cooling system reservoir
5. Automatic gearbox dipstick (yellow)
6. Brake fluid reservoir (grey cap)
7. Battery
8. Fusebox - engine compartment
9. Washer reservoir (blue cap)
10. Power steering reservoir (black cap)

#### **WARNING!**

*Before carrying out maintenance checks or working in the engine compartment, ALWAYS observe the safety precautions listed under 'Safety in the garage' at the beginning of the Maintenance section of this handbook.*

## Engine Compartment



HHR 0050

### 414 & 416 petrol models except 416 automatic gearbox

1. Engine oil filler cap
2. Engine oil dipstick (yellow)
3. Washer reservoir (blue cap)
4. Power steering reservoir
5. Cooling system reservoir (black cap)
6. Brake fluid reservoir (grey cap)
7. Fusebox - engine compartment
8. Battery

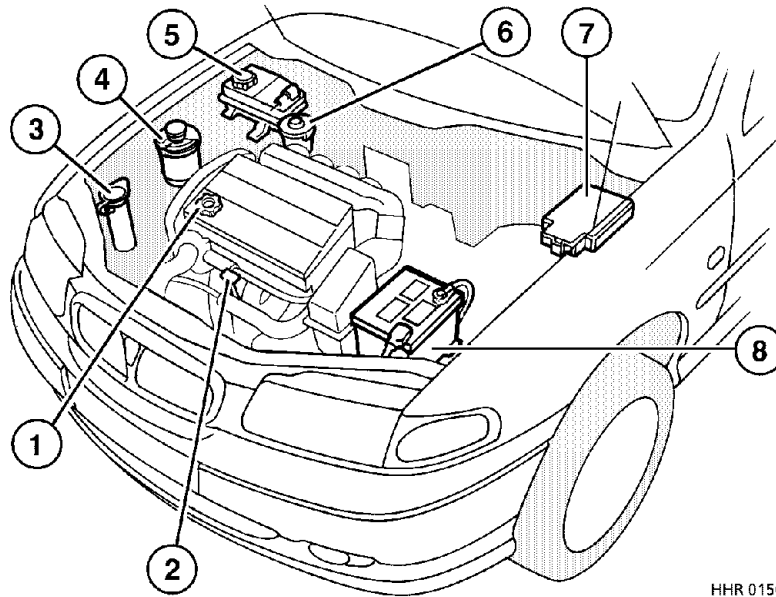
**NOTE:** On 1.4 8 valve models, the position of the oil filler cap will vary from that shown.

#### **WARNING!**

*Before carrying out maintenance checks or working in the engine compartment, ALWAYS observe the safety precautions listed under 'Safety in the garage' at the beginning of the Maintenance section of this handbook.*

## Engine Compartment

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HHR 0156

### 420 petrol models

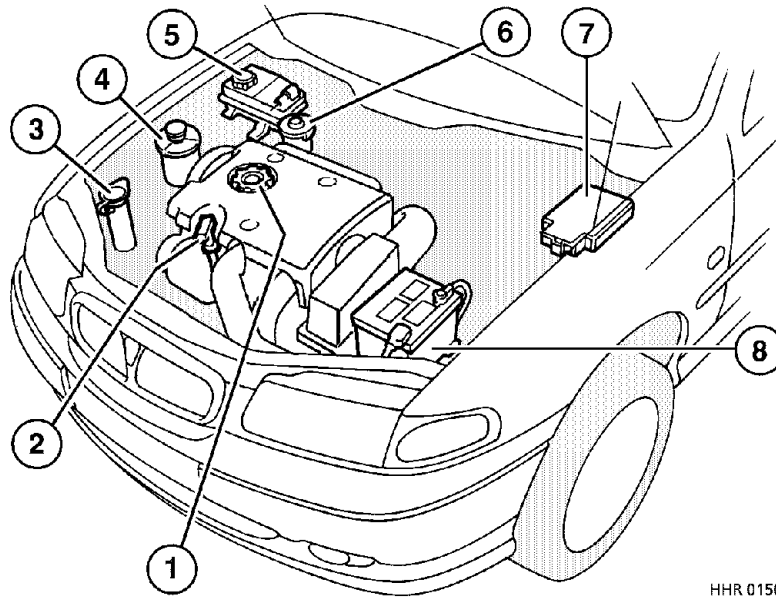
1. Engine oil filler cap
2. Engine oil dipstick
3. Washer reservoir (blue cap)
4. Power steering reservoir
5. Cooling system reservoir (black cap)
6. Brake fluid reservoir (grey cap)
7. Fusebox - engine compartment
8. Battery

#### **WARNING!**

*Before carrying out maintenance checks or working in the engine compartment, ALWAYS observe the safety precautions listed under 'Safety in the garage' at the beginning of the Maintenance section of this handbook.*

## Engine Compartment

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HHR 0150

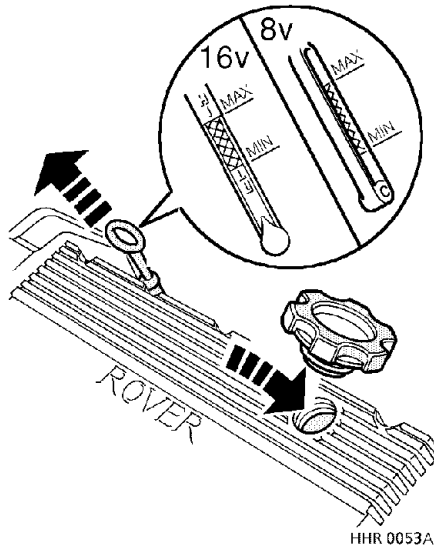
### All diesel models

1. Engine oil filler cap
2. Engine oil dipstick (yellow)
3. Washer reservoir (blue cap)
4. Power steering reservoir
5. Cooling system reservoir (black cap)
6. Brake fluid reservoir (grey cap)
7. Fusebox - engine compartment
8. Battery

#### **WARNING!**

*Before carrying out maintenance checks or working in the engine compartment, ALWAYS observe the safety precautions listed under 'Safety in the garage' at the beginning of the Maintenance section of this handbook.*

## Engine



414 & 416 petrol models except 416 automatic

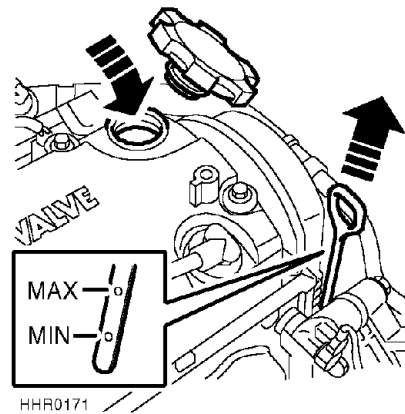
**NOTE:** On 1.4 8 valve models, the position of the oil filler cap will vary from that shown.

### OIL LEVEL CHECK & TOP-UP

Check the oil level weekly or whenever you fill up with fuel. Ideally the oil level should be checked with the engine cold and the car resting on level ground. However, if the car is in use and the engine is already warm, then wait for at least two minutes after switching off before checking the level.

Withdraw the dipstick and wipe the blade clean, then re-insert the dipstick and withdraw again to check the level. If the oil level is near to the lower mark on the dipstick, unscrew the filler cap on top of the valve cover and add oil to maintain the level between the upper and lower marks on the dipstick.

**DO NOT fill above the upper mark!**



416 automatic gearbox cars

After adding oil, wait for a few minutes and then recheck the level. Finally, ensure the filler cap is replaced and fully tightened.

### WARNING!

#### **Petrol & diesel engines:**

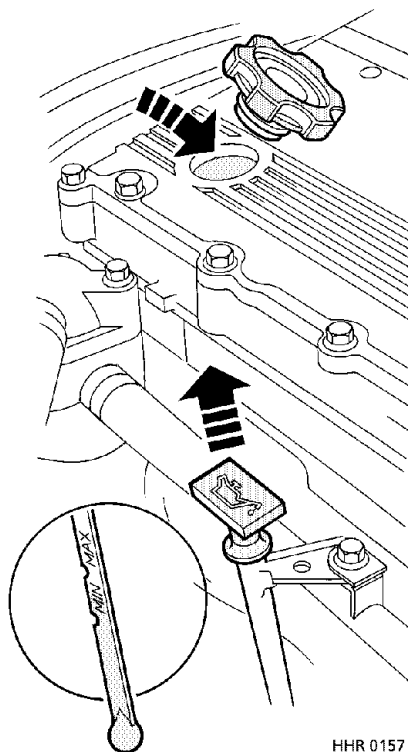
*Driving the car with the engine oil level BELOW the lower mark on the dipstick, will damage the engine.*

#### **Diesel engines:**

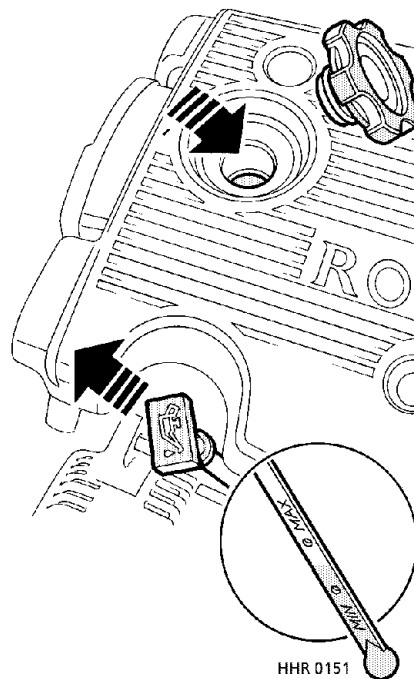
*Driving the car with the engine oil level ABOVE the upper mark, or BELOW the lower mark, will damage the engine.*

**NOTE:** Oil specifications for petrol and diesel engines are shown on the following page.

## Engine



*420 petrol models*



*All diesel models*

### Oil specification

#### **For petrol engines:**

Use any brand of 10W/40 engine oil meeting the minimum specification: *RES.22.OL.G4* or *ACEA A2:96*.

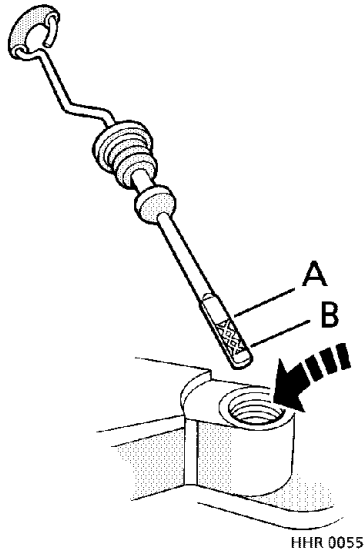
#### **For diesel engines:**

Use any brand of 10W/40 or 15W/40 engine oil meeting the minimum specification: *RES.22.OL.PD2* or *ACEA B2:96*.

Oils manufactured to the above specifications are suitable for use in the temperature range  $-20^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ . For continual operation in climates where temperatures usually exceed or fall below these limits, seek advice from your dealer.

## Automatic Transmission

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### **OIL LEVEL CHECK & TOP-UP**

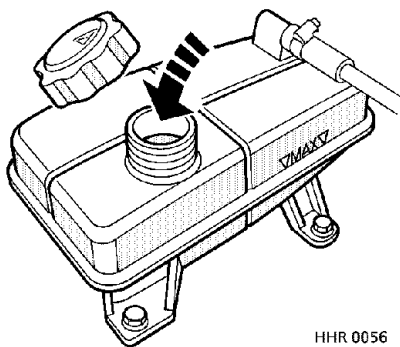
Run the engine until it has reached its normal operating temperature and then check the oil level with the engine switched off and with the car resting on level ground.

