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## Introduction

### THE OWNER'S HANDBOOK

This handbook describes all of the MG Rover models and standard equipment specifications within the model range. Some of the information, therefore, may not apply to your particular car.

For your convenience, the handbook is divided into subject or activity-based sections. These are listed on the previous page and are mostly self-explanatory. However, if you experience difficulty in locating a specific item or piece of information, you should consult the alphabetical index near the back of the book.

You should also be aware that the final (Service History) section of this handbook is, in effect, a separate publication, which enables a record to be kept of the routine services and inspections carried out on the car. This section also provides a facility for the dealer to record brake fluid and coolant changes, and the fitting of any major replacement components needed during the life of the car.

Finally, always remember that if you have any queries, concerning the operation or specification of your car, your MG Rover dealer will be glad to advise you.

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Publication Part No. RCL 0548LAN  
English 01/2003

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

### SYMBOLS USED

The following symbols used within the handbook call your attention to specific types of information.

 ***This warning symbol identifies procedures that must be followed precisely, or information that must be considered with great care, in order to reduce the risk of personal injury or serious damage to the car.***

 ***This recycling symbol identifies those items that must be disposed of safely in order to prevent unnecessary damage to the environment.***

 ***This symbol identifies those features that can be adjusted or disabled/enabled by an MG Rover dealer***

★ An asterisk appearing within the text, identifies features or items of equipment that are either optional, or are only fitted to some vehicles in the model range.

### STATUS AT TIME OF PRINTING

MG 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 dealer.

## Introduction

### SECURITY CARD

The security card contains important emergency information. It is **ESSENTIAL** that you keep the card safe from theft and ensure that it is passed to the new owner if you sell the car.

- **VIN** (vehicle identification number): This number is unique to your vehicle and is essential proof of its specification. The number can also be found in various locations around the vehicle (see '*IDENTIFICATION NUMBERS*', page 212).
- **Locking wheel nut number:** If your vehicle has locking wheel nuts, you will have been provided with a special wheel nut adaptor to remove them. Quote this number if a replacement adaptor is required.
- **Radio serial number:** This unique number is stamped into the case of the audio unit, and is proof of the unit's specification and your ownership in the event of theft.
- **Radio security code number:** This unique code must be entered into the radio whenever the power supply has been disconnected. Without this code, the radio unit will not operate.

 **Never leave the security card inside the car when it is left unattended. Keep the card on your person in case of emergencies.**

### IMPORTANT

When the time comes to sell your car, please remember to pass this handbook and the Security Card to the new owner. Both must be considered part of the car and essential to its operation.

### IN AN EMERGENCY

#### IMPORTANT

##### Remember the breakdown safety code

If a breakdown occurs while travelling:

- Wherever possible, consistent with road safety and traffic conditions, the car should be moved off the main thoroughfare, preferably into a lay-by. If a breakdown occurs on a motorway, pull well over to the inside of the hard shoulder.
- Switch on hazard lights.
- If possible, position a warning triangle or a flashing amber light at an appropriate distance from the vehicle to warn other traffic of the breakdown, (note the legal requirements of some countries).
- Consider evacuating passengers through nearside doors onto the verge as a precaution in case your vehicle is accidentally struck by other traffic.



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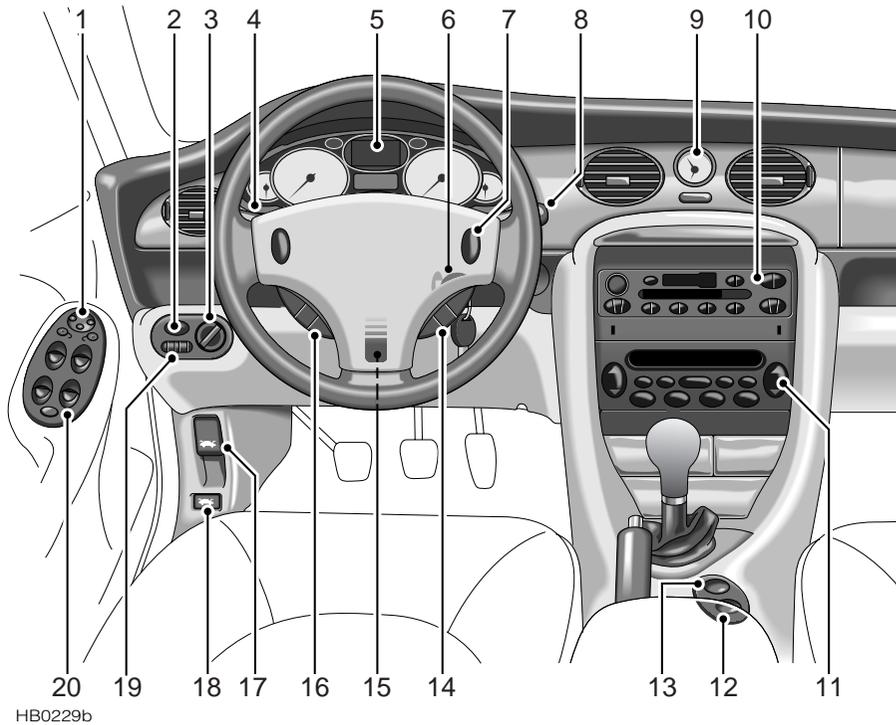
## *Before you Drive*

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## Controls



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3. Main lighting switch
4. Direction indicators
5. Instrument panel
6. Starter switch
7. Horn
8. Wiper/washer controls
9. Clock
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11. Audio system
12. Interior door locking switch
13. Hazard warning lights switch
14. Cruise control switches\*
15. Steering column adjustment lever
16. Remote audio controls
17. Bonnet release
18. Boot release (saloon models)
19. Instrument dimmer control
20. Electric window controls

HB0229b

## Locks & Alarm

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### KEYS AND HANDSETS

You have been supplied with two remote handsets with integral keys which operate all locks.

 **Keep the spare handset key in a safe place - NOT IN THE VEHICLE!**

The keys supplied with your car are programmed to your security system - they CANNOT be re-programmed and the engine cannot be started without a key programmed to your car. If a key is lost or broken, a replacement can only be ordered from an MG Rover dealer.

**NOTE:** MG Rover dealers do not stock spare keys, time has to be allowed for replacements to be programmed to your security system and then delivered to the dealer.

If you lose a key, contact your MG Rover dealer; a key reported lost will be deactivated. If the key is recovered, your dealer can have it reactivated.

### ALARM SYSTEM

Your car is fitted with a sophisticated electronic anti-theft alarm and engine immobilisation system. There are also a number of additional security features, some of which are selectable options. In order to ensure maximum security and operating convenience, you are strongly advised to gain a full understanding of the features and alternatives available, by thoroughly reading this section of the handbook.

**NOTE:** FOR MAXIMUM SECURITY ALWAYS SUPERLOCK THE VEHICLE USING THE REMOTE HANDSET (except when passengers are to be left inside the car).

### ENGINE IMMOBILISATION

Engine immobilisation is an important aspect of the security system, it is designed to safeguard the vehicle from theft, should the driver forget to lock the doors and prevents the engine from being started unless the GENUINE handset key is inserted into the starter switch. Engine immobilisation is automatic whenever any of the following conditions occur:

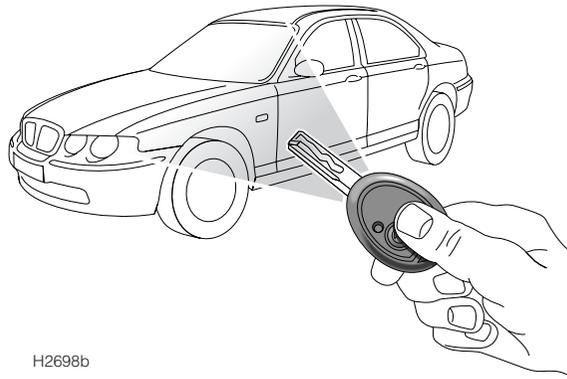
- Three seconds after the starter switch has been turned off.
- If the key is removed from the starter switch.

**The engine will be re-mobilised automatically whenever the genuine handset key is inserted into the starter switch and turned to the first position.**

## Locks & Alarm

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### LOCKING THE CAR AND ARMING THE ALARM Using the remote handset



H2698b

While it is not necessary to point the handset at the car, the handset must be within range when the buttons are pressed. Note that the operating range may vary depending upon handset battery condition and may sometimes be limited by physical and geographical factors beyond your control. From a security point of view, it may not be wise to unlock unless you are close enough to visually confirm that the doors have locked.

### Locking

#### *With the remote handset:*

1. Shut the doors, bonnet and luggage compartment.
2. Press the lock (padlock symbol) button once:
  - all doors are superlocked (see 'Superlocking', page 9)
  - perimetric alarm activated (protects the doors, bonnet and luggage compartment)
  - interior space protection activated\*
3. The direction indicator lights flash three times to confirm that the car is securely locked and the anti-theft alarm indicator light (in the instrument panel) starts to flash.

#### *With the key:*

1. Insert the key and turn the door lock towards the rear of the car:
  - all doors locked (not superlocked)
  - perimetric alarm activated (protects the doors, bonnet and luggage compartment)
  - NO INTERIOR SPACE PROTECTION
2. The direction indicator lights flash three times to confirm that the car is securely locked and the anti-theft alarm indicator light (in the instrument panel) starts to flash.

## Locks & Alarm

### Superlocking

**!** *For safety, NEVER use Superlocking if passengers are to remain inside the car – in an emergency they would not be able to escape. Also, on cars fitted with interior space protection, any movement from inside the car would activate the alarm.*

Provided all the doors are fully closed, the superlocking feature is activated automatically whenever the car is locked using the remote handset. Superlocking immobilises the interior door handles, thereby preventing an intruder from gaining entry by smashing a window and reaching inside the car to operate the door handles.

### Mislock

If the driver's door is not fully closed when the handset lock button is pressed, the alarm sounder or vehicle horn will sound once, indicating a mislock. In this case, none of the doors will lock and the alarm system will not be armed.

If a passenger door, bonnet or the luggage compartment is not fully closed when the handset lock button is pressed, the alarm sounder or vehicle horn will sound once, indicating a mislock. However, the 'partial arming' attributes of the security system will enable as much of the system to be armed as possible (all fully closed door, bonnet or luggage compartment apertures will be protected, but an open door will not!). As soon as the open aperture is closed, the system will automatically revert to an armed state.

**NOTE:** *If a mislock occurs as a result of an open door, the superlocking and interior space protection features will not be activated, until the door is closed and the locking process is repeated.*

### Anti-theft alarm indicator light

The light provides information about the status of the alarm system, as follows:

- **When the alarm is armed:**

The light flashes RAPIDLY while the alarm is arming itself. After ten seconds, the light adjusts to a slower frequency and continues to flash as an anti-theft deterrent until the alarm is disarmed.

- **When the alarm is partially armed:** (mislock)

The light flashes SLOWLY for 10 seconds, then flashes as an anti-theft deterrent (as above) until the alarm is disarmed.

- **When the alarm has been triggered:**

If the light flashes after the car is unlocked, this indicates that the alarm has been triggered during the driver's absence. The light will flash for up to one minute or until the starter switch is turned on.

### If the alarm sounds

If the alarm is triggered, the alarm sounder or vehicle horn will sound for 30 seconds before switching off and resetting itself to the same protection status that existed prior to the alarm being triggered. To silence the alarm, press either button on the remote handset, or lock/unlock the door using the key.

## Locks & Alarm

### Unlocking

#### *With the remote handset:*

- Press the unlock button once. This will disarm the alarm and unlock the driver's door only (see 'Single point entry').
- Press the unlock button twice to disarm the alarm and unlock ALL the doors.

In either case, the direction indicator lights flash once and the interior lights illuminate.

#### *With the key:*

- Turn the key in the driver's door lock towards the front of the car to disarm the alarm and unlock the driver's door only (see 'Single point entry').
- Turn the key twice (or press the interior locking button), to unlock ALL the doors.

### Single point entry

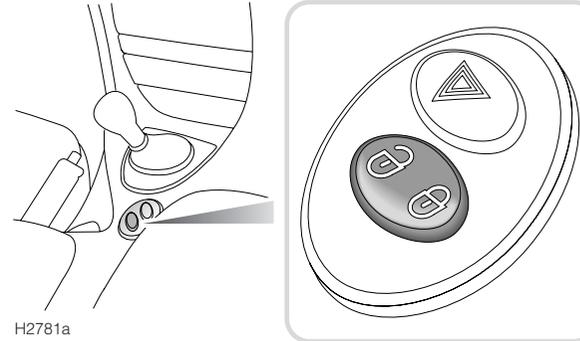


*This feature can be disabled by an MG Rover dealer.*

This is a personal security feature, which enables the driver's door alone to be unlocked, leaving the other doors in a locked state. It can be operated by the remote handset as follows:

Press the unlock button once (or turn the key in the driver's door lock towards the front of the car) to unlock the driver's door. Press the unlock button (or turn the key) a second time to unlock the remaining doors.

### Interior locking switch



This is a personal security feature which allows the driver to lock (or unlock) all the doors from inside the car (while driving or with the car stationary). Press the closed padlock symbol on the switch to lock (the alarm will not be armed), and the open padlock symbol to unlock.

**NOTE:** *The locking switch will not operate the locks if the alarm has been armed.*

## Locks & Alarm

### Interior door handles and door sill locking buttons

From inside the car, each door can be individually locked by depressing the appropriate door sill button. However, doors cannot be unlocked by raising the sill button.

Use the door handles to unlock, as follows:

1. First operation of the door handle unlocks the door.
2. Second operation of the door handle opens the door.

### Speed-related locking\*

 Speed related locking can be selected or deselected by an MG Rover dealer.

This feature locks all the doors automatically when the road speed exceeds 4 km/h and the boot or tailgate when speed has reached 10 km/h. Similarly, the door, boot (or tailgate) locks will unlock automatically when the car has slowed to the same speeds.

This feature is not selectable by the driver, and operation of the door locks by any other means (interior locking switch on the centre console, for example) will disable the speed-related locking function for the remainder of the journey, or until the starter switch is turned off and on again.

### Interior space protection\*

 **Never activate interior space protection if passengers or animals are to be left inside the car - any movement will activate the alarm.**



Interior space protection (ultrasonics) is designed to protect the interior of the car from intrusion (entry by a thief through a smashed window, for example). Ultrasonic sensors, mounted on the roof lining, monitor the interior space and activate the alarm if air movement is detected in the passenger compartment.

**NOTE:** Interior space protection cannot be activated if a door, window or sunroof is open, or if the starter switch is turned on.

**Using the handset:** Interior space protection is activated automatically whenever the remote handset is used to set the alarm.

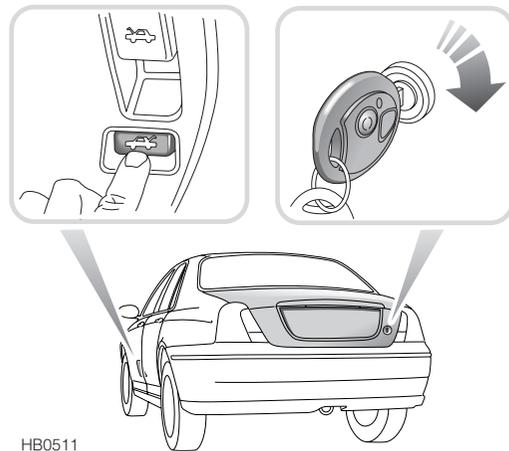
**Key operation:** Using the key to set the alarm will NOT activate interior space protection.

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## Locks & Alarm

### LUGGAGE COMPARTMENT (Saloon models)

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



To open, turn the key clockwise in the lock or, from inside the car, press the release button in the driver's footwell. The luggage compartment and interior lights switch on automatically when the boot lid is opened.

The luggage compartment is automatically locked when the boot lid is closed.

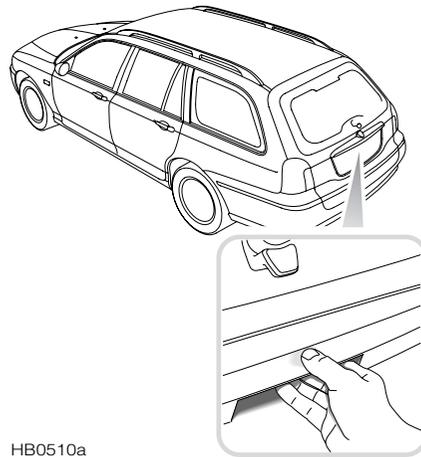
**NOTE:** *The interior release button is not operational when the alarm system is armed.*

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 boot lid is closed.

## Locks & Alarm

### TAILGATE (Tourer models)

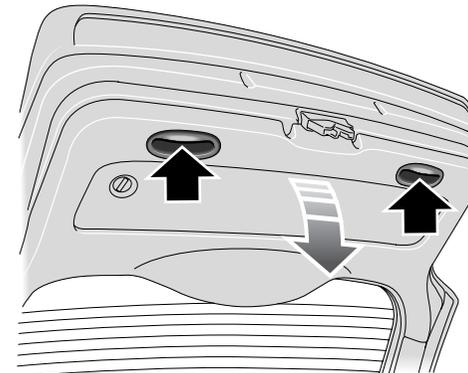
**!** Do not drive with the tailgate open, as poisonous exhaust gases will enter the car.



HB0510a

The tailgate and tailgate window are included in the car's central locking system and lock/unlock automatically in tandem with the doors.

To open the tailgate, the central door locking system must be unlocked (press the unlock button on the handset twice, or turn the door key to the unlock position twice). Operate the release catch concealed in the underside of the tailgate trim applique feature (see inset).



HB0037

When closing the tailgate, use the two hand grips set into the trim panel on the inside of the tailgate (arrowed in illustration) to pull the tailgate down. When the tailgate is partially closed, release the hand grips and apply light downward pressure on the outside of the tailgate below the number plate to close.

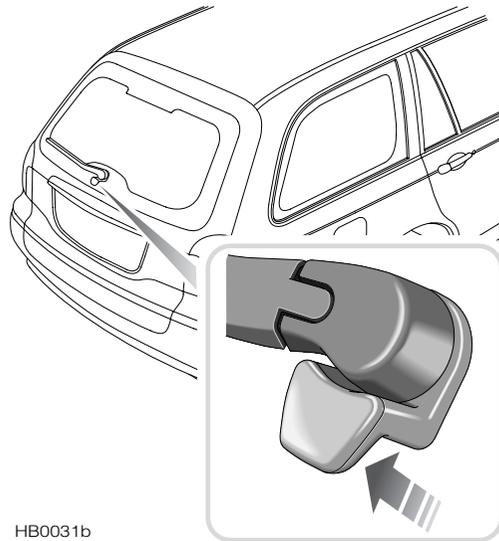
**NOTE:** The luggage compartment and interior lights illuminate automatically when either the tailgate or tailgate window are opened.

**NOTE:** On cars equipped with speed-related locking, if the car has stopped abruptly, and the starter switch is immediately turned off, the speed-related locking control unit may not have had time to unlock the tailgate - if this occurs, turn the starter switch on again for a few seconds and then the tailgate can be opened as normal.

## Locks & Alarm

### Tailgate window

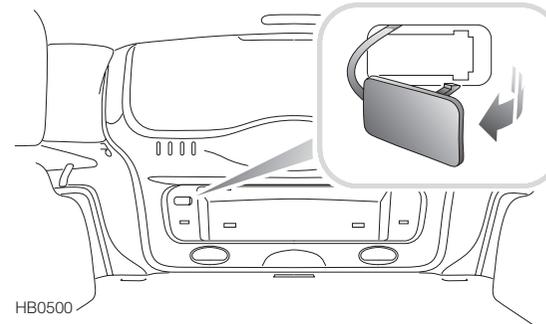
**!** Do not drive with the tailgate window open, as poisonous exhaust gases will enter the car.



HB0031b

The tailgate window should only be opened when the tailgate is closed. With the central door locking system unlocked (handset unlock button pressed twice, or door key turned to the unlock position twice), operate the switch concealed beneath the rear wiper mounting to open (see illustration).

### Tailgate emergency release



HB0500

If the battery is disconnected or discharged, the tailgate can be opened manually as follows:

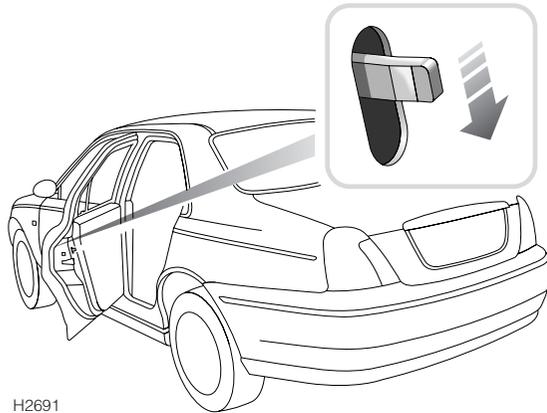
- Fold the rear seat cushion forward to gain access to the loadspace.
- Remove the loadspace cover cassette, see '*LOADSPACE COVER*', page 66.
- Twist the two turnbuckles a quarter turn anti-clockwise to release the tailgate storage cover.
- Lever out plastic tab and pull to release the tailgate.

## Locks & Alarm

### CHILD-PROOF LOCKS

 **NEVER** leave children unsupervised in the car.

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H2691

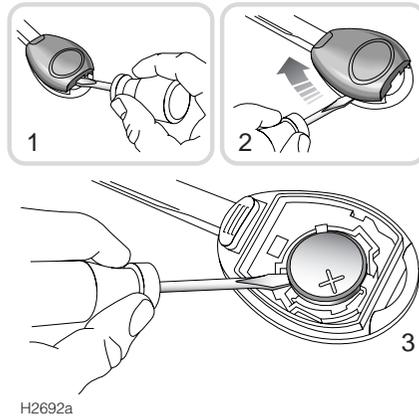
Move the locking levers on the rear doors down to engage the child locks.

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

## Locks & Alarm

### REMOTE HANDSET BATTERY

**!** *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.*



The handset battery should last for approximately three years dependent upon use. It is recommended that you fit an MG Rover YWK10003 or a Panasonic CR2032 replacement battery.

When the battery needs replacing it will be apparent from a gradual deterioration in range and performance.

On cars fitted with a message centre, a warning icon and message will be displayed when the battery needs replacing (see '*Handset (key) battery low - RED*', page 87).

### Battery replacement

1. Insert the blade of a small flat-bladed screwdriver into the slot at the rear of the handset and prise the rear of the back upwards.
2. Insert the screwdriver blade horizontally into the side of the handset and then slide it towards the key. Lift off the back of the handset.
3. Use the screwdriver to prise the battery from its mounting, taking care to avoid touching the circuit board or the metal battery contacts.

**NOTE:** *Finger marks will adversely affect battery life; if possible, avoid touching the flat surfaces of the battery and wipe them clean before fitting.*

4. Fit the new battery, ensuring that correct polarity is maintained ('+' side facing up).
5. Press the two halves of the handset firmly together and ensure that both halves are fully joined to prevent dirt or moisture from entering the handset.
6. To resynchronise the handset, operate either button four times in quick succession. On the fourth press the door should lock or unlock, confirming resynchronisation.

The handset is now ready for use.

### Handset re-synchronisation

If the handset fails to arm or disarm the alarm, this may be because the coded signal transmitted by the handset, is no longer synchronised with the receiver unit in the starter switch.

To re-synchronise the handset, hold the handset in close proximity to the car and operate either handset button at least four times in quick succession.

## Seats

### CORRECT SEATING POSITION

**!** *To avoid the risk of loss of control and personal injury, DO NOT adjust the seats while the car is moving.*

The driver and front passenger seats should be positioned as far rearward as practical. Ideally the seat should be positioned so that the steering wheel can be held with the arms slightly bent and the seat back in a nearly upright position.

**!** *Take care when adjusting the height of the driver's seat – a rear seat passenger's feet might become trapped when lowering the seat rearwards.*

**!** *DO NOT allow front seat occupants to travel with the seat backs reclined steeply rearwards. Optimum benefit is obtained from the seat belt with the backrest angle set to approximately 25° from the upright (vertical).*

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.

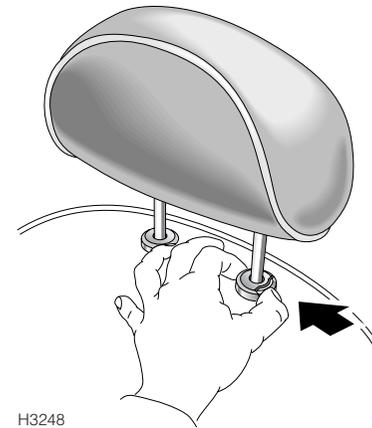
Make sure your driving position is comfortable and enables you to maintain full control of the vehicle. A properly adjusted seat helps reduce the risk of injury from sitting too close to an inflating airbag.

**!** *Your car is fitted with side impact airbags. Refer to the Airbag SRS section of this handbook before fitting seat covers, or carrying out any repair or retrimming operations to the seat or seat covers.*

### HEAD RESTRAINTS

**!** *Adjust the head restraint so that the cushion is level with the back of the head – NOT THE NECK!*

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Raise or lower the restraint until the cushion is level with the back of the head.

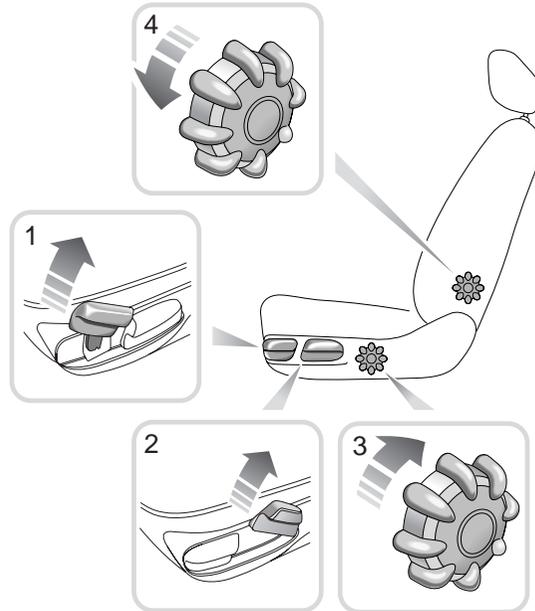
To lower the restraint, depress the button (arrowed) and push the restraint downwards. To raise the restraint, pull the restraint upwards without depressing the button.

On some models the angle of the restraint can be adjusted. Tilt the restraint to ensure it is as close to the back of the head as possible.

To remove the head restraint, depress the button on the left hand mounting and pull the restraint upwards.

## Seats

### MANUALLY OPERATED FRONT SEATS\*



HB0230

#### 1. Forward/rearward adjustment

Lift the lever and slide the seat into position. Make sure the seat is locked in position before driving.

#### 2. Height adjustment (Driver's seat only)

Lift the lever and apply weight to lower the seat rearwards, or allow the seat to rise forwards, as required.

#### 3. Backrest adjustment

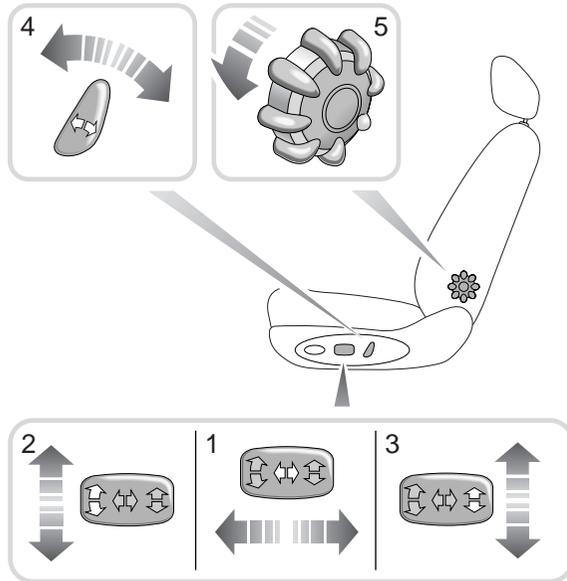
Rotate the handwheel to adjust.

#### 4. Lumbar support adjustment\*

Rotate the handwheel to adjust.

## Seats

### POWER-OPERATED FRONT SEATS\*



HB0231

#### 1. Forward/rearward adjustment

Push and hold the switch forwards or rearwards to move the seat.

#### 2. Seat cushion angle (Driver's seat only)

Push the front of the switch up or down to tilt the seat cushion.

#### 3. Seat cushion height (Driver's seat only)

Push the switch up or down to raise or lower the cushion.

#### 4. Backrest adjustment

Twist the switch forward or backwards until the desired angle is achieved.

#### 5. Lumbar support

Rotate the handwheel to adjust.

#### Heated seats\*

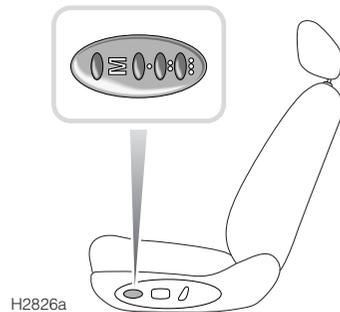
For information on operating the heated front seats, see 'Heated seats\*', page 45.

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## Seats

### DRIVER'S SEAT MEMORY FACILITY\*

**!** *Before activating the seat memory and lazy seat functions, ensure that the area immediately surrounding the seat is clear of obstructions and that all occupants are clear of moving parts.*



Your car can memorise three different driver seating positions. To store the positions in the system memory, the starter switch must be turned to the first or second position.

Adjust the seat to the required position and store the settings by pressing and holding the memory store switch ('M') and, with the memory store switch still depressed, press and release one of the pre-set buttons ('I', 'II' or 'III'). Finally, release the memory store switch; a single chime will sound to confirm that the operation was successful.

**NOTE:** *If the car is in motion, the pre-set will need to be pressed and held for the seat to move. This is to prevent inadvertent operation of the memory pre-sets, which could cause the seat to move into a position in which the driver is unable to drive safely.*

To recall a stored position after the seat has been moved by another driver, open the driver's door and press the appropriate memory pre-set button. The seat will return to the position stored by that memory pre-set, a double chime will sound to confirm that the operation is complete.

### Lazy seats

The lazy seat facility enables the handsets to be used to recall seat positions, when you unlock the doors.

Press and hold the handset unlock button to move the driver's seat to the position stored in pre-set 1. An alternative driver's setting can be programmed using pre-set 2. As before, position the seat and programme pre-set 2 then, when the spare handset is used to activate 'Lazy seats', the seat position stored in pre-set 2 will be selected.

**NOTE:** *Operation of the lazy seat facility will be cancelled if the driver's door is opened.*

## Seat Belts

### SEAT BELT SAFETY

The seat belts fitted to your vehicle are intended for use by adult sized occupants. Each belt should be used by one occupant only.

Observe the following precautions:

- DO make sure ALL passengers are securely strapped in at all times - even for the shortest journeys.
- ALWAYS adjust seat belts to eliminate any slack in the webbing. DO NOT slacken the webbing by holding 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 as low on the hips as possible (never across the abdomen), and ensure that the diagonal belt passes across the shoulder without slipping off or pressing on the neck.
- DO NOT wear seat belts over hard, sharp or fragile items in clothing, such as pens, keys, spectacles etc.
- Always replace a seat belt assembly that has withstood the strain of a severe vehicle impact, or if the webbing shows signs of fraying.
- Where possible use the seat belts to secure large items of luggage that are to be carried on the seats - in the event of an accident, unsecured items become flying missiles capable of causing serious injury.
- DO NOT use a seat belt that is twisted or obstructed in any way that could impede its smooth operation.
- DO NOT allow front seat 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 approximately 25° from the upright (vertical) position.

- DO NOT allow foreign matter (particularly sugary food and drink particles) to enter the seat belt locks - such substances can render the locks inoperative.
- In most countries, all occupants are required by law to wear a seat belt, unless they have been issued with a medical exemption certificate.
- During pregnancy, women should wear the lap belt across the hips below the baby, with the diagonal belt passing across the shoulder, between the breasts and to one side of the baby - if in doubt, consult a doctor.

 ***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!***

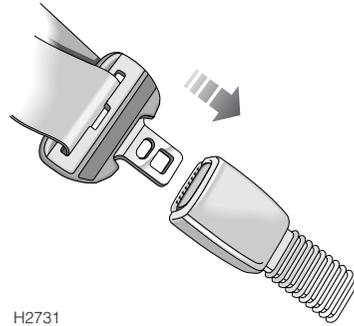
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## Seat Belts

### SEAT BELTS

**!** *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. Read the instructions below and the advice contained under the heading ‘Seat belt safety’ on a previous page.*

#### Fastening the belt



H2731

Pull the seat belt steadily over the shoulder and across the chest 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.

**NOTE:** *Where possible, rear seat passengers should adjust their position to enable the seat belt webbing to cross the shoulder without pressing on the neck.*

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 a near-upright position; DO NOT allow the front passenger to travel with the seat steeply reclined (see ‘Seating positions’, page 28).

#### Releasing the belt

Press the red button on the seat belt buckle.

#### Upper anchorage height adjustment

To reduce the likelihood of injury in an accident, the height of the front seat belt upper anchorage adjusts automatically as the seat is moved either forwards or backwards. The height **CANNOT BE ADJUSTED MANUALLY!**

## Seat Belts

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### SEAT BELT PRE-TENSIONERS

 **The seat belt pre-tensioners will only be activated once and then *MUST BE REPLACED* by an MG Rover dealer. Failure to replace the pre-tensioners will reduce the efficiency of the car's front restraint systems.**

The seat belt pre-tensioners activate in conjunction with the airbag SRS to provide additional protection in the event of a severe frontal, rear or side impact on the vehicle (see 'HOW THE AIRBAG SRS OPERATES', page 29). The pre-tensioners automatically retract the seat belts. This reduces any slack in both the lap and diagonal portions of the belts, thereby reducing forward movement of the belt wearer in the event of a severe collision.

**NOTE:** *The seat belt pre-tensioners will NOT be activated by minor impacts.*

The airbag SRS warning light on the instrument panel, will alert you to any malfunction of the seat belt pre-tensioners (see 'Airbag SRS warning light', page 31).

**NOTE:** *After any impact, always have the seat belts and pre-tensioners checked and, if necessary, replaced by an MG Rover dealer.*

If the pre-tensioners have been activated, the seat belts will still function as restraints, and must be worn in the event that the vehicle remains in a driveable condition.

### Disposing of vehicles

If you sell your car, be sure to inform the new owner that the vehicle is fitted with pre-tensioners, and make the new owner aware that the pre-tensioners must be examined and replaced by qualified personnel after a period of 15 years.

If your car is to be scrapped, unactivated pre-tensioners are potentially very dangerous and must be safely deployed in a controlled environment by qualified personnel, before it is scrapped.

## Seat Belts

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### CARING FOR SEAT BELTS

 **Always replace a seat belt assembly where the webbing shows signs of fraying.**

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

Do not bleach or dye the webbing and avoid contaminating the webbing with polish, oil or chemicals (see '*CLEANING THE INTERIOR*', page 211).

#### Three tests for checking seat belts

1. With the seat belt fastened, give the webbing nearest the buckle a quick 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 snags and snatches and further check the webbing for visual signs of wear or fraying.  
Allow the webbing to retract, checking that retraction is smooth, continuous and complete.
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.

## Child Restraints

### CHILD SEATS

Children are more likely to receive injuries from inflating airbags than taller occupants (see 'AIRBAG SUPPLEMENTARY RESTRAINT SYSTEM (SRS)', page 27). For this reason, it is recommended that children should always be seated in the rear of the vehicle, in a child safety seat or restraint system appropriate to their age and size. A table on the following page outlines the seating positions suitable for use with a child safety seat or restraint system. The range of safety seats approved for use in your car is listed in the MG Rover accessories brochure, which is available from your MG Rover dealer.

For optimum protection, it is recommended that children weighing up to 13 kg (or approximately 18 months of age) are restrained in an MG Rover-approved rear facing child seat in an outer rear seating position.

All infant and child restraint systems are designed to be secured in the car by means of a standard seat belt.

**⚠ DO NOT install a rearward facing child seat in the front passenger seat – an inflating airbag could impact with the seat. Failure to follow this advice could result in serious injury, or even death for the child.**

When installing and using any infant or child restraint system, always follow the manufacturer's instructions. Failure to properly secure the child restraint system can endanger the child in a collision or sudden stop and cause injury to other passengers.



HB0233

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. This type of child seat could cause serious injury to your child in the event of an airbag deployment.



HB0235

If it is necessary for a child to travel in the front, it is essential that the vehicle seat is set fully rearwards and that the child is seated in a FRONT FACING child safety seat, which prevents any part of the child's head coming into close proximity with the side airbag (note the warning label shown above).

## Child Restraints

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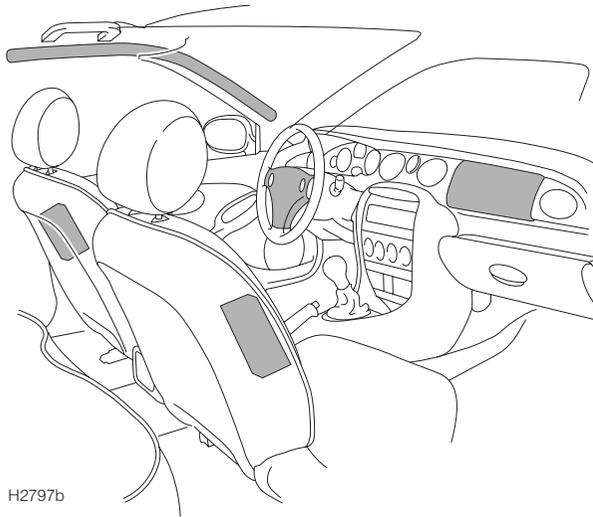
### Child restraint seating options

Mass Group (As indicated on child safety seat packaging)	Seating Positions		
	Front Passenger	Rear Outboard	Rear Centre
<b>0</b> = Up to 10 kg (0 - 9 months)	X	U	U
<b>0+</b> = Up to 13 kg (0 - 18 months)	X	U	U
<b>I</b> = 9 to 18 kg (9 months - 4 years)	X	U	U
<b>II &amp; III</b> = 15 to 36 kg (4 - 12 years)	X	U	X
U = Suitable for 'Universal' category restraints approved for this mass group. X = Seat position NOT suitable for children of this mass group.			

## Airbag SRS

### AIRBAG SUPPLEMENTARY RESTRAINT SYSTEM (SRS)

**!** *The airbag SRS provides **ADDITIONAL** protection in a severe impact only. It does not replace the need to wear a seat belt.*



H2797b

The airbag SRS incorporates front and side airbags for both the driver and front seat passenger.

**NOTE:** *Inflation and deflation of the front and side airbags takes place very quickly and will not protect against the effects of secondary impacts that may occur.*

Provided the front seat occupants are correctly seated, with seat belts properly worn, the airbags will provide additional protection to the chest and facial areas in the event of the car receiving a severe frontal impact, and to the side of the body facing the impact, if a severe side collision occurs.

Side head impact protection (where fitted) will afford additional protection to the side of the head facing the impact, in the event of a severe side collision.

**!** *Do not allow a front seat passenger to obstruct the operation of the airbag by placing feet, knees or any other part of the person, or any other objects in contact with, or in close proximity to, an airbag module.*

The front airbags are located in the centre pad of the steering wheel and in the fascia panel above the glovebox. Side airbags are positioned in the backrest padding on the outward side of both front seats. The side head impact protection airbags (if fitted) are situated behind the roof lining and front pillar finishers (where shown).

**!** *DO NOT attach or position items on, or close to the roof lining or front pillar and 'B' post finishers, or to an airbag 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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### Airbag deployment

To ensure correct deployment of the airbags, it is essential that obstructions are not allowed to intervene between an airbag and the occupant. The following are examples of the type of obstructions that could either, impede correct operation of the airbags, or jeopardise personal safety in the event of an airbag deployment:

- Accessories attached to or obscuring an airbag cover, including the roof lining, front pillar and 'B' post finishers and the part of the front seat containing the side airbag or the pillar between front and rear doors.
- Items of hand luggage, or other objects placed on an airbag cover.
- Feet, knees or any other part of the anatomy in contact with, or in close proximity to, a front airbag cover.
- Items on the shelf below the front passenger airbag that are likely to impede airbag operation in the event of an impact.
- Head, arms or any part of the anatomy in contact with, or in close proximity to, a side airbag.
- Items of clothing or cushions draped over the part of the front seat containing the airbag or hanging from the grab handle attached to the roof.
- Non-approved seat covers fitted over a front seat (in particular, be aware that seat covers approved for other cars will NOT be suitable for this car). If in doubt, seek advice from an MG Rover dealer.

### Seating positions

**⚠** *To minimise the risk of accidental injury from inflating airbags, seat belts should be correctly worn at all times. In addition, both driver and front seat passenger should adjust their seat to provide the maximum practical distance from the front airbags, and also ensure that a gap is maintained between the upper torso and the side of the vehicle, to enable unobstructed inflation of the side airbags.*

In order to provide optimum protection in the event of a severe impact, it is necessary for the airbags to deploy with considerable speed.

An inflating airbag can cause facial abrasions and other injuries if the occupant is too close to the airbag at the time of its deployment.

## Airbag SRS

### HOW THE AIRBAG SRS OPERATES

In the event of a collision, the airbag control unit monitors the rate of deceleration or acceleration induced by the collision, to determine whether the airbags should be deployed.

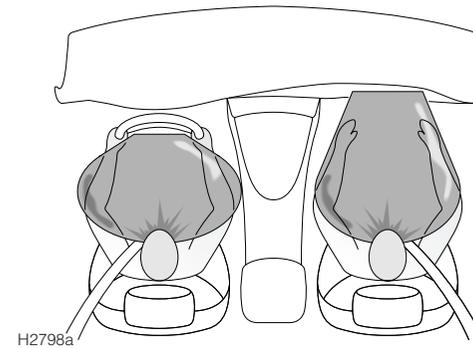
**NOTE:** *The airbag SRS is not designed to operate as a result of rear collisions, minor frontal or side impacts, or if the car overturns; nor will it operate as a result of heavy braking or driving over bumps and potholes.*

Operation of the airbag SRS is dependent entirely on the rate at which the car's passenger compartment changes speed as a result of a collision. The circumstances affecting different collisions (vehicle speed, angle of impact, type and size of object hit, for example), vary considerably and will affect the rate of acceleration or deceleration accordingly.

It follows, therefore, that significant superficial damage can occur without the airbags deploying or, conversely, that a relatively small amount of structural damage may cause the airbags to be deployed.

In the case of a severe frontal collision, both front airbags will be deployed. In the case of a severe side collision, only the side airbag and side head impact protection airbag on the impact side of the vehicle will inflate. However, there may also be impact conditions whereby one set of side and both front airbags deploy at the same time, or where front and side airbags respond separately as a result of a secondary impact occurring after the initial collision has taken place.

**⚠** *An inflating airbag can cause facial abrasions and other injuries. Minimise the risk of injury by ensuring that front seat occupants are wearing their seat belts and are seated correctly, with the seat as far back as is practical.*



Airbag inflation is virtually instantaneous and occurs with considerable force, accompanied by a loud noise. The inflated bag, together with the seat belt restraint system, limit the movement of a front seat occupant, thereby reducing the risk of injury to the head and upper torso.

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

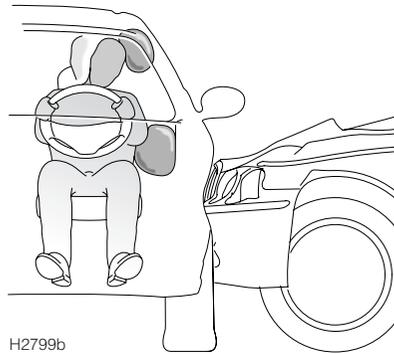
When an airbag inflates, a fine powder is released. This is not an indication of a malfunction, however, the powder may cause irritation to the skin and should be thoroughly flushed from the eyes and any cuts or abrasions of the skin. After inflation, front and side airbags deflate immediately (side head protection airbags deflate slowly). This provides a gradual cushioning effect for the occupant and also ensures that the driver's forward vision is not obscured.

## Airbag SRS

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### Side airbags

**!** *Ensure that a gap is maintained between the upper torso and the side of the vehicle, to enable unobstructed inflation of the side airbags.*



Side airbags are designed to protect the thorax region of the torso and will only deploy in the event of a severe side impact. They will NOT inflate as a result of frontal or rear impacts only.

In the event of a severe side collision, the airbag on the impact side of the car breaks through the seat covering, rapidly inflating to form a cushion between the occupant and the side of the car. The airbag on the non-impact side of the car will not be deployed.

Note that a part of the outer side of the seat trim (identified by the woven 'airbag' label) is specially constructed to enable the airbag to deploy.

*NOTE: The manufacture and materials of the seat are critical to the performance of the airbag. For this reason, non-approved seat covers must NEVER be fitted, and it is recommended that any repair or replacement to the front seats be carried out by an MG Rover dealer (see 'SERVICE INFORMATION', page 32).*

## Airbag SRS

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### Side head impact protection\*

**NOTE:** For the side head impact airbags to deploy correctly, the roof lining and front pillar trim must be undamaged and fitted correctly. Any damage or suspect fitting should be referred to an MG Rover dealer for examination.

Side head impact airbags are designed to protect the head in the event of a severe side impact only. They will NOT inflate as a result of frontal or rear impacts alone.

The side head impact protection modules are located behind the roof lining and front pillar finisher, above the doors. In the event of a severe side collision, the airbag pushes out from behind the roof lining and front pillar finisher as it inflates. The side head impact airbag remains inflated for longer than the other airbags, to provide additional head protection in the event of a secondary impact.

### Airbag SRS warning light

A warning light, mounted on the instrument panel, will alert you to any malfunction of the airbag SRS and seat belt pre-tensioners. The light will illuminate as a bulb and system check when the starter switch is turned to the second position and will extinguish after approximately four seconds. The system should always be checked by a dealer if any of the following symptoms occur:

- The warning light fails to illuminate when the starter switch is turned to the second position.
- The warning light fails to extinguish within approximately four seconds after the starter switch is turned to the second position.
- The warning light illuminates while the car is being driven.

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## Airbag SRS

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### SERVICE INFORMATION

After 15 years from the initial date of registration (or installation date of a replacement airbag SRS), some components will need to be replaced by an MG Rover dealer, who should stamp and sign the appropriate page of the Service History section of this book once the work has been completed.

In addition, ALWAYS contact your dealer if;

- an airbag inflates.
- the front or side of the vehicle is damaged (even if the corresponding airbag has not inflated).
- any part of an airbag module covers show signs of deterioration or damage.

The components of the airbag SRS are sensitive to electrical and physical interference; it is recommended that you ALWAYS seek the assistance of an MG 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, including: the steering wheel, steering column, front seats, fascia and instrument panel.
- Installation of electronic equipment such as a mobile phone, two-way radio or in-car entertainment system.
- Attachment of accessories to, or modification of, the front or side of the vehicle.
- Removal, replacement, or retrimming of a front seat or seat cover.

**⚠ DO NOT service, repair, replace, modify or tamper with any part of the airbag SRS, or wiring in the vicinity of an airbag SRS component; this could cause the system to activate, resulting in personal injury.**

### Disposing of the vehicle

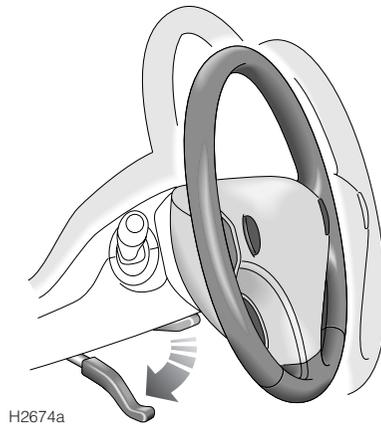
If you sell your vehicle, be sure to inform the new owner that the vehicle has an airbag SRS and make the new owner aware of the airbag module replacement date.

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

## Steering Column

### STEERING COLUMN ADJUSTMENT

**!** *DO NOT attempt to adjust the height or angle of the steering wheel while the car is in motion. This is extremely dangerous.*



Adjust the angle and height of the steering column to suit your driving position:

1. Fully release the locking lever.
2. Hold the steering wheel in both hands and tilt the steering column up or down to move the wheel into the most comfortable position.

**NOTE:** *If it is difficult to move the steering column into a new position, disengage the steering lock by turning the starter switch to the first position and align the front wheels straight ahead.*

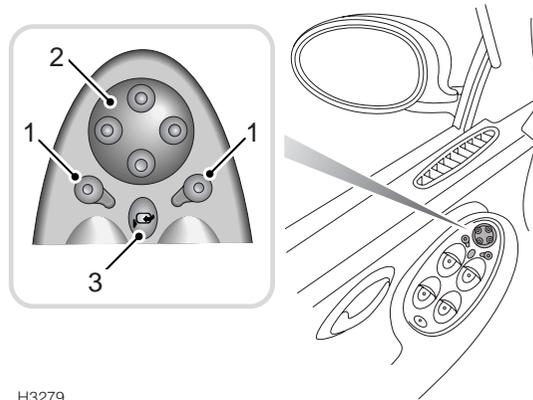
3. Pull or push the steering wheel closer to, or further away from, your body.
4. Once a comfortable driving position has been selected, pull the locking lever fully up to lock the steering column into its new position.

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## Mirrors

### POWER-OPERATED DOOR MIRRORS

**NOTE:** Objects viewed in exterior mirrors may appear further away than they actually are.



#### Mirror glass adjustment

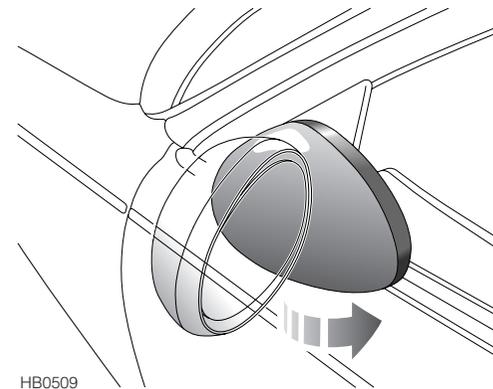
- With the starter switch turned on (first position), press the appropriate switch (1) to select the left or right mirror.
- Use switch (2) to tilt the mirror glass up/down/left or right.

#### Heating elements

The door mirrors have integral heating elements which disperse ice or mist from the glass. The heating elements operate continuously while the starter switch is in the second position.

#### Mirror folding\*

The body of each door mirror is designed to fold flat against the side of the car on impact. The mirrors can also be folded back manually towards the side windows into a 'park' position to enable the car to negotiate narrow openings.



On some cars the 'park' position can be achieved electrically, as follows:

With the starter switch turned on, press the mirror fold switch (3); both mirrors will fold back towards the side window. Press the switch a second time to return the mirrors to their normal position. If one mirror is accidentally knocked out of position, a single press of the switch will resynchronise both.

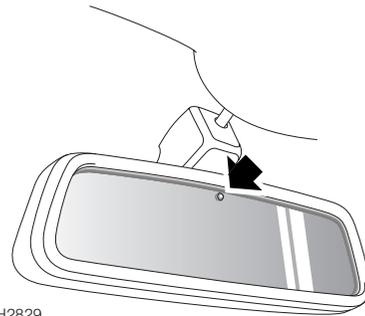
**NOTE:** The mirror fold switch can also be operated for up to 40 seconds after the starter switch has been turned off.

## Mirrors

### INTERIOR REAR-VIEW MIRROR

Adjust the body of the mirror by hand to achieve the best possible view to the rear. The dipping function of both the automatic and manual mirrors helps to reduce glare from the headlights of following vehicles at night.

#### Automatic mirror\*



H2829

The interior mirror is equipped with a light sensor (arrowed) which activates the automatic dipping function.

#### Manual mirror\*

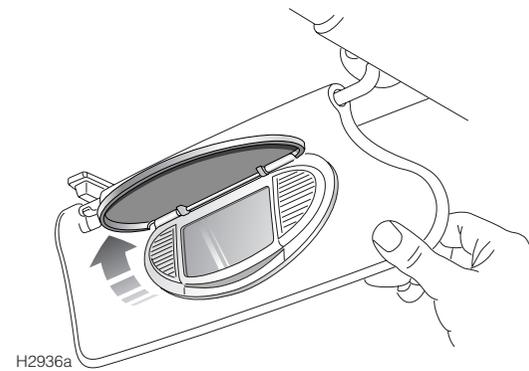
Move the lever at the base of the mirror forward to 'dip' the mirror. Normal visibility is restored by pulling the lever back again.

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

### VANITY MIRROR

**!** The driver's vanity mirror\* should only be used when the car is stationary

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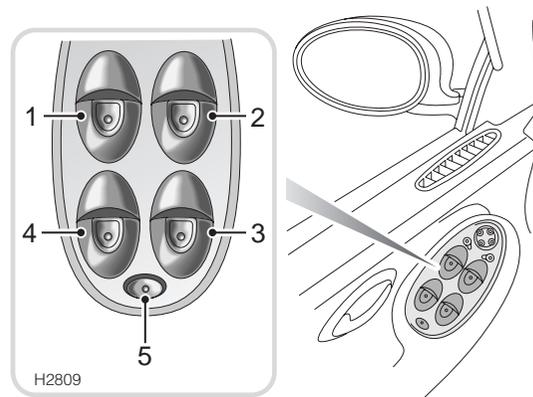


Pivot the sun visor downward to use the vanity mirror. On some models, the vanity mirror has a cover and is illuminated when the cover is raised. Close the cover to extinguish the lights.

## Windows

### POWER-OPERATED WINDOW CONTROLS

**!** *Accidental closing of a power-operated window on fingers, hands or on any other vulnerable parts of the body can result in serious injury.*



Driver's door console

The switches on the driver's door operate the following:

1. Left hand front window.
2. Right hand front window.
3. Right hand rear window\*.
4. Left hand rear window\*.
5. Rear window isolation switch\*.

**NOTE:** *The front and rear passenger windows can also be operated by individual window switches, mounted on each door. The rear window switches will not operate if the isolation switch has been activated.*

### Operating the windows

The electric windows can be operated when the starter switch is in the first or second position and for up to 40 seconds after the starter switch is turned off (provided neither front door is opened in the meantime).

Push the switch down to lower, and lift the switch up to raise the window. The window will stop moving as soon as the switch is released (unless the 'one-touch' feature is active).

**!** **ENSURE children are kept clear when raising or lowering a window.**

### Rear window isolation switch\*

Press the switch to isolate the rear window controls (an indicator light in the switch illuminates), press again to restore control.

**NOTE:** *ISOLATE the rear window switches when carrying children.*

### 'One-touch' down

By briefly pressing and then releasing a switch (within half a second), a window can be opened at a single touch. Window movement can be stopped at any time by pressing the switch again.

### 'One-touch' up and 'Anti-trap'\*

On some models, the driver's door has a 'one-touch' up facility which acts in the same way as 'one-touch' down. Window movement can be stopped at any time by pressing the switch again.

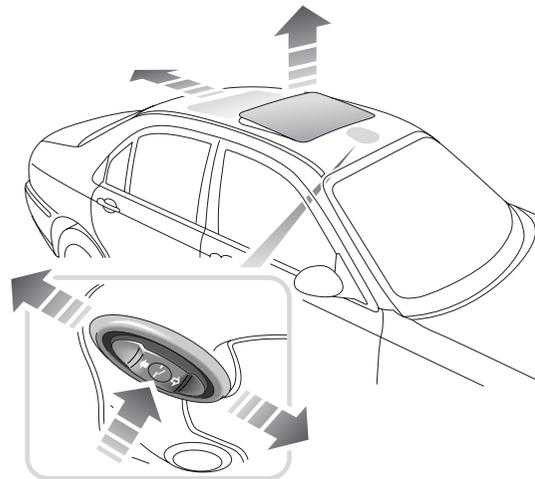
The 'anti-trap' function is a safety feature which prevents the driver's window from fully closing if an obstruction is sensed - if this happens the window will open slightly to allow the obstruction to be removed.

## Sunroof

### SUNROOF OPERATION\*

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

**!** *DO NOT allow passengers to extend any part of their bodies through the sunroof aperture while the car is moving - injury from flying debris, branches of trees or other obstructions could occur.*



H2707

The sunroof can be operated when the starter switch is in the first or second position and for up to 40 seconds after the starter switch is turned off (provided the driver's door is not opened in the meantime).

The sunroof opens and closes in two separate phases, as follows:

- **To TILT the roof:**

With the sunroof either open or closed, press and release the central portion of the sunroof button. The sunroof will automatically close (if open) and then tilt upwards. Sunroof movement can be stopped at any time by pressing the tilt button for a second time. Push the sunroof switch forward to lower the tilt and return the roof to the closed position.

- **To OPEN the roof:**

Push the sunroof switch rearwards, releasing when the sunroof is in the desired position. Push the switch forward to close the sunroof.

#### 'One-touch' operation

Firmly push the switch rearwards and release (the switch will be felt to click into position), the sunroof will fully open. Push the switch firmly forward and release to fully close the sunroof at a single touch. Sunroof movement can be stopped at any time by briefly pressing the centre of the switch.

#### 'Anti-trap' function

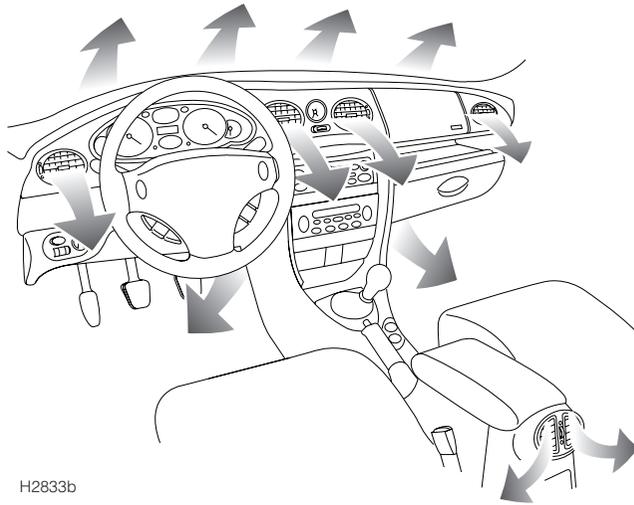
**NOTE:** *The anti-trap feature does not function when the roof is closing from a tilt open position.*

The anti-trap function is a safety feature which prevents the sunroof from closing fully if there is an obstruction. If an obstruction is detected, the sunroof will open slightly to allow the object to be removed.

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## Heating & Ventilation

### VENTILATION



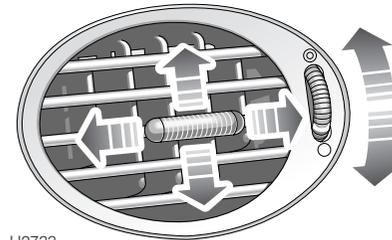
The heating and ventilation system provides fresh or heated air to the interior of the car from the air intake grille in front of the windscreen. Always keep the air intake grille clear of obstructions such as leaves, snow or ice.

Air outlets are provided to the windscreen, face and feet - the location of those vents is shown in the illustration above - and to rear seat passengers from ducts beneath the front seats.

**NOTE:** On saloon models, keep the air grille in the rear window shelf uncovered to enable air flow through the whole of the interior.

Cars fitted with Automatic Temperature Control (ATC) are equipped with an additional outlet which supplies unheated or cooled air to the rear of the passenger compartment.

### Face level vents



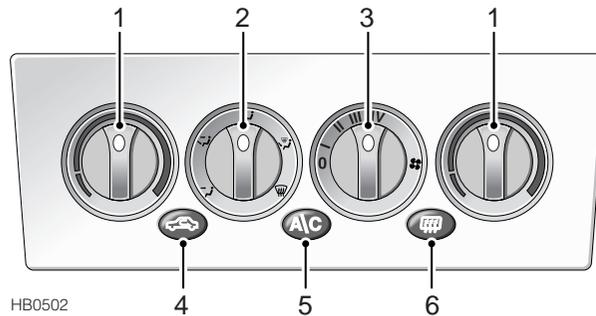
Rotate the thumbwheel down to close or up to open the vents. Direct the air flow by moving the control in the centre of the louvres up or down, or from side to side.

When carrying rear seat passengers, direct air from the outer vents towards the front seat occupants and use the centre vents to direct air towards the rear seat passengers.

**NOTE:** To increase output from the centre face vents, shut the outer vents.

## Heating & Ventilation

### HEATING Control panel



#### 1. Air temperature controls

- BLUE: Unheated air
- RED: Heated air

Where dual temperature controls are fitted (as illustration), the left hand dial controls air temperature from the vents on the left side of the car and the right hand dial controls air temperature from the vents on the right side of the car.

Where a single control is fitted, the dial controls air temperature from the vents on both sides of the car.

#### 2. Air distribution control

**NOTE:** When distributing air to the face level vents, they must be FULLY open to ensure best performance.

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

#### 3. Blower switch

Turn the switch clockwise to increase the blower speed.

**NOTE:** With the blower switched off, the volume of air entering the car is dependent on driving speed alone.

#### 4. Recirculated air supply button

Press to operate (the indicator light in the switch illuminates). With this button pressed, the heater recirculates the air already inside the car, preventing the entry of traffic fumes. Press again to switch off.

If the air conditioning is switched on, air recirculation will remain active until fresh air is selected, or until the air conditioning is switched off.

With air conditioning switched off (and on cars not equipped with air conditioning), air recirculation will automatically switch off after 4 minutes operation. This reduces the risk of misting windows. To override this timed feature, press and

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## Heating & Ventilation

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hold the recirculation button for 2 seconds (until the light in the switch flashes) – but note that the function must then be switched off manually.

***NOTE:** Leaving the system in recirculation mode can cause the windscreen to mist. If this happens, switch off recirculation and turn the controls to maximum demisting.*

### 5. Air conditioning switch\*

With the engine running, press to operate. The indicator light in the switch illuminates when the air conditioning is switched on.

In addition, note that air recirculation is activated automatically whenever the air conditioning is switched on as an aid to more efficient cooling of the car's interior. In conditions of high humidity, slight screen misting may be experienced when the air conditioning is first switched on. This is not a fault, misting will clear after a few seconds once the system is in operation.

***NOTE:** The air conditioning will not operate without the engine running nor when the blower switch is turned to position 'O'.*

***NOTE:** Because the system dehumidifies the air supplied to it, surplus water is produced and expelled via drain tubes beneath the car. This may result in a small pool of water forming under the car when stationary and is not a cause for concern.*

### 6. Rear screen demister

The demister will only function with the engine running. Press to operate; the indicator light in the switch illuminates whenever the demister is on and extinguishes when the demister is turned off.

If the exterior temperature is below 10° C (50° F), the demister will switch on automatically and operate for a period of 20 minutes before switching off. However, if the exterior temperature is greater than 10° C (50° F), the demister will not switch on automatically, but will respond to any manual operation by switching off automatically after 12 minutes.

 ***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 heating elements.***

## Heating & Ventilation

### Operating advice

The following procedures will enable you to gain maximum benefit from the heating and ventilation system. However, because the system uses heat from the engine to warm the air, full heating will not be available until the engine reaches its normal operating temperature.

### To achieve maximum demisting/defrosting

- Select 'windscreen' on the air distribution control.
- Turn the air temperature control(s) to the RED segment.
- Turn the blower switch to 'IV'.

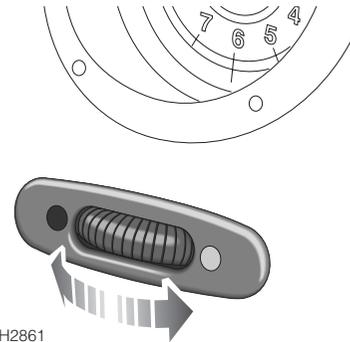
### To achieve maximum heating

- Turn the air distribution control to foot level vents.
- Turn the air temperature control(s) to the RED segment.
- Select 'IV' on the blower switch (increase as required).

### To achieve maximum ventilation

- Turn the air distribution control to face level vents and ensure the vents are open.
- Turn the air temperature control(s) to the BLUE segment.
- Select 'IV' on the blower switch (adjust as required).
- Switch on air conditioning (where fitted).

### Heater bypass control



Air supply from the face level vents is further controlled by the heater bypass control in the centre of the fascia panel.

The enables cooler air to be directed towards the face at those times when the heater is required to provide hot air to keep the interior of the car warm - particularly useful during winter. The bypass is controlled by turning the thumbwheel:

- towards the BLUE spot to open the bypass.
- towards the WHITE spot to close the bypass.

### If the air distribution control is set to foot, screen or window vents:

- Heater bypass closed - all air flow is prohibited.
- Heater bypass open - unheated (fresh) air supply only.

### If the air distribution control is set to face or foot and face vents:

- Heater bypass closed - heated air supply (temperature as heater setting).
- Heater bypass open - a blend of heated and unheated air (which has bypassed the heater) providing a cooler output.

## Heating & Ventilation

### Particle/pollen filter/odour filter\*

A particle filter will help to keep the car interior free from pollen and dust. To remain fully effective, the filter should be replaced every 2 years or 50,000 km, at the time of an oil service or inspection.

The particle filter can be combined with an odour filter to help inhibit the smell of traffic fumes. The combined filter requires replacement every 12 months or 25,000 km.

### AUTOMATIC TEMPERATURE CONTROL (ATC)\*



H2734b

### Auto mode

#### *In brief*

- Press the 'AUTO' button for fully automatic operation.
- Press the temperature control switches to select the required temperature (see 'Temperature control') - a temperature of 22° C (72° F) is recommended.
- Let the automatic temperature control system do the rest.

The system features automatic temperature and air distribution control, which is programmed to maintain optimum levels of comfort within the car in all but the most severe climatic conditions.

## Heating & Ventilation

While the controls can be adjusted manually to satisfy individual requirements, allowing the system to function automatically (in Auto mode) is by far the simplest method of operation for the owner and is preferable in most operating conditions.

In Auto mode, air temperature, air distribution and blower speeds are adjusted automatically to achieve and then maintain the desired temperature.

**NOTE:** *In Auto mode, following a cold start at low exterior temperatures, the blower speed will not increase until the engine coolant temperature has started to rise.*

Both the air distribution and blower controls can be operated independently to override the automatic setting. In this case, the relative symbols will move outside the enclosed central area of the display, to indicate that they are no longer controlled automatically.

**NOTE:** *For ATC to function correctly, all windows (and sunroof) should be closed and the air intake must be free from obstructions (ice, snow, leaves and other debris). In addition, the solar sensor centrally positioned on the top of the fascia panel must not be covered.*

### Temperature control

Operate the rocker switches on either side of the display to set the required temperature for the corresponding side of the passenger compartment (left hand switch for the left side of the car, and right hand switch for the right side). The system will not achieve temperatures on the passenger side of the car more than 5° C greater or less than the temperature set for the driver's side.

Temperatures above 28° C and below 16° C cannot be set. Above or below these maximum and minimum settings 'HI' or 'LO' will appear in the display.

**NOTE:** *The temperatures shown on the display are target temperatures only and are not reflective of any specific temperature measured within the interior of the car.*

### Defrost



Press the button at the beginning of a journey to clear frost or mist (the indicator in the switch illuminates and the defrost symbol, along with the blower symbol, appears in the display).

The defrost facility automatically activates the following:

- The most efficient heater settings to clear the windscreen and front side windows.
- The heated rear screen - for a maximum of 20 minutes.

Press the button again to cancel defrost and restore the original settings, or press 'Auto' to go straight into Auto mode.

1

## Heating & Ventilation

### Economy mode

 Press the 'ECON' button to operate (the display shows 'ECON').

In economy mode, the air conditioning compressor is switched off and the system functions as a conventional heating and ventilation system. This reduces the load on the engine, thereby reducing fuel consumption.

The air distribution, blower and recirculation controls can be operated independently.

Pressing the 'ECON' button a second time will switch the air conditioning on, and return the system to Auto mode.

**NOTE:** *In economy mode, it may not be possible for the system to always maintain a comfortable temperature.*

### Blower control

 Use the control to adjust the blower speed. Press the '+' symbol to increase, and the '-' symbol to decrease blower speed. The display will show a number of segments (0 - 6) which represent the blower speed. When no segments are showing, the blower fan is not operating. However, note that the blower speed can only be reduced to zero in economy mode.

**NOTE:** *If the air distribution and blower controls are operated independently, the system may not be able to achieve or maintain the required temperature settings.*

### Air distribution control

 Press the button to adjust. Air distribution changes sequentially with each press of the control, as follows:

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

A further operation of the control returns to the start of the sequence.

**NOTE:** *For optimum comfort, ensure all the vents are open and that the slider in the centre of each vent is in its central position.*

### Recirculation

 The air recirculation feature can be used to prohibit the entry of air from outside the car, recirculating the air inside the car instead. This is useful to prevent the entry of traffic fumes.

The feature also significantly influences the dehumidifying and cooling performance of the air conditioning system. Therefore, in Auto mode, air recirculation is controlled automatically to enable the air conditioning system to achieve its optimum performance.

## Heating & Ventilation

To operate recirculation manually, press the switch (the indicator in the switch illuminates). Note that if ECON mode has been selected, or the air conditioning is off, recirculation will switch off automatically after 4 minutes. To override this timed feature, press and hold the switch for 2 seconds (a double bleep will sound).

**NOTE:** *Prolonged recirculation can cause the windows to mist.*

### Heated rear screen



The heated rear screen will switch on automatically for 20 minutes if the engine is started when the outside temperature is less than 10° C.

The heated rear screen will also operate automatically in association with the automatic temperature control.

To operate manually, press the switch (the indicator in the switch illuminates). The heated rear screen has two pre-set operation times, which are dependant on the outside temperature:

- If the outside temperature is less than 10° C, the rear screen heater will operate for 20 minutes before switching off automatically.
- If the outside temperature is 10° C or greater, the rear screen heater operates for 12 minutes before switching off.

**NOTE:** *The heated rear screen will not operate unless the engine is running.*

 **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 heating elements.**

### Temperature conversion



Press the switch to convert the temperature display to or from Fahrenheit or Centigrade.

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### On/off button



Press to switch on and off. When switching on, note that the system automatically recalls the mode and control settings that were last used.

### Heated seats\*



Press the switch to operate (the indicator light in the switch illuminates) - press again to switch off.

When operating, the heating elements in the seat will function intermittently in order to reach and then maintain a temperature within a predetermined range of 33° C to 45° C.

**NOTE:** *Seat heaters consume considerable power from the battery. For this reason they should only be operated when the engine is running.*

## Parking Heater

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### **PARKING HEATER\***

Some diesel engine cars are equipped with a programmable automatic heating facility, which enables the owner to pre-heat the interior of the car (and warm up the engine) prior to use. The parking heater can also be operated remotely, using the handset supplied.

In addition to warming the vehicle interior and engine, the parking heater facility also reduces engine start-up emissions.

To warm the interior of the car, the parking heater economically burns a small amount of fuel drawn from the main fuel tank to generate heat, which is then distributed to the engine and the car's heating system.