Withdraw the dipstick and wipe the blade clean, then FULLY re-insert the dipstick and withdraw again in order to check the level. The level must be maintained between the upper and lower marks on the dipstick (shown as 'A' and 'B' in the illustration).

If necessary, add automatic transmission fluid equivalent to Dexron II into the dipstick tube to top-up. Ensure the new level does not exceed the upper mark on the dipstick.



## Cooling System



HHR 0056

Cooling system reservoir - all models except  
416 automatic gearbox cars

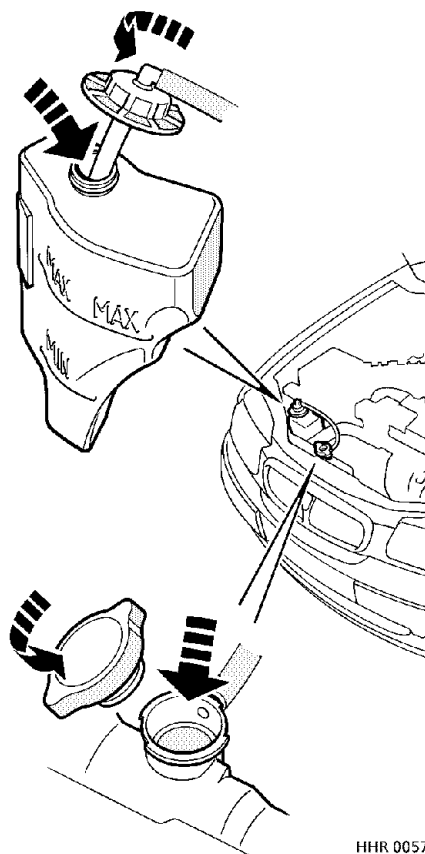
### WARNING!

- Prevent anti-freeze coming in contact with the skin or eyes. If this should happen, rinse immediately with plenty of water.
- Anti-freeze is poisonous and can be fatal if swallowed. If swallowing is suspected, seek medical attention immediately.
- DO NOT remove either the reservoir or radiator caps when the cooling system is hot - escaping steam or water could cause serious injury.

### COOLANT CHECK & TOP-UP

The coolant level should be checked weekly when the system is cold, and topped up with a mixture of 50% anti-freeze and 50% water.

Top up to the '**MAX**' mark shown on the exterior of the reservoir. If the level falls appreciably during a short period, suspect leakage or overheating and arrange for your dealer to examine the vehicle.



HHR 0057

Cooling system reservoir and radiator cap  
- 416 automatic gearbox models only

## Cooling System

---

### **416 automatic gearbox models:**

If the reservoir is completely empty, check and, if necessary, top-up the coolant in the radiator before adding coolant to the reservoir, as follows:

- 1) Ensure the engine is cool.
- 2) Without pressing down, turn the filler cap anti-clockwise until it stops. This will relieve any pressure in the cooling system.
- 3) Remove the filler cap by pressing down and turning anti-clockwise.
- 4) If necessary, add coolant (a mixture of 50% anti-freeze and 50% water) until the level reaches the base of the filler neck.
- 5) Replace and tighten the filler cap.

Now top-up the coolant reservoir, to HALF WAY between the '**MIN**' and '**MAX**' marks shown on the side of the container.

### **Anti-freeze**

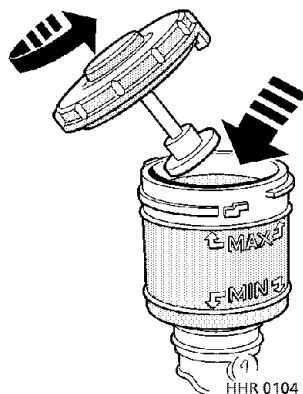
The anti-freeze content of the coolant must be maintained at a minimum of 50%. To ensure that the anti-corrosion properties of the coolant are retained, the anti-freeze content should be checked by your dealer once a year.

For maximum corrosion prevention, use *Unipart Superplus 3 Anti-Freeze and Summer Coolant*. If this is unavailable, use an ethylene glycol based anti-freeze which meets specification BS 6580 and BS 5117.

### **WARNING!**

*DO NOT use anti-freeze to any specification other than that indicated above, or add rust inhibitors or other additives to the coolant - these may not be compatible with the coolant or engine components.*

## Brakes & Clutch



### BRAKE FLUID CHECK & TOP-UP

Fluid level in the brake reservoir may fall slightly during normal use, but should not drop below the '**MIN**' mark. If there is any appreciable drop in level over a short period, consult your dealer.

#### Topping-up

Wipe the filler cap clean before removing to prevent dirt from entering the reservoir. Twist the cap a quarter turn anti-clockwise to remove, then top-up the reservoir to the '**MAX**' mark using a recommended fluid:

*AP New Premium Super DOT 4 brake fluid.*

*Castrol Universal DOT 4 brake fluid.*

Use only new fluid from a sealed container (old fluid from uncapped containers or fluid previously bled from the system will absorb moisture, and adversely affect braking performance).

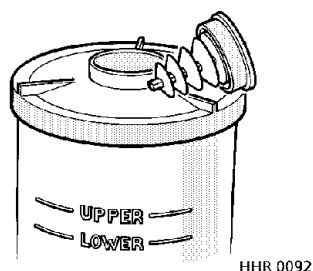
To refit the cap, press down firmly while turning clockwise - this will ensure the cap is securely locked in position.

### WARNING!

- *DO NOT drive the car if the fluid level is below the '**MIN**' mark.*
- *Brake fluid will damage painted surfaces: Soak up any spillage with an absorbent cloth immediately and wash the area with a mixture of car shampoo and water.*
- *If brake fluid should come into contact with the skin or eyes, rinse immediately with plenty of water.*
- *Brake fluid must be completely replaced every two years regardless of mileage.*

**NOTE:** *The clutch on manual gearbox cars requires no maintenance. The hydraulic operating system is sealed, making topping-up the reservoir unnecessary.*

## Power Steering



HHR 0092

### POWER STEERING FLUID LEVEL

Check and top-up the fluid level ONLY when the engine is cold. You should also ensure that the steering wheel is not turned between stopping the engine and checking the fluid level.

Wipe the filler cap clean to prevent dirt from entering the reservoir, and top-up to the 'upper' level mark with *Unipart Power Steering fluid*, or an equivalent fluid meeting Dexron IID specification.

Do not overfill!

**NOTE:** *The colour of Dexron IID may differ from that of the power steering fluid used to fill the system during manufacture. This is not cause for concern.*

### WARNING!

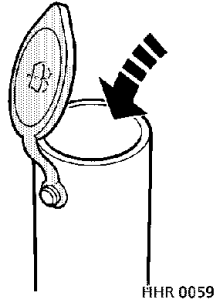
*If the fluid level has dropped below the 'lower' level mark, it is important to top-up the reservoir before starting the engine or damage to the steering pump could result.*

### Emergency operation only!

*Any large or sudden drop in the fluid level must be investigated by a Rover dealer immediately.*

*If it can be established that fluid loss is slow, then the reservoir may be topped-up to the 'upper' level mark to enable the car to be driven to the nearest Rover dealer for examination.*

## Wipers & Washers



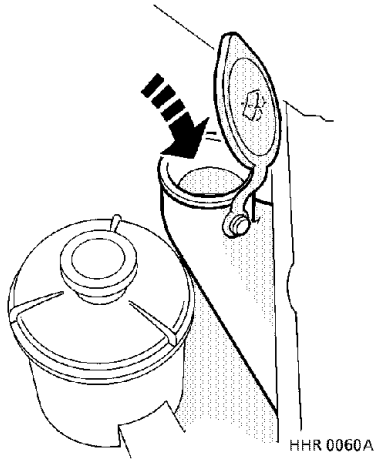
### WINDSCREEN WASHERS

Check the reservoir level at least every week and top-up with a mixture of water and a good quality proprietary screenwash.

**NOTE:** *The washer reservoir fitted to some 416 automatic gearbox cars has a level gauge attached to the reservoir cap.*

### WARNING!

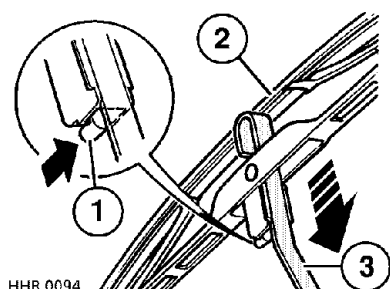
*Do not use an anti-freeze or vinegar/water solution in the screen washer reservoir - anti-freeze will damage painted surfaces, while vinegar can damage the windscreen washer pump.*



*416 automatic gearbox cars only*

## Wipers & Washers

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### WIPER BLADES

Wash the wiper blades in warm soapy water and periodically check their condition. If signs of hardness or cracking in the rubber are found, or if the wipers leave streaks or unwiped areas on the windscreen during use then the wiper blades should be replaced.

Clean the windscreen regularly with an approved glass cleaner and ensure the screen is thoroughly cleaned before fitting replacement wiper blades.

### Wiper blade replacement

Lift the wiper arm away from the windscreen. With the blade at 90° to the arm as shown, disconnect the blade by pushing in the locking tab (1) and sliding the blade (2) down the arm (3).

Fitting a replacement blade is a reversal of this process; position the new blade assembly on the wiper arm and slide the blade fully towards the hooked end of the arm until it locks in place. Check that the blade is securely locked before returning the wiper assembly to the windscreen.

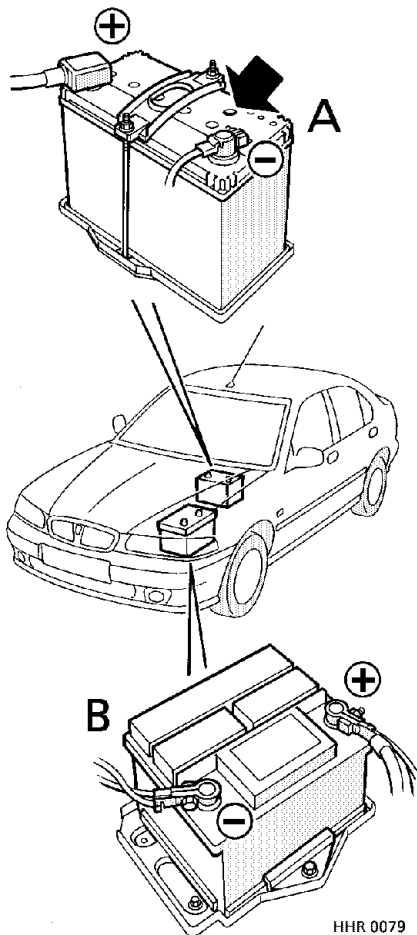
Only fit replacement wiper blades that are identical to the original specification.

### Washer jets

The washer jets are set during manufacture and should not require adjustment.

If a jet becomes blocked, use a thin wire or needle as a probe to clear the obstruction.