The parking heater will then operate until the preset running time has elapsed, heating and maintaining the car's interior at the desired temperature. The heating programme can be cancelled at any time by pressing the 'OFF' button on the remote handset.

Avoid repeated operation of the parking heater, as this can discharge the car battery - it will take the car's charging system approximately 20 minutes of normal driving to recover the charge expended during 30 minutes operation of the parking heater (sometimes longer in extremely cold conditions).

**NOTE:** *The parking heater operates independently of the car's ignition system - there is no need to leave the starter key in the starter switch and do not leave the car with the starter switch turned on.*

**⚠ DO NOT operate the parking heater in enclosed spaces, such as garages or workshops. A hazardous build up of exhaust fumes may occur.**

**⚠ DO NOT operate the parking heater where there is a risk of fire (areas such as filling stations where flammable liquids or gases may be present, for example).**

### **SETTING THE CAR'S HEATER CONTROLS**

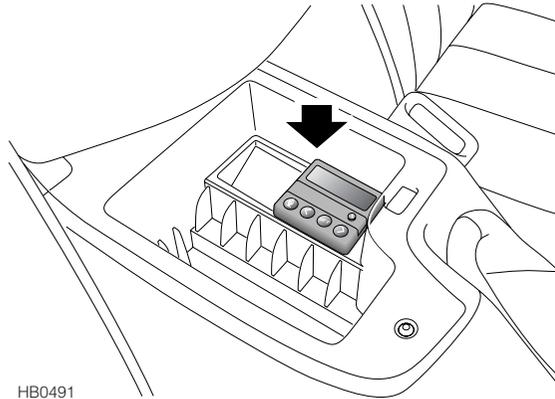
The parking heater utilises the car's interior heating and ventilation system settings, it is therefore recommended that the car is left with the following heater settings selected if the parking heater is to be programmed for automatic operation. These settings have been found to provide the optimum comfort with acceptable battery power usage when used for a duration of 30 minutes. These settings are recommended, but can be adjusted for individual comfort.

- Set the individual temperature controls to 22° C.
- Press the 'AUTO' button to activate Auto mode.

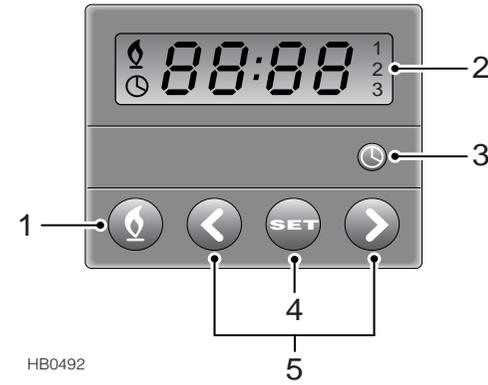
## Parking Heater

### SETTING & OPERATING THE PARKING HEATER

### Timer unit controls



The parking heater timer unit is located in the centre console cubby box. Up to three separate preset operating start times can be programmed, each running for a maximum of 30 minutes.



1. Manual operation control.  
Press to manually turn the parking heater on or off.
2. Display.  
Shows the current time or preset time and preset number.  
Indicates whether manual operation has been selected.
3. Clock control.  
Press to enable the current time to be changed. Change the clock using the timer adjustment controls (5).
4. SET control.  
Press to cycle through the parking heater time presets.  
Change the presets using the timer adjustment controls (5).
5. Timer adjustment controls.  
Press either the 'forward' or 'backward' arrow button to change the clock or preset time.

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## Parking Heater

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### Setting the current time

**NOTE:** Both the current time and any preset start-up time are set and displayed in 24 hour clock format.

If the power supply to the unit has been interrupted (by vehicle battery disconnection, for example), the time of day will need to be reset and any preset programmes will be lost. Reset the time as follows:

- Press the clock control (3) – the display illuminates and the clock symbol and ‘:’ flash.
- Set the time using the timer adjustment controls (5), pressing the right control to advance the time and the left control to turn the clock back. The time increments in minutes, with the incremental change accelerating the longer the control is kept depressed.
- Once the correct time is displayed, release the control and leave the unit for approximately 10 seconds, until the display extinguishes.

**NOTE:** To display the current time, press the clock control. The display illumination ceases 10 seconds after the control is released.

### Setting the heater start time presets

Up to three different preset start times can be programmed using the timer unit, as follows:

- Press the ‘SET’ control (4) in the timer unit – the display illuminates, showing a preset programme number (on the right hand side of the display) and previously programmed start time associated with that preset.
- If the desired preset is not displayed, press and release the ‘SET’ control again. This cycles through the presets – repeat until the desired preset number is displayed.
- To adjust the start time for that preset, use the timer adjustment controls (5) to set the desired time.

**NOTE:** You must begin to set the start time within approximately 10 seconds of selecting the desired preset (before the display illumination ceases), otherwise the above procedure must be repeated.

If at any time you wish to cancel the programming process, press and release the ‘SET’ control repeatedly (cycling through the preset numbers) until the display and preset number extinguish.

### Selecting a preset programme

Press and release the ‘SET’ control (4) repeatedly until the desired preset number is displayed (‘1’, ‘2’ or ‘3’) and check that the start time is correct. After 10 seconds, the start time will extinguish, but the display remains illuminated. The timer is now set to activate the heater at the programmed time.

To cancel a programmed preset start-up time, press and release the ‘SET’ control repeatedly (cycling through the preset numbers) until the display extinguishes.

## Parking Heater

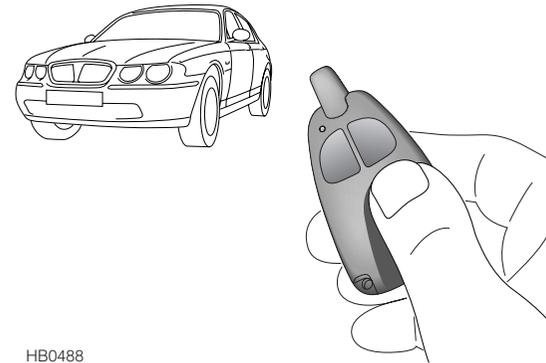
### Manual operation

Manual operation allows you to switch on the heater, either when leaving the vehicle for a short time, or when parked up, to keep the car interior warm.

To switch the heater on, press the manual operation control (1) - the flame symbol in the display illuminates. The heater will operate until the set temperature is reached, or until 30 minutes has elapsed.

To manually switch off the heater, press the control again - the flame symbol and the display extinguish.

### USING THE REMOTE HANDSET



HB0488

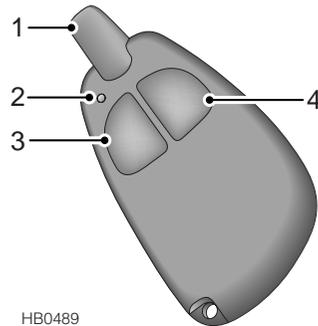
The remote handset supplied with your parking heater, has an approximate unobstructed range of 300 metres, but this range can be substantially reduced by buildings, obstructions or mountainous terrain.

**NOTE:** *If the handset is operated within 2 metres of the car, the signal may be too strong, causing the handset indicator light to flash rapidly (signifying an error). If this occurs, move further away from the car and try again.*

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## Parking Heater

### Remote handset controls



HB0489

1. Aerial
2. Indicator light
3. ON button
4. OFF button

### Operating the parking heater

To activate the parking heater, press and hold the 'ON' button for approximately 1 second, or until the red indicator light in the handset illuminates. The indicator light will then flash at 1 second intervals, to indicate that the parking heater is operating.

If there is an error (if the handset is out of range, for example), the indicator light will flash rapidly. If an error occurs, reduce the distance between the handset and the car and press and hold the 'ON' button again.

**NOTE:** If the indicator light flashes orange, it indicates that the handset batteries may need replacing (see 'REPLACING THE HANDSET BATTERIES', page 52 for further information).

To deactivate the parking heater at any time during operation, press and hold the 'OFF' button for approximately 1 second (or until the indicator light illuminates constantly). The indicator light should then stop flashing.

### Checking the preset running time

The preset running time can be adjusted, in 10 minute increments, between 10 minutes and 60 minutes. To check the duration of the current programmed running time, press and release both the 'ON' and 'OFF' buttons simultaneously three times in quick succession. The number of times the indicator light flashes corresponds to the time (in minutes x 10) that the parking heater will operate for (e.g. a single flash = 10 minutes, 4 flashes = 40 minutes).

If you do not wish to alter the running time, leave the handset for 10 seconds, after which it will return to operating mode.

## Parking Heater

### Changing the preset running time

Press and release both the 'ON' and 'OFF' buttons simultaneously three times in quick succession. The indicator light flashes as described above. Within 10 seconds, press the 'OFF' button, to increase the running time by 10 minutes - the indicator light will flash the correct number of times to confirm the new running time (one flash for 10 minutes, two flashes for twenty minutes et.c.). Continue to press and release the 'OFF' button until the desired running time is reached. To set the new running time, either briefly press the 'ON' button, or do not press any button for 10 seconds - the new running time is now set.

#### IMPORTANT

To avoid inadvertent drain on the car battery, it is not recommended that the preset running time be increased from the default (30 minutes), except in extreme conditions.

To return the running time to its default value (30 minutes), press and hold both the 'ON' and 'OFF' buttons simultaneously for 10 seconds, at which point the indicator light will extinguish.

### EFFECTS OF CAR BATTERY DISCONNECTION

If the car battery is disconnected or discharged for a short time, the timer control unit's programmed time settings and presets will be lost (the control unit display flashes). The time and preset settings will need to be re-entered before the system will operate automatically (see '*SETTING & OPERATING THE PARKING HEATER*', page 47).

If the car battery is disconnected or discharged for a prolonged period of time, the remote handset may lose synchronisation with the control unit. Although this is unlikely, the handset can be resynchronised by following the procedure detailed below.

### SYNCHRONISING THE HANDSET/ PROGRAMMING ADDITIONAL HANDSETS

If the remote handset has lost synchronisation with the parking heater receiver (if the car battery has been disconnected for a prolonged period, for example), or if an additional handset is to be programmed, the handset will need to be synchronised.

Disconnect the negative lead on the car battery for a minimum of 5 seconds. Reconnect the negative lead and, within 2 seconds, press and hold the handset 'OFF' button for a further 2 seconds (approximately). The handset indicator light will flash once to confirm that the handset is now synchronised correctly. If the light fails to flash, repeat the above procedure.

**NOTE:** Up to 2 additional remote handsets can be synchronised for use with your parking heater. Replacement or additional handsets can be ordered through your MG Rover dealer.

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## Parking Heater

### REPLACING THE HANDSET BATTERIES

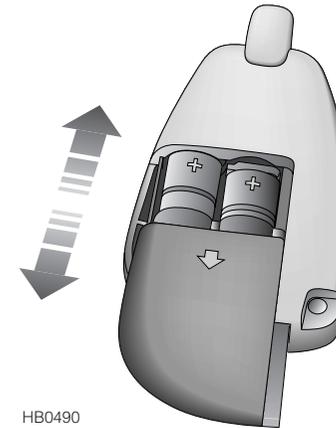
#### Battery condition

The handset indicator light automatically informs the user of the condition of the batteries when the handset is used. Press either of the handset buttons and check the battery condition as follows:

Battery condition	Indicator light
Batteries good	Illuminates <b>RED</b> after 1 second, for <b>0.5 seconds</b> .
Batteries low	Flashes <b>ORANGE</b> after 1 second, for <b>3 seconds</b> .
Replace batteries	Flashes <b>ORANGE</b> after 1 second, for <b>5 seconds</b> .

If the ambient temperature is lower than 0° C and the handset is cold, the batteries may falsely be indicated as needing replacement (alkaline batteries do not operate as well in cold temperatures). If this occurs, place the handset somewhere warm (a pocket, for example) until the batteries have warmed sufficiently to work correctly.

#### Battery replacement

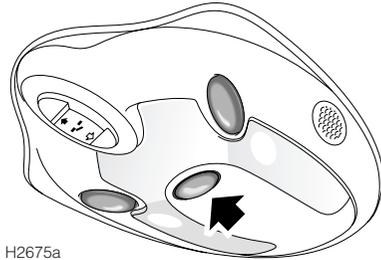


With the back of the remote handset facing uppermost, slide off the battery compartment cover and remove the discharged batteries. Replace with two MN21 12V alkaline batteries, ensuring that the correct battery polarity is maintained.

After replacing the batteries, ensure that the cover is refitted securely.

## Interior Equipment

### FRONT COURTESY AND MAP READING LIGHTS



H2675a

#### Manual operation

Press the appropriate switch to turn the courtesy or map reading lights on, press again to turn off.

The front courtesy light switch (arrowed) will also operate the rear courtesy lights.

#### Automatic operation

Courtesy light illumination occurs automatically whenever the car is unlocked, when a door or the boot lid or tailgate is opened, or when the starter switch is turned off, providing the headlights have been illuminated during the previous 30 seconds. The lights remain illuminated for 20 seconds after the doors are closed, or until the starter switch is turned on.

After driving, the courtesy lights will fade and then extinguish 20 seconds after the last door is closed, or as soon as the car is locked.

**NOTE:** If a door or the boot is left open for longer than 16 minutes, a 'time-out' function will extinguish the interior lights automatically to prevent the battery from discharging.

#### 'Permanent off'

If necessary, the automatic illumination features described above can be switched off, as follows:

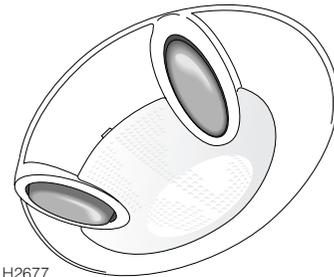
Press and hold the courtesy light switch (arrowed in illustration) for a full 5 seconds. The interior lights (including the luggage compartment light) will flash and then extinguish. Automatic operation is now suppressed (manual operation is still available). To restore automatic operation, repeat the above process (i.e. press and hold the front courtesy light switch for a further 5 seconds).

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## Interior Equipment

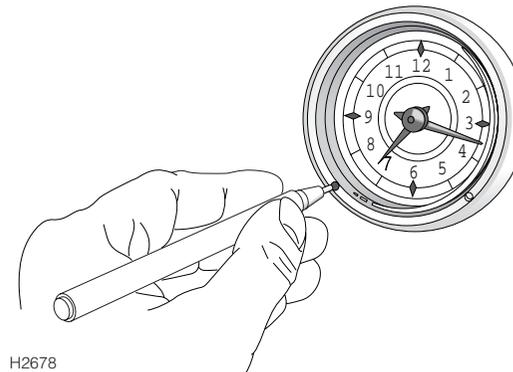
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### REAR COURTESY AND READING LIGHTS



The rear courtesy lights illuminate and extinguish automatically in conjunction with the front courtesy lights. Press the appropriate switch to illuminate the relevant map reading light - press again to switch off.

### CLOCK



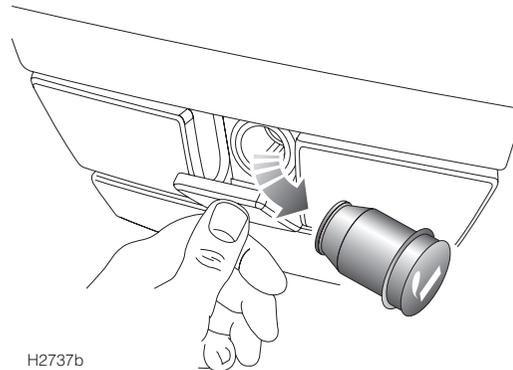
To adjust the clock, use a ball point pen or similar probe to advance or retard the hands, by pressing the right or left hand buttons at the bottom of the clock bezel.

**NOTE:** *The clock will need to be reset if the battery has been disconnected.*

## Interior Equipment

### CIGAR LIGHTER

 **ONLY** hold the cigar lighter by the handle.



H2737b

With the starter switch turned on, press the cigar lighter cover to open. Press the lighter in to heat up; when it has reached the correct temperature, it will partially eject and can then be withdrawn for use.

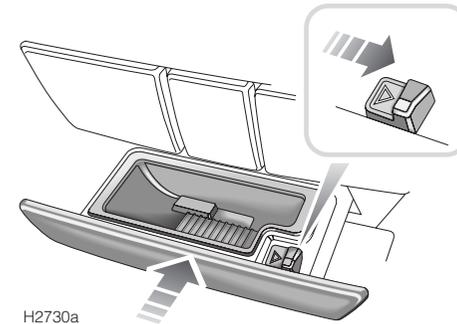
**NOTE:** *DO NOT* plug accessories into the cigar lighter socket (an auxiliary power socket is available as an accessory - consult your dealer).

The cigar lighter cover will not close again until it has been allowed to open fully.

### ASHTRAYS

#### Front ashtray

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H2730a

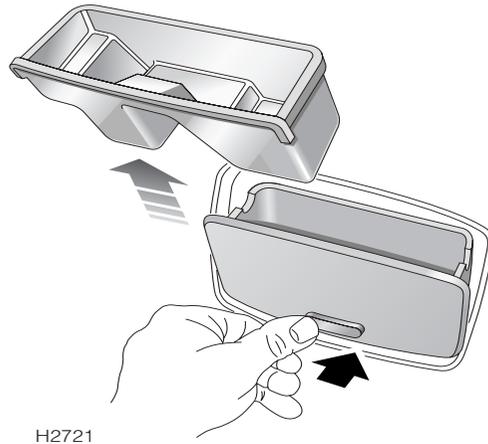
Press the leading edge of the ashtray to open.

To empty the front ashtray, press the tray eject catch (see inset) and lift the inner tray from the surround.

## Interior Equipment

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### Rear ashtray

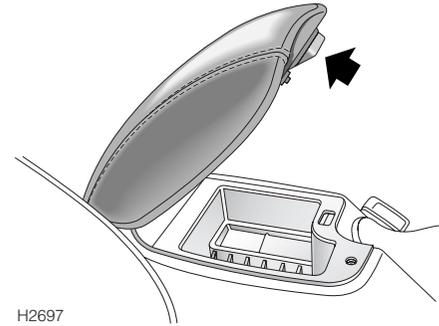


H2721

Press the button to open.

To empty the rear ashtray, hold the inner tray by the sides and carefully pull out.

### CUBBY BOX



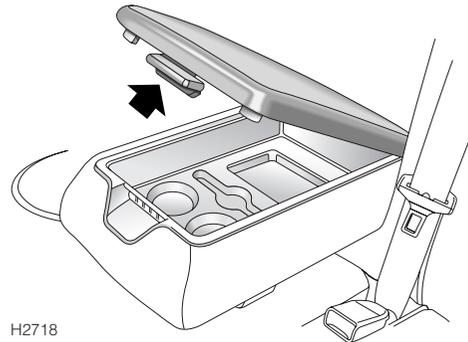
H2697

Lift the release catch (arrowed) to open the lid. The cubby box is designed to securely hold tapes or compact discs and the accessory torch available from an MG Rover dealer.

**NOTE:** *If an auxiliary power socket is fitted to the vehicle, it will be located in the cubby box.*

## Interior Equipment

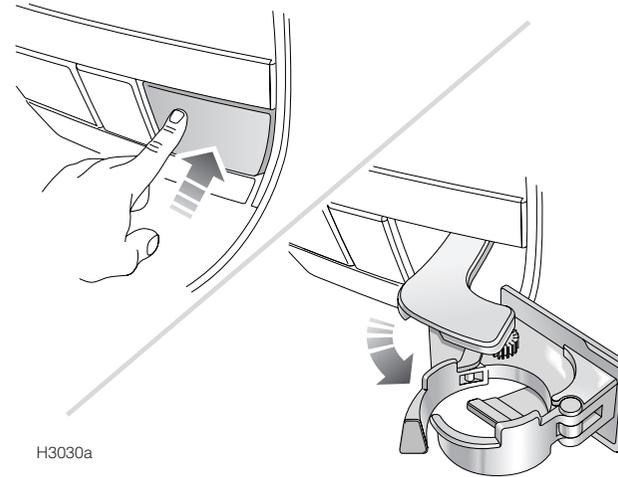
### REAR ARM REST STOWAGE\*



H2718

Lift catch (arrowed) to open. Stowage spaces are provided for a pen, memo pad and cup rests for use when the car is stationary. Space is also provided for the optional first aid kit.

### CUP HOLDERS Front cup holder\*



H3030a

Press the passenger side panel to open.

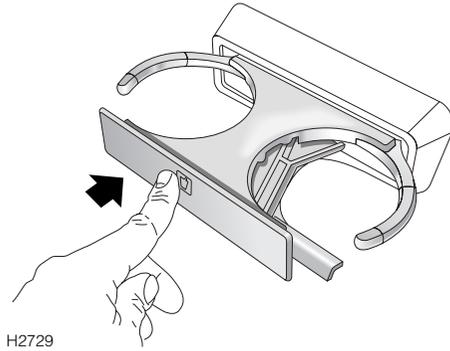
 ***The cup holder should not be used while the car is in motion.***

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## Interior Equipment

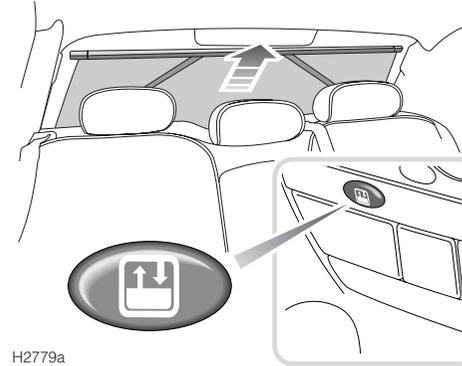
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### Rear cup holder\*



Press the front of the cup holder to open.

### REAR SUNBLIND\*



Press the switch to raise or lower the blind.

**!** *Ensure that passengers are warned to keep clear of the sunblind while it is being operated.*

## In-Car Telephones

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### IN-CAR TELEPHONES

**⚠** *Refrain from operating a telephone fitted with its own aerial inside the car (see main text).*

Your car uses a number of electronic systems designed to provide you with maximum comfort, safety and economy. These systems may be affected by the use of non-approved mobile communication equipment inside the car. However, the use of an external aerial will greatly reduce the likelihood of this occurrence.

**⚠** *Using any hand-held appliance while driving can be dangerous. Always stop the car before making or receiving a call and ensure the telephone is switched off while you are driving.*

For your safety, always note the following precautions before fitting or using an in-car telephone, or any electrical equipment:

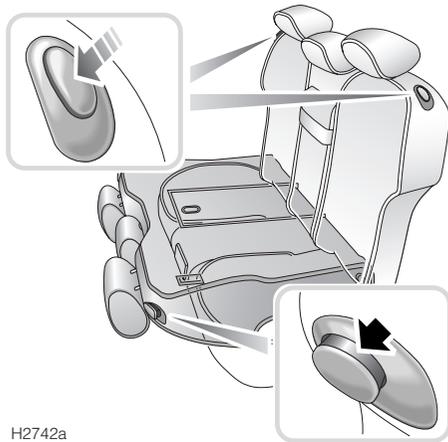
- Only use an installation kit incorporating an aerial external to the vehicle.
- Ensure that the installation is carried out by a competent installer.
- Refrain from operating a mobile phone fitted with its own aerial inside the car - the electromagnetic field radiated by the phone may interfere with the car's electrical systems.

## Load Carrying - Saloon

### FOLDING THE REAR SEATS

**!** *DO NOT carry objects on the rear shelf - they could become dangerous projectiles in the event of an accident.*

DO NOT carry unsecured equipment, tools or luggage that could move, causing personal injury in the event of an accident, or emergency manoeuvre - where possible, use the seat belts to secure luggage carried on seats.



H2742a

To increase luggage space, press either of the release catches (see top inset) and fold the seat backrest forward.

Note that only one of the backrest release catches needs to be depressed in order to fold the seat.

### 'Latch secure' indicators

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

The release catches pop up when the rear seat is folded forward, revealing a red band around the catch.

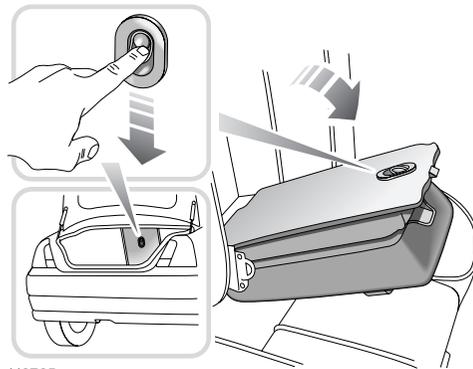
When returning the seat to the upright position, ensure that the catches drop back into the backrest and that the red band (arrowed in lower inset) is no longer visible - this confirms that the backrest is secure.

**NOTE:** *When returning the seat to the upright position, ensure that the seat belts are not trapped.*

## Load Carrying - Saloon

### CARRYING LONG LOADS

**!** *Ensure that all long loads which project into the passenger compartment are securely restrained.*



A fold down hatch is fitted in the middle of the rear seat. This enables longer loads to be carried at the same time as two rear passengers.

To open the hatch, press down the catch (see inset) and fold the hatch cover forwards onto the rear seat.

### Carrying heavy loads

Luggage carried in the loadspace will shift position in the event of an accident or sudden stop. On saloon models, always ensure heavy items are placed as low and as far forward as possible, preferably pushed against the rear seat squab.

### ROOF RACKS

To ensure absolute safety, only fit accessories that have been designed and tested for your car. Your MG Rover dealer will provide details of approved tow bars and roof racks.

The total load must NEVER exceed that given in 'TOWING WEIGHTS', page 269, and must include the weight of the roof rack within the load.

**!** *A loaded roof rack can reduce the stability of the car, particularly when cornering and encountering cross winds. All loads should be evenly distributed and secured within the periphery of the roof rack.*

## Load Carrying - Tourer

### FOLDING THE REAR SEATS

The rear seat backrest is divided into two parts, either, or both, of which can be folded forward onto the seat cushion to increase the loadspace area.



HB0023a

To release the backrest, press one or both of the release catches (as required) shown in the illustration.

### 'Latch secure' indicators

**!** *Ensure that the rear seat backrests are securely latched in the upright position when the seat is in use and when loads are carried in the loadspace behind.*

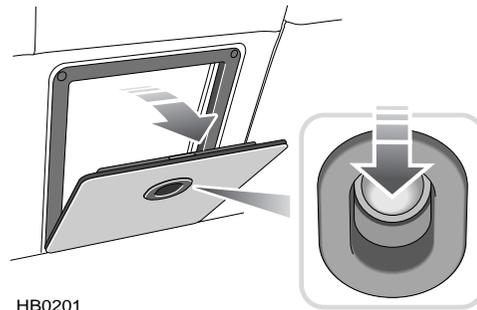
After returning either (or both) parts of the backrest to the upright position, check to ensure that the RED band on each release catch (arrowed in inset) is no longer visible - this will confirm that the latches retaining the backrest have engaged and that the backrest is secure.

When returning the backrest to the upright position, ensure that the seat belts are not trapped.

**NOTE:** *The centre seat belt is prevented from operating if the backrest latch is not fully engaged.*

## Load Carrying - Tourer

### LOAD CARRYING Carrying long loads



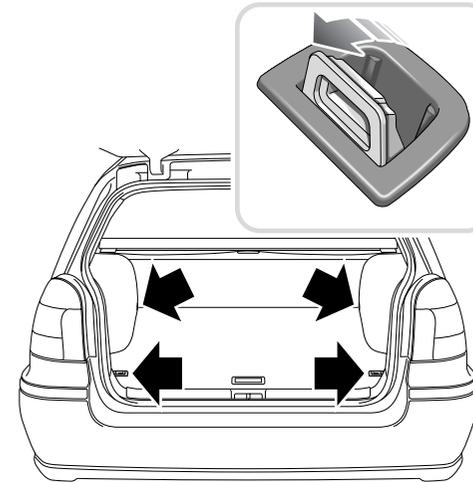
HB0201

On some models, a fold down hatch is fitted into the rear seat. This enables longer loads to be carried at the same time as one or two rear passengers.

To open the hatch, fold the centre armrest down then, from inside the loadspace, press down the catch (see inset) and fold the hatch cover back into the loadspace area.

**⚠** *Ensure that all long loads, which project into the passenger compartment, are securely restrained.*

### Lashing rings



HB0021

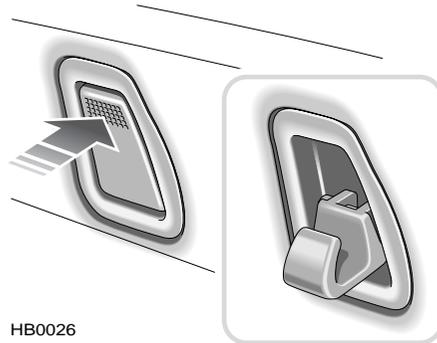
Luggage carried in the loadspace will shift position in the event of an accident or sudden stop. Four lashing rings are set into recesses in the loadspace floor and wheel arches, where shown. Raise the rings from the floor (see inset) and secure all loads before driving.

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

1

## Load Carrying - Tourer

### Carrying hooks\*

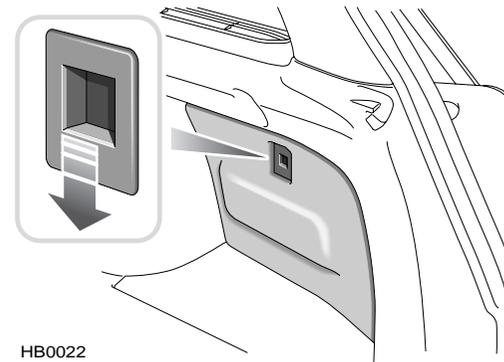


On some cars, two retractable carrying hooks are set into the side trim panels in the loadspace. Use these to secure bags or loose items, which might, otherwise, move around the loadspace in response to the car's momentum.

### Restraint strap\*

Some cars are fitted with a fabric strap on the left side of the loadspace. Use the strap to secure loose items such as a first aid kit (available as an accessory from MG Rover dealers), or to restrain the movement of fluid containers.

### Side storage compartments\*

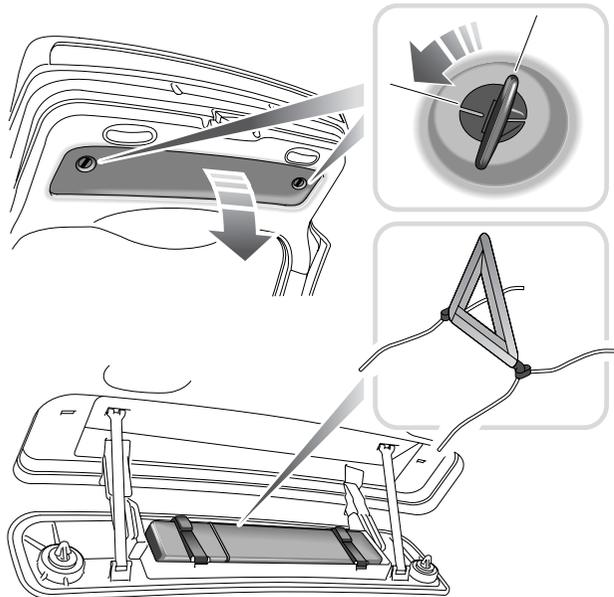


Some cars are equipped with enclosed storage compartments, one on each side of the loadspace. To remove a storage compartment cover, pull the catch down (see inset). When replacing, ensure the catch is pushed up fully to secure the cover in position.

**NOTE:** On cars equipped with a navigation system, the right hand storage compartment is used to house the navigation computer. Also, on some cars, both the left and right hand compartments are used to house the audio system amplifier and woofer.

## Load Carrying - Tourer

### Tailgate storage

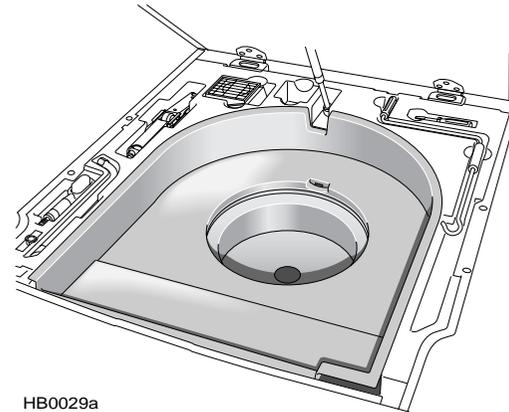


HB0030

A shallow storage compartment is set into the tailgate trim. This is principally intended to house the emergency warning triangle, available as an accessory from MG Rover dealers.

Twist the two turnbuckles (shown in upper inset) a quarter turn anti-clockwise to release the cover.

### Underfloor storage\*



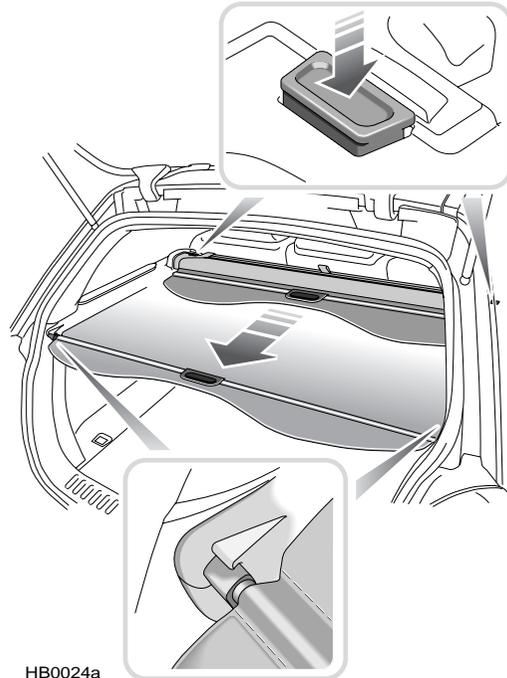
HB0029a

Raise the hinged portion of the loadspace floor (see '*SPARE WHEEL & TOOLS (Tourer)\**', page 224) to reveal the shallow underfloor storage tray. A deeper, circular storage compartment is set into the centre of the tray.

1

## Load Carrying - Tourer

### LOADSPACE COVER



HB0024a

The loadspace cover is a spring-loaded roller blind, which can be pulled from its cassette and secured to hooks at the rear of the loadspace (see lower inset).

To release the loadspace cover cassette from the car, depress the two catches (shown in upper inset). When refitting, push the cassette firmly into position and ensure the catches are fully engaged.

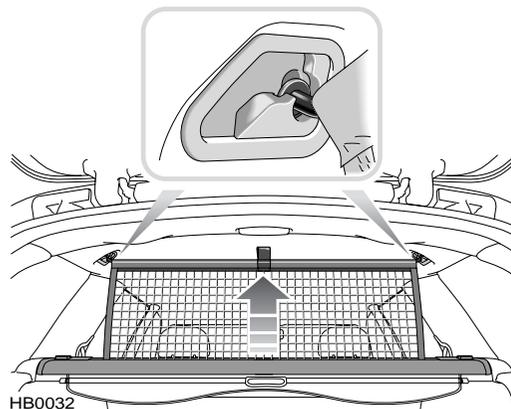
**⚠ DO NOT carry luggage on top of the loadspace cover. Loose items could become dangerous projectiles in the event of an accident or emergency manoeuvre. For the same reason, it is not wise to store the loadspace cover cassette loose in the car.**

## Load Carrying - Tourer

### STOWAGE SAFETY NET

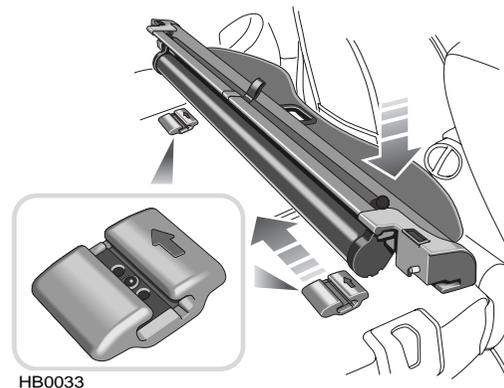
### Using the safety net with the rear seats folded

1



On some cars, the loadspace cover cassette also incorporates a safety net, designed to prevent loose loads and items of luggage from encroaching into the passenger compartment in the event of an accident or emergency manoeuvre.

To use the net, pull the central tab towards the roof and hook both sides of the net into the slots set into the roof lining above, and on both sides of, the rear seat.

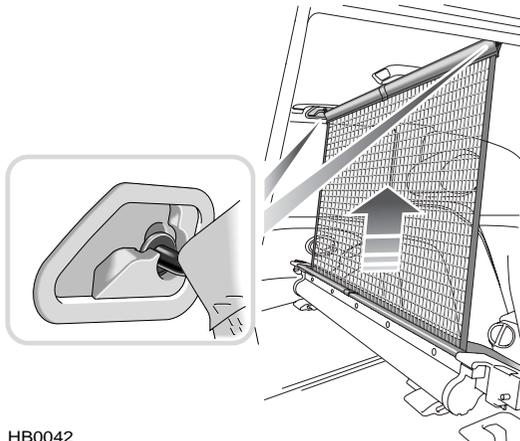


1. Detach the safety net/loadspace cover cassette from its normal position behind the rear seats.
2. Fold the rear seat backrests forward.
3. Turn the cassette round (through 180°) so that the loadspace cover faces towards the FRONT of the car.
4. Align the base of the cassette with the two mounting blocks on the seat backs (one of these is shown in the inset below), noting that the two flat plates on the underside of the cassette are to engage with the two mounting blocks.

**NOTE:** There is also a small peg on the underside of the left plate, which runs in the small channel in the left mounting block, to prevent the cassette from being fitted the wrong way round.

## Load Carrying - Tourer

- From the right side of the car, feed the base of the cassette into the mounting blocks (note the direction arrows moulded into the mounting blocks). The left hand mounting block will engage first; once both blocks have engaged, push the cassette firmly towards the left side of the car.



HB0042

- Pull the central tab towards the roof and hook both sides of the net into the slots set into the roof lining above the cassette (these are integral with the rear seat passenger grab handles).

### ROOF RACKS

To ensure absolute safety, only fit accessories that have been designed and tested for your car. Your MG Rover dealer will provide details of approved tow bars and roof racks.

The total load must NEVER exceed that given in 'TOWING WEIGHTS', page 269, and must include the weight of the roof rack within the load.

**!** *A loaded roof rack can reduce the stability of the car, particularly when cornering and encountering cross winds. All loads should be evenly distributed and secured within the periphery of the roof rack.*

# Towing

## TOW BARS

**!** Only fit towing accessories that have been approved by MG Rover, otherwise damage to the car may result. For example, an unrecommended tow bar electrical connection could damage the main lighting switch.

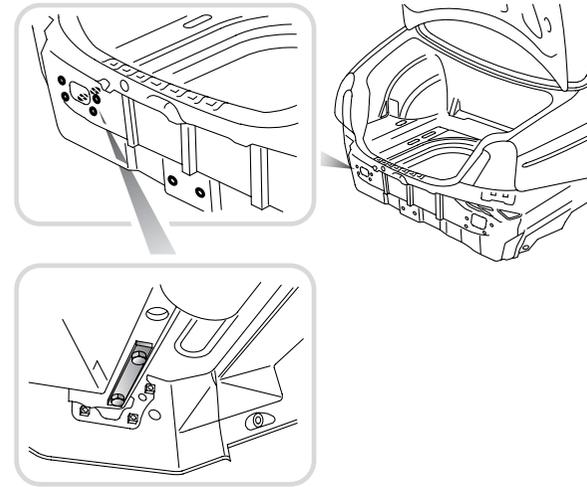
To ensure absolute safety, only fit accessories that have been designed and tested for your car. Your MG Rover dealer will provide details of approved tow bars.

The permissible maximum towing weight, the maximum rear axle weight and towing hitch downward load and the maximum towing hitch overhang, are given in 'Technical data'. In the interest of safety, these must not be exceeded.

### Tow bar mounting points

**!** The tow bar is attached to the vehicle body NOT the chassis and fitment requires specialised skills and knowledge. It is therefore essential that only a tow bar approved for use with your car is fitted and that it is fitted by qualified personnel.

The following information locating the mounting points is for reference only and does not include details of the tow bar installation process. The mounting points shown are for the installation of an approved tow bar - no other means of attaching a tow bar should be used.



H3001

Saloon models

The illustration shows the bumper assembly removed.

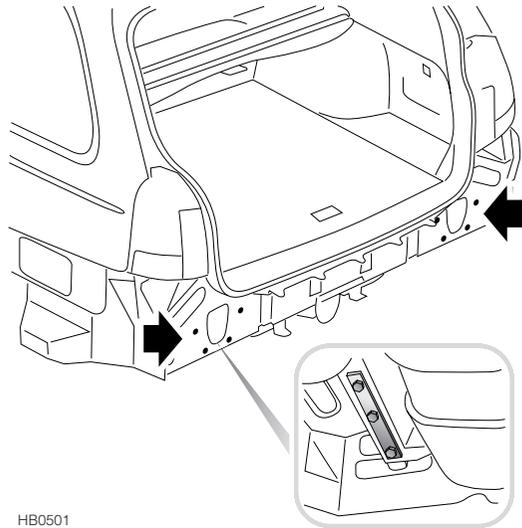
- The upper inset shows the centre and left-side mounting points - the right-side mounting points are symmetrically opposite to those on the left side.
- The lower inset shows the additional left-side mounting points on the underside of the car (underside mounting points on the right-side are similar).

If a towing hitch with a detachable tow bar is fitted, always detach the tow bar when the car is not being used for towing.

1

## Towing

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HB0501

*Tower models*

The illustration shows the bumper assembly removed.

- The main picture shows left and right-side mounting points.
- The inset shows the additional mounting points on the underside of the car (underside mounting points on the right-side are similar).

If a towing hitch with a detachable tow bar is fitted, always detach the tow bar when the car is not being used for towing.

# Towing

## TOWING A TRAILER

**!** *DO NOT use the rear lashing point for towing purposes - serious damage to the car may result.*

**NOTE:** *Towing regulations vary from country to country. It is very important to ensure that national regulations governing towing weights and speed limits are observed (refer to the relevant national motoring organisation for information). The maximum permissible towed weights quoted in 'TOWING WEIGHTS', page 269, refer to the car's design limitations and NOT to any specific territorial restriction.*



H2712b

It is the driver's responsibility to ensure that car and trailer are loaded and balanced so that the combination is stable when in motion. When preparing your car for towing, pay careful attention to the trailer manufacturer's recommendations and also follow the guidelines below:

- Ensure that the car tyre pressures are correct for towing and that the trailer tyre pressures are as recommended by the trailer manufacturer.
- Check the operation of trailer brakes and lights.

- For maximum stability, ensure that trailer loads are properly secured and unable to shift position during transit. Also, position loads so that most of the weight is placed close to the floor and, where possible, immediately above or close to the trailer axle(s).
- After loading the trailer, check that the weight on the tow hitch point (this is also called the draw-bar loading weight, or nose weight), does not exceed the figure quoted in 'TOWING WEIGHTS', page 269.
- Where the load weight can be divided between trailer and tow vehicle, loading more weight into the vehicle will generally improve the stability of the combination.
- The car's maximum rear axle weight and maximum gross train weight (see 'WEIGHTS', page 265) must not be exceeded, when the trailer is attached and any passengers or luggage are in place inside the car. For high trailer weights, this may require passengers and/or luggage to be removed from the car.

**!** *Ensure that the maximum vehicle laden weight and maximum rear axle weight are not exceeded.*



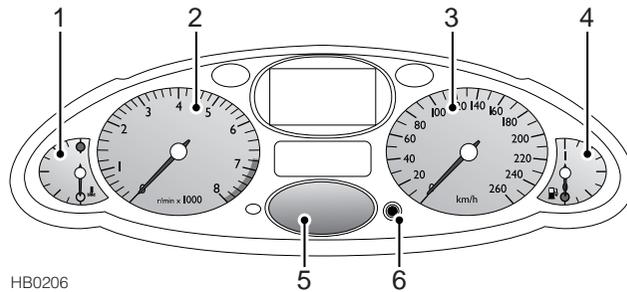
## ***Driving Controls***

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  - 119** Parking Aid*
-

## Instruments

### INSTRUMENT PANEL



HB0206

*Petrol model illustrated*

#### 1. Temperature gauge

This gauge indicates the temperature of the engine coolant. As the engine warms up, the pointer will rise to the mid-point of the gauge, where it should remain while the engine is operating at its normal temperature.

If the pointer reaches the RED mark (red indicator light in the gauge illuminates), the coolant is too hot and severe engine damage could result; stop the car as soon as safety permits and seek qualified assistance.

#### 2. Tachometer

Indicates engine speed in revolutions per minute (x 1000). To protect the engine from damage, NEVER allow the tachometer pointer to remain in the RED sector of the gauge for prolonged periods.

#### 3. Speedometer

Indicates road speed in kilometres per hour.

#### 4. Fuel gauge

The pointer falls to zero when the starter switch is turned off, but quickly rises to show the level of fuel in the tank when the switch is turned to the second position.

An indicator light in the fuel gauge will illuminate when the fuel level is low (approximately 9 litres remaining) - if the light illuminates, refuel at the earliest opportunity.

**⚠** *Never allow the car to run out of fuel - the resultant misfire could damage the catalytic converter.*

#### 5. Total distance and trip recorder (odometer)

The digital display indicates the total distance travelled by the car and the trip recorder distance for individual journeys.

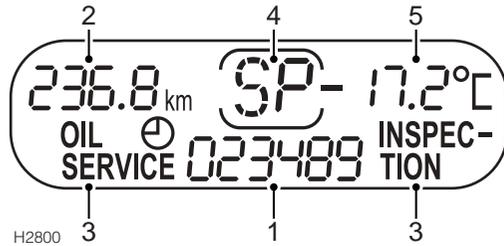
#### 6. Trip recorder reset button

Press to return the trip recorder to zero.

With the starter key removed or turned to the off position, press the trip recorder reset button to check the total distance travelled and the fuel level. Both the trip recorder and the fuel gauge return to the 'off' state after 30 seconds.

## Instruments

### TRIP RECORDER



The instrument panel features an LCD display located at the bottom centre which provides information about the following functions:

#### Digital odometer (1) and trip recorder (2)

When the engine is switched off (starter switch in the off position), the display remains in the stand-by mode. Pressing the trip recorder reset button will cause the total distance travelled by the car and the last recorded trip distance to be displayed for approximately 30 seconds. The fuel gauge will also show the current level in the fuel tank.

When the starter switch is turned to the first position, the display illuminates to show the total distance travelled, the last recorded trip distance and the external temperature.

When the starter switch is turned to the second position, the trip recorder can be reset for a new journey by briefly pressing the trip recorder button.

#### Service interval display (3)

This shows the distance remaining before the next oil service or inspection is due. When the starter switch is initially turned to the second position, the service type and the distance remaining until the next service is due are displayed for approximately four seconds, after which the display reverts to show the odometer, trip recorder and external temperature readings.

**NOTE:** After the completion of each service, the dealer will reset the distance display, to commence the countdown to the next service.

Three types of service information can be notified to the driver:

1. Distance until next oil service is due.
2. Distance until next inspection is due.
3. Brake fluid change is due (clock symbol).

For detailed information about the service interval display, refer to 'ROUTINE SERVICING', page 184.

#### Gear display (automatic transmission only) (4)

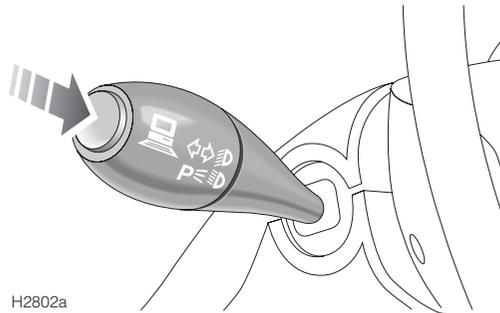
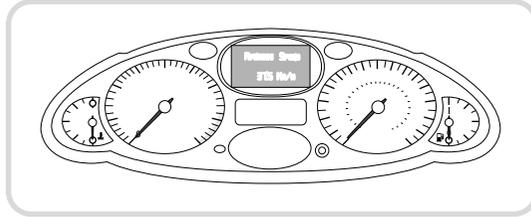
This shows the current gear lever position ('P', 'R', 'N', 'D', '4', '3' or '2') and the transmission mode. Sport mode is indicated by an 'S' and snow mode is indicated by a snowflake symbol. An automatic gearbox fault is indicated by the letters 'EP' (Emergency Programme) appearing.

#### External temperature display (5)

This is displayed when the starter switch is in the first or second position (except during the initial four second warm-up period). The external temperature mode can be switched between °C or °F by waiting until the car is stationary and then pressing and holding the trip recorder reset button while turning the starter switch off at the same time.

## Trip Computer

### TRIP COMPUTER - FUNCTION SELECTION\*



The trip computer utilises the message centre on the highline instrument pack only and provides valuable information to assist the driver to calculate fuel stops, journey times and distances.

When the starter switch is turned on, the different trip computer functions can be selected by pressing the button on the end of the left-hand column stalk. Repeated pressing of the button causes the display to scroll through the following possible selections.

- Trip distance 2
- Range (distance to tank empty)
- Average consumption (fuel)
- Average speed
- Limit (overspeed)

By pressing and holding the button for longer than 2 seconds, the selected display can be reset (not 'range').

When a trip computer feature is selected, it will be displayed until another trip computer feature is selected, or until the trip computer is switched off. However, note that the message centre is also used to display warning messages and these will automatically override the trip computer display (see *'Warning messages'*, page 77).

#### **Trip distance 2**

The trip computer has a unique trip recorder facility ('trip recorder 2'), which is separate from the standard trip recorder. The two are not linked.

## Trip Computer

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### **Range (distance to tank empty)**

This function is automatic and displays the remaining distance you can travel before the fuel gauge reads empty. The distance will change when the car is refuelled.

The 'range' calculation is based on a combination of current driving style, and the fuel consumption recorded by the computer during the previous few minutes.

### **Average consumption (fuel)**

This function is automatic and indicates the average fuel consumption since the last time the trip computer was reset (average consumption is calculated by dividing the distance travelled by the amount of fuel used). The consumption value can be reset at any time to begin calculating new consumption values for a particular journey or driving conditions.

### **Average speed**

This function is automatic and indicates the average speed since the last time it was reset (average speed is calculated by dividing the actual distance travelled by the accumulated time in which the starter switch has been turned on).

The average speed display can be reset at any time to begin calculating a new average speed value for a particular journey or driving condition.

### **Limit (overspeed)\***

The overspeed warning function is an aid to keeping within speed limits set by the driver. Press and hold the trip computer button to increase the set speed by increments of 5 km/h. Whenever the set speed is exceeded an audible warning will sound and the set speed will be displayed in the message centre.

Once a speed has been set, the warning can be turned on or off by BRIEFLY pressing the trip reset button (this will not reset the trip meter).

### **Warning messages**

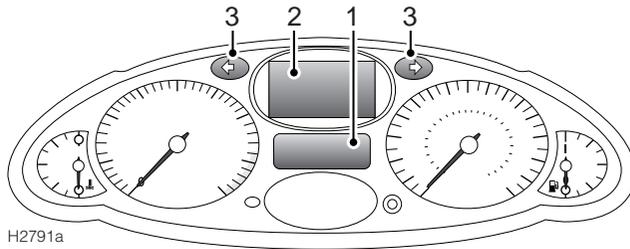
A warning message will override the trip computer display. If a warning message is received while the trip computer is in use, the trip feature will be replaced by the warning message. Pressing the trip computer button (on the end of the left-hand column stalk) will return the display to the trip computer feature that was active before the warning message was received.

If the fault responsible for the warning message continues to exist, the trip computer will time out every 20 seconds and the warning message will be displayed again.

2

## Warning Lights

### WARNING LIGHT POSITION AND OPERATION



The standard instrument panel features two main clusters of warning lights, one situated in the centre of the pack (1) and the other located at the upper centre of the instrument pack (2).

On cars featuring a message centre, the message centre display replaces the upper cluster of warning lights (2) and is used to display relevant warnings, trip computer functions\* and navigation system functions\*.

The location of all other warning lights, including directional indicators (3) and gauge positioned warning lights (low fuel level and high engine coolant temperature), are the same for both the standard instrument panel and the panel with message centre included.

### Direction indicators - GREEN

 The left and right direction indicators (3) are represented by directional arrows located at the top of the instrument panel. The warning lights flash in time with the left or right direction indicator lights whenever they are operating.

If the hazard warning lights are operated, both warning lights will flash together.

If either warning light flashes very rapidly, this means that one of the direction indicator lights is not operating.

**NOTE:** Only failure of the front or rear directional indicator lights will cause the warning lights to flash more rapidly than for normal operation. Failure of a side repeater light will have no effect on the warning light flash frequency.

## Warning Lights

### CENTRE CLUSTER WARNING LIGHTS



H2759

#### Low oil pressure - RED



Illuminates as a bulb check when the starter switch is turned to the second position and extinguishes when the engine is started. If the light remains on, or illuminates continuously when 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.

#### ABS - YELLOW



Illuminates for approximately 2 seconds as a bulb and system check when the starter switch is turned to the second position. If the light does not extinguish, then a fault has occurred with the ABS system and you should consult your dealer at the earliest opportunity.

If an ABS fault occurs while driving, the ABS warning light will be illuminated and ABS operation will be suspended, but normal braking will still be available. Consult your dealer at the earliest opportunity.

#### Main beam - BLUE



Illuminates when the headlights are switched to main beam.

#### Check engine - YELLOW (petrol models only)



This warning light is used to indicate faults detected by the engine management system. The indicator illuminates as a system check when the starter switch is turned to the second position and should extinguish when the engine is started.

If an engine operation or emissions problem occurs while the car is being driven, the indicator will illuminate.

#### *If the warning light illuminates and the car drives normally:*

Contact your dealer to arrange a service appointment at your earliest convenience - YOU MAY STILL DRIVE THE CAR.

#### *If the warning light flashes and/or the car does not drive normally:*

Avoid high speeds and seek immediate assistance from your dealer.

#### Cruise Control - YELLOW



Illuminates when cruise control is active and extinguishes when cruise control is cancelled.

#### Airbag SRS - RED



The light illuminates when the starter switch is turned to the second position and extinguishes after about four seconds. If the light illuminates at any other time or fails to extinguish after start up, an airbag restraint system fault has been detected, seek qualified assistance urgently.

2

## Warning Lights

### Seat belt warning - RED



The light illuminates for approximately five seconds when the engine is started as a reminder to the driver to ensure that all occupied seat belts are securely fastened.

**NOTE:** In some markets the light will fail to extinguish until the seat belts are fastened.

### Handbrake & brake system - RED



This warning light will illuminate for approximately 3 seconds as a bulb check whenever the starter switch is turned to the second position. Subsequent illumination may indicate a fault with the braking system such as brake fluid loss, handbrake on or electronic brake force distribution failure.

For handbrake operation, the light illuminates when the handbrake is applied and extinguishes when it is fully released. If the warning light remains illuminated five seconds after the handbrake has been released, a fault with the braking system is indicated - check the brake fluid level (see 'BRAKE FLUID', page 196). If the light continues to illuminate, stop the car as soon as safety permits and seek qualified assistance urgently.

### Battery charging - RED



The light illuminates as a bulb check when the starter switch is turned to the second position and extinguishes as soon as the engine is running. If the light remains on, or illuminates when driving, a fault with the battery charging system is indicated. Seek qualified assistance urgently.

### UPPER CENTRE CLUSTER WARNING LIGHTS - (standard instrument panel only)



H3253

### Front fog lights - GREEN\*



The front fog warning light is illuminated whenever the front fog lights are switched on.

### Door open - RED



Illuminates when any of the doors (including the boot or tailgate and bonnet) are not fully closed. DO NOT drive the vehicle with the light illuminated.

### Brake pad wear - YELLOW



This warning light is illuminated to alert the driver that the brake pads are worn and need to be serviced.

### Low engine coolant - RED (diesel models only)



This warning light illuminates for 20 seconds if the engine coolant drops below a pre-determined level. If this occurs, top-up the coolant at the earliest opportunity. If the light illuminates again within a short period of time, seek qualified assistance.

## Warning Lights

### Trailer light failure - YELLOW\*



This warning light only functions when a trailer has been electrically connected to the car's exterior lighting circuit using the dedicated socket. The warning light will illuminate if a bulb failure has been detected on the trailer.

### Bulb failure - YELLOW



This warning light illuminates if a bulb failure is detected on an exterior light whenever the relevant circuit has been switched on (e.g. brake lights, headlights, sidelights etc.). Check which light is not operating and replace the bulb.

Note that failure of the following lights will not be detected:

- High mounted stop light
- Front fog lights\*
- Reversing lights
- Side repeater lights

### Glow plugs - YELLOW (diesel models only)



Illuminates when the starter switch is turned to the second position. When the engine is cold, wait for the light to extinguish before starting.

### Engine malfunction - YELLOW (diesel models only)



Illuminates as a bulb check when the starter switch is turned to the second position. Also illuminates as a warning while driving if an engine malfunction is detected. If this occurs, the car can still be driven, but engine power will be reduced. Drive with extra care (e.g. when overtaking). Seek qualified assistance as soon as possible.

### Traction control - YELLOW\*



On cars equipped with the standard instrument panel (no message centre), the light flashes while the traction control system is operating (cars equipped with a message centre, feature a traction control message, which appears for a minimum of 4 seconds).

The light also illuminates for approximately 3 seconds as a bulb check when the starter switch is turned on and illuminates continuously whenever traction control is manually disabled. If there is a fault with the system, the warning light will remain illuminated even when the car is stationary. In this case you should seek qualified assistance at the earliest opportunity.

### Rear fog guard light - YELLOW



Illuminates when the rear fog guard lights are switched on.

### Low washer fluid - YELLOW\*



Illuminates when the washer fluid level in the washer reservoir is low. Top up washer reservoir.

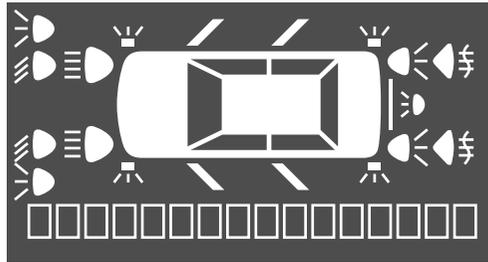
### Overspeed - RED (market option)



Illuminates when the car's road speed exceeds 120 km/h.

## Message Centre

### MESSAGE CENTRE DISPLAY\*



On instrument packs that incorporate a message centre, information concerning various aspects of the car's status is displayed by a combination of icons and words in the display at the upper centre of the instrument panel.

#### Bonnet open - RED



A large vehicle icon showing the bonnet open with the words 'BONNET OPEN' is displayed for approximately 4 seconds. If the bonnet has not been closed within the timeout period, the display is replaced by a small icon showing the bonnet and boot in the open condition. Close the bonnet securely before attempting to drive the car.

#### Boot or tailgate open - RED



A large vehicle icon showing the boot open with the words 'BOOT OPEN' is displayed for approximately 4 seconds. If the boot has not been closed within the timeout period, the display is replaced by a small icon showing the bonnet and boot in the open condition. Close the boot securely before attempting to drive the car.

#### Bonnet/boot or tailgate open - RED



Small icon used to warn that the bonnet or boot is still open after the main warning display has timed out. Close the bonnet/boot securely before attempting to drive the car.

#### Door open - RED



A large vehicle icon showing the relevant door opened with the words 'DOOR OPEN' is displayed. If more than one door is open during the status check, this will be shown on the display. If the display extinguishes (timed-out) before the open door is closed, the display is replaced by a small icon showing all four doors in the open condition. Close any open doors before attempting to drive the car.

#### Door open - RED



Small icon used to warn that a door or doors are still open after the main warning display has timed-out. Close all doors securely before attempting to drive the car.

#### Dipped beam fail - YELLOW



A large vehicle icon with a dipped headlight with the message 'DIPPED BEAM FAIL' is displayed. The icon shows a dipped beam headlight on the left or right hand side of the car in accordance with the side suffering the bulb failure. The message will be displayed for approximately 4 seconds after selection of dipped beam headlights. Replace the failed bulb.

## Message Centre

### Main beam fail - YELLOW



A large vehicle icon with a main headlight with the message 'MAIN BEAM FAIL' is displayed. The icon shows a main beam headlight on the left or right hand side of the car in accordance with the side suffering the bulb failure. The message will be displayed for approximately 4 seconds after selection of main beam headlights. Replace the failed bulb.

### Sidelight fail - YELLOW



A large vehicle icon with an active sidelight with the message 'SIDE LIGHT FAIL' is displayed. The icon shows a sidelight on the same side of the car as the bulb failure. The message will be displayed for approximately 4 seconds after selection of the lighting circuit. Replace the failed bulb.

### Tail light fail - YELLOW



A large vehicle icon with an active tail light with the message 'TAIL LIGHT FAIL' is displayed. The icon shows a tail light on the same side of the car as the bulb failure. The message will be displayed for approximately 4 seconds after selection of the lighting circuit. Replace the failed bulb.

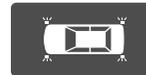
### Brake light fail - YELLOW



A large vehicle icon with an active brake light with the message 'BRAKE LIGHT FAIL' is displayed. The icon shows a brake light on the same side of the car as the bulb failure. The message will be displayed for 4 seconds approx. after pressing the brake pedal and the bulb failure being detected. Replace the failed bulb.

*NOTE: Failure of the high mounted stop lamp bulb will not be detected or displayed on the message centre.*

### Indicator fail - YELLOW



A large vehicle icon with an active direction indicator with the message 'INDICATOR FAIL' is displayed. The icon shows the right or left hand side location of the direction indicator which has failed (but will not show whether the indicator is at the front or rear). The message will be displayed for approximately 4 seconds after selecting the direction indicators and the bulb failure being detected. Replace the failed bulb.

### Fog light fail - YELLOW



A large vehicle icon with an active fog light with the message 'FOG LIGHT FAIL' is displayed. The icon shows the relevant location of the fog light which has failed (front or rear and left or right side). The message will be displayed for 4 seconds after operating the fog lights. Replace the failed bulb.

2

## Message Centre

### Number plate light fail - YELLOW



A large vehicle icon with an active number plate light with the message 'NO. PLATE LIGHT' is displayed. The message will be displayed for approximately 4 seconds after turning on the side or headlights. Replace the failed bulb.

**NOTE:** A number plate light failure is only detected if both bulbs have failed.

### Bulb failure - YELLOW



Illuminates when the lights are switched on and a bulb failure is detected. The message 'BULB FAILURE' is also displayed. After approximately 4 seconds the message changes to a small icon.

**NOTE:** A summary of bulb failures is shown when the starter switch is turned off.

### Lights on - YELLOW



The icon is displayed with the message 'LIGHTS ON'. In addition, an audible warning chimes if the door is opened with the lights still switched on. The message and icon are displayed for 10 seconds before reverting to an icon without text. The icon will be switched off after 1 minute if no further action is taken.

### Rear fog guard lights on - YELLOW



The icon is displayed with the message 'REAR FOG ON' when the rear fog guard lights have been selected. The message is first displayed as a large icon for 4 seconds, after which it reduces to a small icon while the lights remain on.

### Low fuel level - YELLOW



This icon is displayed in addition to illumination of the low fuel warning light in the fuel gauge when fuel in the fuel tank is down to the reserve level. The icon is displayed with the message 'LOW FUEL' and illuminates for 4 seconds. Refuel at the earliest opportunity.

### High engine coolant temperature - RED



This message is displayed in addition to illumination of the high coolant temperature warning light in the temperature gauge whenever the engine coolant rises to its maximum operating temperature. The icon is displayed with the message 'ENGINE OVERHEAT'.

### Low engine coolant - RED (diesel models only)



This icon is displayed with the message 'LOW COOLANT' for 20 seconds if the engine coolant drops below a pre-determined level. If this occurs, top-up the coolant at the earliest opportunity. If the message appears again within a short period of time, seek qualified assistance.

### ABS System failure - YELLOW



This message is displayed together with the warning light in the centre cluster of the instrument panel when an ABS system fault has been detected. The icon is displayed with the message 'ABS FAULT'.

If an ABS fault occurs while driving, the ABS warning light illuminates and ABS operation will be suspended. However normal braking will still be available. Consult your dealer at the earliest opportunity.

## Message Centre

### No battery charge warning - RED



This message is displayed (together with the dedicated warning light in the centre cluster of the instrument panel) when a battery charging problem has been detected. The icon is displayed with the message 'CHARGE FAULT'. The message is only displayed when the engine has been running at over 400 rev/min for more than 5 seconds, and is displayed for as long as the condition exists.

### Low oil pressure - RED



This message is displayed (together with the dedicated warning light in the centre cluster of the instrument panel) when engine oil pressure is dangerously low and liable to result in engine damage. The icon is displayed with the message 'LOW OIL PRESSURE'. The message is only displayed when the engine has been running at greater than 400 rev/min for more than 5 seconds, and is displayed for as long as the condition exists. Stop the car as soon as safety permits and SWITCH OFF THE ENGINE IMMEDIATELY. Seek qualified assistance before driving.

### Seat belt warning - RED



This message is displayed (together with the dedicated warning light in the centre cluster of the instrument panel) when the engine is started, as a reminder to the driver to ensure that all occupied seat belts are securely fastened. The icon is displayed with the message 'SEAT BELT PLEASE'.

### Brake pad low - YELLOW



This icon is displayed with the message 'BRAKE PADS LOW' and alerts the driver that the brake pads are worn and need to be serviced. The message and large icon are displayed for 4 seconds, after which time a small icon is displayed for as long as the condition exists. Have the brake pads checked and/or replaced.

### Brake fluid/Electronic brake distribution failure - RED



This message is displayed (together with the dedicated warning light in the centre cluster of the instrument panel) to alert the driver of a brake system failure. The icon is displayed continuously while a fault exists, with the message 'BRAKE FAULT' appearing for 4 seconds. Check the brake fluid level (see 'BRAKE FLUID', page 196). If the warning continues to illuminate, seek qualified assistance urgently.

### Airbag SRS malfunction - RED



This message is displayed (together with the dedicated warning light in the centre cluster of the instrument panel) to alert the driver of a SRS system failure. The icon appears with the message 'AIRBAG FAULT' for 4 seconds, but is not displayed during the initial start-up procedure. If this warning appears, the airbag/SRS system will not be fully operational, seek qualified assistance urgently.

## Message Centre

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### Engine malfunction - YELLOW (diesel models only)



This warning icon illuminates with the message 'CHECK ENGINE' if an engine malfunction is detected while driving. If this occurs, the car can still be driven, but engine power will be reduced. Drive with extra care (when overtaking, for example) and seek qualified assistance as soon as possible.

### Check engine - YELLOW (petrol models only)



This warning icon is used to indicate faults detected by the engine management system. If an engine operation or emissions problem occurs while the car is being driven, the icon is displayed with the message 'CHECK ENGINE'.

*If 'Check engine' illuminates, and the car drives normally:* Contact your dealer to arrange a service appointment at your earliest convenience - YOU MAY STILL DRIVE THE CAR.

*If 'Check engine' illuminates and the warning light also flashes (see 'Warning lights') and/or the car does not drive normally:* Avoid high speeds and seek immediate assistance from your dealer.

### Traction control operation/malfunction - YELLOW\*



The warning illuminates for approximately 4 seconds while traction control is operating and illuminates continuously while traction control is manually disabled. The icon is displayed with the message 'TRACTION CONTROL'. If the warning stays on, a fault with the system is indicated; seek qualified assistance.

### Trailer light fail - YELLOW\*



This warning message only functions when a trailer has been electrically connected to the car's exterior light circuit using the dedicated socket. The warning message will be displayed if a bulb failure has been detected on the trailer. The icon is displayed with the message 'BULB FAILURE'.

### Low washer fluid level - YELLOW



Displayed when the fluid level in the washer reservoir is low. The icon is displayed with the message 'LOW WASHER FLUID' for 4 seconds when it is initially activated, and also at start up and shut down. Top up washer reservoir.

### Glow plug operation (Diesel only) - YELLOW



Displayed at start up when the starter switch is in the second position until the glow plug temperature has been reached. The icon is displayed with the message 'GLOW PLUG ON'. Do not start the engine until the warning message has been extinguished.

### Fuel cut-off (inertia) switch - YELLOW



Displayed if the inertia switch has tripped. The icon is displayed with the message 'INERTIA SWITCH'. The car will not start until the inertia switch has been reset (see 'FUEL CUT-OFF SWITCH', page 103).

## Message Centre

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### Handset (key) battery low - RED



Displayed if the instrument pack detects that the handset battery is low. The icon is displayed with the message 'KEY BATTERY LOW'. Replace the handset battery at the earliest opportunity (see '*REMOTE HANDSET BATTERY*', page 16).

### Low battery mode - YELLOW



Displayed when the battery voltage is less than 10V and extinguishes when the battery voltage rises above 11V. The display is extinguished during engine cranking and for a further five seconds after cranking. The icon is displayed with the message 'LOW BATTERY'. If the message remains illuminated recharge battery or seek qualified assistance.

### Engine disabled - YELLOW

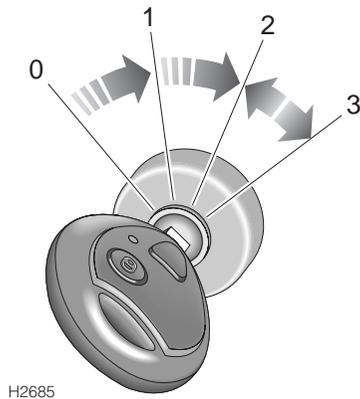


Displayed if the engine has been disabled (immobilised - see '*ENGINE IMMOBILISATION*', page 7). The icon is displayed with the message 'ENGINE DISABLED'.

## Starting & Driving

### STARTER SWITCH

**!** *DO NOT remove the key or turn the starter switch off while the car is in motion; this will cause the steering lock to engage, making it impossible to steer the car.*



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

#### **Position 0**

- Key can be removed
- Steering is locked.
- Most lighting circuits are operational, including sidelights, headlights and hazard warning lights.

#### **Position 1**

- Steering unlocked.
- Individual electrical equipment and accessories can now be operated.

#### **Position 2**

- All instruments, warning lights and electrical circuits are operational.

#### **Position 3**

- Starter motor operates - release the key immediately the engine starts (the key will automatically return to the second position). The operation of some electrical functions will be interrupted during engine cranking.

**NOTE:** *On automatic models, gear selector position 'P' or 'N' must be selected before the engine will start.*

### **Unlocking the steering**

After inserting the key, a small movement of the steering wheel while turning the starter switch to the first position will help to disengage the steering lock.

### **Locking the steering**

After removing the key, turn the steering wheel towards the kerb until the lock engages.

## Starting & Driving

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### PETROL MODELS

 **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.**

 **Catalytic converters can be damaged if the wrong fuel is used, or if an engine misfire occurs. Before starting the engine, you should be aware of the precautions detailed under 'CATALYTIC CONVERTER', page 92.**

#### Starting the engine

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

**NOTE:** Continued use of the starter will not only discharge the battery, but may damage the starter motor and the catalytic converter.

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.