## Battery



**Battery 'A' - 416 automatic gearbox models**

**Battery 'B' - all other models**

### **WARNING!**

- Batteries contain sulphuric acid. If acid should come into contact with the eyes or skin, wash IMMEDIATELY with cold water and seek medical advice.
- During normal use, batteries emit explosive hydrogen gas sufficient to cause severe explosions capable of causing serious personal injury - ensure sparks and naked lights are kept well away from the engine compartment.
- For safety, remove all metal wrist bands and jewellery before working in the engine compartment, and NEVER allow the battery terminals or leads to make contact with tools or other metal parts of the car.

### **Battery maintenance**

The battery is designed to be maintenance free so no topping-up is required.

The battery fitted to 416 automatic gearbox models has a battery condition indicator (arrowed in illustration). Occasionally check the colour showing in the indicator window - a label on the top of the battery explains the test indicator colours.

## Battery

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### **WARNING!**

- *ONLY fit a replacement battery of the same type and specification as the original. Other batteries may vary in size and have different terminal positions, capable of creating a potential fire hazard when connected to the car's electrical system.*
- *To avoid damaging the electrical system, ensure correct polarity when refitting the battery.*
- *After disconnection of the vehicle battery, the handset may need to be re-synchronised (see item 6 of 'Handset battery').*

### **IMPORTANT**

*If the battery has become discharged, while the alarm system is armed, you should be aware that the alarm may start sounding as soon as battery power is restored (when a replacement battery is installed, or booster cables are connected). If the alarm starts sounding, disarm the alarm by pressing the handset LOCK button four times in quick succession and then pressing the unlock button once.*

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### **Battery removal**

Before disconnecting the battery, disarm the alarm (see 'Important information'), then turn the starter switch to position '0', switch off all electrical equipment and remove the starter key.

ALWAYS disconnect the negative ('-') terminal first. When replacing the battery, connect the positive ('+') terminal first. While disconnecting, do not allow the battery terminals to make contact with metal parts of the car.

To release the battery from the car, undo the battery clamping plate or rods.

**NOTE:** *Used batteries are potentially hazardous - disposal should be at authorised waste disposal sites ONLY.*



## Battery

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### **Battery charging**

Before charging, ensure the battery is REMOVED FROM THE CAR - charging the battery with the cables connected can cause serious damage to the car's electrical system.

If your battery has an electrolyte level marked on the casing, ensure the electrolyte is at or above this level before charging. If the electrolyte is below this level, refer to your dealer.

Batteries generate explosive gases, contain corrosive acid and produce levels of electric current high enough to cause serious burns. While charging always heed the following precautions:

- Make sure the battery charger is disconnected from its power supply before connecting its leads to the battery terminals.
- Make sure the leads are securely clamped before switching on the charger, and DO NOT move the clamps while the charger is switched on.
- Shield your eyes or avoid leaning over the battery.
- Keep the area around the top of the battery well ventilated.
- Keep naked lights clear of the battery (batteries emit inflammable hydrogen during and after charging).
- When charging is finished, switch off the charger BEFORE disconnecting the charging leads and then leave the battery for an hour before reconnection to the car.

### **Radio/cassette player:**

Following disconnection and reconnection of the battery the word 'CODE' may appear in the digital display and the radio/cassette player may not operate.

To restore operation, re-enter the security code using the procedure described in the '*In-Car Entertainment*' book.

# Tyres

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## **WARNING!**

*DEFECTIVE TYRES ARE DANGEROUS!  
DO NOT drive your car if any tyre is  
excessively worn or damaged, or is  
inflated to an incorrect pressure.*

*Incorrect tyres can affect the stability  
and handling characteristics of your  
car - only fit replacement tyres that are  
identical to the original specification.*

## **CARING FOR YOUR TYRES**

Always drive with consideration for the condition of the tyres, and frequently inspect the tread and side walls for any sign of distortion (bulges), cuts or wear.

The most common causes of tyre failure are:

- Bumping against kerbs
- Driving over deep potholes
- Driving with under or over-inflated tyres.

### **Tyre pressures**

Correctly inflated tyres will ensure that you enjoy the best combination of tread life, ride comfort, fuel economy and road handling.

Check the pressures at least every week (including the spare wheel) preferably when the tyres are cold (be aware that the car can be driven up to one mile (1.6 km) before the tyres start to warm up).

Air pressure naturally increases in warm tyres; if it is necessary to check the tyres when they are warm (after the car has been driven for a while, even in cold weather), you should expect the pressures to have increased by between 4 and 6 lbf/in<sup>2</sup>. In this circumstance, DO NOT let air out of the tyres in order to match the recommended pressures.

The recommended pressures are shown in 'Technical Data' at the rear of the book.

Remember; incorrectly inflated tyres may wear rapidly or unevenly, are more easily damaged, and can seriously affect the car's road handling characteristics and fuel economy.

### **Snow chains**

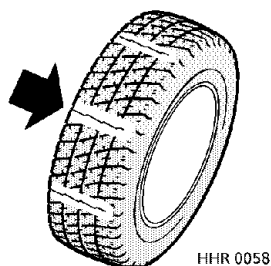
Unsuitable snow chains could damage the tyres, wheels, suspension, brakes or bodywork of your car. Only fit snow chains that are recommended by a Rover dealer and have been approved by Rover for use on your car.

In use, always observe the following precautions:

- Fit snow chains to the front wheels only.
- Always adhere to the snow chain fitting and retensioning instructions and the speed limitations for varying road conditions.
- Avoid tyre damage and excessive chain wear by removing snow chains when driving on snow free roads.

## Tyres

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### **Tyre wear indicators**

The tyres on your car have wear indicators moulded into the tread pattern at several points around the circumference. When the tread has worn down to 1.6 mm, the indicators will come to the surface of the tread pattern, producing the effect of a continuous band of rubber across the width of the tyre.

The indicators provide warning that there is insufficient tread remaining to provide good traction, particularly on wet roads. For safety, a tyre **MUST** be replaced as soon as a wear indicator becomes visible.

If tyre wear is uneven (on one side of the tyre only) or becomes abnormally excessive, the wheel alignment should be checked by your dealer.

### **Valve caps**

Keep the valve caps screwed down firmly. They prevent dirt from entering the valve.

### **Punctured tyres**

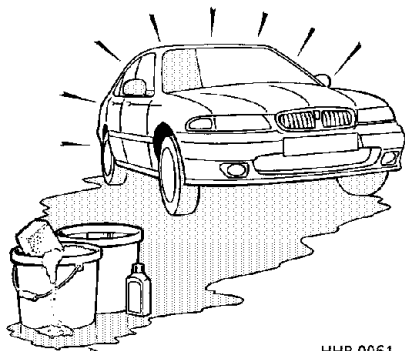
Your car is fitted with tubeless tyres, which will not normally leak if penetrated by a sharp object, provided it remains in the tyre. If you are aware of this occurring, reduce speed immediately and drive with caution until the spare wheel can be fitted. Remember, punctured or damaged tyres must be permanently repaired or replaced **AS SOON AS POSSIBLE!**

### **Replacement tyres**

Wheel rims and tyres are matched to suit the handling characteristics of the car. Changing the specification of a wheel or tyre can adversely affect the car's handling and, ultimately, your own safety, in emergency road situations.

To be safe, **ONLY** fit replacement tyres that are identical to the original specification shown in '*Technical Data*' at the back of this book.

## Cleaning & Car Care



HHR 0061

### WASHING YOUR CAR

Road dirt, oil, and deposits from birds and trees can permanently spoil the paint finish. Wash your car frequently using a clean, grit free sponge and generous quantities of cold or lukewarm water containing a car shampoo. Rinse and dry off with a chamois leather.

- In hot weather, DO NOT wash the car in direct sunlight - move the car into the shade!
- DO NOT use hot water!
- DO NOT use detergent soap products or washing up liquid.

During winter months when salt has been used on the roads, use a hose to wash the underside. Pay particular attention to wheelarches and panel seams, and to removing accumulations of mud.

When using a hose, do not direct the jet into the heater air intake ducts, or through the wheel trim apertures onto the brake components, or at the door, sunroof or window seals, where water pressure could penetrate the seals.

### WARNING!

*Some high pressure cleaning systems available on garage forecourts are sufficiently powerful to penetrate door and window seals and damage rubbing strips and locking mechanisms. Never aim the water jet directly at components that might easily be damaged.*

### Radio aerial

To prevent accidental damage, unscrew and remove the roof mounted aerial before entering an automatic car wash.

### Getting rid of tar spots

Use white spirit to remove tar spots and stubborn grease stains from paintwork. Then wash immediately with soapy water to remove all traces of the spirit.

### Body protection

After washing, inspect the paintwork for damage. Treat paint chips and scratches with a Rover touch-up pencil. If the damage has revealed bare metal, use a coloured primer first, then apply the base coat and finish off with a lacquer pencil, if appropriate. Carry out this treatment after washing, but before polishing or waxing.

Take care to ensure that car polish and body cleaning compounds are not applied to the window glass or seals.

More extensive damage to paint or bodywork must be repaired in accordance with the manufacturer's recommendations. Failure to do this will invalidate the Anti-Corrosion Warranty!

## Cleaning & Car Care

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### **Windows and mirrors**

Regularly clean the windows, inside and out, using an approved glass cleaner.

*Windscreen:* Always clean the windscreen after using an automatic car wash and before fitting replacement wiper blades.

*Rear window:* Clean the inside of the rear window with a soft cloth, using a side to side motion to avoid damaging the heating elements. DO NOT scrape the glass or use an abrasive cleaning fluid.

*Mirrors:* Mirror glass is particularly susceptible to damage; DO NOT use abrasive cleaning compounds or metal scrapers.

### **Wiper blades**

Regularly wash the wiper blades with warm soapy water (NEVER use a spirit or petrol based solvent).

### **LOOKING AFTER THE INTERIOR**

*Vinyl/plastic/cloth-faced materials:* Clean with diluted upholstery cleaner.

*Leather:* Seats, steering wheel and any trim features should be cleaned with warm water and a non-detergent soap. Dry and polish the leather with a dry, clean, lint-free cloth.

DO NOT use petrol, detergents, furniture creams or polishes!

*Carpets:* Sweep regularly with a brush or vacuum cleaner and clean with diluted upholstery cleaner.

### **Clock & radio**

Clean with a dry cloth only. DO NOT use cleaning fluids or sprays.

### **Seat belts**

Extend the belts, then use warm water and a non-detergent soap to clean. On no account use bleaches, dyes or cleaning solvents - these can weaken the belt webbing. Finally, allow the belts to air-dry naturally, and do not retract them or use the car until they are completely dry.

### **Airbag SRS**

To prevent airbag SRS damage, the steering wheel centre pad and the passenger side cover should ONLY be cleaned sparingly with a damp cloth and upholstery cleaner.

DO NOT allow these areas to be flooded with the liquid, and DO NOT use petrol, detergent, furniture cream or polishes.

For more detailed car care information, ask your dealer for a copy of *'The Complete Rover Body Care Handbook'* - AKM 569.

## Emergency Starting

### USING BOOSTER CABLES

#### WARNING!

- *During normal use, batteries emit explosive hydrogen gas, sufficient to cause severe explosions capable of causing serious personal injury - ensure sparks and naked lights are kept well away from the engine compartment.*
- *DO NOT disconnect the discharged battery.*
- *Make sure BOTH batteries are of the same voltage (12 volts), and that the booster cables are approved for use with 12 volt car batteries.*
- *To avoid injury, always adopt the following procedure when using booster cables.*

### IMPORTANT

*If the battery has become discharged, while the alarm system is armed, you should be aware that the alarm may start sounding as soon as battery power is restored (when a replacement battery is installed, or booster cables are connected). If the alarm starts sounding, disarm the alarm by pressing the handset LOCK button four times in quick succession and then pressing the unlock button once.*

Using booster cables (jump leads) from a donor battery, or a battery fitted to a donor vehicle, is the only approved method of starting a car with a flat battery. Push or tow starting is NOT recommended!

- 1) If a donor vehicle is to be used, the vehicles should be parked with their battery locations adjacent to one another. Ensure that the two vehicles do not touch.
- 2) Apply the handbrakes and ensure that the gear levers on both vehicles are in neutral ('P' - Park for cars with automatic transmission).
- 3) Turn off the starter switch and ALL electrical equipment of BOTH vehicles.
- 4) Connect the RED booster cable between the positive (+) terminals of BOTH batteries.

## *Emergency Starting*

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5) Connect the BLACK booster cable from the negative (-) terminal of the donor battery to a good earth point (eg. an engine mounting or other unpainted surface), at least 0.5 m from the battery and well away from fuel and brake lines (see following illustrations).

**DO NOT connect a booster cable to the negative (-) terminal of the discharged battery!**

6) Check that the cables are clear of the moving parts of both engines, then start the engine of the donor vehicle and allow it to idle for a few minutes.

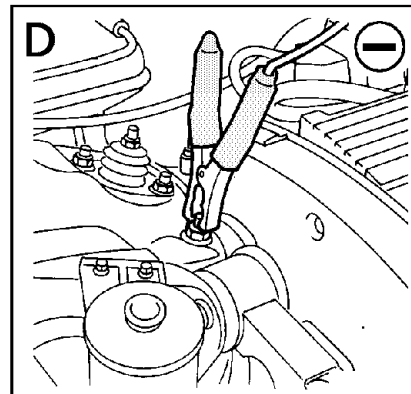
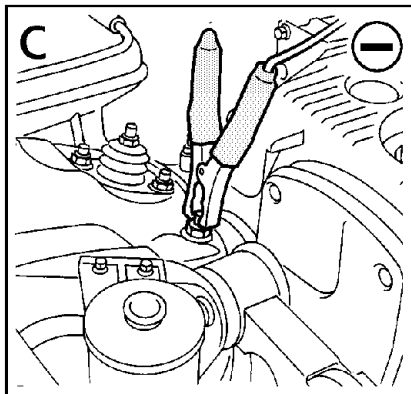
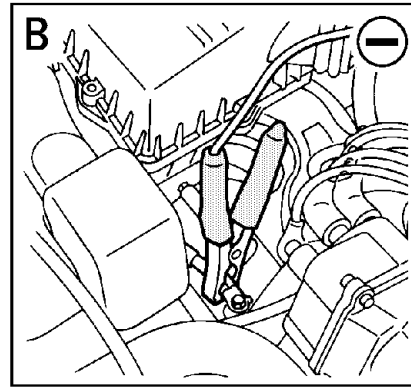
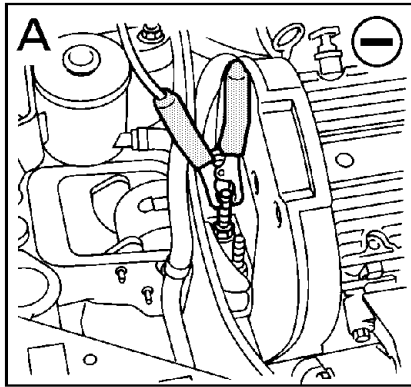
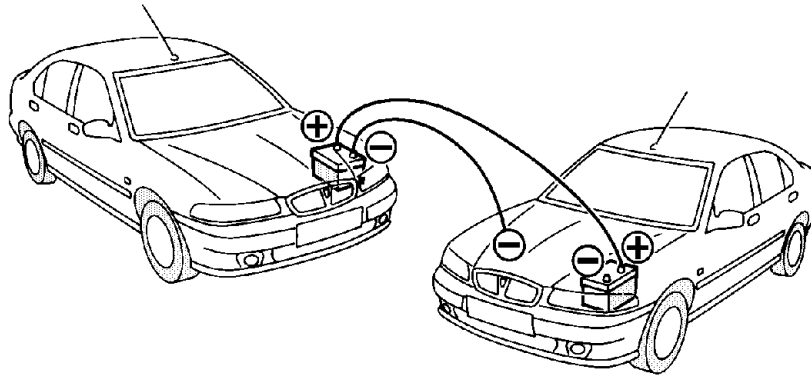
7) Now start the engine of the car with the discharged battery (DO NOT crank the engine for more than 15 seconds at a time).

8) Once both engines are running normally, allow them to idle for two minutes before switching off the engine of the donor vehicle and disconnecting the booster cables. DO NOT switch on any electrical circuits on the previously disabled vehicle, until AFTER the booster cables have been removed.

9) Disconnecting the booster cables must be an EXACT reversal of the procedure used to connect them, ie: disconnect the BLACK cable from the earth point on the disabled vehicle FIRST.

**The following illustrations identify the recommended earthing point for your particular car:**

## Emergency Starting



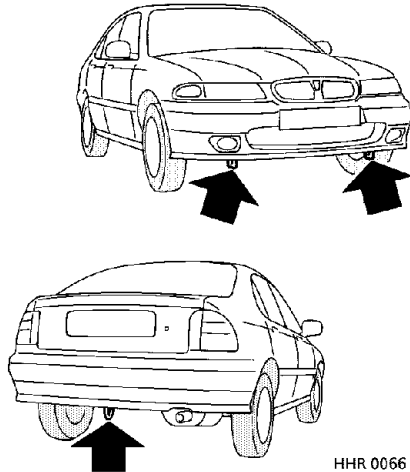
HHR0153A

A. 414 & 416 manual models.  
C. 420 diesel models.

B. 416 automatic models.  
D. 420 petrol models.



## Emergency Towing



Both the front and rear lashing eyes are intended for use by the emergency services or qualified vehicle recovery specialists ONLY, to assist in the recovery of your car should a breakdown or accident occur.

- DO NOT use the lashing eyes to tow your car behind another vehicle using a rope or chain.
- DO NOT use the lashing eyes for towing another vehicle, trailer or caravan.

### Transporter or trailer lashing

If your car should require transporting on the back of a trailer or transporter, only use the recommended lashing eyes - DO NOT secure lashing hooks or trailer fixings to other parts of the car.

### Towing for recovery

If your car is to be towed, most qualified recovery specialists will use wheel lift equipment to suspend the front wheels, while the rear wheels remain on the ground. However, if it is necessary for the car to be towed with all four wheels on the ground, follow this procedure.

### Before being towed:

- 1) Turn the starter key to position 'I' to unlock the steering and then to position 'II' to enable the brake lights, wipers and direction indicators to be operated if necessary.
- 2) Place the gear lever in neutral.
- 3) Release the handbrake.

### WARNING!

- DO NOT attempt to tow the car unless the starter switch is turned to position 'I' in order to unlock the steering (if, due to an accident or electrical fault, this is considered unsafe, disconnect the battery before turning the switch).
- DO NOT remove the starter key or turn the switch to position '0' while the car is in motion.
- Without the engine running, the brake servo and power steering pump cannot provide assistance. Greater effort will therefore be required to operate the brake pedal and to turn the steering wheel. Longer stopping distances will also be experienced.

## Emergency Towing

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<b>IMPORTANT</b>
------------------

*Ideally, cars fitted with an automatic gearbox should only be moved by trailer/transporter, or on suspended tow (with the front wheels raised).*

*If these facilities are unavailable and it is necessary for the car to be towed on all four wheels, adhere strictly to the following:*

*Before towing:*

- 1. Start the engine.*
- 2. Move the gear selector lever to 'D4', and then to neutral ('N').*
- 3. Switch off the engine.*

*DO NOT allow the car to be towed further than 50 miles (80 km), and restrict the towing speed to a maximum of 35 mph (55 km/h).*

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## Wheel Changing

### WARNING!

*Always observe the following precautions!*

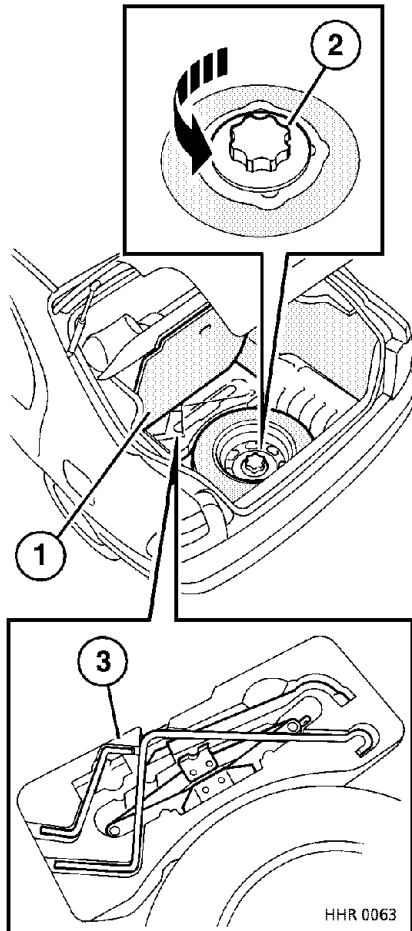
- *Choose a safe place to stop away from the main thoroughfare, and ensure your passengers get out of the car and wait in a safe area away from other traffic.*
- *Switch on the hazard warning lights to alert other road users. Apply the handbrake and engage 1st gear (select 'P' for automatic transmission).*
- *Ensure the jack is positioned on firm, level ground. Do not position the jack on metal gratings or manhole covers, or use additional material between the base of the jack and the ground.*
- *If jacking on a slope, place chocks at the front and rear of the wheel diagonally opposite the one to be removed.*
- *Care must be taken to avoid accidental contact with any underbody parts, especially the hot exhaust system components, likely to cause personal injury during the raising or lowering of the car.*

*In addition:*

*NEVER jack the car with passengers inside or with a caravan or trailer connected!*

*NEVER work beneath the car with the jack as the only means of support. The jack is designed for wheel changing only!*

## Wheel Changing



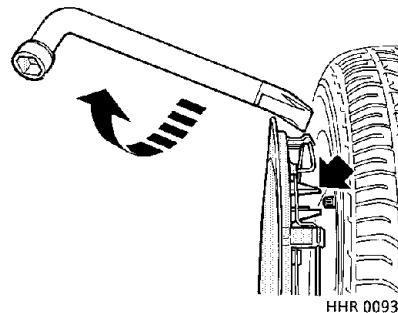
### Removing the spare wheel and tools

- 1) Remove the luggage compartment floor covering.
- 2) Unscrew the spare wheel clamp and lift the wheel from the luggage compartment.
- 3) Remove the tool kit, comprising: jack, jack handle, wheel nut spanner, sunroof key and locking wheel nut removal tools (if fitted).