#### 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 starts.
- 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 starts.
- DO NOT pump the accelerator pedal during starting.

## Starting & Driving

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### DIESEL MODELS

**⚠** *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.*

**⚠** *Catalytic converters can be damaged if the wrong fuel is used, or if an engine misfire occurs. Before starting the engine, you should be aware of the precautions detailed under ‘CATALYTIC CONVERTER’, page 92.*

#### Starting the engine

1. Check that the handbrake is applied and that the gear lever is in neutral ('P' or 'N' for automatic transmission).
2. Switch off all unnecessary electrical equipment (including the air conditioning).
3. Insert the key and turn the starter switch to the second position. Wait until the glow plug warning light extinguishes.
4. Turn the key to the third position to operate the starter motor; DO NOT press the accelerator pedal during starting and release the key as soon as the engine is running.

**NOTE:** *Continued use of the starter will not only discharge the battery, but may damage the starter motor and the catalytic converter.*

If the engine stalls, you **MUST** turn the starter switch fully off before turning the starter switch back to the second position. Then wait until the glow plug warning light goes out before attempting to restart; the engine will not start after stalling by turning the starter switch from the second position.

In temperate climates, DO NOT operate the starter switch for longer than 5 seconds; if the engine fails to start, switch off and wait for 10 seconds before re-using the starter.

#### Precautions

- The diesel engine must not be run above fast idle speed until the oil pressure warning light extinguishes. This will ensure that the engine and turbo-charger bearings are properly lubricated before being run at speed.
- ALWAYS allow the engine to idle for 10 seconds before switching off.

## Starting & Driving

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### ALL MODELS

#### Cold climates

In temperatures of  $-10^{\circ}\text{C}$  and below, engine cranking times will increase. As the starter motor may need to operate for longer, it is essential that all unnecessary electrical equipment is switched off while cranking.

**NOTE:** *When starting manual transmission vehicles in freezing conditions or when the battery is in a low state of charge, depress the clutch before starting and hold it down until the engine is running.*

#### Warming up

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

#### Parking

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

#### Towing - switching off

After periods of strenuous towing (particularly at high altitude or in hot weather), it is good practice to allow the engine to idle for a few minutes before switching off. This will enable the engine cooling system to continue operating for a while in order to reduce underbonnet heat.

### RUNNING-IN

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

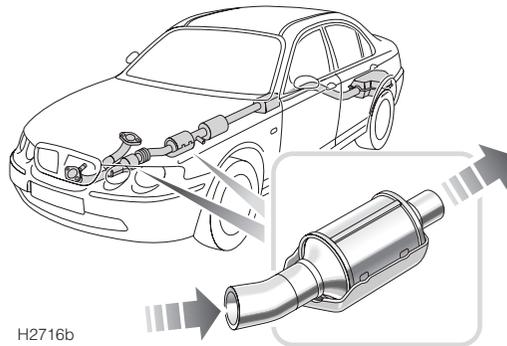
- Do not allow the engine to exceed 3,000 rev/min in any gear.
- Do not operate at full throttle in any gear.
- Do not allow the engine to labour in any gear.
- Avoid heavy braking where possible.

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

## Catalytic Converter

### CATALYTIC CONVERTER

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



The exhaust system incorporates one or two catalytic converters, which convert poisonous exhaust emissions from the engine into environmentally less harmful gases.

Catalytic converters are easily damaged through improper use, particularly if the wrong fuel is used, so be sure to take notice of the following precautions to minimise the chance of accidental damage.

#### Fuel

- Use ONLY fuel recommended for your car.
- Never allow the car to run out of fuel - this could cause a misfire which could damage the catalyst.

#### Starting

- Do not continue to operate the starter after a few failed attempts; seek qualified assistance.
- Do not operate the starter if an engine misfire is suspected and do not attempt to clear a misfire by pressing the accelerator pedal.
- Do not attempt to push or tow start the car.

#### Driving

**NOTE:** *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 in accordance with the car's service interval plan shown in the Maintenance section of this handbook.*

- Do not overload or excessively 'rev' the engine.
- Do not switch off the engine when the car is in motion with a drive gear selected.
- Consult your dealer if you think your car is burning too much oil, as this will progressively reduce catalyst efficiency.
- If a misfire is suspected, or the car lacks power while driving, provided the engine has reached its normal operating temperature, it may be driven SLOWLY (at risk of catalyst damage) to a MG Rover dealer.
- Do not run the engine with a spark plug or lead removed or use any device that requires an insert into a spark plug.
- Do not drive on terrain likely to subject the underside of the car to heavy impacts.

## Environmental Driving

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### PROTECTING THE ENVIRONMENT

Environmental issues are increasingly influencing our lives, and the motor car is sometimes seen as a major source of air pollution.

In a great many respects, however, criticism of the car and its manufacturer is misplaced, for few industries have done more to reduce pollution than the motor industry. MG Rover is no exception. Your car has been designed with the latest technology in order to minimise the environmental impact of exhaust emissions. Even so, any further reduction in emissions is in everyone's interest and, to this end, there are a number of ways in which you, the owner, can also make a contribution.

#### Starting the engine

Although it is a common perception that cars should be 'warmed up' before being driven, this is not the case.

The majority of poisonous emissions are produced immediately following a cold start and in the period while the engine is warming up. Because the car warms up much faster while it is being driven, it is less harmful to the environment to drive away immediately after starting rather than to allow the engine to idle.

#### Driving style

The way in which you drive your car has a significant bearing on environmental pollution, as well as affecting the amount of fuel you use:

- **Avoid full throttle acceleration**  
Steady, rather than rapid, acceleration uses considerably less fuel, reduces exhaust pollutants and also minimises the wear to mechanical components.
- **Avoid driving at maximum speed**  
Fuel consumption, exhaust emissions and noise levels all increase significantly at high speeds. For example, travelling at 100 km/h uses up to 20 per cent less fuel than driving at 112 km/h.
- **Do not drive in a low gear for longer than necessary**  
Driving in lower gears uses more fuel and creates more noise. Change up to a higher gear as soon as possible, provided it does NOT cause the engine to labour.
- **Drive smoothly**  
Anticipating obstructions and slowing down well in advance, avoids the need for unnecessary acceleration and harsh braking. A smooth driving style not only reduces fuel consumption, but can reduce the emission of poisonous gases by two thirds or more.
- **Switch off the engine when waiting in traffic**  
When it is obvious that the car will be stationary for several minutes or more, and provided it is safe to do so, switch off the engine. The impact on the environment of starting the engine again will be less than the effect of allowing the engine to idle for 45 seconds or more.

## Environmental Driving

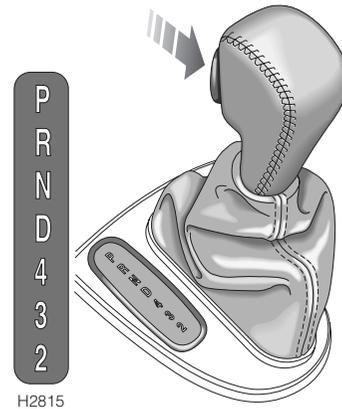
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### Maintenance

- ***Have the car regularly serviced***  
Regular servicing from a qualified technician will ensure optimum fuel economy and minimise exhaust pollutants, as well as effectively extending the service life of the car.
- ***Check the tyre pressures regularly***  
Under-inflated tyres increase the rolling resistance of the car which, in turn, increases fuel consumption. Over or under-inflated tyres wear out more rapidly and also have a detrimental effect on the car's handling characteristics.
- ***Do not carry unnecessary loads***  
The additional weight of unnecessary loads wastes fuel, especially in stop/start conditions where the car is frequently required to set off from stationary.
- ***Remove roof racks***  
The additional air resistance created by roof racks and carriers increase drag and waste fuel (an unladen roof rack can increase fuel consumption by as much as 0.3 l/100km).

## Automatic Transmission

### GEAR SELECTOR



The automatic transmission features a five speed gearbox with three manually selectable modes: Normal (economy), Sport and Snow mode.

**NOTE:** A light on the selector display and a number or letter on the trip recorder display, identifies the selected gear position.

The selector lever is fitted with a spring loaded catch, designed to minimise the possibility of accidental selection of the 'P' (Park) and 'R' (Reverse) positions from other drive gears or the accidental selection of a gear too low for the car's road speed. To release the catch, press and hold the trigger mounted in the handle of the selector lever (arrowed in illustration) while moving the lever.

**!** Do not press the trigger when changing gear, except when necessary.

The following gear changes will be inhibited unless the trigger is used:

- 'P' to 'R'
- 'D' to '4'
- '4' to '3'
- '3' to '2'
- 'N' to 'R'
- 'R' to 'P'

### Selector lever positions

**!** Always leave the car with the gear selector in 'P' (Park) position when parked.

- 'P' Park  
In this position the transmission is locked to prevent the car from rolling away. Select ONLY when the car is stationary and with the handbrake applied.
- 'R' Reverse  
Select ONLY when the car is stationary.
- 'N' Neutral  
Use this position when the car is stationary and the engine is to idle for a short period (e.g. at traffic lights).
- 'D' Drive  
Select for all normal driving; fully automatic gear changing occurs on all five forward gears, according to road speed and accelerator position.

## Automatic Transmission

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- '4' (1st, 2nd, 3rd and 4th gears)  
Automatic gear changing is limited to the lower four gears only; use this position for town driving and on winding country roads.
- '3' (1st, 2nd and 3rd gears)  
Automatic gear changing is limited to the lower three gears only; use this position in congested traffic conditions. This position also provides moderate engine braking for descending slopes.
- '2' (1st and 2nd gears)  
Automatic gear changing is limited to first and second gears only; use when driving up steep gradients and for negotiating very narrow, twisting roads. This position also provides more pronounced engine braking for descending steep slopes.

### Using the automatic transmission

The following information is important - particularly for drivers who are unused to driving cars with automatic transmission.

- Before starting the engine, ensure that both foot brake and handbrake are applied.
- After starting the engine, KEEP BOTH BRAKES APPLIED before and whilst moving the selector lever to the required drive position.
- Keep the brakes applied until you are ready to move - an 'automatic' will tend to creep forward (or backward) without throttle application, as soon as the brakes are released.
- Never 'rev' the engine while selecting a drive gear, or while the car is stationary with a drive gear selected - an 'automatic' will move immediately the accelerator pedal is pressed.

### Gear change speeds

With 'D' selected, 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 larger throttle openings will cause the gearbox to delay gear changes until faster road speeds have been reached (thereby increasing the rate of acceleration).

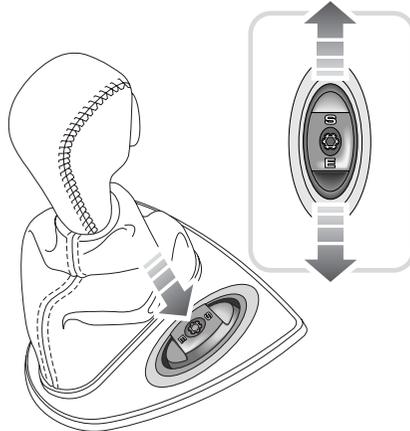
With practice, gear changes can be made to occur at a wide range of road speeds depending on accelerator position.

### 'Kick-down'

To provide rapid acceleration for overtaking, push the accelerator pedal to the full extent of its travel in a single, quick movement (this is known as 'kick-down'). Up to a certain speed, this will cause an immediate downshift into the lowest appropriate gear, followed by rapid acceleration. Once the pedal is relaxed, normal gear change speeds will resume (dependent upon road speed and accelerator pedal position).

## Automatic Transmission

### MODE SWITCH



H2827

The automatic gearbox has three driver-selectable operating modes: Normal (economy), Sport and Snow. When the starter switch is turned on, the transmission automatically selects the Normal (economy) mode.

#### Normal (economy) mode

**E** Normal mode is suitable for all day to day driving and optimises fuel consumption and exhaust emissions. To return to Normal mode after selecting either of the other modes, pull the switch towards the rear of the car.

#### Sport mode

**S** Push the switch towards the front of the car to select ('S' appears in the trip recorder display). With Sport mode selected, the gearbox is more responsive to accelerator pedal movement - downshifts occur earlier and upshifts are delayed to make optimum use of the engine's power while accelerating.

Select sport mode when increased engine acceleration is required, or when negotiating long inclines, but note that driving in sport mode will increase fuel consumption.

#### Snow mode

 Press down on the centre of the switch to select (a snowflake symbol appears in the trip recorder display). Select Snow mode when moving from rest on loose or slippery surfaces (the car will move off in second gear and subsequently upshift at lower speeds, thereby reducing the possibility of wheel spin).

2

## Automatic Transmission

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### AUTOMATICALLY SELECTED MODES

**NOTE:** *Automatically selected modes cannot be selected by the driver and will not operate if Sport or Snow mode are selected.*

The transmission control system automatically selects different gear change modes, listed below, designed to suit a variety of driving conditions.

- **Hill ascent, trailer and high altitude mode**

A suitable gear change pattern is selected to counter momentum loss, caused by the more frequent gear changing which can occur when climbing hills, or when towing a trailer or caravan. This gear change pattern is also selected at high altitudes to combat low engine torque.

- **Hill descent mode**

Unless some form of braking is applied, vehicles will naturally increase speed when travelling down hill. On most automatic vehicles, this results in the highest gear being selected, thereby reducing engine braking to a minimum.

On this car however, the hill descent mode applies a brake within the transmission and, depending on circumstances, changes to a lower gear, or (more commonly on diesel engine cars) inhibits automatic selection of higher gears.

Hill descent mode will only be activated when the accelerator pedal is fully released, and when some braking effort has been applied but a certain amount of acceleration is still occurring. The precise operating parameters of hill descent mode will differ according to engine type.

**NOTE:** *Hill descent mode is not designed to be driver-activated, or to replace the good practice of selecting an appropriate low gear for steep descents, or making normal use of the brakes at all times.*

- **Cruise control mode**

When cruise control (if fitted) is activated, a suitable gear change pattern is selected which is less sensitive to throttle changes. This reduces the amount and frequency of gear changes, providing a smoother ride.

- **Cold start mode**

In very cold conditions the automatic transmission will stay in the lower gears for longer, to help the engine reach its normal operating temperature more quickly. This will help to improve overall fuel economy and driveability, and reduce emissions.

- **High coolant temperature mode**

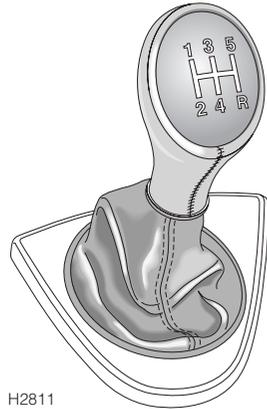
In high ambient temperatures during extreme load conditions, it is possible for the engine and the gearbox to overheat. At a certain temperature, the transmission will select a gear change pattern designed to aid the cooling process, whilst enabling the gearbox to continue performing normally in high temperatures.

- **Smooth change mode**

Engine torque is reduced during gear changes, creating a much smoother ride.

## Manual Gearbox

### GEAR LEVER



H2811

The gear positions are indicated on the gear lever knob.

Synchromesh is provided on all gears (including reverse). In the neutral position, the gear lever is spring loaded to rest naturally in the centre of the gate between 3rd and 4th gears.

### Precautions while driving

- Do not rest your hand on the gear lever while driving - pressure from your hand may cause premature wear to the gear selector mechanism.
- Do not rest your foot on the clutch pedal when driving - excessive wear to the clutch will result.
- Do not hold the car stationary on a hill by slipping the clutch. This will wear out the clutch. Always use the handbrake.

2

## Fuel System

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### TYPE OF FUEL

#### Petrol engines

**Petrol fuel specification:** 95 RON unleaded petrol to EN 228 specification.

The RON value (octane rating) and type of petroleum (unleaded or leaded) available at garage forecourts, will vary in different parts of the world. For example, in most European countries 95 RON unleaded fuel is readily available, but in other parts of the world fuel supplies may be limited to leaded or lower octane fuels only.

Before a new car is delivered to the first owner, the engine is tuned to suit the fuel supplies commonly available in the market in which the car is to be purchased. However, if the car is later exported to a different country, or is used to travel between different territories, you should be aware that the available fuel supplies may not be compatible with the engine specification. If in doubt, consult an MG Rover dealer for advice.

The RON value quoted above is a MINIMUM requirement for the United Kingdom and most European markets and can be safely exceeded. For optimum engine performance, 98 RON unleaded petrol should be used.

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

#### Diesel engines

**Diesel fuel specification:** Good quality diesel fuel to EN 590 specification.

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.

### SAFETY ON THE FORECOURT

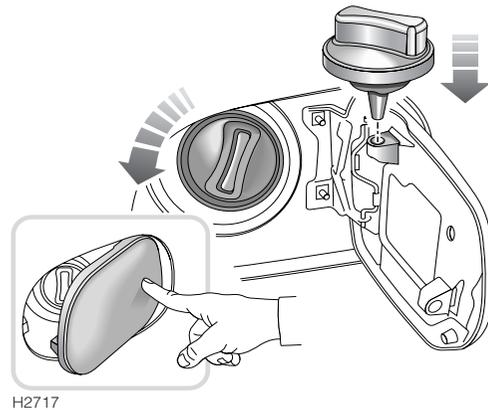
 ***Petroleum gases are highly inflammable and, in confined spaces, are also extremely explosive.***

Always take care when refuelling:

- Switch off the engine.
- Do not smoke or use a naked flame.
- Do not use a mobile phone.
- Avoid spilling fuel.
- Do not overfill the tank.

## Fuel System

### FUEL FILLER



#### Fuel filler flap

The fuel filler flap is located on the rear right-hand wing and is linked to the central door locking system. With the car unlocked, push on the right-hand side of the flap to open.

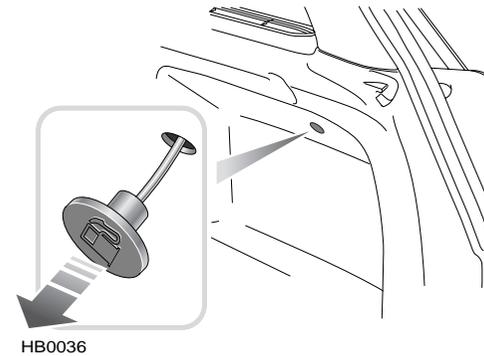
**NOTE:** *The fuel flap is locked only when the car is locked using the handset (locking the car with the key or interior locking switch will not secure the fuel flap).*

#### Fuel filler cap

Unscrew the filler cap anti-clockwise and allow any pressure inside the tank to escape, before removing the cap.

Stow the filler cap where shown in the illustration.

### Emergency fuel filler release (Tourer models only)



If, for any reason, the fuel filler flap automatic unlocking mechanism fails, the flap can be released manually by pulling a release cord in the loadspace area.

The cord is located on the right hand side, to the rear of the fuel filler and under the top lip of the storage pocket (see illustration).

2

## Fuel System

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### FUEL FILLING

**!** *Use only the recommended fuel! Serious damage to the catalytic converter will occur if the wrong fuel is used.*

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 nozzle sufficiently to fully open the flap before filling.

**!** *DO NOT fully fill the tank if the vehicle is to be parked in direct sunlight, or high ambient temperature – expansion of the fuel could cause spillage.*

#### **Diesel engines**

The diesel fuel filling system on garage forecourts is designed to fill at a maximum of 45 litres per minute. Use of commercial vehicle diesel pumps with a higher fill rate may result in premature pump cut-off and fuel spillage.

### **Empty fuel tank**

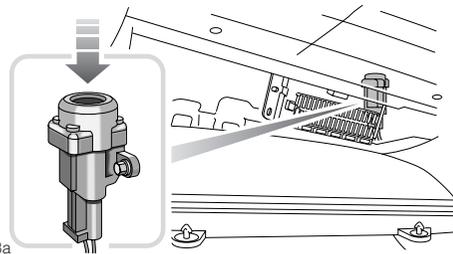
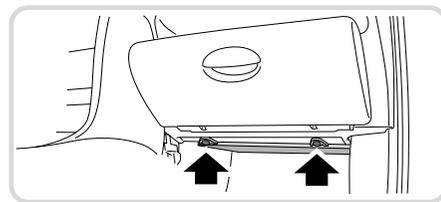
Never allow the car to run out of fuel – the resultant misfire could destroy the catalytic converter. In the event of the fuel tank running dry:

- *Petrol engine:* Start the engine carefully after refuelling. If the engine runs unevenly, switch off and contact your MG Rover dealer before attempting to restart the engine.
- *Diesel engine:* The fuel system will prime automatically and the engine can be started.

## Fuel System

### FUEL CUT-OFF SWITCH

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



In the event of a collision or sudden impact, an inertia switch automatically cuts off the fuel supply to the engine and, providing the alarm is disarmed, unlocks the doors.

When the switch operates, the interior lights illuminate until the system is reset by pressing the rubber top of the cut-off switch (arrowed in illustration). In addition, the hazard warning lights flash until switched off.

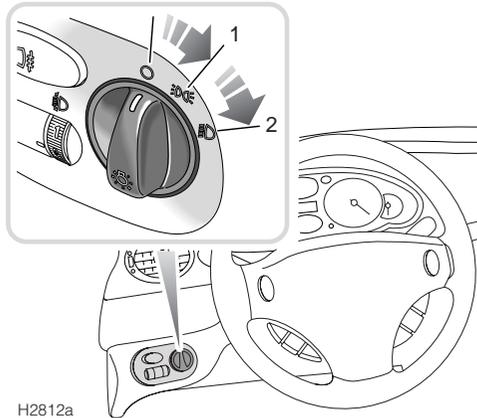
The inertia switch is located behind the glovebox and can be reached from underneath by removing the four fixings securing the access cover.

The switch must be reset before the engine can be started.

## Lights & Indicators

### LIGHTING SWITCH

**NOTE:** If the lights (other than parking lights and headlight courtesy delay) are left on after the starter switch has been turned off, a warning chime will sound when the driver's door is opened, until either the lights are turned off, or the door is closed.



### Side, tail and instrument panel lights

Turn the lighting switch to the first position.

**NOTE:** If a tail light bulb is defective, the corresponding brake light will illuminate as a substitute tail light until the defective bulb is replaced. Note that on cars equipped with a message centre, bulb failures are identified on the instrument panel display.

### Headlights

With the starter switch turned to the second position, turn the lighting switch to the second position.

To illuminate the driveway after stopping the engine, the headlight courtesy delay feature can be operated as follows:

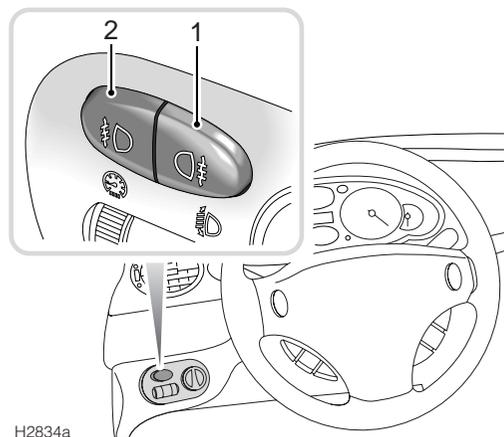
Having stopped the car, turn the starter switch off BEFORE turning off the lighting switch. The headlights will then remain illuminated for approximately 30 seconds. (If the light switch is turned off before the starter switch is turned to position '0', the feature will not operate).

If necessary, the courtesy delay can be cancelled at any time during the 30 seconds by turning the starter switch on and then off again.

## Lights & Indicators

### FOG LIGHTS

**!** *Fog lights should ONLY be used when visibility is severely restricted – other road users could be dazzled in clear conditions.*



**NOTE:** *Both the rear and front fog lights are switched off automatically when the main lighting switch or the starter switch are turned off, and will need to be reselected when the starter switch is turned back on.*

### Rear fog guard lights

Press the switch (1) to switch on and off; the warning light in the instrument panel will illuminate when the fog lights are on. The lights will only operate when the starter switch is in the second position and when:

- The headlights are switched on.
- The sidelights and front fog lights (if fitted) are switched on.

### Front fog lights\*

Press the switch (2) to switch on and off; the warning light in the instrument panel will illuminate when the fog lights are on.

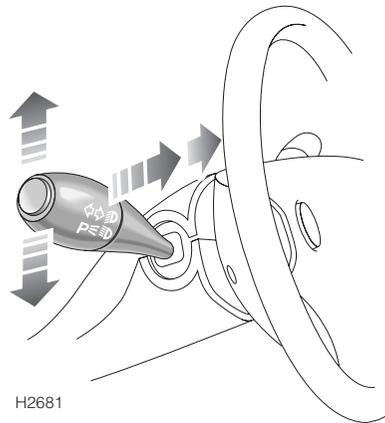
The lights operate only with the starter switch in the second position and the headlights or sidelights switched on.

2

## Lights & Indicators

### DIRECTION INDICATOR LEVER

**!** Take care not to dazzle oncoming vehicles when driving using main beam headlights.



#### 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.

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

#### Headlight main and dipped beam

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

*NOTE: Main beam selection is cancelled automatically whenever the lighting or starter switches are turned off.*

#### Headlight flash

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

#### Parking lights

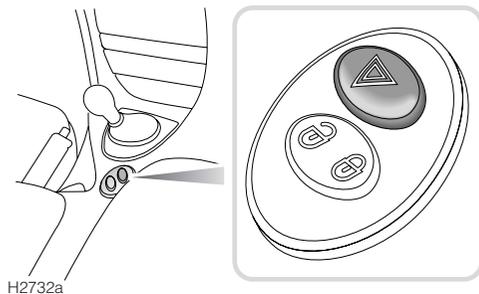
The near or off-side tail and side lights can be switched on independently for parking purposes, as follows:

With the starter switch turned off, move the direction indicator lever fully DOWN to switch on the left hand parking lights. Move the direction indicator lever fully UP to illuminate the right hand parking lights.

To cancel the parking lights, return the direction indicator lever to the off position.

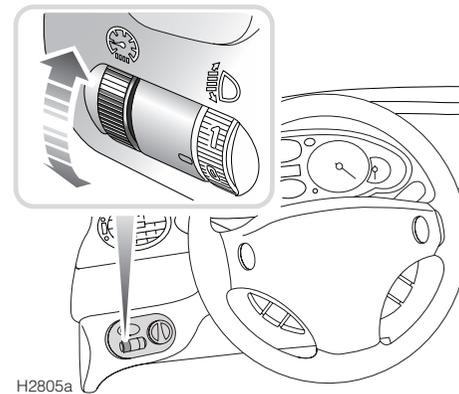
## Lights & Indicators

### HAZARD WARNING LIGHTS



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

### INSTRUMENT DIMMER CONTROL



Rotate the control up to increase and down to decrease instrument illumination. The instrument dimmer also controls the illumination of switches, audio system, message centre, trip computer and the satellite navigation system\*.

**NOTE:** Instrument and switch illumination will automatically dim when the sidelights are switched on.

## Lights & Indicators

### HEADLIGHT BEAM HEIGHT ADJUSTER

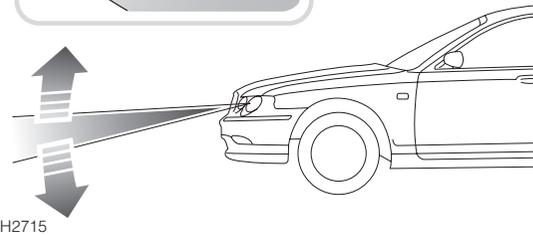
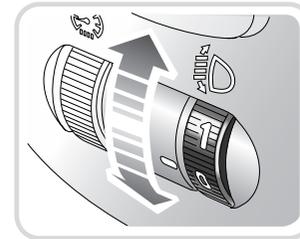
The angle of the dipped beams is affected by the distribution of passenger and luggage weight within the car. It is important that the headlights are adjusted to ensure that the point at which the beams of light meet the road surface provides adequate illumination ahead of the vehicle, without dazzling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

### Automatic adjustment

Cars fitted with Xenon headlights are equipped with a headlight levelling system, which automatically adjusts the height of the headlight beams for varying load conditions.

**NOTE:** Any failure of the automatic levelling system will be apparent from the headlight beams maintaining their lowest position, regardless of vehicle load, in which case the vehicle should be taken to a dealer for rectification at the earliest opportunity.

### Manual adjustment



Using the following load conditions as a guide, adjust the headlights by rotating the adjuster wheel (see inset):

- **Position '0'**  
Driver only, or driver plus a front seat passenger.
- **Position '1'**  
Up to all the seats occupied plus an evenly distributed load in the boot.
- **Position '2'**  
Driver only, plus an evenly distributed load in the boot.

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

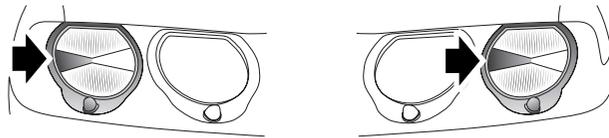
## Lights & Indicators

### HEADLIGHT BEAM SPREAD ADJUSTMENT

Headlight beams are set during manufacture to conform to the requirements of either left or right hand drive markets.

Owners of cars travelling to countries where it is necessary to drive on the opposite side of the road, are required to adjust the beam spread pattern of dipped beam headlights to avoid dazzling other road users.

### Cars with Halogen reflector-type headlights



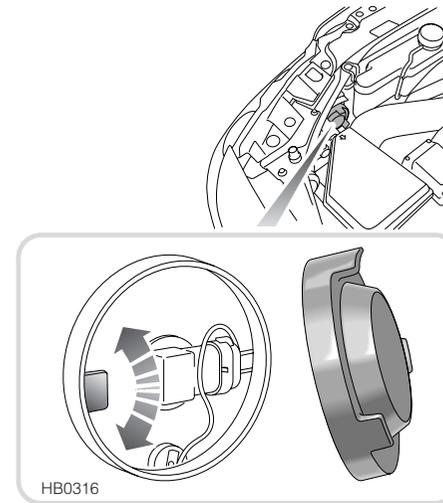
HB0317

*Conversion of RH Drive headlights illustrated.  
LH drive conversion symmetrically opposite*

Use masking tape cut to size and affixed to the lens of both dipped beam lights in the (darkened) segments shown in the illustration. The markings on the lens will act as a guide. Alternatively, use a proprietary masking kit or accessory of the type available at many garages and service stations.

### Cars with Halogen projector or Xenon headlights

These cars have an adjuster built into the light unit which can be moved to adjust the beam spread pattern of the outboard dipped beam headlights. The adjuster lever is located in the inboard light unit on Xenon headlights and in the outboard light unit on Halogen projector headlights and should be used as follows:



HB0316

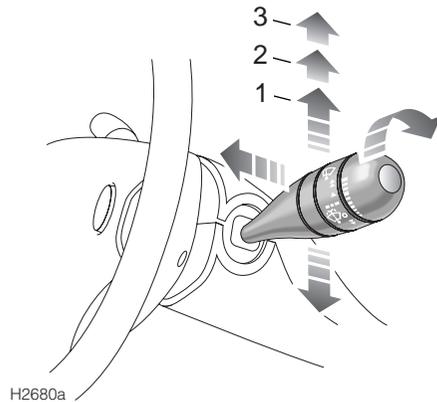
*LH Xenon headlight illustrated*

1. Remove the cover from the rear of the appropriate headlight.
2. Locate the lever inside the headlight unit and move the lever to the alternative position from which it is currently set.
3. Remember to replace the headlight cover.

On return to your home country, remember to reset the lever to its original position.

## Wipers & Washers

### WINDSCREEN WIPER CONTROLS



The wipers and washers will only operate when the starter switch is in the first or second position.

If the road speed drops below 8 km/h while the wipers are operating, they will slow to the next slowest operating mode; i.e. fast wipe to normal wipe, normal wipe to intermittent. This facility can be manually overridden by changing the wipe setting.

#### IMPORTANT

- 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 screen.

Push the lever up to select different wiper speeds

1. Intermittent wipe
2. Normal speed wipe
3. Fast speed wipe

#### Single wipe

Pull the lever down and release (if the lever is held down, the wipers will operate at high speed until the lever is released).

#### Variable delay - intermittent wipe

Rotate the switch to vary the delay between wipes. The delay will also vary according to road speed - any increase in speed will reduce the delay.

#### Auto-park



*Auto-park can be selected or deselected by an MG Rover dealer.*

If the starter switch is turned off while the wipers are operating, the wipers will continue operating until the parked position is reached.

#### Rain sensor\*

Some cars are equipped with an optical rain sensor fitted to the inside of the windscreen behind the rear view mirror. The sensor is able to detect varying amounts of dirt and water on the outside of the windscreen. With the wiper control set to Intermittent Wipe, the variable delay will be adjusted automatically according to the information supplied by the rain sensor.

If the sensor detects constant rain, the wipers will operate continuously at normal speed wipe.

## Wipers & Washers

### WINDSCREEN WASHERS

Pull the lever towards the steering wheel – the washers operate immediately. After a short delay, the wipers will commence operating in conjunction with the washers, both functions continuing until the lever is released.

Note that the wipers continue operating for a further three wipes after the lever is released.

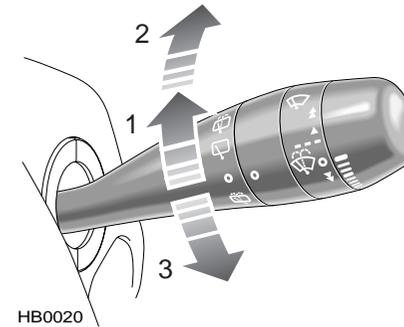
 The number of wipes can be adjusted to either 2 or 4 by an MG Rover dealer.

If the washers fail to deliver the screen wash solution (dirt or ice may have blocked the jets), release the lever immediately. This will prevent the wipers from operating, and the consequent risk of visibility being impaired by dirt smearing across the unwashed windscreen.

### HEADLIGHT WASHERS\*

When the headlights are illuminated, the headlight washers operate automatically in conjunction with every fifth operation of the windscreen washers.

### REAR SCREEN WIPER AND WASHER (Tourer models only)



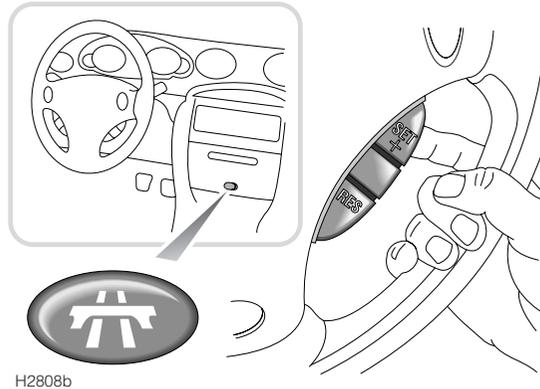
1. Rotate the switch clockwise to the first position: after three initial wipes the wiper continues operating intermittently.
2. Rotate the switch further clockwise, to the second position and hold against spring pressure: both wiper and washer operate continuously while the switch is held in this position. Screen washing ceases as soon as the switch is released but intermittent wiping continues until the switch is returned to the off position.
3. Rotating the switch anti-clockwise to the third position provides the same features described in 2 (above).

**NOTE:** If reverse gear is selected while the windscreen wipers are switched on, the tailgate wiper will operate automatically for three wipes.

2

## Cruise Control

### CRUISE CONTROL\*



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.

**NOTE:** Using 'sport' mode on automatic gearbox vehicles is not recommended with cruise control selected.

#### The following precautions must be observed when using cruise control:

- DO NOT attempt to use cruise control when using reverse gear.
- DO NOT use cruise control on winding or slippery road surfaces, or in traffic conditions where a constant speed cannot easily be maintained.

- On petrol engine vehicles, DO NOT rest your foot under the accelerator pedal while cruise control is engaged - your foot could become trapped.
- ALWAYS switch off the master switch when you no longer intend to use cruise control.

#### To operate cruise control

The cruise control system has three switches; a master switch on the centre console and two control switches marked 'SET+' and 'RES' mounted on the steering wheel.

1. Press the master switch (the switch indicator light and the warning light in the instrument panel illuminate whenever cruise control is operating).
2. Accelerate until the desired cruising speed is reached. This must be above the system's minimum operational speed of 35 km/h and below the maximum operating speed of 200 km/h.

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

3. Lift the 'SET+' switch to set the road speed in the system memory. Cruise control will now maintain that speed without the need to use the accelerator pedal.

With cruise control operating, speed can be increased by normal use of the accelerator; e.g. for overtaking. When the accelerator is released, road speed will return to the selected cruising speed. On diesel engine cars, cruise control will be disengaged if the accelerator is used for longer than 30 seconds - lift the 'RES' switch to re-engage.

## Cruise Control

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### **To increase the set cruising speed**

Lift and hold the 'SET+' switch - the car will accelerate automatically. Release the switch as soon as the desired speed has been reached.

Alternatively, the set speed can be increased incrementally by 'tapping' the 'SET+' switch. Each operation of the switch will increase the speed by approximately 1.5 km/h.

### **Disengaging cruise control**

Cruise control will automatically disengage if the brake or clutch pedals are depressed, or if 'N' (neutral) is selected on an automatic gearbox. Cruise control can also be disengaged by operating the 'RES' switch.

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

## Brakes

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### FOOT BRAKE

For added safety, the hydraulic braking system operates through dual circuits. If one circuit should fail, the other will continue to function, but increased brake pedal travel, greater pedal pressure, and longer stopping distances will be experienced.

In the event of a brake failure where only one circuit is operational, the car should be brought to a halt as soon as traffic conditions safely allow. **DO NOT** continue driving - seek qualified assistance.

### Servo assistance

The braking system is servo assisted, but **ONLY** while the engine is running. Without servo assistance greater brake pedal effort is necessary to safely control the car, resulting in longer stopping distances. Always be aware of the following:

- **NEVER** allow the car to freewheel with the engine turned off.
- **ALWAYS** take particular care when being towed with the engine turned off.

If the engine should stop for any reason while driving, bring the car to a halt as quickly as traffic conditions safely allow, and **DO NOT** pump the brake pedal lest the braking system lose any remaining servo-assistance available.

**⚠ NEVER move the car without the engine running because brake servo assistance may not be available. The brakes will still function, but more pedal pressure will be required to operate them.**

### Electronic brake force distribution

Your car is equipped with Electronic Brake force Distribution (EBD), which, in order to maintain braking efficiency, automatically proportions the distribution of braking forces between front and rear axles, under all load conditions.

For example; under light loads EBD applies less effort to the rear brakes in order to maintain vehicle stability; however if the car is heavily laden or towing, then more effort will be applied to the rear brakes.

The EBD system incorporates a monitoring system, which checks that all electrical components are in working order when the starter switch is turned on and also at frequent intervals while the car is being driven. The EBD monitoring system is linked to the brake system warning light on the instrument panel. If this light illuminates while driving, or remains illuminated for more than three seconds after the starter switch is turned on, there is a fault with the braking system, and EBD may not be available. If this occurs, stop the car as soon as safety permits and seek qualified assistance immediately. **DO NOT** drive the car with the brake system warning light illuminated.

### Wet conditions

Driving through water or even very heavy rain may adversely affect braking efficiency. Dry the braking surfaces by intermittent light application of the foot brake, after first ensuring that you are at a safe distance from other road users.

## Brakes

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### Brake system warning light



The warning light on the instrument panel should illuminate for about 3 seconds as a bulb check whenever the starter switch is turned to the second position, and also illuminate whenever the handbrake is applied (provided the starter is switched to the second position).

If the warning light illuminates while driving, or fails to extinguish when the handbrake is fully released, a fault with the braking system is indicated. Check the brake fluid level; if the light continues to illuminate, seek qualified assistance before continuing.

**⚠** *If the brake warning light illuminates while driving, bring the car to a halt as quickly as traffic conditions and safety permit and seek qualified assistance before continuing. DO NOT drive with the warning light illuminated.*

### Brake pads

Brake pads require a period of bedding in. For the first 800 km, you should avoid situations where heavy braking is required.

Remember that regular servicing is vital to ensure that all the brake components are examined for wear at the correct intervals, and changed when required to ensure long term safety and optimum performance.

**⚠** *DO NOT rest your foot on the brake pedal while driving; this may overheat the brakes, reduce their efficiency and cause excessive wear.*

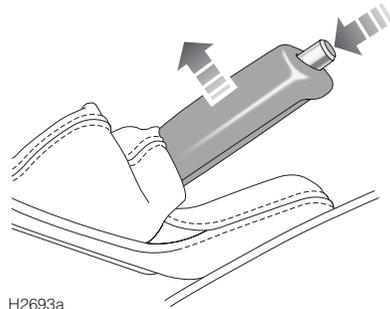
### Brake pad wear indicator

The road wheels are fitted with brake pad wear sensors. When a brake pad wears to a predetermined point, the sensor activates the instrument panel warning light/display. The warning will remain active until the worn brake pad is replaced.

## Brakes

### HANDBRAKE

**!** *DO NOT drive with the handbrake applied, or apply the handbrake while the car is in motion; this could result in loss of control, prevent the anti-lock braking system from functioning correctly, and may even cause damage to the rear brakes.*



H2693a

The handbrake operates on the rear wheels only. 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.

When parking on a steep slope, do not rely on the handbrake alone to hold the car. On manual gearbox models, leave the car parked with the gearbox in a low forward gear when facing uphill and in reverse gear when facing downhill. On automatic gearbox models, selection of 'P' (park) will lock the transmission and, together with the handbrake, prevent the car from rolling away.

### ANTI-LOCK BRAKES (ABS)

**!** *ABS cannot overcome the physical limitations of stopping the car in too short a distance, cornering at too high a speed, or the danger of aquaplaning, i.e. where a layer of water prevents adequate contact between the tyres and the road surface.*

*The fact that a car is fitted with ABS must never tempt the driver into taking risks that could affect his/her safety or that of other road users. In all cases, it remains the driver's responsibility to drive within normal safety margins, having due consideration for prevailing weather and traffic conditions.*

The purpose of the anti-lock braking system (ABS) is to prevent the wheels from locking while braking, thereby enabling the driver to retain steering control of the car.

Under normal braking conditions, (where sufficient road surface friction exists to reliably bring the car to a halt without the wheels locking), ABS will not be activated. However, should the braking force exceed the available adhesion between the tyres and the road surface causing the wheels to lock (on slippery roads, for example), then ABS will automatically come into operation.

This will be recognisable by a rapid pulsation felt through the brake pedal.

## Brakes

### Braking in an emergency

 **DO NOT pump the brake pedal at any time; this will interrupt operation of the ABS and may increase braking distance.**

If an emergency situation occurs, the driver should apply full braking effort even when the road surface is slippery. The anti-lock braking system will constantly monitor the rotational speed of the wheels and vary braking pressure to each according to the amount of traction available. This will ensure that the wheels do not lock and that the car is brought to a halt in the shortest possible distance for the prevailing road surface conditions.

**NOTE:** *On soft surfaces such as powdery snow, sand or gravel, the braking distance required by the anti-lock braking system may be greater than for non-ABS braking, even though improved steering would be experienced. This is because the natural action of locked wheels on soft surfaces is to build up a wedge of surface material in front which assists the car to stop.*

No matter how hard you brake, you should be able to continue steering the vehicle as NORMAL.

However, always remember that anti-lock braking operates only AFTER the driver has already lost control. ABS cannot reliably compensate for driver error or inexperience.

### ABS Warning light



The ABS incorporates a monitoring system, which checks that all the electrical components are in working order as soon as the starter switch is turned on, and also at frequent intervals during a journey.

The warning light on the instrument panel is an important part of this system. The light should illuminate for approximately 2 seconds when the starter switch is turned to the second position and then extinguish.

If the warning light fails to extinguish or illuminates while driving, a fault has been detected by the self-monitoring system and full ABS control may not be available. If this occurs, consult your dealer at the earliest opportunity.

**NOTE:** *The normal (non-ABS) braking system remains fully operational and is not affected by partial or full loss of the ABS. However, braking distances may increase.*

## Traction Control

### ELECTRONIC TRACTION CONTROL\*

The purpose of electronic traction control is to aid traction, thereby helping the driver to maintain control of the car in situations where one or both of the driving wheels are spinning (for example, if one wheel is on ice and the other on tarmac).

The traction control system monitors the driving speed of each wheel individually. If spin is detected on one wheel, the system automatically brakes that wheel, transferring torque to the opposite, non-spinning, wheel. If both wheels are spinning, the system will reduce engine speed in order to regulate wheel rotation until traction is regained.

**NOTE:** *The individual wheel braking feature of the traction control system will not operate at road speeds above 100 km/h. The engine torque reduction feature continues to function up to the car's maximum speed.*

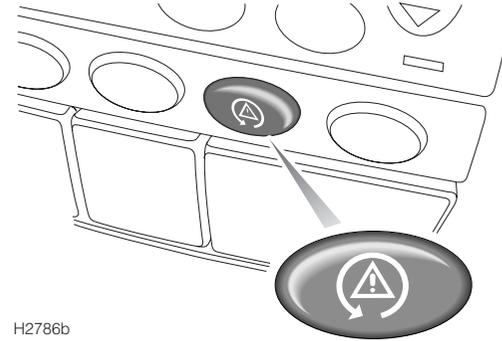
### Warning light



On cars equipped with the standard instrument panel (no message centre), the light flashes while the traction control system is operating (cars equipped with a message centre feature a traction control message, which appears for a minimum of 4 seconds).

The light also illuminates as a bulb check (for approximately 3 seconds) when the starter switch is turned on and illuminates continuously whenever traction control is manually disabled. If there is a fault with the system, the warning light will fail to extinguish and remains illuminated even when the car is stationary. In this case you should seek qualified assistance at the earliest opportunity.

### Manual override



H2786b

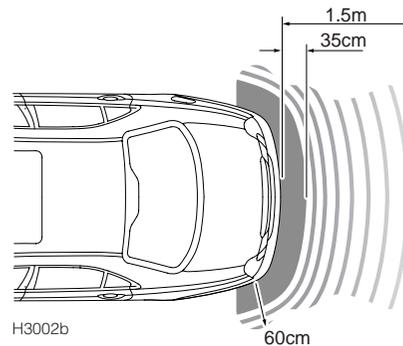
Traction control is entirely automatic in operation. However, the system can be manually overridden by pressing the traction control disable switch (see illustration). The system will then remain disabled until the switch is pressed a second time, or until the starter switch is turned off.

**NOTE:** *When driving with snow chains fitted, it is recommended that traction control be disabled.*

## Parking Aid

### PARKING AID\*

**!** *The parking aid is not infallible. It is for guidance only! The sensors may not be able to detect certain types of obstruction, e.g. narrow posts, small objects close to the ground, objects above the level of the boot on saloon models and some objects with non-reflective surfaces.*



Four ultrasonic sensors, situated in the rear bumper, scan an area behind the car searching for obstructions. If an obstruction is detected, the sensors calculate its distance from the rear of the car and communicate this information to the driver by sounding warning chimes. It is important to remember that the system is no more than an AID to parking. It is not foolproof in operation, nor is it a substitute for observation and personal judgement.

**!** *Keep the sensors free from dirt, ice and snow. If deposits build up on the surface of the sensors, their performance may be impaired. When washing the car, avoid aiming high pressure water jets directly at the sensors from close range.*

### Parking aid in operation

With the starter switch turned to the second position, the parking aid operates automatically whenever reverse gear is selected and is switched off as soon as reverse is deselected.

When reverse is selected a short 'bleep' will sound to confirm that the system is working (Note that a one second delay will occur before the 'bleep' sounds).

**NOTE:** *If a longer, higher pitched, sound is emitted (for a duration of 5 seconds) when reverse gear is selected, this indicates a fault with the system - contact your dealer for assistance.*

While reversing:

- If an obstruction is located within the 1.5 m range of the rear parking aid sensors or 60 cm of the corner sensors, the warning commences chiming. As the car moves closer to the obstruction, the chimes are transmitted more rapidly.
- Once the obstruction is within 35 cm of the rear bumper, the chimes merge into a continuous warning tone.

**NOTE:** *In the case of cars equipped with factory fitted towing equipment, the parking aid will not operate while a caravan or trailer is hitched to the car.*

- If the distance between the car and an obstruction to the side of the car remains unchanged for over three seconds, the warning chimes cease.



## ***Audio System***

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- 122** Audio System Identification*
- 123** Radio Reception*
- 124** Radio Data System*
- 125** Remote Audio Controls*
- 126** CD32 - Audio System*
- 141** Harmony - Audio System*
- 150** Symphony - Audio System*
- 162** CD Changer Unit*
- 164** Care of Cassette Player and Tapes*
- 165** Satellite Navigation*
- 178** Satellite Navigation System Settings*
- 180** Security Code*

## Audio System Identification

### AUDIO SYSTEM SPECIFICATION

This section of the handbook covers only those audio systems fitted as standard to cars within the model range at the time of manufacture.

If, at the time of ordering your car, you specified a different audio system, it will have been fitted by your dealer before you took delivery of your car. In this case, you will have received an additional operating manual detailing the features and operation of your audio system, which should be used in place of the instructions that follow.

You are requested to read the audio operating instructions carefully in order to gain maximum enjoyment from the system.



AS0031

*CD32 Audio System*



AS0013

*Harmony Audio System*



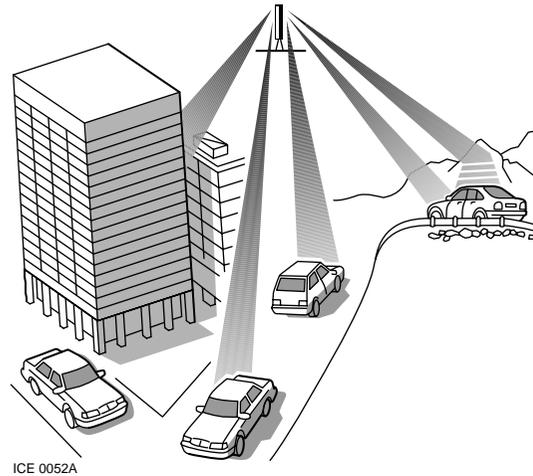
AS0014

*Symphony Audio System*

**NOTE:** The Symphony audio system is also available with optional satellite navigation (see 'Satellite Navigation').

## Radio Reception

### RADIO RECEPTION



Distortion, interference and lack of signal clarity, are often attributed to a fault in the radio - this is rarely the case.

Problems of this kind are usually caused by phenomena such as atmospheric conditions, signal strength, hilly terrain, tall buildings, bridges and even electrical interference from power lines.

**Please remember:** A car radio receives signals while the vehicle is in motion (unlike a domestic set) - constantly changing direction and moving away from, or nearer to, the transmitter whilst negotiating terrain with widely differing reception characteristics. Some interference is to be expected from time to time.

FM transmitters can only broadcast over a limited range and good, clear signals will only be received in the immediate area of the transmitter. When travelling, it may be necessary to re-tune the radio from time to time, to offset the effects of moving from one transmitter area to another.

While RDS automatic retuning eases this problem, some manual retuning may still be needed (especially for local stations) in areas of weak reception.

The broadcast range for good stereo reception (usually within a 50 to 65 km radius of the transmitter) is noticeably less than it is for mono.

FM Signals (like light waves) travel in a straight line, so large obstacles, such as tall buildings, can shield the car from the signal causing distortion or loss of reception (known as dead spots).

Distortion can also occur if FM signals received directly from the transmitter mix with signals which have been reflected by obstructions such as mountains, hills and tall buildings (this is known as multi-path distortion).

## Radio Data System

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### **RADIO DATA SYSTEM (RDS)**

Your radio is equipped with RDS (Radio Data System). RDS is being introduced in European countries and operates on the FM waveband. The system enables the audio unit to receive other information in addition to radio signals. Depending upon the specification of the audio unit fitted to your car, these may include:

- *the programme service name*: enables the set to display the radio station name instead of the frequency.
- *alternative frequencies for the FM radio station being received*: enables the audio unit to automatically select the strongest available signal, thereby maintaining the best possible reception.
- *a traffic and/or news information facility*: enables the audio unit to give priority to traffic and/or news information broadcasts over other radio, tape or CD programmes.
- *an alarm announcement facility*: enables the set to give priority to emergency information broadcasts; e.g. very serious accidents or natural disasters.
- *EON (enhanced other networks)*: enables the audio unit to broadcast traffic and/or news information from radio stations other than the one to which the radio is currently tuned (provided they are all members of a linked network).
- *PTY (programme type)*: enables the audio unit to be programmed to select broadcasts of a specific programme type.

**NOTE:** *In some countries, not all FM radio stations broadcast RDS. If a non-RDS station is received, these features will not be available.*

### **Receiving RDS stations**

Harmony and Symphony audio units are automatically in the RDS mode whenever the FM waveband is selected. On the CD32 audio RDS is selectable (see '*RADIO CONTROLS*', page 130).

With RDS active, whenever an RDS radio station is received, the station name illuminates in the display. The audio constantly scans all alternative frequencies on which that station can be received, and automatically switches to the strongest available signal.

This is particularly useful on long journeys where the car travels through different transmitter areas serving the same radio station.

**NOTE:** *On Harmony and Symphony audio units this facility can be deactivated or reactivated by your dealer.*

### **Local radio and regional broadcasts**

Reception of most local radio stations is intentionally limited to a comparatively small area around the transmitter.

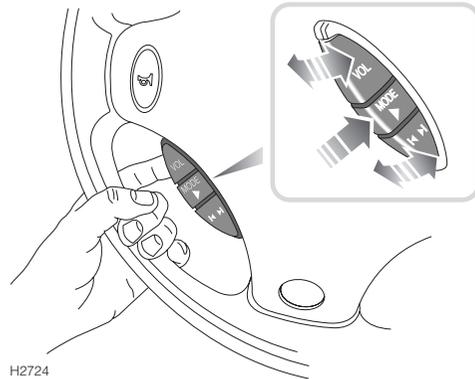
Once the limit of the reception range is reached, it is unlikely that the RDS facility will be able to locate an alternative frequency for the local radio station being received.

Note that in some countries, certain broadcasting companies transmit regional programmes on the FM waveband, either continuously or periodically during the day. This may result in the audio unit changing between a number of different regional radio stations within the radio programme you have selected.

**NOTE:** *On Harmony and Symphony audio units, this facility can only be deactivated or reactivated by your dealer. On the CD32 audio, the feature is selectable (see '*REG ON*' and '*REG OFF*' in '*MENU CONTROL FUNCTIONS*', page 140).*

## Remote Audio Controls

### REMOTE AUDIO CONTROLS



H2724

#### **Volume control**

Lift or press down to increase or decrease volume.

#### **Mode select control**

Press to change to tape or compact disc play, or to return to radio tuner mode. The mode change will only be effected if a tape or disc has been loaded.

#### **Search control**

**NOTE:** On some cars (those equipped with a high-line navigation unit), a single, brief operation of the search control (either up or down), will activate a change of pre-set.

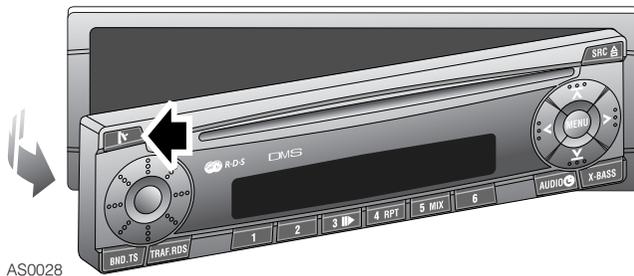
Lift or press down to change to the next or previous radio station on the selected waveband.

During tape or CD play, lift the control to move forward to the next track, or press down to return to the start of the current track. Operate the control repeatedly to move forward or back through several tracks at a time.

## CD32 - Radio

### DETACHABLE CONTROL PANEL

For added protection against theft, remove the control panel and take it with you when you leave the car. DO NOT leave the control panel inside the car.



### Removing the control panel

Press the release button (arrowed in illustration) to unlock the control panel, then pull the control panel away from the audio unit as shown.

If the audio unit is switched on when the control panel is removed, the unit switches off automatically and switches back on when the control panel is replaced.

**NOTE:** If a CD is loaded, it need not be ejected before removing the control panel.

### Replacing the control panel

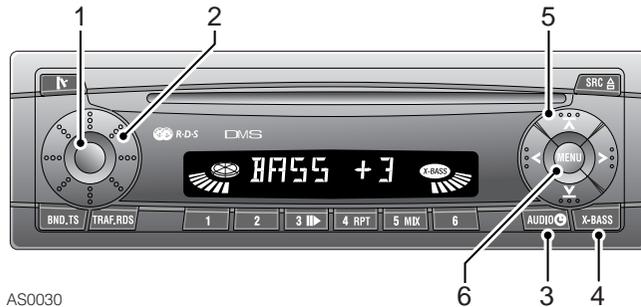
Place the right side of the panel into position, then push the left-hand side into the front of the audio unit until it clicks into place.

### IMPORTANT

- DO NOT subject the control panel to severe shocks, or expose it to direct sunlight or other sources of heat.
- Avoid direct skin contact with the electrical contacts on the back of the control panel. Periodically, clean the contacts on the back of the control panel and the matching contacts on the audio unit with a clean, dry, lint-free cloth. Use methylated spirits if available.
- When replacing the control panel, do not press the display.

## CD32 - Radio

### SOUND CONTROLS



AS0030

#### 1. On/off button

Press to switch on (the display shows 'CODE' followed by 'ROVER'). Press and hold for at least two seconds to switch off.

**NOTE:** The audio unit can be operated without the starter switch turned on. However, it will switch off automatically after one hour in order to avoid draining the battery.

#### 2. Volume control

The volume can be adjusted in steps from 0 to 66. Rotate to left or right (the volume level is shown in the display).

The volume can also be adjusted using the remote switches on the steering wheel (see 'REMOTE AUDIO CONTROLS', page 125).

**NOTE:** If you have a car telephone with a mute signal output connected to the stereo system, radio or CD play automatically mutes to a preset volume level while the telephone is in use (see 'Muting the sound', page 128).

#### 3. Audio selection control

Use in conjunction with the <> and  $\uparrow$   $\downarrow$  controls (5) to adjust bass, treble, balance and fader levels. Note that different bass and treble levels can be set for each sound source (e.g. radio, or CD).

**Bass:** To increase or reduce bass response:

1. Press the AUDIO control - ('BASS' shows in the display).
2. Press  $\uparrow$  or  $\downarrow$  to adjust bass response.
  - 'BASS +7' = maximum bass
  - 'BASS 0' = normal bass
  - 'BASS -7' = minimum bass

**Treble:** To increase or reduce treble response:

1. Press the AUDIO control - ('BASS' shows in the display).
2. Press either < or > until 'TREB' appears in the display.
3. Press  $\uparrow$  or  $\downarrow$  to adjust treble response.
  - 'TREB +7' = maximum treble
  - 'TREB 0' = normal treble
  - 'TREB -7' = minimum treble

**Balance:** To adjust the balance between right and left speakers:

1. Press the AUDIO control - ('BASS' shows in the display).
2. Press either < or > until 'BAL' appears in the display.
3. Press the  $\uparrow$  or  $\downarrow$  to adjust the right/left balance.
  - 'BAL +9' = maximum sound from RIGHT
  - 'BAL 0' = equal balance
  - 'BAL -9' = maximum sound from LEFT

## CD32 - Radio

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**Fader:** To adjust the balance between front and rear speakers:

1. Press the AUDIO control - ('BASS' shows in the display).
2. Press < or > until 'FADER' appears in the display.
3. Press  $\uparrow$  or  $\downarrow$  to adjust the front/rear balance.
  - 'FADER +9' = maximum sound from FRONT
  - 'FADER 0' = equal balance
  - 'FADER -9' = maximum sound from REAR

#### 4. X-Bass control

Use the X-BASS feature to boost bass responses at low volume. Separate levels can be set for each sound source (e.g. radio, or CD).

1. Press the X-Bass control.
2. Repeatedly press either the <> or  $\uparrow$   $\downarrow$  controls (5) until the required setting is displayed.
  - 'X BASS OFF' = feature switched off.
  - 'X BASS 1' = minimum boost.
  - 'X BASS 2' = medium boost.
  - 'X BASS 3' = maximum boost.
3. Press the X-Bass control to store the required setting.

**NOTE:** After 8 seconds without further adjustment, all audio settings are stored and the selection mode (including X-BASS) cancels automatically.

#### Muting the sound

Briefly press the on/off button (1) ('MUTE' appears in the display). The volume will instantly reduce to a preset level. The preset volume level can be adjusted as follows:

1. Press the MENU button (6).
2. Press the  $\uparrow$  control until 'MUTE LVL' is displayed.
3. Press the <> controls to adjust the volume.
4. Press the MENU button twice to store the setting.

#### Setting the power-on volume

The default volume (the volume level present when the audio unit is switched on) can be adjusted, as follows:

1. Press the MENU button (6).
2. Press  $\uparrow$  until 'ON VOL' is displayed.
3. Press < or > to reduce or increase the volume.
4. Press the MENU button twice to store the setting.

**NOTE:** If 'LAST VOL' is selected, the power-on volume will be the same as the volume level that was set when the unit was last switched off, provided this did not exceed volume level 38.

## CD32 - Radio

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### **Output level display**

Illuminated bars flash in the display to provide a graphic indication of the sound control settings as they are adjusted. At other times, the display symbolises the radio's output level. The output level display can be enabled or disabled as follows:

1. Press the MENU button (6).
2. Press the **↔** control until 'PEAK LVL' is displayed.
3. Press **<** or **>** to select 'PEAK ON' or 'PEAK OFF'.
4. Press the MENU button twice to store the setting.

### **Treble reduction feature (HICUT) - FM only**

HICUT improves reception in poor operating conditions. If interference occurs, the treble is automatically reduced. The feature can be enabled or disabled as follows:

1. Press the MENU button (6).
2. Press the **↔** control until 'HICUT' is displayed.
3. Press the **<** or **>** controls to select 'HICUT 1' (treble reduction activated), or 'HICUT 0' (no treble reduction).
4. Press the MENU button to store the setting.

## CD32 - Radio

### RADIO CONTROLS



#### 1. Waveband/Travelstore selector (BND.TS)

Press briefly to select the required waveband. There are three memory banks for the FM waveband (FM1, FM2 and FMT - each has the same tuning range) and two AM wavebands, MW and LW.

Press and hold to activate Travelstore (see 'TRAVELSTORE', page 136).

**NOTE:** Pressing the waveband selector briefly during CD play will change the audio mode to radio tuner operation.

#### 2. Tuning controls

Briefly press either the  $\blacktriangle$  or  $\blacktriangledown$  controls. The unit automatically searches up or down the frequency range and tunes to the next receivable station (see 'RADIO TUNING', page 133).

Radio frequencies can also be selected using the remote switches on the steering wheel (see 'REMOTE AUDIO CONTROLS', page 125).

#### 3. Pre-set buttons

Use to store up to 6 radio stations on each waveband or memory bank (see 'Programming the pre-sets', page 135).

Press briefly to select a stored frequency.

Press and hold to store a frequency.

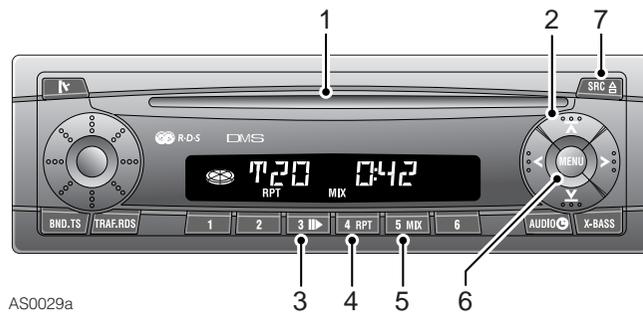
#### 4. Traffic information/RDS control

**Traffic information:** Press briefly to switch on (or switch off) traffic information mode (see 'Selecting traffic information', page 138). Press briefly to return to normal radio or CD reception during a traffic information broadcast.

**Radio Data System (RDS):** Press and hold for two seconds or more to select or inhibit RDS - the 'RDS' indicator illuminates when RDS has been activated (see 'RADIO DATA SYSTEM (RDS)', page 124).

## CD32 - Single Play CD

### SINGLE PLAY CD CONTROLS



#### 1. CD compartment

With the starter switched on, partially insert a disc, with the label side uppermost, until resistance is felt, at which point the disc will be drawn into the player and playback starts automatically.

If a disc is already loaded, press the SRC button (7) until 'CD' appears in the display. Playback starts from the point on the disc at which play last stopped.

To remove a disc, press and hold the SRC button (7).

**NOTE:** Inserting a disc when the starter switch is turned off will switch on the audio in CD mode, but playback will be limited to one hour.

#### IMPORTANT

- Use standard 12cm CDs only.
- DO NOT use 8 cm CD singles, or irregularly shaped or damaged CDs - these may damage the compact disc player.

#### 2. Track selection/search

**Track Selection:** Press one of the <> or ⏮ ⏭ controls to select the next, or previous track. Press the control repeatedly to move forward or back through the tracks on the disc.

**Fast track selection:** Press and hold either the ⏮ or ⏭ control. The CD player skips tracks (forward or back) until the control is released.

**Fast search:** With a CD playing, press and hold the appropriate < or > control to play forward or back through the current track at a greatly increased speed (volume reduces).

#### 3. Pausing playback

To pause playback, press pre-set button 3 ('PAUSE' appears in the display). Press again to cancel pause.

#### 4. Repeat play

Press pre-set button 4 (RPT) to repeat the current track ('RPT TRCK' is displayed and the RPT indicator illuminates in the lower part of the display). Press again to cancel the repeat function ('RPT OFF' is displayed and the RPT indicator extinguishes).

#### 5. Random play (MIX)

Press pre-set button 5 (MIX) to play each track in a random order ('MIX CD' is displayed and the MIX indicator illuminates in the lower part of the display). Random play continues until the button is pressed again ('MIX OFF' is displayed and the MIX indicator extinguishes).

**NOTE:** With random play selected, the track selection controls (2) can be used to skip to the next randomly selected track, or to the start of the current track.

3

## CD32 - Single Play CD

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### 6. Track scanning

Track scanning enables you to listen to the first few seconds of each track on the disc.

Press and hold the MENU button (6) for two seconds ('SCAN' appears in the display). Press the MENU button again to stop the scan at your chosen track.

*NOTE: The scan time can be adjusted to suit your requirements (see 'MENU CONTROL FUNCTIONS', page 140).*

### 7. CD mode selection/CD eject control

Press briefly to change to or from CD or radio modes.

With the audio unit switched on, press and hold for two seconds or more to eject a disc.

### Changing the display

The information appearing in the display can be set to show either: the track number (e.g 'T18 PLAY'), or the track number and elapsed time display (e.g T12 2:39'), as follows:

1. Press the MENU button (6).
2. Press the  control until 'CD DISP' is displayed.
3. Press the  controls alternately to select 'PLAY' or 'TIME'.
4. Press the MENU button twice to store your selection.

## CD32 - Radio Tuning

### RADIO TUNING



#### Manual tuning

*NOTE: Manual tuning on the FM waveband can only be undertaken with RDS and PTY deactivated.*

If you know the frequency of the radio station you are seeking, or you need to select a radio station that is too weak to be found by automatic tuning, use manual tuning, as follows:

1. Press the waveband selector (2) to select the desired waveband or memory bank.
2. If necessary, press and hold the RDS button (1) until RDS is deactivated (the RDS indicator disappears from the display) and disable PTY (see 'Switching PTY on and off', page 137).
3. Operate one of the <> tuning controls (3) until the desired frequency has been reached.

*Fast manual tuning:* By keeping either of the <> tuning controls depressed, the waveband is scanned rapidly down or up until the control is released.

#### Automatic tuning

Select the required waveband, then briefly press the  $\uparrow$  or  $\downarrow$  tuning control (3).

The radio searches the frequency range (up or down depending upon which tuning control was pressed) for a radio station of acceptable strength. Once a suitable station is found, the search stops. To continue searching, press one of the tuning controls again.

#### Tuning sensitivity

The sensitivity with which automatic tuning takes place can be adjusted. For example, the tuner can be configured to enable it to respond only to those radio stations which provide strong reception or, alternatively, to radio stations with weaker transmissions as well.

1. Press the MENU control (4).
2. Press the  $\uparrow$  or  $\downarrow$  controls (3) until 'SENS' appears in the display.
3. Press the <> controls (3) to set the required sensitivity ('SENS LO1' indicates that the tuner is at its lowest sensitivity setting and will tune to strong signals only, while 'SENS HI6' indicates that the tuner is most sensitive). If 'SENS LO' has been selected, the 'lo' indicator illuminates in the display.
4. Press the MENU button to store your selection.

*NOTE: Different tuning sensitivities can be set for FM and MW/LW.*

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## CD32 - Radio Tuning

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### **Waveband scan**

Waveband scanning enables you to listen to all receivable stations on the selected waveband for between 5 and 30 seconds each.

*To start scanning:* Press the MENU button (4) for two seconds ('SCAN' is displayed briefly, followed by the frequency or station name flashing).

*To stop scanning:* Briefly press the MENU button again.

**NOTE:** The scan time can be adjusted to suit your requirements (see '*MENU CONTROL FUNCTIONS*', page 140).

### **MONO/STEREO**

Whenever the FM waveband is selected, the radio automatically reproduces stereo sound, provided a suitable signal is available.

However, if a signal becomes too weak for good stereo reception, only mono sound is produced until the signal strengthens sufficiently for stereo sound reproduction.

## CD32 - Radio Tuning

### RADIO PRE-SET BUTTONS



The six pre-set buttons (3) can be used to manually store up to eighteen FM stations (six each on FM1, FM2 and FMT), six MW stations and six LW stations.

### Programming the pre-sets

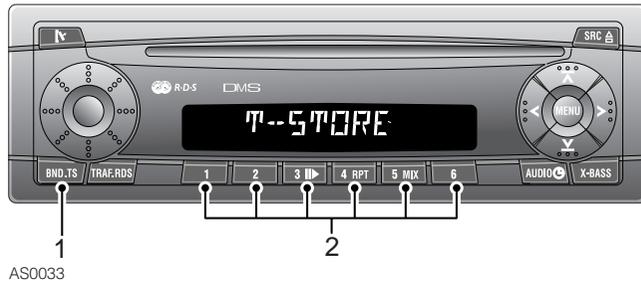
- Press the waveband selector (1) to select the required waveband or memory bank (FM1, FM2, FMT, MW or LW).
- Using the tuning buttons (2), select the desired frequency (see '*RADIO TUNING*', page 133).
- Press and hold one of the pre-set buttons (3). The radio will mute briefly while the frequency is being stored. If 'BEEP ON' has been selected (see '*MENU CONTROL FUNCTIONS*', page 140), an audible 'beep' will confirm that the frequency has been stored.
- Release the pre-set as soon as radio sound is restored and the new frequency details are displayed.

### Operating the pre-sets

Once the pre-set buttons have been programmed, select the desired waveband, then press the pre-set button of your choice. The display will initially show the pre-set number you have selected and the station frequency e.g: 'P3 101.3'. This is followed by the waveband and station frequency (or station name).