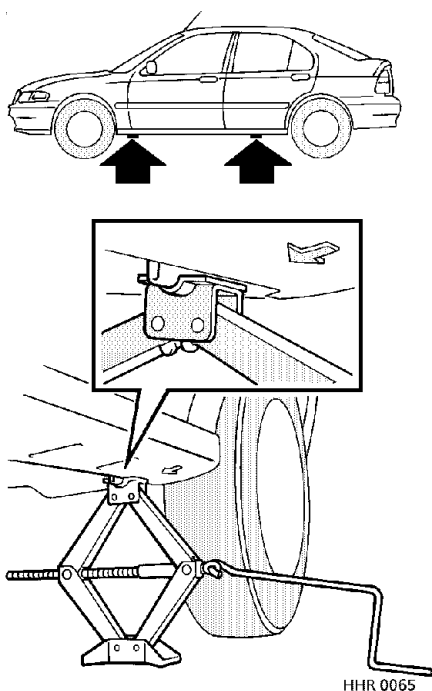
**NOTE:** A steel spare wheel is fitted to all models (including those fitted with alloy road wheels).

### Removing the wheel trim

Slide the flat, wedge, end of the wheel nut spanner behind the edge of the wheel trim (steel wheels only). Working carefully around the wheel, apply a twisting action to the tool to prise the trim from the wheel.



## Wheel Changing



### Positioning the jack

Position the jack under the jacking point nearest the wheel to be removed (note that arrows pressed into the sills identify the four jacking points). Turning the jack screw by hand, raise the jack until the jack head fits snugly around the centre of the jacking point.

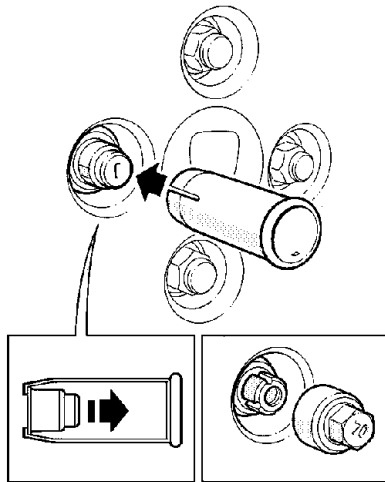
### Changing the wheel

- 1) Before raising the car, use the wheel nut spanner to slacken each of the wheel nuts half a turn anti-clockwise (refer to the following page for information about locking wheel nuts).
- 2) Attach the jack handle and turn the jack screw clockwise to raise the car until the tyre is clear of the ground. Remove the wheel nuts and wheel (DO NOT scratch the surface of the wheel by placing it face down on the ground).
- 3) Fit the spare wheel and tighten the wheel nuts (domed side towards the wheel) until the wheel is firmly seated against the hub.
- 4) Lower the car and remove the jack and wheel chocks, then FULLY tighten the wheel nuts in diagonal sequence.
- 5) Refit the wheel trim, ensuring that the valve stem is located between the valve stem guides (plastic lugs arrowed in wheel trim removal illustration). Use firm pressure with the flat of the hand to press the wheel trim into position.
- 6) Finally, return the tools and the wheel (face down) to the luggage compartment.

### WARNING!

*Check the tyre pressure before driving, and have the tightness of the wheel nuts checked by your dealer as soon as possible!*

## Wheel Changing



HHR 0084

### LOCKING WHEEL NUTS

Cars with alloy wheels are fitted with one locking wheel nut on each wheel. These are visually very similar to standard wheel nuts, but can only be removed using the special tools provided, as follows:

- 1) Push the plastic extractor tube firmly onto the locking wheel nut cover. By levering the tube from side to side, the stainless steel nut cover can be pulled from the nut.
- 2) Fit the metal key socket over the wheel nut, then fit the wheel nut spanner over the socket and unscrew the nut in the normal way.

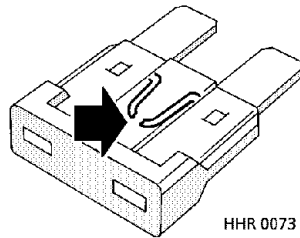
Keep the key socket and extractor with the tool kit in the space provided.

**NOTE:** *The socket can be conveniently retained inside the extractor tube when not in use.*

A code number is stamped on the face of the socket. Ensure the code number is recorded on the Security Information card supplied with your literature pack - you will need to quote this number if replacement components are required. DO NOT keep the card in the car!

## Fuses

Fuses are simple circuit breakers, which protect electrical equipment by preventing the electrical circuits from being overloaded. A 'blown' fuse is indicated when the electrical equipment it protects becomes inoperative. Check a suspect fuse by removing it from the fuse box and looking for a break in the wire inside the fuse (an example of a broken fuse is shown below).



### Fuse colours

In both fuse boxes, the fuses are colour coded to identify their amperage ratings as follows:

BROWN	7.5 amp
RED	10 amp
BLUE	15 amp
YELLOW	20 amp
GREEN	30 amp

There are two fuse boxes; the main fuse box located behind the driver's personal storage compartment inside the car and the other in the engine compartment. The location and value of each fuse is shown on the charts attached to the rear of the driver's storage compartment and the underside of the engine compartment fuse box cover. They are also shown in the following illustrations.

Spare fuses are provided in the main fuse box, however these are not numbered in the following illustration.

### Renewing a fuse

Always turn off the starter switch and the appropriate electrical circuit before removing a fuse. To remove a fuse, press the removal tweezers onto the head of the fuse and pull (see illustration on following page). Always replace a fuse with another of the same (or lower) rating. If a replacement fuse blows almost immediately, this indicates a serious electrical problem and the circuit MUST be checked by a Rover dealer.

**NOTE:** *Fuse removal tweezers are located in the driver's compartment fuse box only.*

## Fuses

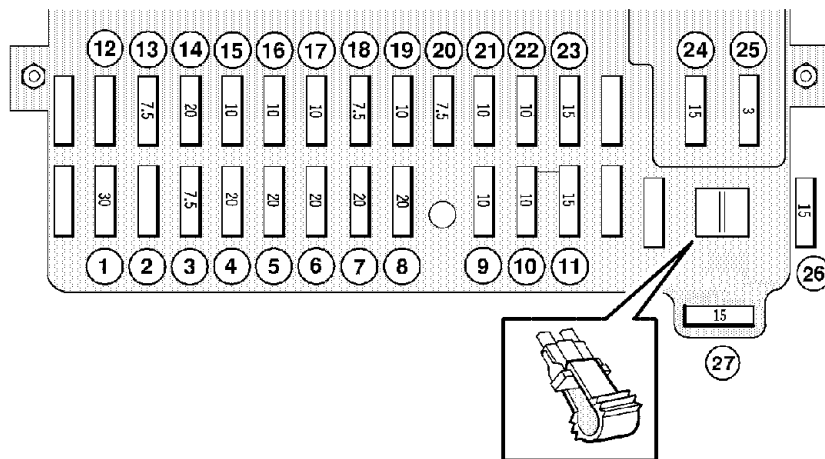
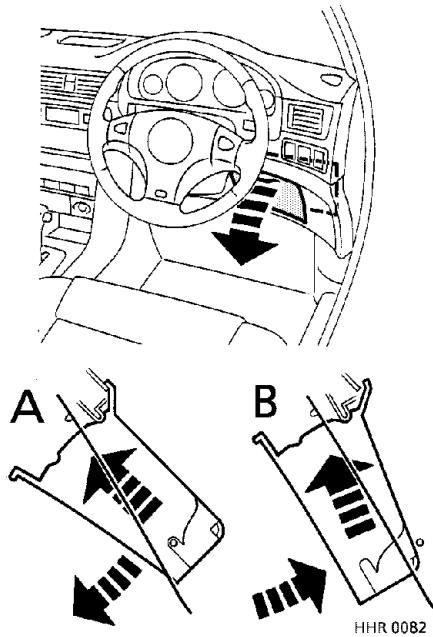
### MAIN FUSE BOX

To access the interior fuse box, first remove the driver's personal storage compartment as follows (see diagram 'A'):

Open the storage compartment, then push it upwards (against spring pressure) to release it from the retaining pivots (one on each side near the bottom). At the same time, pull the storage compartment out and away from the surrounding panel.

To replace the storage compartment (diagram 'B'), first locate and align the indents at the top (one on each side) of the storage compartment with the two retaining springs.

Push the storage compartment upwards (holding it against the pressure of the two springs) while pushing the bottom into position. Note that the storage compartment pivots near its base and will latch into place once the two pivot pins have engaged with the appropriate slots low down on each side of the storage compartment.



HHR0067A



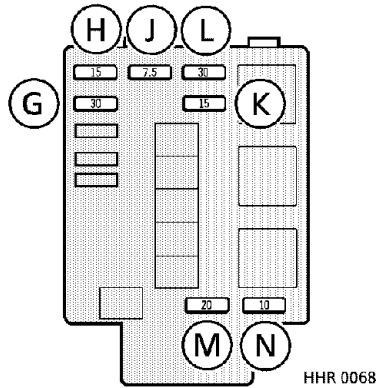
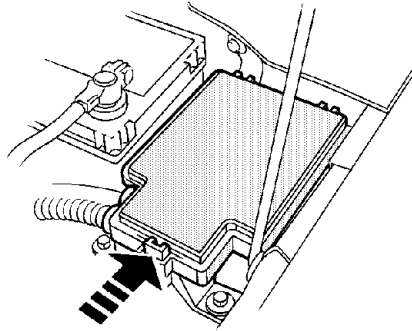
## *Fuses*

### MAIN FUSE BOX (inside the car)

Fuse No	Rating (amps)	These units not operating
1	30	Sunroof
2	20	Heated seats
3	7.5	Interior light
4	20	Window - rear right
5	20	Window - front right
6	20	Door locks, anti-theft alarm
7	20	Window - rear left
8	20	Window - front left
9	10	Headlight - right, main
10	10	Headlight - left, main
11	15	Fog lights - front
12	-	-
13	7.5	Mirrors, heater, cooling fan
14	20	Wiper, washer, windows, sunroof
15	10	Indicators, alarm, reversing lights
16	10	Anti-lock brakes
17	10	Tail light - left
18	7.5	Starting signal
19	10	Tail, number plate & instrument lights
20	7.5	Fog guard lights - rear
21	10	Headlight - right, low
22	10	Headlight - left, low
23	15	Clock, radio, cigar lighter
24	15	Engine
	15	Fuel pump <sup>1</sup>
25	3	Airbag SRS
26	15	Engine <sup>1</sup>
27	15	Ignition coil <sup>1</sup>

<sup>1</sup>416 Automatic gearbox cars.

## Fuses



### ENGINE COMPARTMENT FUSES

The fuse box is located to the rear of the engine compartment on the left hand side. Press the catch (arrowed in illustration) to release the cover.

Fuse 'G' (if fitted) will be rated at either 20 or 30 amps dependent on model.

Fuse 'K' will be rated at either 15 or 30 amps dependent on model.

**NOTE:** Owners are advised against removing or replacing the fuses, relays and fusible links identified on the underside of the fuse box lid as: 1, 2, 3, and A, B, C, D, E, or F. Failure of any of these items should be investigated by a Rover dealer.

Fuse No	Rating (amps)	These units not operating
G	30*	Air conditioning fan
H	15	Engine management system
J	7.5	Clock, radio
K	30 <sup>1</sup>	Cooling fan
L	30	Heated rear window
M	20	Horn, stop lights
N	10	Hazard warning lights

\* On automatic gearbox cars, fuse G will be rated at 20 amps.

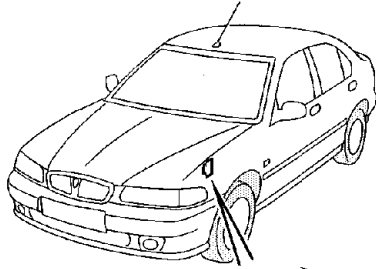
<sup>1</sup> On some models, fuse K will be rated at 15 amps.