## CD32 - Radio Tuning

### TRAVELSTORE



Travelstore operates on the FM waveband only and enables you to rapidly tune and store the six strongest FM radio signals in a single operation. This facility is particularly useful if you are in an unfamiliar area and have little knowledge of local transmitter frequencies.

### Programming Travelstore

Press and hold the waveband selector (1) - the radio mutes and an audible 'beep' will sound (if 'BEEP ON' has been selected - see 'MENU CONTROL FUNCTIONS', page 140) and the display shows 'T-STORE'.

Travelstore scans the FM waveband to find the six strongest frequencies and then stores them in the FMT memory bank in order of signal strength. Radio sound is restored once the operation is complete.

If Travelstore is unable to locate and store six strong stations, the display shows ('----') for any unoccupied pre-sets, and the radio reverts to the last recalled pre-set frequency on the FM waveband.

**NOTE:** Travelstore overwrites any stations already stored on the FMT memory bank.

**NOTE:** If Travelstore is programmed with traffic information active, then programming will be limited to those stations capable of providing traffic information. In some areas this could severely limit the frequencies available to Travelstore and, for this reason, it is recommended that traffic information is switched off before Travelstore is programmed.

**NOTE:** Station frequencies can also be stored manually onto pre-sets in the FMT memory bank (see 'RADIO PRE-SET BUTTONS', page 135).

### Operating Travelstore

To tune to a Travelstore frequency, select the FMT waveband then press the pre-set button (2) of your choice. The display will initially indicate the selected pre-set number and then display the frequency (or station name) and FMT waveband e.g: 'FMT 89.5'.

## CD32 - Radio Tuning

### PROGRAMME TYPE (PTY)

Some radio stations broadcasting on the FM waveband provide programme type (PTY) information that can be received by the radio tuner. Using the PTY feature, radio broadcasts of a particular programme type can be selected.

#### PTY Programme types

NEWS	ROCK Music	PHONE IN
AFFAIRS	MOR Music	TRAVEL
INFO	LIGHT Music	LEISURE
SPORT	CLASSICS	JAZZ
EDUCATE	OTHER Music	COUNTRY
DRAMA	WEATHER	NATIONAL Music
CULTURE	FINANCE	OLDIES
SCIENCE	CHILDREN	FOLK Music
VARIED	SOCIAL	DOCUMENT
POP Music	RELIGION	TEST

#### Switching PTY on and off

To switch programme type on ('PTY ON') or off ('PTY OFF'), see '*MENU CONTROL FUNCTIONS*', page 140. When 'PTY' is selected the 'PTY' indicator will illuminate in the lower part of the display.

The language in which the programme type is displayed can be set to either English, French or German by using the MENU button, see 'PTY LANG' in '*MENU CONTROL FUNCTIONS*', page 140.

#### Selecting a programme type

1. With PTY switched on, repeatedly press one of the <> controls, or briefly press a pre-set button, until the desired programme type is displayed (see accompanying table).
2. Press one of the  $\nabla$   $\blacktriangledown$  controls. The radio will search for (and then tune to) the next radio station on the waveband broadcasting the desired programme type. During the search, the display will alternately show 'SEARCH' and the programme type.

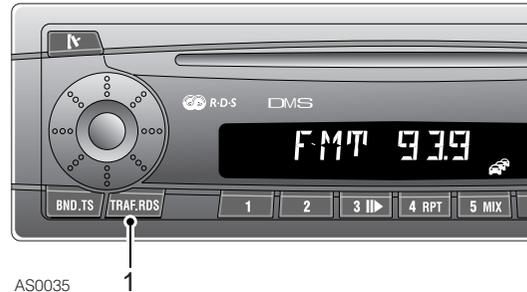
If no station of the desired programme type can be found, the display will briefly show 'NO PTY' and then return to the previously tuned station. However, if the tuned radio station, or another station on the same broadcasting network, later broadcasts a programme of the desired programme type, the radio will automatically switch to this broadcast (even during CD play).

#### Storing PTY programmes on the pre-set buttons

With the desired programme type selected, press and hold one of the pre-set buttons. The programme type is then stored on the pre-set button.

## CD32 - Traffic Information

### TRAFFIC INFORMATION BROADCASTS



On the FM waveband, your radio is able to receive traffic information broadcasts automatically as and when they occur.

#### Selecting traffic information

Briefly press the TRAF-RDS control (1) - the traffic jam symbol illuminates in the display. To switch off the traffic information feature, briefly press the control again.

Unwanted traffic information broadcasts can be aborted by pressing the control. In this case, because the feature is being disabled DURING a traffic information broadcast, disablement is only temporary - the feature will return as soon as the next traffic information bulletin is broadcast.

A warning bleep will sound if:

- The car leaves the reception area of the traffic information station being received.
- While listening to a CD the car leaves the reception area of the traffic information station currently tuned and the subsequent automatic search cannot find a new traffic information station.
- The radio is retuned from a traffic information station to a station that does not broadcast traffic information.

In each case, either switch off the traffic information feature, or tune to a station that broadcasts traffic information.

#### Traffic information broadcasts during CD play

When the radio is in traffic information mode, CD play will be interrupted by traffic information broadcasts automatically as and when they occur.

#### Setting the volume for Traffic announcements

The volume of traffic information broadcasts ('TA VOLUME') can be set independently from the volume required for other audio functions, see 'MENU CONTROL FUNCTIONS', page 140.

**NOTE:** The volume level for traffic information broadcasts can also be adjusted by turning the volume control during traffic information announcements.

## CD32 - Clock & Time

### CLOCK



AS0037

To display the time, press and hold the clock control (2). The display will be present for approximately two seconds.

#### Setting the time

1. Press the MENU button (1).
2. Press the  $\uparrow$  or  $\downarrow$  control until 'CLOCKSET' appears in the display.
3. Press the  $\rightarrow$  control. The time shows in the display with the minute figures flashing.
4. Adjust the minutes by pressing the  $\uparrow$   $\downarrow$  controls (up to increase or down to reduce).
5. Once the minutes have been set, press the  $\leftarrow$  control. This will cause the hour digits to flash.
6. Adjust the hours by pressing the  $\uparrow$   $\downarrow$  controls (up to increase or down to reduce).
7. Once all changes are complete, press the MENU button twice.

#### Changing between 12 and 24 hour displays

1. Press the MENU button (1).
2. Press the  $\uparrow$  or  $\downarrow$  control until '12H MODE' or '24H MODE' appears in the display.
3. Press the  $\leftarrow$   $\rightarrow$  controls to switch between displays.
4. Press the MENU button to store your selection.

#### Clock displays when the audio is switched off

*With the starter turned ON:*

The audio unit can be programmed to display the time, as follows:

1. With the audio switched on, press the MENU button (1).
2. Press the  $\uparrow$  or  $\downarrow$  control until either 'CLOCK ON' or 'CLOCKOFF' appears in the display.
3. Press the  $\leftarrow$   $\rightarrow$  controls to switch between displays (with 'CLOCKOFF' selected, the time display is prohibited).
4. Press the MENU button to confirm your selection.

*With the starter turned OFF:*

The time can be displayed when both the audio unit AND starter switch are turned off, as follows:

- Briefly press the clock button (2). The time is displayed for approximately 8 seconds.

*NOTE: This feature is available in both 'CLOCK ON' and 'CLOCKOFF' modes.*

3

## CD32 - Menu Functions

### MENU CONTROL FUNCTIONS

The following table identifies the full range of functions obtainable by pressing the menu button and then using the **▲** or **▼** controls. Once an adjustment has been completed, press the menu button once (or twice) to exit the menu and store the settings.

TAVOLUME	Select to adjust audio volume for traffic broadcasts - press <b>&lt;&gt;</b> controls to increase or reduce volume.
PEAK LVL	With PEAK ON selected, display shows graphic representation of radio output level - press <b>&lt;&gt;</b> controls to select PEAK ON or PEAK OFF.
HICUT 1 HICUT 0	HICUT enables or prohibits the automatic reduction of treble response in poor reception areas. HICUT 1 enables, HICUT 0 prohibits - press the <b>&lt;&gt;</b> controls to toggle between the two.
ON VOL	Default volume when audio is switched on - press <b>&lt;&gt;</b> controls to increase or reduce volume.
MUTE LVL	Audio volume when mute is activated - press <b>&lt;&gt;</b> controls to increase or reduce volume.
AUX ON AUX OFF	This feature is not recommended for use with R over 75 and MGZT models. Set to AUX OFF.
SENS	Adjusts sensitivity of radio tuning - press <b>&lt;</b> or <b>&gt;</b> to increase or reduce tuning sensitivity.
SCANTIME	Select to adjust scanning time for radio and CD play - press <b>&lt;</b> or <b>&gt;</b> to adjust (between 5 and 30 seconds).
PTY ON PTY OFF	Select to enable or prohibit programme type (PTY) selection - press the <b>&lt;&gt;</b> controls to toggle between PTY ON and PTY OFF.

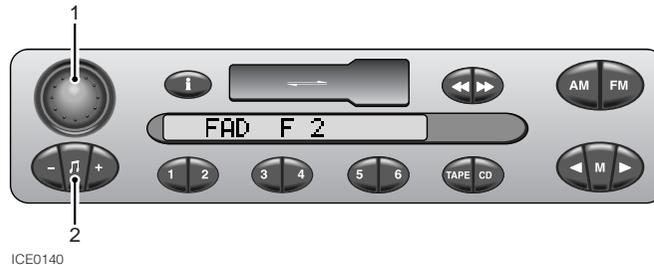
PTY LANG	Select to change PTY language - press <b>&lt;</b> or <b>&gt;</b> to select English, French or German.
CLOCK ON CLOCKOFF	Enables or prohibits time display when audio is switched off - press <b>&lt;&gt;</b> controls to toggle between 'CLOCK ON' and 'CLOCK OFF'.
CLOCKSET	Select to adjust time display - press <b>&lt;</b> or <b>&gt;</b> to select minutes or hours, and <b>▲</b> or <b>▼</b> to adjust the time.
12H MODE 24H MODE	Select to change clock display mode - press <b>&lt;&gt;</b> controls to toggle between 12 & 24 hour modes.
BEEP ON BEEP OFF	An audible signal accompanies some operations where a control is pressed for 2 seconds or more - press <b>&lt;</b> or <b>&gt;</b> to toggle between BEEP ON and BEEP OFF.
REG ON REG OFF	Reception of regional programme variations can be enabled or prohibited - use the <b>&lt;&gt;</b> controls to select REG ON or REG OFF.

**NOTE:** Some of the above features will not be available during CD play, or MW/LW radio operation. The following additional feature is available during CD play:

CD DISP	Select to alter single play CD display - press <b>&lt;&gt;</b> controls to select TIME (display shows track playing time) or PLAY (display shows track number).
CDC DISP	This feature is not applicable.

## Harmony - Radio

### SOUND CONTROLS



#### 1. On/off and volume control

Press to switch on (display briefly shows 'CODE ENABLED'). Press again to switch off.

Rotate steadily to right or left to adjust the volume.

The volume can also be adjusted using the remote switches on the steering wheel (see '*REMOTE AUDIO CONTROLS*', page 125).

**NOTE:** If you have a car telephone with a mute signal output connected to the stereo system, radio, tape or CD play automatically mutes when the telephone is in use.

#### 2. Audio selection button

Press one or more times to select bass, treble, fader or balance (display confirms selection), as described below.

Press and hold for at least two seconds to zero all audio settings (display shows 'FLAT').

**Bass:** Press once, then operate the '-' or '+' buttons to reduce or increase bass response. The display shows:

- 'BASS -6' = minimum bass
- 'BASS 0' = normal bass
- 'BASS +6' = maximum bass

**Treble:** Press twice, then operate the '-' or '+' buttons to reduce or increase treble response. The display shows:

- 'TREB -6' = minimum treble
- 'TREB 0' = normal treble
- 'TREB +6' = maximum treble

**Fader:** Press three times, then operate the '-' or '+' buttons to adjust the balance between front and rear speakers. The display shows:

- 'FAD F 6' = max sound from FRONT
- 'FAD 0' = equal balance
- 'FAD R 6' = max sound from REAR

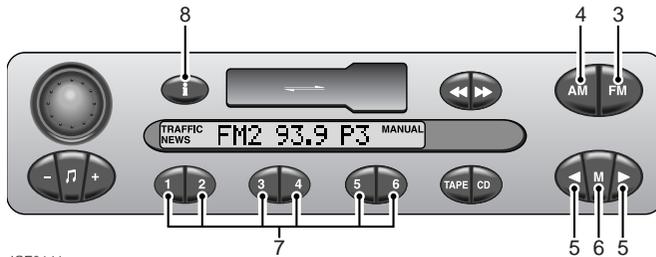
**Balance:** Press four times, then operate the '-' or '+' buttons to adjust the balance between left and right speakers. The display shows:

- 'BAL R 6' = max sound from RIGHT
- 'BAL 0' = equal balance
- 'BAL L 6' = max sound from LEFT

**NOTE:** After 8 seconds without further adjustment, the audio selection mode is cancelled automatically.

## Harmony - Radio

### RADIO CONTROLS



ICE0141

#### 3. FM waveband selector

Press briefly once or twice to select FM frequencies. There are two FM bands (FM1 and FM2). Both have the same tuning range, and each one can be used to store six frequencies on the pre-set buttons.

Press and hold to activate auto-store (see '*AUTO-STORE*', page 147).

#### 4. AM waveband selector

Press briefly to select one of the three AM bands (MW1, MW2 and LW). Each can be used to store six stations on the pre-set buttons.

Press and hold to activate auto-store (on MW only - see '*AUTO-STORE*', page 147).

#### 5. Tuning buttons

Briefly press either button to search up or down the frequency range (see '*RADIO TUNING*', page 145).

#### 6. Manual tuning selector

Press to select manual tuning mode ('MANUAL' is displayed) - use in conjunction with the tuning buttons (see '*Manual tuning*', page 145). Press again to return to automatic tuning.

The frequency can also be selected using the remote switches on the steering wheel (see '*REMOTE AUDIO CONTROLS*', page 125).

**NOTE:** Manual tuning defaults to automatic tuning if unused for more than 8 seconds.

#### 7. Pre-set buttons

Use to store up to 6 radio stations on each waveband.

Press briefly to select a stored frequency.

Press and hold to store a frequency on a pre-set (see '*Programming the pre-sets*', page 146).

#### 8. Traffic and news information

Press briefly to switch on (or switch off) traffic information mode - FM waveband only (see '*Selecting traffic information*', page 148).

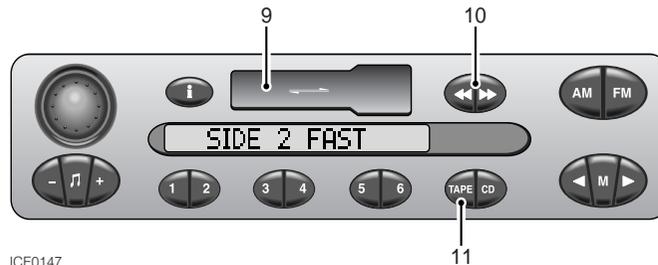
Press and hold for 2 seconds to switch on (or switch off) news mode - FM waveband only (see '*Selecting news information*', page 148).

Press briefly to return to normal radio, tape or CD reception during a traffic or news announcement.

**NOTE:** Both traffic and news information can be operational at the same time.

## Harmony - Cassette Player

### CASSETTE PLAYER CONTROLS



ICE0147

#### 9. Cassette compartment

Insert the tape with the open side to the right and push in carefully. The radio mutes and tape play starts immediately (display shows 'SIDE 1' or 'SIDE 2').

At the end of either side of the tape, play will automatically continue in the opposite direction.

If the set is switched off during tape play, the cassette remains in stand-by mode. Play resumes when the set is switched on again.

#### 10. Fast forward/rewind/reverse and eject buttons

During tape winding, 'FAST' shows in the display.

- To forward or reverse wind, press either one of the two buttons.
- To stop tape winding, half press the remaining (unlocked) button. Tape play will automatically resume.
- To reverse the direction of tape play, half press both buttons simultaneously.
- To eject the tape, FULLY press both buttons simultaneously. The unit returns to radio mode, selecting the waveband and frequency last in use.

#### 11. Tape mode selector

Press to select tape play (display shows 'SIDE 1' or 'SIDE 2').

To change to radio reception during tape play, press either of the waveband selection buttons (FM or AM) - tape play will stop and the radio automatically selects the frequency last in use on whichever waveband was selected.

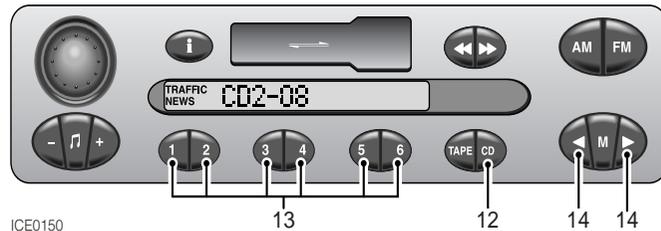
To return to tape play, press the tape mode button.

**NOTE:** The remote switches on the steering wheel can also be used to change to or from radio or tape play (see 'REMOTE AUDIO CONTROLS', page 125).

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## Harmony - Compact Disc Player

### COMPACT DISC PLAYER CONTROLS



#### 12. CD mode selector

Press to select CD player mode. Playback starts from the point on the disc at which play last stopped, or from the start of the first disc if the magazine is newly inserted. The display shows the disc and track number (i.e. 'CD2 - 08'). If a magazine has not been inserted into the autochanger, 'NO MAGAZINE' is displayed.

At the end of each disc, playback automatically continues with the next disc (missing discs are skipped if less than six have been loaded). Once the last track of the final disc has been played, playback reverts to the first track of the first disc.

#### 13. Disc selection buttons (1-6)

Each button is numerically allied to the equivalent compartment in the CD magazine. By pressing one of the buttons, the CD from the magazine compartment of the same number is loaded and the first track commences playing.

If a disc has been inserted the wrong way up, or an empty compartment is selected, the display shows 'NO DISC' and the next available disc is selected instead.

#### 14. Track search buttons

*Skip:* Briefly press the appropriate button to skip to the beginning of the next track, or return to the start of the current track (the display shows disc and track numbers). Press the search buttons as often as necessary to reach the desired track. If either button is pressed and held, the CD player continues to skip tracks (forward or back) until the button is released.

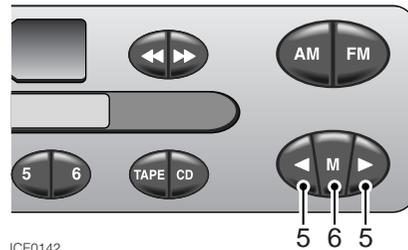
*Fast search:* Press the Manual mode button ('M'), then press and hold the appropriate search button; the audio unit will play the first few seconds of every track on all the discs in the autochanger magazine. When the search button is released, fast search ceases and normal playback resumes.

**NOTE:** The compact disc player controls will operate only with the optional CD changer unit.

**NOTE:** Skip, search and mode selection can be operated using the remote switches on the steering wheel (see 'REMOTE AUDIO CONTROLS', page 125).

## Harmony - Radio Tuning

### RADIO TUNING



#### Manual tuning

If you know the frequency of the radio station you are seeking, or you need to select a radio station that is too weak to be found by automatic tuning, use manual tuning, as follows:

Select the desired waveband (FM or AM), then press the manual tuning button (6) ('MANUAL' appears in the display). By pressing either tuning button (5), the frequency changes (either up or down) in steps of 0.1 MHz for FM, or 9 kHz for MW, or 1 kHz for LW.

#### Fast manual tuning

By keeping either tuning button depressed, the waveband is scanned rapidly up or down until the button is released.

#### Automatic tuning

Select the required waveband (FM or AM), then briefly press one of the tuning buttons (5).

The radio automatically searches the frequency range (either up or down depending upon which of the tuning buttons is pressed) looking for a radio station of acceptable strength. Once a suitable station is found, the search stops unless you choose to continue by pressing the tuning button again.

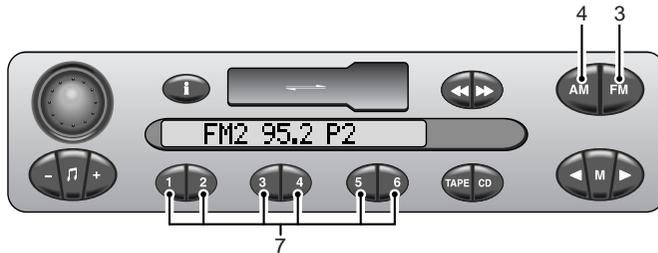
*NOTE: If you have a car telephone with a mute signal output connected to the radio, the radio automatically mutes when the telephone is in use.*

#### MONO/STEREO

Whenever the FM waveband is selected, the radio automatically reproduces stereo sound, provided a suitable signal is available. However, if a signal becomes too weak for good stereo reception, only mono sound is produced until the signal strengthens sufficiently for stereo sound reproduction.

## Harmony - Radio Tuning

### RADIO PRE-SET BUTTONS



ICE0143

The six pre-set buttons (7) can be used to manually store up to twelve FM stations (six each on FM1 and FM2), twelve MW stations (six each on MW1 and MW2), and six LW stations.

### Programming the pre-sets

- Select the required waveband (FM1, FM2, MW1, MW2 or LW).
- Tune to the desired frequency using either automatic or manual tuning.
- Press and hold one of the pre-set buttons. The radio will mute while the frequency you have chosen is stored on the pre-set. The display briefly shows the frequency and station name (where appropriate) of the radio station previously stored on the pre-set, and then the new frequency (and station name).
- Release the pre-set as soon as radio sound is restored and the new frequency details are displayed.

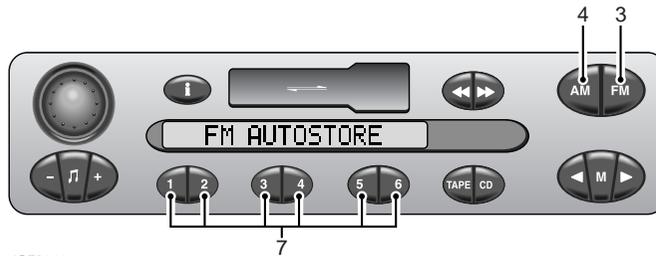
**NOTE:** *Once the pre-sets have been programmed, they will be retained by the unit until either; they are re-programmed, or power to the audio unit is disturbed (car battery disconnection for example).*

### Operating the pre-sets

Once the pre-set buttons have been programmed, operation is simple; select the desired waveband, then press the pre-set button of your choice.

## Harmony - Radio Tuning

### AUTO-STORE



ICE0144

Auto-store enables you to rapidly tune and store the strongest FM and MW radio signals in a single operation. This facility is particularly useful if you are in an unfamiliar area and have little knowledge of local transmitter frequencies.

### Programming auto-store

Press and hold the appropriate waveband selection button (3 or 4) - the radio mutes and the display shows either 'FM AUTOSTORE' or 'MW AUTOSTORE'.

Auto-store scans the waveband to find the six strongest frequencies and then stores them on either the FM2 or MW2 pre-set buttons in order of signal strength. Radio sound is restored once the operation is complete.

If auto-store is unable to find six strong stations, the remaining pre-sets are not used (display shows 'NO STATION').

**NOTE:** Auto-store overwrites any stations already stored on the FM2 or MW2 pre-set buttons.

**NOTE:** If FM auto-store is programmed with the traffic facility armed, then programming will be limited to those stations capable of providing traffic information only. For this reason, it is recommended that the traffic information facility is switched off before the pre-set stations are stored and before auto-store is programmed.

### Operating auto-store

To tune to one of the auto-store frequencies, select FM2 or MW2, then press the pre-set button of your choice.

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## Harmony - Traffic & News Information

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### INFORMATION BROADCASTS

On the FM waveband, the RDS facility enables your radio to receive traffic and news information broadcasts from local radio stations that are linked to the same network as the station to which it is tuned.



Traffic and news information broadcasts can be selected by pressing the information button.

Once selected any available traffic and news information broadcasts are then received automatically as and when they occur (even if you are listening to cassette tapes or CDs).

### Selecting traffic information

BRIEFLY press the information button - the word 'TRAFFIC' illuminates in the display.

During traffic announcements the display flashes 'TRAFFIC' alternately with the name of the radio station providing the information.

If the radio is tuned to a weak FM signal or a radio station that cannot provide traffic information, the message 'STATION SEEK' flashes in the display while the radio searches the waveband and then tunes to a radio station that does provide traffic information broadcasts.

In remote areas, it may be impossible to find a traffic information station. The radio will search the waveband twice; if a station cannot be found, the radio displays 'NO TRAFFIC' and returns to the station to which it was previously tuned.

*NOTE: When traffic information is switched on, occasional, and very brief, muting of the radio may occur while the set searches for traffic broadcasts. For this reason, it is recommended that traffic information is switched off when not needed.*

### Selecting news information

Press and hold the information button for approximately 2 seconds - the word 'NEWS' illuminates in the display.

During news broadcasts the display flashes 'NEWS' alternately with the name of the radio station providing the news information.

*NOTE: Both traffic and news information can be selected at the same time. However, the radio gives priority to traffic information.*

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## Harmony - Traffic & News Information

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### **Switching off information broadcasts**

*Traffic information:* To switch off traffic information, briefly press the information button ('TRAFFIC' disappears from the display). This action will prevent traffic information broadcasts from being received until the button is pressed again.

*News information:* To switch off news information, press and hold the information button for approximately 2 seconds ('NEWS' disappears from the display). This action will prevent future news broadcasts from being received until the feature is reselected.

Unwanted information broadcasts can be aborted by similarly pressing the information button. In this case, because the feature is being disabled DURING an information broadcast, disablement is only temporary - the feature will return as soon as the next traffic or news information bulletin is broadcast.

### **Information broadcasts during tape or CD play**

When the radio is in either traffic or news information mode, CD or tape play will be interrupted by information broadcasts automatically as and when they occur.

### **Volume for Traffic and News announcements**

The volume of traffic and news information broadcasts can be set independently from the volume required for other audio output (e.g. radio, cassette tape and CD), as follows:

Wait for a traffic or news announcement, then during the broadcast, adjust the volume to the desired level (this is likely to be greater than that required for other audio output). Once this volume has been set, it will be memorised by the audio unit and replicated automatically next time a traffic or news announcement is broadcast.

Note that further adjustments to the volume can be made during any subsequent traffic or news announcements.

### **Emergency alarm announcement**

Emergency announcements cannot be activated or deactivated by the user. If an emergency traffic or news announcement is transmitted ('ALARM' appears in the display), all other audio functions will be overridden.

## Symphony - Radio

### SOUND CONTROLS



ICE0151

#### IMPORTANT

The audio unit has a 20 minute time-out function. This enables the unit to be switched on and then used for up to 20 minutes after the starter switch has been turned off and the key removed. After 20 minutes, the unit will switch off automatically.

#### 1. On/off and volume control

Press to switch on (display shows 'ROVER'). Press again to switch off.

Rotate steadily to right or left to adjust the volume.

The volume can also be adjusted using the remote switches on the steering wheel (see 'REMOTE AUDIO CONTROLS', page 125).

**NOTE:** The volume level automatically increases or decreases according to road speed, thereby combating any additional road or wind noise that may be experienced.

**NOTE:** If you have a car telephone with a mute signal output connected to the stereo system, radio, tape or CD play automatically mutes when the telephone is in use.

## Symphony - Radio

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### 2. Audio selection control

Press one or more times to select bass, treble, balance or fader (display confirms selection), as described below.

Press and hold for two seconds to zero all audio settings (display shows 'FLAT').

*Bass:* Press once, then rotate to left or right to reduce or increase bass response. Display shows:

- 'BASS -9' = minimum bass
- 'BASS 0' = normal bass
- 'BASS +9' = maximum bass

*Treble:* Press twice, then rotate to left or right to reduce or increase treble response. Display shows:

- 'TREB -9' = minimum treble
- 'TREB 0' = normal treble
- 'TREB +9' = maximum treble

*Balance:* Press three times, then rotate to adjust balance between left and right speakers. Display shows:

- 'BAL R9' = max sound from RIGHT
- 'BAL 0' = equal balance
- 'BAL L9' = max sound from LEFT

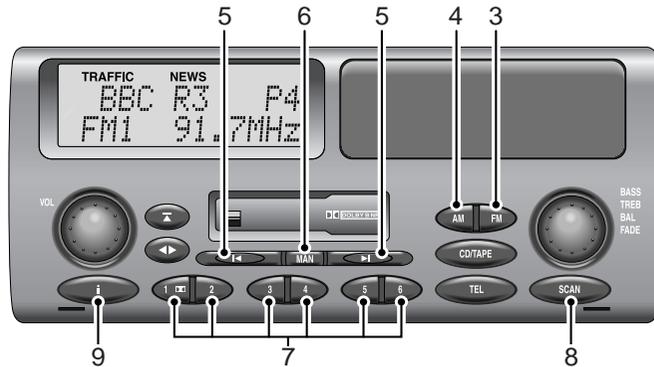
*Fader:* Press four times, then rotate to adjust balance between rear and front speakers. Display shows:

- 'FAD F9' = max sound from FRONT
- 'FAD 0' = equal balance
- 'FAD R9' = max sound from REAR.

**NOTE:** After 8 seconds without further adjustment, the audio selection mode is cancelled automatically.

## Symphony - Radio

### RADIO CONTROLS



ICE0152

#### 3. FM waveband selector

Press briefly once or twice to select FM frequencies. There are two FM bands (FM1 and FM2). Both have the same tuning range, and each one can be used to store six frequencies on the pre-set buttons.

Press and hold to activate auto-store (see 'AUTO-STORE', page 159).

#### 4. AM waveband selector

Press briefly once, twice or three times to select one of the three AM bands (MW1, MW2 and LW). Each can be used to store six stations on the pre-set buttons.

Press and hold to activate auto-store (on MW only - see 'AUTO-STORE', page 159).

#### 5. Tuning buttons

Briefly press either button to search up or down the frequency range (see 'RADIO TUNING', page 157).

#### 6. Manual tuning selector

Press to select manual tuning mode ('MAN' is displayed) - use in conjunction with the tuning buttons (see 'Manual tuning', page 157). Press again to return to automatic tuning.

The frequency can also be selected using the remote switches on the steering wheel (see 'Remote audio controls').

**NOTE:** Manual tuning defaults to automatic tuning if unused for more than 14 seconds.

#### 7. Pre-set buttons (1-6)

Use to store up to 6 radio stations on each waveband.

Press briefly to select a stored frequency.

Press and hold (until radio beeps) to store a frequency on a pre-set (see 'Programming the pre-sets', page 158).

## Symphony - Radio

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### 8. Scan mode button

Press to scan through all frequencies on the chosen waveband (each radio station will be played for 5 seconds). Press again to cancel the scan. See *'Waveband scan'*, page 157.

### 9. Traffic and news information

Press briefly to switch on (or switch off) Traffic information mode - FM waveband only (see *'Selecting traffic information'*, page 160).

Press and hold for 2 seconds to switch on (or switch off) News mode - FM waveband only (see *'Selecting news information'*, page 160).

Press briefly to return to normal radio, tape or CD reception during a traffic or news announcement.

**NOTE:** Both traffic and news information can be operational at the same time.



## Symphony - Cassette Player

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*Skip:* With the unit in automatic mode, press the appropriate search button to skip to either the beginning of the next track, or the beginning of the current track ('SEEK', and chevrons indicating the direction of tape movement, appear in the display). To select automatic mode (or return to manual mode), press the manual button (6) located between the two tape search controls - the 'MAN' indicator in the display extinguishes.

**NOTE:** *The skip function may not find spaces between tracks of less than three seconds duration, and also may be confused by excessive background noise, very soft musical passages and intermittent pauses in music or speech.*

**NOTE:** *The skip function can also be controlled using the remote switches on the steering wheel (see 'Remote audio controls').*

### 15. Dolby<sup>1</sup> B-type noise reduction

Press pre-set 1 when playing tapes recorded using Dolby B NR, the display shows 'DD'.

### 16. Tape scan button

Press the SCAN button to listen to the first 10 seconds of each track on the tape (both sides). The display shows 'TAPE SCAN'. The scan continues until the button is pressed again or until another function is selected.

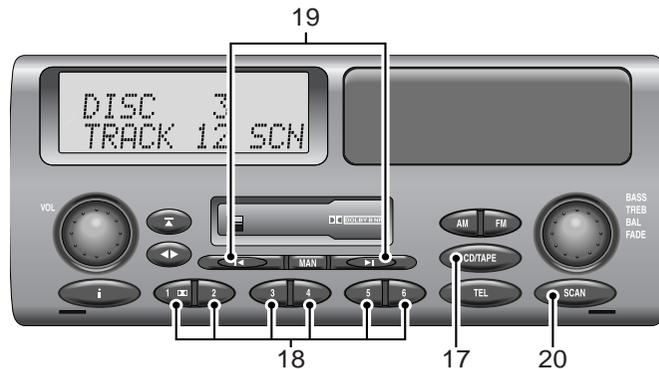
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1. Noise reduction manufactured under license. Dolby and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

## Symphony - Compact Disc Player

### COMPACT DISC PLAYER CONTROLS



ICE0154

#### 17. CD mode selector

Press to select CD player mode. Playback starts from the point on the disc at which play last stopped, or from the start of the first disc if the magazine is newly inserted. The display shows disc and track numbers (i.e. 'DISC 3 TRACK 12'). If no magazine has been inserted into the autochanger, 'NO MAGAZINE' is displayed.

At the end of each disc, playback automatically continues with the next disc (missing discs are skipped if less than six have been loaded).

**NOTE:** If a magazine compartment is empty or a disc has been inserted into the magazine upside down, 'NO DISC' is displayed.

#### 18. Disc selection buttons (1-6)

Press the appropriate button to select a disc. If an empty compartment is selected, the next available disc is selected instead.

#### 19. Track search buttons

Press the appropriate button once to skip to the beginning of the next track, or to return to the start of the current track. Press either button repeatedly to select other tracks on the disc. If a button is pressed and held, the CD player continues to skip tracks (forwards or backwards) until the button is released.

*Search:* Press the manual mode button ('MAN'), then press and hold the appropriate search button to move forward or backward through the disc in play mode, but at increased speed (volume reduces and display shows 'FFWD' or 'FREW').

#### 20. Scan mode button (SCAN)

Press the SCAN button to listen to the first 10 seconds of every track on the selected disc. 'SCN' appears in the display, along with the number of the disc and the scanned track. The scan continues until the button is pressed again or until another function is selected.

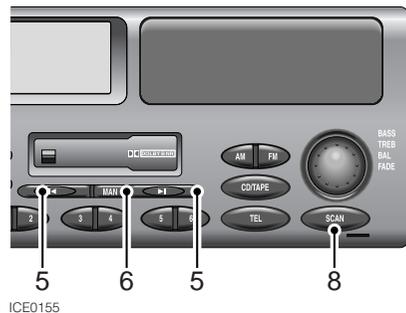
By pressing and holding the SCAN button for approximately 2 seconds, random play mode is activated, whereby tracks from any of the discs will be played in random order ('RND' and the disc and track numbers are displayed).

**NOTE:** The compact disc player controls will operate only with the optional CD changer unit.

**NOTE:** Skip and mode selection can be operated using the remote switches on the steering wheel (see 'Remote audio controls')

## Symphony - Radio Tuning

### RADIO TUNING



#### Manual tuning

If you know the frequency of the radio station you are seeking, or you need to select a radio station that is too weak to be found by automatic tuning, use manual tuning, as follows:

Select the desired waveband (FM or AM), then press the manual tuning selector (6) (the 'MAN' indicator illuminates in the display). By pressing either tuning button (5), the frequency changes (either up or down) in steps of 0.1 MHz for FM, or 9 kHz for MW, or 1 kHz for LW.