## Fuses

### GLOW PLUG FUSE

(diesel models)

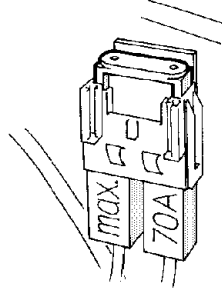
An additional fuse (rated at 60 amps) protecting the glow plugs, is attached to the left side of the engine compartment, where shown in the upper illustration.



### ABS FUSE

(where fitted)

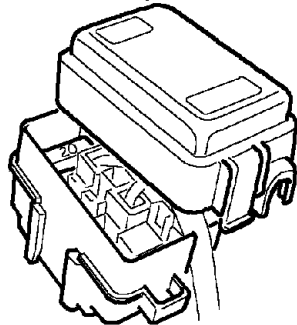
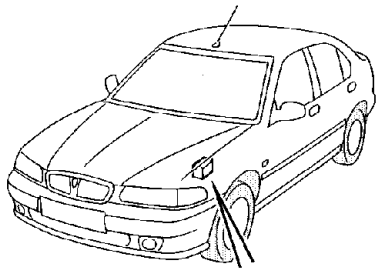
An additional fuse, protecting the anti-lock braking system, is attached to the left side of the engine compartment, where shown.



HHR 0081B

**NOTE:** On diesel models fitted with ABS, the glow plug and ABS fuses are mounted together.

On some models, the ABS fuse is housed in a small fuse box (see lower illustration) - press the catches on both sides to release the cover.



HHR 0175

## Bulb Replacement

For your own safety and that of other road users, check the operation of the exterior lights every day the car is in use.

Remember that driving with defective lights may be unlawful and subject to legal penalties.

Before replacing a bulb, always turn off the lighting switch to prevent any possibility of a short circuit. Replace bulbs with the same type and specification.

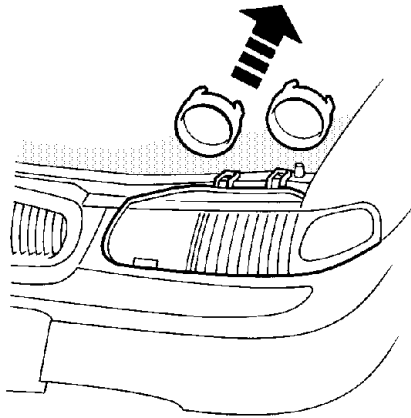
### WARNING!

*Halogen bulbs become very hot when lit - scratches on the glass, oil deposits and even perspiration from the skin can cause a bulb to overheat and shatter.*

*Always take care when handling and replacing headlight or main beam bulbs. Manoeuvre bulbs into the light unit carefully to protect them from scratching and hold them by the metal base to prevent perspiration from contacting the glass. If contaminated, clean the bulb with methylated spirits and a clean cloth.*

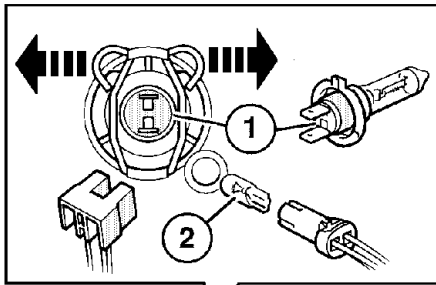
Bulb	Watts	Part No.
Headlight - dip	55	GLB 499
Headlight - main beam	55	GLB 448
Front fog light	55	GLB 448
Sidelight	5	GLB 501
Direction indicator	21	GLB 382
Side repeater light	5	GLB 501
Tail light	5	GLB 207
Brake light	21	GLB 382
Reversing light	21	GLB 382
Fog guard light	21	GLB 382
Number plate light	5	GLB 501
Glovebox light	5	GLB 239
Interior light	5	GLB 989
Luggage compartment light	5	GLB 9605

## Bulb Replacement



### 1. Headlight

- Remove the circular rubber cover from the rear of the light unit and detach the electrical connector from the rear of the bulb.
- Unhook the wire securing clips (arrowed in illustration) and pivot them away from the rear of the bulb.
- Remove the bulb. When fitting the new bulb, ensure the rectangular metal tab is positioned at the top.

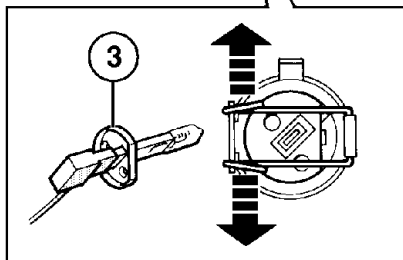
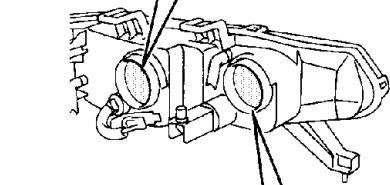


### 2. Sidelight

- The sidelight bulb holder is immediately adjacent to the headlight bulb. With the circular rubber cover removed, pull the bulb holder from the light unit and pull the bulb to remove.

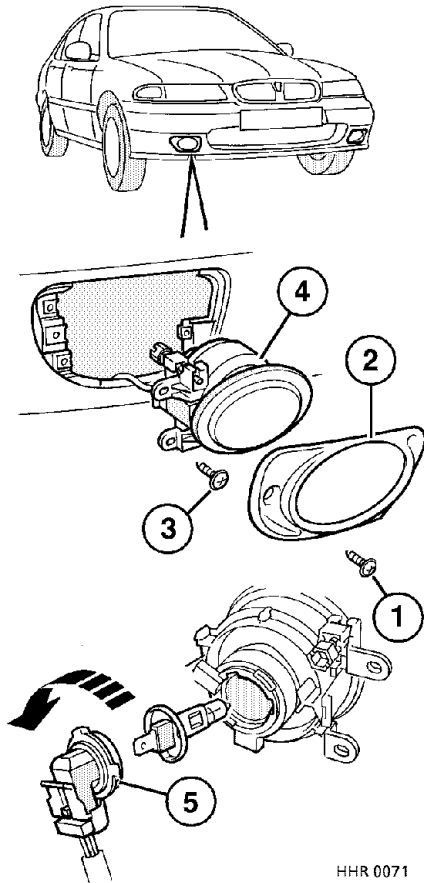
### 3. Main beam

- Remove the circular rubber cover.
- Unhook the wire securing clips (arrowed in illustration) and pivot them away from the rear of the bulb.
- Extract the bulb (with connector attached) from its location in the light unit, then separate the bulb from its connector.



HHR 0069

## Bulb Replacement



### Front fog light (if fitted)

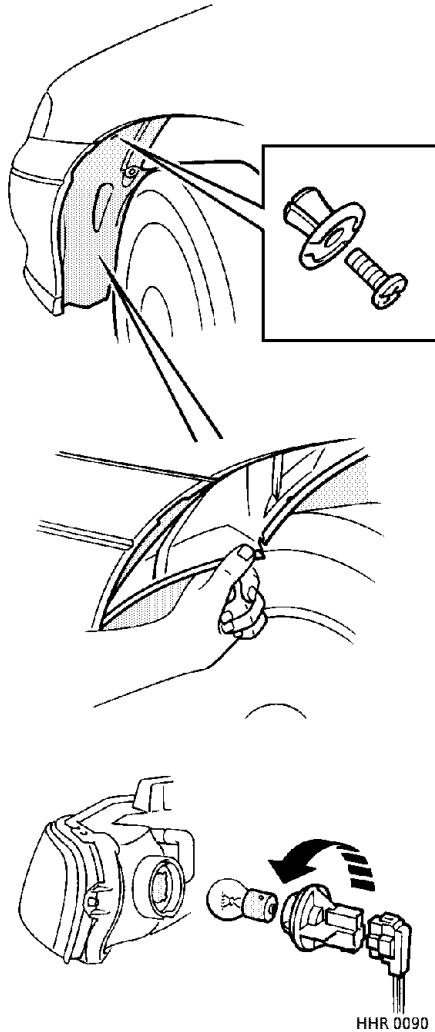
- Using a cross-headed screwdriver, remove the fog light cover retaining screw (1) and fog light cover (2).
- Remove the three screws (3) holding the fog light unit to the bumper and extract the light unit (4).
- Twist the bulb holder (5) anti-clockwise a quarter turn to release it from the light unit. Pull the bulb to remove.

### WARNING!

*Halogen bulbs become very hot when lit - scratches on the glass, oil deposits and even perspiration from the skin, can cause a bulb to overheat and shatter.*

*Always take care when handling and replacing headlight, main beam or fog light bulbs. Manoeuvre bulbs into the light unit carefully, to protect them from scratching and hold them by the metal base to prevent perspiration from contacting the glass. If contaminated, clean the bulb with methylated spirits and a clean cloth.*

## Bulb Replacement

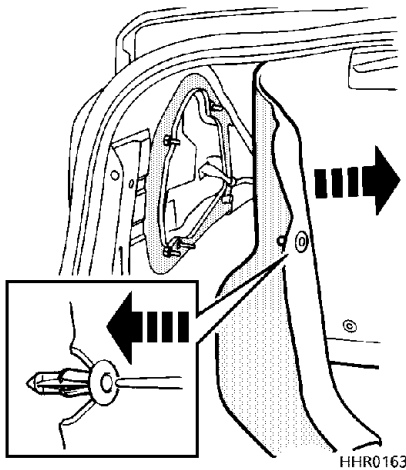


### Front direction indicator light

The direction indicator bulbs are accessible from behind the wheel arch liners, as follows:

- Turn the steering wheel to full left lock to access the right indicator bulb or full right lock to access the left indicator bulb.
- Use a screwdriver to remove the plastic screw-ribose securing the wheelarch liner (see inset) and pull the wheelarch liner down until it naturally folds along the crease line. This will open up a gap, enabling you to reach behind the liner and feel the rear of the bulb holder.
- Twist a quarter turn anti-clockwise to release the bulb holder from the headlight unit, then push and twist to remove the bulb.
- When replacing, note that the screw-ribose is made in two parts - as it is tightened, the inner 'screw' progressively expands the outer 'ribose' thereby securing the liner to the wing panel.

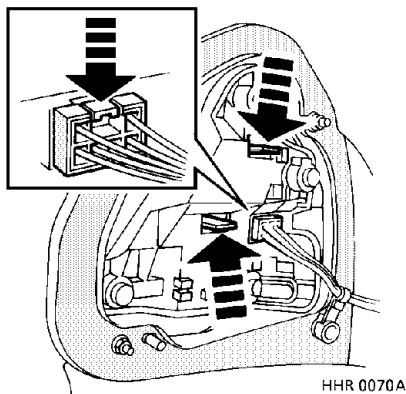
## Bulb Replacement



### Rear lights

From inside the luggage compartment, remove the fastener (illustrated in inset) and pull back the moulded lining as shown.

To remove the fastener, use a pointed tool to push in the centre (see inset) - the fastener can then be easily extracted from the moulded lining.



### 5 door models

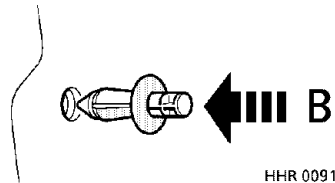
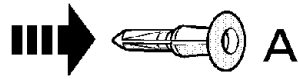
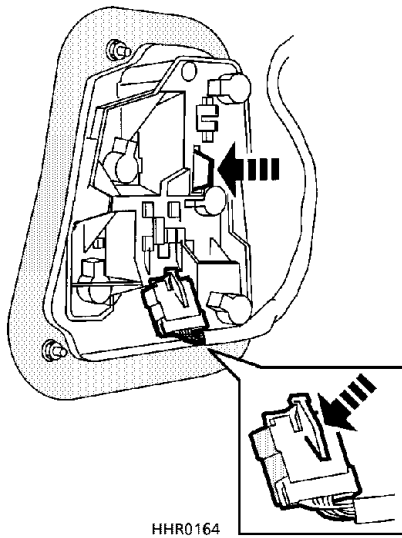
Detach the electrical connector from the back of the light unit by depressing the release catch (arrowed in inset) and then pulling the connector free.

Squeeze both levers (arrowed in main illustration) to release the light unit, then withdraw the light unit from the rear of the car.

When refitting, ensure levers are securely clipped into the light unit by pushing the levers outwards.



## Bulb Replacement



HHR 0091

To replace the fastener, push on the pointed end (arrowed in illustration 'A') until the centre protrudes from the collar (as illustration 'B').

Insert the fastener through the moulded luggage compartment lining and into the hole in the body, then push the centre of the fastener (as arrow 'B') until it locks (flush with the collar).

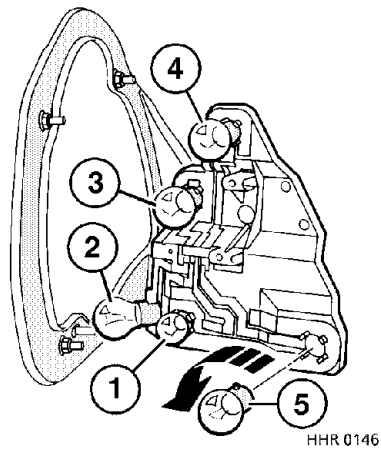
### 4 door models

Detach the electrical connector from the back of the light unit by depressing the release catch (arrowed in inset) and then pulling the connector free.

Pull the lever (arrowed in illustration) towards the centre of the car to release the light unit, then withdraw the light unit from the rear of the car.

When refitting, ensure the lever is securely clipped into the light unit by pushing it away from the centre of the car.

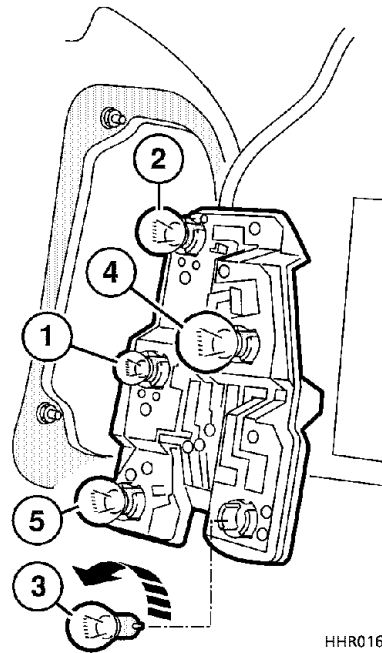
## Bulb Replacement



### *5 door models*

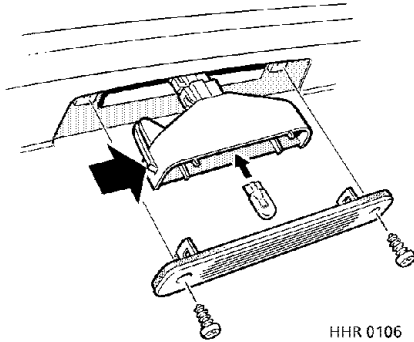
Push and turn the bulbs anti-clockwise to remove:

- tail light (1)
- brake light (2)
- reversing light (3),
- direction indicator light (4)
- fog guard light (5).



### *4 door models*

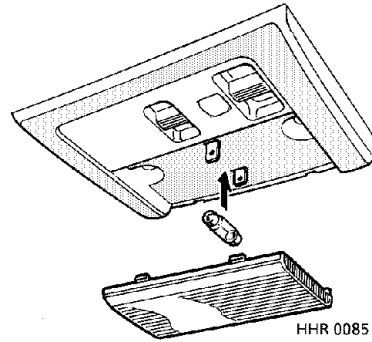
## Bulb Replacement



### Number plate light

Remove both screws to release the light unit, then compress the clip (arrowed in illustration) to remove the lens from the light unit.

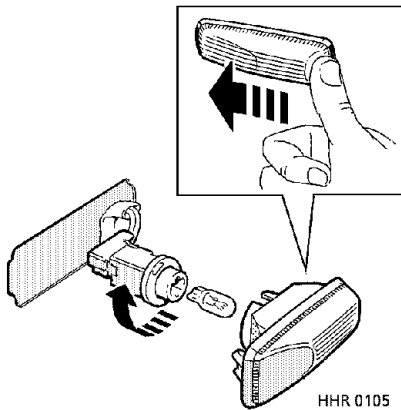
Pull to remove the bulb from its socket.



### Front courtesy light

Pull down on the front edge of the lens to remove it from the light housing. Spring the bulb connectors apart to release the bulb.

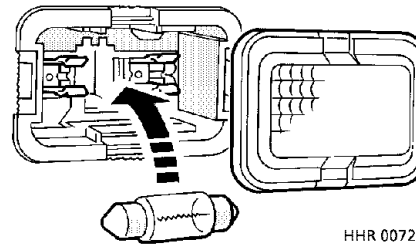
When replacing the lens, fully insert the tabs on the rear edge first.



### Side repeater light

Push the rear of the lens firmly towards the front of the car to withdraw the light unit from the wing.

Twist to release the bulb holder from the light unit, then pull the bulb from its socket.



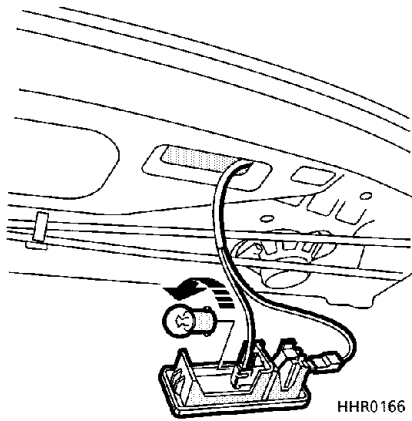
### Luggage compartment light

(5 door models)

Use a small screwdriver to prise the lens from the light housing. Pull the bulb to remove.

## *Bulb Replacement*

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### **Luggage compartment light**

(4 door models)

Use a small screwdriver to prise the light from its housing. Twist the bulb to remove.

## *Parts & Accessories*

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### **SERVICE PARTS & ACCESSORIES**

Only ROVER DEALERS are able to provide the full range of recommended parts and accessories, that meet our rigorous standards of safety, durability and performance.

Always consult your Rover dealer regarding the suitability, installation and use of any parts or accessories before fitting.

### **Travelling abroad**

In certain countries, it is illegal to fit parts which have not been made to the vehicle manufacturer's specification.

Owners should ensure that any parts or accessories fitted to the car while travelling abroad will also conform to the legal requirements of their home country.

### **WARNING!**

- *It is extremely hazardous to fit parts or accessories where installation requires the dismantling of, or addition to, either the electrical or fuel systems.*
- *If an airbag SRS is fitted, ALWAYS consult a Rover dealer before fitting any accessory.*
- *Fitting parts or accessories that have not been approved by Rover may be dangerous and could invalidate the vehicle warranty.*

# Vehicle Identification

## IDENTIFICATION NUMBERS

When communicating with your dealer always quote the Vehicle Identification Number (VIN). If your communication concerns the engine, gearbox or body, it may be necessary to quote these numbers as well.

### 1. Vehicle identification number (VIN).

Stamped on the VIN plate at the foot of the left hand door pillar and also stamped into the centre of the bulkhead at the top, inside the engine compartment. In addition, as a deterrent to car thieves and to help the police, the VIN is stamped into a plate visible at the bottom left corner of the windscreen.

**NOTE:** The body colour and trim codes are also stamped on the VIN plate and must be quoted if paint or trim items are required.

### 2. Engine number.

*Automatic gearbox models:* Stamped into the front face of the engine block where shown.

*Manual gearbox models (petrol):* Stamped into the front face of the right hand side of the cylinder block.

*Diesel models:* Stamped into the front face of the engine block, where shown.

### 3. Manual gearbox number.

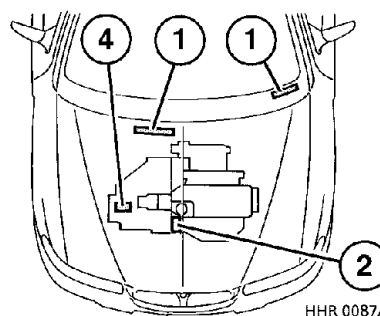
On a label attached to the upper face of the gearbox housing.

### 4. Automatic gearbox number.

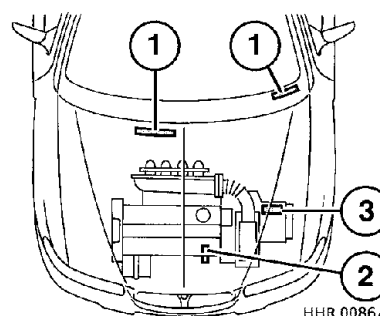
Stamped on a label affixed to the upper face of the gearbox housing adjacent to the dipstick.

### Body number

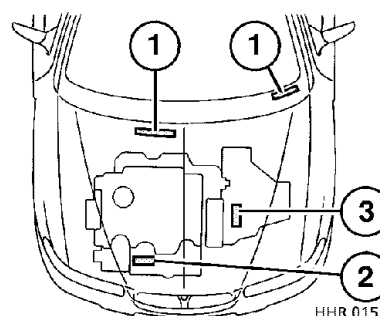
Stamped on a plate inside the luggage compartment adjacent to the spare wheel well.



*Automatic gearbox models*



*Manual gearbox models (petrol)*



*Diesel models*

## Technical Data

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### Engine - 1.4 petrol

Capacity .....	1396 cm <sup>3</sup>
Firing order .....	1 - 3 - 4 - 2
Idle speed .....	875 ± 50 rev/min
Fuel .....	95 RON unleaded to EN 228

### Engine - 1.6 petrol (manual gearbox models)

Capacity .....	1589 cm <sup>3</sup>
Firing order .....	1 - 3 - 4 - 2
Idle speed .....	875 ± 50 rev/min
Fuel .....	95 RON unleaded to EN 228

### Engine - 1.6 petrol (automatic gearbox models)

Capacity .....	1590 cm <sup>3</sup>
Firing order .....	1 - 3 - 4 - 2
Idle speed .....	750 ± 50 rev/min
Fuel .....	95 RON unleaded to EN 228

### Engine - 2.0 petrol

Capacity .....	1994 cm <sup>3</sup>
Firing order .....	1 - 3 - 4 - 2
Idle speed .....	850 ± 25 rev/min
Fuel .....	95 RON unleaded to EN 228

### Engine - 2.0 diesel

Capacity .....	1994 cm <sup>3</sup>
Firing order .....	1 - 3 - 4 - 2
Idle speed	
420 D & 420 SD .....	850 ± 25 rev/min
420 SDi, 420 SLDi & 420 GSDi .....	805 ± 25 rev/min
Fuel .....	Diesel (AGO) to EN 590

## Technical Data

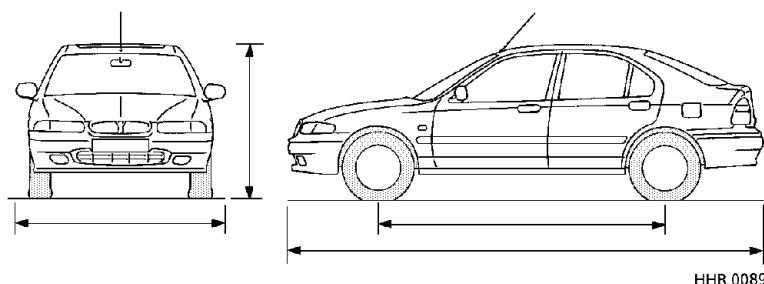
### Ignition system

Type .....	Breakerless, electronic	
Spark plugs:		
Automatic gearbox models .....	GSP 5658	
All other petrol models .....	GSP 6662	
Spark plug gap:		
Automatic gearbox models .....	1.1 mm .....	0.045 in
All other petrol models .....	0.85 mm .....	0.035 in

### Electrical

Battery type .....	Sealed for life
Voltage and polarity .....	12 V, negative (-) earth

### Dimensions



HHR 0089

Overall length:		
5 door models .....	4.316 m .....	14 ft 1 in
4 door models .....	4.491 m .....	14 ft 9 in
Overall width (including mirrors) .....	1.93 m .....	6 ft 3.9 in
Overall height* .....	1.385 m .....	4 ft 6.0 in
Ground clearance* .....	120 mm .....	4.7 in
Wheelbase.....	2.62 m .....	8 ft 6.0 in
Turning circle (kerb to kerb).....	10.3 m .....	34 ft
Wheel alignment:*		
Front .....	0° 0' ± 8'	
Rear (toe-in) .....	0° 11' ± 6'	
* At unladen weight		



## Technical Data

### Wheels and tyres

#### Wheel size and type:

Steel wheels (414, 416 & 420 diesel) .....	5J X 14
Steel wheels (420 petrol models) .....	5.5J X 15
Alloy wheels .....	5J X 14
	5.5J X 15
	6J X 15

#### Tyre size:

414 models (steel wheels) .....	175/65 R14 82T
414 models (alloy wheels) .....	185/55 R15 81V or 185/55 R15 81H
416 models (steel wheels) .....	185/60 R14 82H
416 models (alloy wheels) .....	185/55 R15 81V or 185/55 R15 81H
420 petrol models (steel & alloy wheels) .....	195/55 R15 84H or 195/55 R15 84V
420 diesel models (steel wheels) .....	185/65 R14 86T
420 diesel models (alloy wheels) .....	195/55 R15 84H
Road wheel nut torque.....	98 - 118 Nm

Cars with 6J X 15 alloy road wheels will be equipped with a 5.5J X 15 steel 'space saver' spare wheel - have the damaged tyre repaired and refit the alloy wheel as soon as possible.

Cars with 5.5J X 15 or 5J X 14 alloy road wheels will be equipped with a 5.5J X 15 or 5J X 14 steel spare wheel respectively, fitted with a tyre of identical specification to that fitted to the alloy road wheels.

**NOTE:** When replacing tyres, make sure the supplier is aware that all the tyres on your car should conform to one specification and that a mixture of 'H' and 'V' rated tyres is not recommended.

**NOTE:** The load index ('81', '82', '84' or '86') shown on the sidewall of the tyres fitted to your car may exceed the appropriate specification shown above. If this is the case, it is permissible to fit replacement tyres with a load index that conforms to either; the specification shown above, or the specification shown on the tyre.

## Technical Data

### Tyre pressures

Tyre size		Normal		Max. load		High speed		Towing	
		lb/in <sup>2</sup>	bar	lb/in <sup>2</sup>	bar	lb/in <sup>2</sup>	bar	lb/in <sup>2</sup>	bar
175/65 R14 82T	<b>Front:</b>	30	2.1	30	2.1	34	2.4	30	2.1
	<b>Rear:</b>	30	2.1	30	2.1	34	2.4	34	2.4
185/55 R15 81V & 185/55 R15 81H (manual gearbox cars)	<b>Front:</b>	30	2.1	33	2.3	35	2.4	30	2.1
	<b>Rear:</b>	30	2.1	33	2.3	35	2.4	35	2.4
185/55 R15 81V & 185/55 R15 81H (auto gearbox cars)	<b>Front:</b>	30	2.1	36	2.5	35	2.4	35	2.4
	<b>Rear:</b>	30	2.1	36	2.5	35	2.4	39	2.7
185/60 R14 82H	<b>Front:</b>	30	2.1	30	2.1	35	2.4	30	2.1
	<b>Rear:</b>	30	2.1	30	2.1	35	2.4	34	2.4
185/65 R14 86T	<b>Front:</b>	30	2.1	32	2.2	34	2.4	30	2.1
	<b>Rear:</b>	30	2.1	30	2.1	34	2.4	30	2.1
195/55 R15 84H (diesel engine cars)	<b>Front:</b>	32	2.2	35	2.4	36	2.5	32	2.2
	<b>Rear:</b>	30	2.1	32	2.2	34	2.4	32	2.2
195/55 R15 84H & 195/55 R15 84V (petrol engine cars)	<b>Front:</b>	32	2.2	35	2.4	38	2.6	32	2.2
	<b>Rear:</b>	30	2.1	32	2.2	36	2.5	32	2.2

**NOTE:** The tyre size is displayed on the outer wall of each tyre.

**Normal driving conditions:** carrying up to 4 passengers and luggage.

**Max. load conditions:** driving with the car loaded to its maximum gross vehicle weight.

**High speed motoring:** driving at speeds of 100 mph (160 km/h)\*.

\* This may be permitted legally in some markets.

## *Technical Data*

### Capacities

Fuel tank (usable) .....	55 litre .....	12.0 gal
Engine oil (and filter) refill:		
416 automatic models .....	3.3 litre.....	5.8 pt
414 & 416 manual models .....	4.5 litre.....	7.9 pt
420 petrol models .....	4.5 litre.....	7.9 pt
420 diesel models .....	4.8 litre.....	8.4 pt
Engine oil (and filter) fill from dry:		
416 automatic models .....	4.0 litre.....	7.0 pt
414 & 416 manual models .....	4.8 litre.....	8.4 pt
420 petrol models .....	5.0 litre.....	8.8 pt
420 diesel models .....	5.2 litre.....	9.2 pt
Manual gearbox refill		
- 414 & 416 models.....	1.8 litre.....	3.1 pt
- 420 petrol & diesel models .....	2.0 litre.....	3.5 pt
Manual gearbox fill from dry		
- 414 & 416 models.....	2.0 litre.....	3.5 pt
- 420 petrol & diesel models .....	2.2 litre.....	3.9 pt
Automatic gearbox refill .....	2.7 litre.....	4.7 pt
Automatic gearbox fill from dry .....	5.9 litre.....	10.3 pt
Cooling system (refill):		
416 automatic models .....	3.7 litre.....	6.5 pt
414 & 416 manual models (with heater) .....	4.3 litre.....	7.6 pt
414 & 416 manual models (with air/con).....	4.6 litre.....	8.1 pt
420 petrol models .....	4.6 litre.....	8.1 pt
420 diesel models .....	6.3 litre.....	11.1 pt
Cooling system fill from dry:		
416 automatic models .....	4.4 litre.....	7.7 pt
414 & 416 manual models (with heater) .....	5.0 litre.....	8.8 pt
414 & 416 manual models (with air/con).....	5.3 litre.....	9.3 pt
420 petrol models .....	7.5 litre.....	13.4 pt
420 diesel models .....	7.0 litre.....	12.3 pt
Washer reservoir:		
416 automatic models .....	4.5 litre.....	7.9 pt
All other models .....	6.5 litre.....	11.4 pt

## Technical Data

### Weights

Approx unladen vehicle weight (full fuel tank, excluding options):		
Petrol models .....	1120 - 1245 kg .....	2468 - 2745 lb
Diesel models .....	1240 - 1280 kg .....	2734 - 2822 lb
Max gross vehicle weight:		
1.4 & 1.6 petrol models .....	1640 kg .....	3615 lb
2.0 petrol & diesel models .....	1720 kg .....	3792 lb
Max rear axle load (must NOT be exceeded!) .....	840 kg .....	1852 lb
Max rear axle load when towing .....	880 kg .....	1940 lb
Max towing weight - allowing the vehicle to restart efficiently on a 12% (1 in 8) gradient with two occupants (braked trailer) * .....		
	1000 kg .....	2200 lb
Towing hitch downward load .....	70 kg .....	154 lb
Coupling device maximum overhang .....	970 mm .....	38 in
Max roof rack load (including weight of rack) .....	65 kg .....	143 lb

*\* Any additional weight, such as luggage or additional passengers, should be deducted from the maximum towing weight quoted above. On automatic gearbox cars a transmission oil cooler should be fitted if the towing weight exceeds 800 kg (1760 lbs).*

## Technical Data

### Fuel consumption

The fuel consumption figures shown below have been calculated using a standard testing procedure (the new EC test procedure from Directive 93/116/EC), and produced in accordance with The Passenger Car Fuel Consumption (Amendment) Order 1996. Under normal use, a car's actual fuel consumption figures may differ from those achieved through the test procedure, depending on driving technique, road and traffic conditions, environmental factors, vehicle load and condition.

MODEL	URBAN		EXTRA-URBAN		COMBINED	
	m.p.g	l/100km	m.p.g.	l/100km	m.p.g.	l/100km
<i>Petrol models:</i>						
1.4 8V manual	29.5	9.6	49.4	5.7	39.6	7.1
1.4 16V manual	29.7	9.5	54.5	5.2	41.7	6.8
1.6 16V manual	28.5	9.9	52.1	5.4	39.9	7.1
1.6 16V automatic	24.4	11.6	36.5	7.7	30.9	9.1
2.0 16V manual	21.6	13.1	46.8	6.0	32.7	8.6
<i>Diesel models:</i>						
2.0 (86PS)	36.1	7.8	63.9	4.4	49.7	5.7
2.0 (105PS)	39.8	7.1	65.7	4.3	53.0	5.3

#### Urban cycle

The urban test cycle is carried out from a cold start and consists of a series of accelerations, decelerations and periods of steady speed driving and engine idling. The maximum speed attained during the test is 31 mph (50 km/h) with an average speed of 12 mph (19 km/h).

#### Extra-urban cycle

The extra-urban test cycle is carried out immediately after the urban test. Approximately half of the test comprises steady speed driving, while the remainder consists of a series of accelerations, decelerations and engine idling. The maximum test speed is 75 mph (120 km/h) and the average speed 39 mph (63 km/h). The test is carried out over a distance of 4.3 miles (7 km).

#### Combined

The combined figure is an average of the urban and extra-urban test cycle results, which has been weighted to take account of the different distances covered during the two tests.

**NOTE:** These figures should not be compared with figures produced using the ECE/EEC procedure, previously required by The Passenger Car Fuel Consumption Order 1983. Because of the changes in test procedure, even the urban figures would differ if the same car were subjected to both tests.

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