#### Fast manual tuning

By keeping either tuning button depressed, the waveband is scanned rapidly (up or down) until the button is released.

#### Automatic tuning

Select the required waveband (FM or AM), then briefly press one of the tuning buttons (5) - ('SEEK' and chevrons indicating the direction of search appear in the display).

The radio automatically searches the frequency range (either up or down depending upon which of the tuning buttons is pressed) looking for a radio station of acceptable strength. Once a suitable station is found, the search stops unless you choose to continue by pressing the tuning button again.

**NOTE:** If you have a car telephone with a mute signal output connected to the radio, the radio automatically mutes when the telephone is in use.

#### Waveband scan

Select the desired waveband (FM or AM) and press the SCAN button (8). The radio scans through the waveband, seeking stations of acceptable strength. Each time a strong signal is found, the radio plays that station for 5 seconds (the display shows waveband and frequency, accompanied by the word 'SCAN'). After 5 seconds the radio mutes and scans for the next station, and so on.

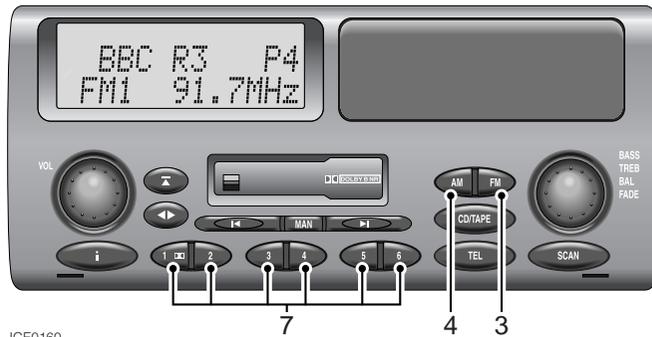
To stop the scan, press the button again - the radio commences playing the station at which the scan was stopped.

#### MONO/STEREO

Whenever the FM waveband is selected, the radio automatically reproduces stereo sound, provided a suitable signal is available. However, if a signal becomes too weak for good stereo reception, only mono sound is produced until the signal strengthens sufficiently for stereo sound reproduction.

## Symphony - Radio Tuning

### RADIO PRE-SET BUTTONS



ICE0160

The six pre-set buttons (7) can be used to manually store up to twelve FM stations (six each on FM1 and FM2), twelve MW stations (six each on MW1 and MW2), and six LW stations.

### Programming the pre-sets

- Select the required waveband (FM1, FM2, MW1, MW2 or LW).
- Tune to the desired frequency using either automatic or manual tuning.
- Press and hold one of the pre-set buttons until a bleep sounds. The frequency is now stored (the display shows the waveband and frequency or name of the station to which you have tuned).

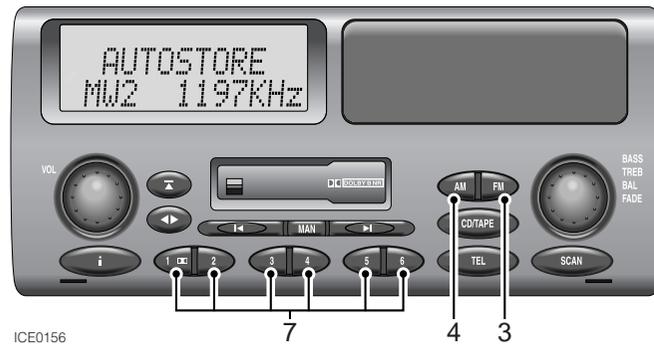
**NOTE:** Once the pre-sets have been programmed, they will be retained by the unit until either; they are re-programmed, or power to the audio unit is disturbed (car battery disconnection for example).

### Operating the pre-sets

Once the pre-set buttons have been programmed, operation is simple; select the desired waveband, then press the pre-set button of your choice.

## Symphony - Radio Tuning

### AUTO-STORE



Auto-store enables you to rapidly tune and store the strongest FM and MW radio signals in a single operation. This facility is particularly useful if you are in an unfamiliar area and have little knowledge of local transmitter frequencies.

### Programming auto-store

Press and hold the appropriate waveband selection button (3 or 4) until a bleep sounds (the radio mutes and the display shows 'AUTOSTORE').

Auto-store scans the waveband to find the six strongest frequencies and then stores them on either the FM2 or MW2 pre-set buttons in order of signal strength. Radio play restores once the operation is complete.

If auto-store is unable to find six strong stations, the remaining pre-sets are not used.

**NOTE:** Auto-store overwrites any stations already stored on the FM2 or MW2 pre-set buttons.

**NOTE:** If FM auto-store is programmed with the traffic facility armed, then programming will be limited to those stations capable of providing traffic information only. For this reason, it is recommended that the traffic information facility is switched off before the pre-sets are stored and before auto-store is programmed.

### Operating auto-store

To tune to one of the auto-store frequencies, select FM2 or MW2, then press the pre-set button of your choice.

3

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## Symphony - Traffic & News Information

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### INFORMATION BROADCASTS

On the FM waveband, the RDS facility enables your radio to receive traffic and news information broadcasts from local radio stations that are linked to the same network as the station to which it is tuned.



Traffic and news information broadcasts can be selected by pressing the information button.

Once selected any available traffic and news information broadcasts are then received automatically as and when they occur (even if you are listening to cassette tapes or CDs).

### Selecting traffic information

BRIEFLY press the information button - the 'TRAFFIC' indicator illuminates in the display.

During traffic announcements the display slowly flashes 'TRAFFIC INFO'.

If the radio is tuned to an FM radio station that does not provide traffic information, the message 'NO TRAFFIC' is displayed.

If the radio is tuned to an FM signal that is too weak to provide traffic information, the message 'STATION SEEK' is displayed while the radio searches the waveband and tunes to a signal that is strong enough to broadcast traffic information.

In remote areas, it may be impossible to find a traffic information station. The radio will search the waveband twice; if a station cannot be found, the radio switches off traffic and returns to the station to which it was previously tuned.

*NOTE: When traffic information is switched on, occasional, and very brief, muting of the radio may occur while the set searches for traffic broadcasts. For this reason, it is recommended that traffic information is switched off when not needed.*

### Selecting news information

Press and hold the information button until a bleep sounds - the 'NEWS' indicator illuminates in the display.

During news broadcasts the display flashes 'NEWS' alternately with the name of the radio station providing the news information.

*NOTE: Both traffic and news information can be selected at the same time. However, the radio gives priority to which ever broadcast commenced first - one information source cannot interrupt another!*

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## Symphony - Traffic & News Information

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### **Switching off information broadcasts**

*Traffic information:* To switch off traffic information, briefly press the information button (the 'TRAFFIC' indicator disappears from the display). This action will prevent traffic information broadcasts from being received until the button is pressed again.

*News information:* To switch off news information, press and hold the information button for approximately 2 seconds (a bleep sounds and the NEWS indicator disappears from the display).

Unwanted information broadcasts can be aborted by similarly pressing the information button. In this case, because the feature is being disabled DURING an information broadcast, disablement is only temporary - the feature will return as soon as the next traffic or news information bulletin is broadcast.

### **Information broadcasts during tape or CD play**

When the radio is in either traffic or news information mode, CD or tape play will be interrupted by information broadcasts automatically as and when they occur.

### **Volume for Traffic and News announcements**

The volume of traffic and news information broadcasts can be set independently from the volume required for other audio output (e.g. radio, cassette tape and CD), as follows:

Wait for a traffic or news announcement, then during the broadcast, adjust the volume to the desired level (this is likely to be greater than that required for other audio output). Once this volume has been set, it will be memorised by the audio unit and replicated automatically next time a traffic or news announcement is broadcast.

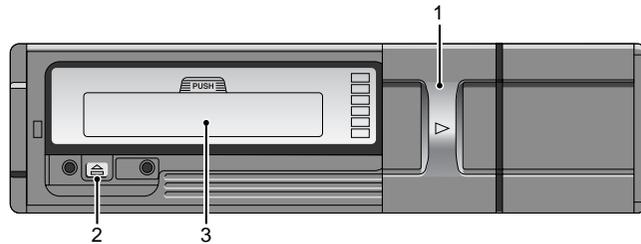
Note that further adjustments to the volume can be made during any subsequent traffic or news announcements.

### **Emergency alarm announcement**

Emergency announcements cannot be activated or deactivated by the user. If an emergency traffic or news announcement is transmitted ('ALARM' appears in the display), all other audio functions will be overridden.

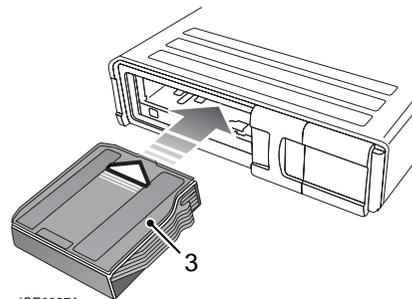
## CD Changer Unit

### REMOVING/INSERTING THE MAGAZINE



ICE0096

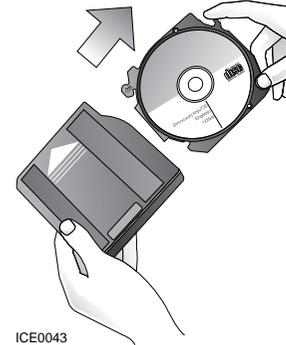
Fully open the sliding cover (1) to insert or remove the magazine. Keep the cover closed at all other times to prevent dust and dirt from entering. Press the button (2) to eject the magazine.



ICE0097A

Insert the magazine (3) in the direction of the arrow marked on the magazine casing and push it fully into the changer. Finally, close the sliding cover.

### Loading & unloading the magazine



ICE0043

Holding the magazine as shown (arrow on magazine casing uppermost), remove each CD tray in turn.

Place a disc (label side uppermost) onto each tray - holding **ONLY** the outside edge and centre hole of the disc. Load only one disc in each tray. Correctly align the tray with the parallel slots on each side of the magazine and slide the tray into the magazine.

To unload the magazine, hold the magazine with the arrow uppermost, pull out each tray in turn, holding the tray securely so as not to drop the disc. Unload one disc at a time and handle only the edge and centre of the disc.

**NOTE:** Additional magazines can be obtained from an MG Rover dealer.

## CD Changer Unit

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### IMPORTANT

- Use standard 12cm CDs only.
- DO NOT use irregularly shaped or damaged CDs - these may damage the compact disc changer.
- 8cm CD singles must NOT be used, even if a CD adaptor is fitted.
- If temperatures in excess of 70°C occur in the autochanger, the message 'HIGH TEMP' will be displayed - change to radio or tape mode until the unit has cooled.
- The CD autochanger should only be used as described - any other application or method of use could result in the user being exposed to invisible laser radiation exceeding the limit of laser class 1.

### CARING FOR COMPACT DISCS

Dirt, dust, condensation and heat can damage discs. Always observe the following precautions:

**NEVER** touch the horizontal playing surface (the unlabelled side) of a disc! Handle discs by holding the outer edges, or the edge of the central hole and the outer edge, between finger and thumb.

**ALWAYS** return discs to their boxes after use (dirt detracts from the sound quality).

**NEVER** leave the disc or the box exposed to excessive heat or direct sunlight!

**NEVER** use a solvent or abrasive cleaner! Dust or dirt should be removed from the playing surface by wiping with a clean, dry, lint-free cloth always wipe in a straight line from the centre to the edge of the disc!

3

## Care of Cassette Player and Tapes

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### CARE OF CASSETTE PLAYER AND TAPES

Use only good quality tapes with a maximum capacity of ninety minutes (C90). Check that both spools rotate freely and remove any loose turns at the start of the tape by winding one spool with a pen or pencil.

#### Cassette player

In use, the tape head accumulates dust and contamination, gradually impairing sound reproduction and, in extreme cases, reducing volume too. To combat contamination, clean the tape head periodically (after approximately every 20 hours playing time) by passing a wet type cleaning cassette through the player.

**NOTE:** *Because your cassette player is fitted with auto reverse, the cleaning cassette must be played in both directions.*

The tape will require more frequent cleaning in winter, as contamination is greater in conditions of low temperature and increased humidity. However, the use of good quality tapes keeps the build up to a minimum.

#### Cassette tapes

- Always store cassettes in their boxes when not in use.
- Never leave cassettes in the vehicle during extremes of temperature. In particular, do not leave tapes in direct sunlight as they may warp and become unusable, or jam the tape player mechanism.
- Fast forward, or rewind tapes every 8 to 10 plays to prevent them from becoming too tightly wound.
- Ensure that labels attached to the cassette are glued firmly in place.
- DO NOT leave tapes in the cassette player for more than a few hours in very cold or humid conditions - the oxides on the tape surface may contaminate the cassette player mechanism.

**NOTE:** *After continuous playing, cassettes may become hot to touch. This is normal and will not harm good quality tape.*

## Satellite Navigation

### INTRODUCTION



The satellite navigation system fitted to your car uses the Global Positioning System (GPS). GPS works in conjunction with direction and speed sensors incorporated into the car's electronic systems, to continually monitor the position of the car. The navigation computer then integrates this data with the information stored on the navigation CD, enabling you to plan and follow a route map to your desired destination. This is particularly useful if you are travelling to or through unfamiliar territory.

In addition, the satellite navigation system provides the following facilities:

- Recommended routes allowing for personal preferences (fastest route, without using motorways etc).
- Destination input using either town / road name, or by selecting a point of interest.

- Audio and visual destination guidance, including automatically updated instructions (in case of ignored instructions, or if road works cause a diversion). Audio instruction is provided via a speaker located in the driver's footwell. Visual instruction is displayed in the message centre in the upper centre of the instrument pack.
- General information on destination and present location (hotels, restaurants, parking etc).
- An address book to store frequently needed destinations.

There are 24 GPS satellites in orbit (at a height of 21,000 km) around the earth. The GPS navigation system will pick up and utilise any available signals to plot your position. To accurately determine your position, the GPS receiver needs to be able to pick up the signals from at least four satellites.

Obstacles such as tall buildings, tunnels and mountains can sometimes shield a vehicle from satellite signals, which may cause a temporary interruption to the operation of the navigation system. However, the car's direction and speed sensors minimise any effect on the performance of the navigation system, if this should occur. Normal operation will resume once the obstruction has been passed.

**!** *The navigation system is designed only as a guide and does not relieve the driver of the responsibility for driving in accordance with traffic regulations.*

*In the interests of road safety, information should only be programmed into the navigation system when the car is stationary.*

## Satellite Navigation

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### **OPERATING INFORMATION**

The navigation system can only provide information and guidance for the area covered by the navigation CD – ensure that you are using the latest version of the correct CD for your country.

Some maps contain areas of unattributed geometry. In these areas the navigation system will announce that “you are leaving the registered road network”. The navigation screen will revert to a ‘Target Direction Arrow’ which displays the direction and distance to your destination ‘as the crow flies’. No audible instructions will be given in these areas.

***NOTE:** Navigation CDs are updated approximately every 6 months and you will automatically receive the first update free, along with information on how to order further updates.*

Under normal operating conditions, the satellite navigation system requires approximately 8 seconds to confirm the car's position using the satellites.

If the car battery has been disconnected, or if the car has been transported to a new location on another vehicle (e.g. by trailer or train), the navigation system will require approximately 15 minutes to identify the new position. Entering the new location manually will reduce this delay (see ‘ENTERING THE CAR'S POSITION’, page 178).

Metallic objects interfere with satellite signal reception. For this reason, do not store any metallic objects in close proximity to the satellite receiver, located on the rear shelf.

## Satellite Navigation

### INSTALLING THE NAVIGATION CD



H2902

The navigation computer is located on the right hand side of the luggage compartment. Check that the 'ON' indicator light is illuminated, if not, press the eject button (1) to activate the system. Partially insert the navigation CD until it is automatically drawn into the computer (the 'CD-IN' indicator light will illuminate).

**!** *DO NOT insert any CD into the navigation computer, other than a genuine navigation CD.*

Once the navigation CD is loaded, it is unnecessary to remove it unless the following applies:

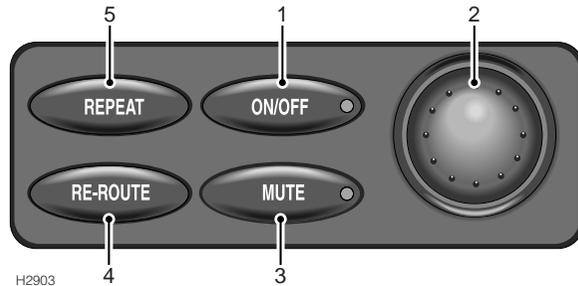
- You are travelling in an area not covered by the current CD (another country, for example). Obtain the correct CD for the new country and install it at the appropriate time.
- If you are updating the computer with the latest version of the navigation CD (the CDs are updated approximately every 6 months).

To eject the navigation CD press the eject button (1).

**NOTE:** *If the navigation system is switched on and there is no navigation CD loaded, the warning 'NOTE: NO CD IN NAV. - COMPUTER! PLEASE INSERT CD!' will appear in the display. Insert the CD and wait for a few seconds until the display reverts to the GPS display.*

## Satellite Navigation

### USER CONTROLS



#### 1. Navigation on/off control

Press to turn the navigation system on or off (the switch indicator light illuminates when the navigation system is turned on).

#### 2. Menu select control

The menu select control operates most functions of the navigation system.

Rotate the control clockwise to scroll up through a vertical menu and from left to right on a horizontal menu. Rotate the control anti-clockwise to scroll down through a vertical menu and from right to left on a horizontal menu.

Press the control to select the highlighted option.

#### 3. Audio mute control

Press to mute the audio navigation instructions (the switch indicator light illuminates). Press again to reactivate audio instructions.

#### 4. Re-route control

Press to select the re-route function, then rotate the menu select control to set the detour distance (to avoid roadworks or traffic queues, for example). Press the menu select control to enter the detour distance.

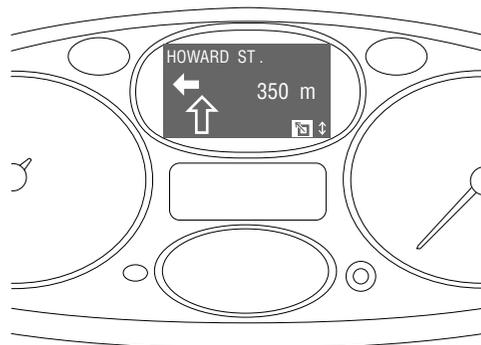
When the navigation computer has plotted the new route, audio and visual instructions are given.

#### 5. Repeat control

Press to listen to the last audio navigation instruction for a second time. The repeat function will only operate if the last instruction given is still valid.

## Satellite Navigation

### NAVIGATION DISPLAY



AS0015a

The navigation system shares the larger display panel at the top of the instrument pack with the message centre. From time to time it may be necessary for message centre information to be displayed while the navigation system is in use. In this case, the message centre display will alternate with the navigation display. However, audible information accompanying navigation displays will be unaffected.

### DISPLAY SYMBOLS

#### The escape icon

Using the menu select control, highlight and select this icon to return to the previous menu without altering any information programmed into the navigation computer.

#### Arrows

↑ This symbol indicates that there is an additional screen 'above' the display currently being viewed. Rotate the menu select control clockwise to scroll up to the next screen.

↓ This symbol indicates that there is an additional screen 'below' the display currently being viewed. Rotate the menu select control anti-clockwise to scroll down to the next screen.

↕ This symbol indicates that there are additional screens, both above and below the display currently being viewed. Use the menu select control to scroll up or down to the next screen.

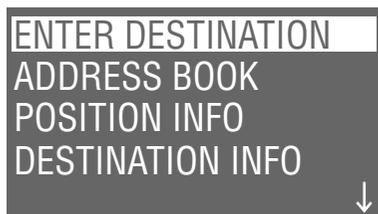
On menu displays, the display will revert to warning light display after approximately 20 seconds of inactivity. Further operation of the menu select control will restore the navigation display.

On navigation guidance displays, the display reverts to the warning light display, every twenty seconds (approx.). When the next relevant navigation instruction is valid, the navigation guidance display reappears (until the instruction is completed).

**NOTE:** *New warnings in the message centre will always take precedence over the navigation display.*

## Satellite Navigation

### ENTERING A DESTINATION



H2862

With the navigation system turned on, turn the menu select control until 'ENTER DESTINATION' is highlighted, then press the control to select.

In most markets, the country is read from the navigation CD as a default setting and is entered automatically. If this does not occur a 'typewriter' menu appears and it will be necessary to enter the country name manually as you would the town or city, as follows:



H2863

Using the menu select control, highlight the 'CITY?' option, and then press the control to select. A 'typewriter' menu appears in the display.

Rotate the menu select control until the first letter of the town or city is highlighted, then press the control to select. Repeat this procedure until the full name of the country has been entered, then highlight 'ENTER' and press to select.

**NOTE:** On the typewriter menu, the left pointing arrow deletes the last selection, the right pointing arrow creates a space, and a dot replaces an invalid letter or number.

As an aid to the selection process, when entering a name, the navigation computer automatically displays only the letters that, according to the computer, could follow the preceding letter to give a valid name. Once the navigation computer has been provided with enough information, the system may suggest a completed name before it is fully entered manually.

Repeat this procedure to enter the road name and, if possible, the house number of your destination.

**NOTE:** The navigation system can only give information on your destination when a valid country and town have been entered.

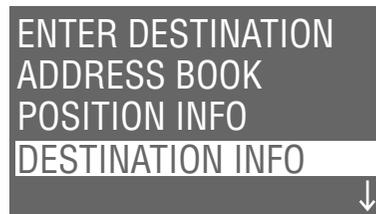
### Using the index

By highlighting and selecting 'INDEX' after entering a few letters of either a town or road name, the relevant part of the index is displayed. Rotate the menu select control to scroll through the index until the correct destination is highlighted, then press the control to select.

## Satellite Navigation

### Using destination information

When entering a destination and the exact address is not known (if you are travelling to a museum for example), the destination information function enables you to select a specific building or monument as your destination.



H2921

- From the main menu, highlight and select 'DESTINATION INFO'.



H2919

- The display shows the last destination entered. Change the destination town, if necessary, as described in 'ENTERING A DESTINATION', page 170, then highlight and select 'DEST.INFO'.



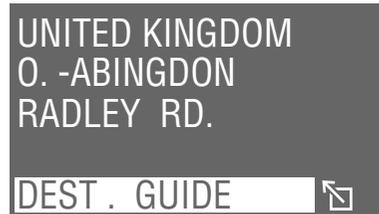
H2870

- Scroll through the list until the desired category is highlighted and press to select. A list of all available entries for the chosen category is displayed. Scroll through the list to highlight and select your chosen destination (see 'INFORMATION ON LOCATIONS', page 177).

3

## Satellite Navigation

### Route preference



H2866

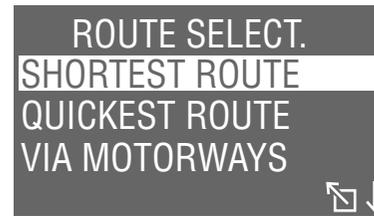
After selecting the chosen destination, highlight and select 'DEST.GUIDE'. The navigation computer asks whether you wish to travel using the last selected preference (see below).



H2922

If the last route preference is still valid, highlight and select 'YES'.

If you do not wish to use the last route preference, highlight and select 'CHANGE'. You can now choose one of four methods; highlight and select your choice.



H2867

- 'SHORTEST ROUTE' - this selection plots the shortest route possible (in terms of distance).
- 'QUICKEST ROUTE' - this selection plots your route using the fastest roads and avoiding town centres etc.
- 'VIA MOTORWAYS' - motorways and main arterial roads are given priority.
- 'AVOID MOTORWAYS' - motorways are avoided, wherever possible (to select 'AVOID MOTORWAYS' it is necessary to scroll down to the next screen of the menu).

Highlight and select your preferred choice of route.

**NOTE:** The navigation system plots routes according to the road information and characteristics stored on the navigation CD. Therefore, the route suggested by the navigation system may differ from the route that may be expected.

## Satellite Navigation

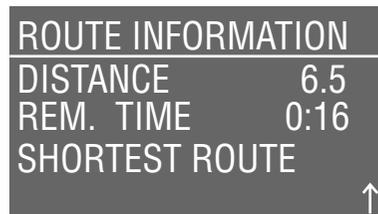
### ROUTE INFORMATION



H2874F

After the chosen route method is selected, the navigation computer displays the distance to the next relevant junction and the direction which should be taken at that junction (a solid arrow).

From this screen, rotate the menu select control anti-clockwise to view the route information screen, which provides the following information:



H2869

- Distance to destination.
- Remaining time to destination (estimated).
- Route preference (via motorways etc.).



H2868

Rotate the menu select control clockwise (for two 'notches') to view the vehicle position screen, which states the country, town and road of the car's current position.

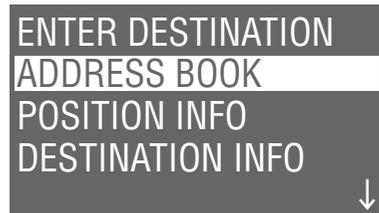
3

## Satellite Navigation

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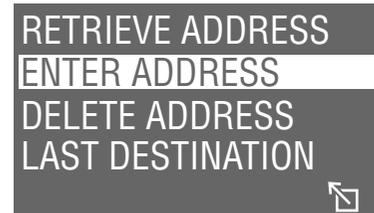
### USING THE ADDRESS BOOK

### Entering an address



H2923

- From the main menu, highlight and select 'ADDRESS BOOK'
- Select the required function from the address menu.



H2928

From the address book menu, highlight and select 'ENTER ADDRESS'. The last address programmed into the navigation computer appears on the display, with an additional entry at the top providing the facility to enter a name for the address. If this is the address that you want to enter, highlight and select 'NAME'; use the alphanumerical menu to programme the chosen name and then highlight and select 'ENTER'. Then, from the enter address menu, highlight and select 'ENTER' - the address is now listed in the address book.

If you want to enter a different address, highlight and select each part of the address in turn and enter using the 'typewriter' menu (see '*ENTERING A DESTINATION*', page 170).

## Satellite Navigation

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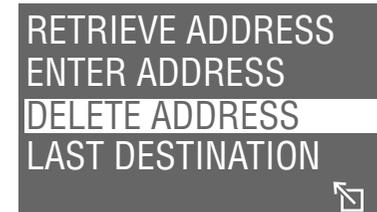
### Retrieving an address



H2929

From the address book menu, highlight and select 'RETRIEVE ADDRESS'. The address that was last entered into the address book is displayed (along with an arrow to indicate that there are other addresses listed), as a default. Use the menu select control to scroll through the addresses until the correct one is displayed, then highlight and select 'RECALL'. The destination guide screen is then displayed ('DEST.GUIDE'), see *'Route preference', page 172*.

### Deleting an address



H2927

To delete an entry from the address book, highlight and select 'DELETE ADDRESS' in the address book menu. Use the menu select control to scroll through the addresses until the correct one is displayed, then highlight and select 'DELETE'. The display returns to the address book menu. If you decide not to delete any of the addresses, highlight and select the 'Escape' icon.

3

## Satellite Navigation

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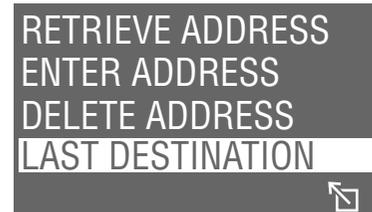
### Emptying the address book



H2930

From the address book menu, highlight (but not select) 'DELETE ADDRESS' using the menu select control. Then, press and hold the menu select control; the navigation computer asks you to confirm that you want to delete all entries. If you do, highlight and select 'YES', if not, highlight and select 'NO'. If 'YES' is selected, the display returns to the destination guide menu (see *'Route preference', page 172*). If 'NO' is selected, the display will ask if you want to delete the last entry made in the address book (see *'Deleting an address', page 175*).

### Last destination



H2872

The navigation computer stores the last ten destinations programmed into the system. To recall an address, highlight and select 'LAST DESTINATION' from the address book menu. The computer asks if you want to retrieve or delete an address from the list, if you do, highlight and select the appropriate prompt. A list is then displayed with either 'RECALL' or 'DELETE' at the bottom of the display. Scroll through the list until the chosen address is displayed, then highlight and select 'RECALL' or 'DELETE'. If the address is being recalled, the display returns to the destination guide menu (see *'Route preference', page 172*), if an address is being deleted, or if the 'Escape' icon is selected, the display will revert to the previous screen.

## Satellite Navigation

### INFORMATION ON LOCATIONS

A large number of facilities associated with your current location, or any listed destination town or city are stored on the navigation CD (e.g. hotels, airports, museums etc). These facilities can be viewed and, if desired, can then be selected as your destination.

#### Information on current locations

This option can be used to find facilities closest to the car's current position; the nearest petrol station for example.



H2871

From the main menu, highlight and select 'POSITION INFO' to display an alphabetical list of facilities.

Scroll through the list, then highlight and select the desired facility (e.g. petrol stations), to display a list of up to ten of the closest petrol stations.

Scroll through the list until the petrol station of your choice appears in the display, then highlight and select 'RECALL' to enter it as your new destination. The new destination appears in the display with 'DEST. GUIDE' highlighted. Select 'DEST.GUIDE' if you wish to alter your route to the destination (see 'Route preference', page 172).

### Information on your destination

Having entered a destination town or city, highlight and select the escape icon to return to the main menu. Highlight and select 'DESTINATION INFO' from the main menu to display the destination and 'DEST. INFO'.

Highlight and select 'DEST. INFO', to display an alphabetical list of facilities in the vicinity of your destination.



H2924

Scroll through the list, then highlight and select the desired facility (e.g. hotels) to display the 'typewriter' menu. Use the typewriter menu to enter the hotel name, if known, or highlight and select the index prompt to display a list of all the hotels close to your destination.

Scroll through the list until the hotel of your choice appears in the display, then highlight and select 'RECALL' to enter it as your new destination. The new destination appears in the display, with 'DEST. GUIDE' highlighted. Select this prompt if you wish to alter your route to the destination (see 'Route preference', page 172).

## Satellite Navigation System Settings

### ENTERING THE CAR'S POSITION

If the car battery has been disconnected, or if the car has been transported to a new location on another vehicle (by trailer or train, for example), the navigation will require up to 15 minutes to identify the new position. Entering the car's position manually as follows, reduces this delay:

From the main menu, scroll down to the next screen and highlight and select 'SETTINGS'.

From the SETTINGS menu, highlight and select 'POSITION VEHICLE'.

**NOTE:** If the correct CD is in the navigation computer, the country is automatically entered. If you have travelled to a new country, a new CD is needed.



Highlight and select 'CITY?', then use the typewriter menu to enter the town or city name. Once the name is entered, the bar at the bottom of the display highlights 'INDEX' or 'ENTER', depending on the following:

- If the display highlights 'INDEX', the computer needs you to confirm the name (if there are two towns of the same name within the area covered by the navigation CD, for example). If this is the case, select INDEX and then highlight and select the correct name from the list.
- If the display highlights 'ENTER', simply press the menu select control to enter the name.



Repeat the above procedure to enter the name of the road where you are currently situated. The navigation computer asks you to enter a 'JUNCTION'. This is the name of the road that you will next come to. Select 'JUNCTION', then enter the name using the typewriter (if required), or select the correct road name if a list of names is displayed. 'CROSSING JUNCTION NOW' appears in the display, requesting you to press the select menu control as you cross the junction.

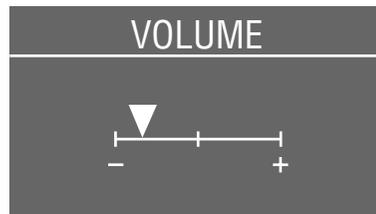
Provided that the information entered into the computer is correct, the navigation system only requires approximately 1 minute to position the car and provide instructions on how to reach your destination (if a destination has been entered).

## Satellite Navigation System Settings

### USER PREFERENCES

From the main menu, scroll down to the next screen to highlight and select 'SETTINGS'. From the SETTINGS menu, highlight and select the setting which needs adjustment.

#### Changing the volume setting for audible instructions



H2873

Highlight and select 'VOLUME'. The display shows a slide scale bar with an arrow indicating the current volume level. Use the menu select control to move the arrow to the left or right, to decrease or increase the volume level. To help you set the required volume, the navigation computer 'voice' is heard at the changed volume as each adjustment is made. Press the menu select control to enter the new setting.

#### Changing the language setting

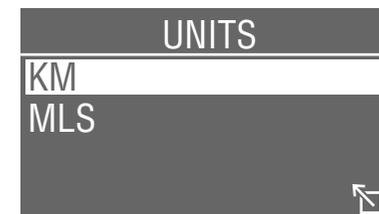


H2925

This setting changes the language of all menu and audible instructions. Highlight and select 'LANGUAGE' to display all available languages. Highlight and select the chosen language to enter the new setting, or highlight and select the escape icon to return to the Settings menu.

3

#### Changing the units of measurement



H2926

Highlight and select 'UNITS', then highlight and select either 'KM' to select metric, or 'MLS' to select imperial measurement. If no change is required, highlight and select the escape icon to return to the Settings menu.

## Security Code

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### SECURITY CODE INFORMATION

To reduce the risk of theft, your audio unit was programmed with a four-digit security code before the car left the factory. Once activated, this code prevents the unit from functioning if it is illegally removed from the car.

In addition, each unit is further protected by a time delay penalty system. If an incorrect code is entered:

- **CD32 audio:** A one hour time delay is imposed after the third and all subsequent code entry attempts.
- **Harmony & Symphony audio:** A one minute time delay is imposed after the first code entry attempt. Thereafter, the time delay doubles (2 min, 4 min, 8 min, etc.) with each failed attempt.

Your car was supplied with a Security Information card. This card contains a record of the four digit security code, as well as the audio unit's unique serial number. The serial number is also stamped into the metal side of the audio unit and, in the event of theft, would confirm proof of ownership.

It is VERY IMPORTANT that you keep a safe record of the security code and heed the following advice:

- NEVER keep a record of the security code in the car.
- If you lose your code number, contact an MG Rover dealer, who will be able to obtain this information for you.

### ENTERING THE SECURITY CODE

If power to the audio unit has been interrupted (car battery disconnected, for example), the code MUST be entered before the unit can be operated. Enter the code as follows:

#### CD32 audio

- Switch on the radio ('CODE' appears in the display, followed by '0000').
- Press pre-set button 1 the required number of times to enter the first digit of the code.
- Press pre-set button 2 the required number of times to enter the second digit of the code.
- Repeat this process using pre-set buttons 3 and 4 to enter the third and fourth digits of the code.
- When the correct code is displayed, press the **⏏** control to store the code.

***NOTE:** If three incorrect codes have been entered, the first one hour time delay period commences. During the delay period, 'WAIT 1 H' appears in the display - DO NOT switch off. At the end of the delay period, 'CODE' reappears in the display and you can then enter the correct code.*

## Security Code

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### Harmony and Symphony audio

- Switch on the radio ('CODE' appears in the display). Press pre-set button 1.
- Press either the up or down tuning button until the first digit of the security code appears in the display. Press pre-set 1 to store the first digit in the unit's memory.
- Use either tuning button to select the second digit of the code (until the correct digit appears in the display). Press pre-set 1 to store the second digit.
- Select the third digit, again using the tuning buttons (until the correct digit is displayed). Press pre-set 1 to store the third digit.
- Select the final digit (the display now shows the full four digit code). Press pre-set 1 to store the final digit.

If the correct code has been selected the radio will commence operating immediately.

***NOTE:** If an incorrect code has been entered, the first time delay period commences. During the delay period, 'CODE WAIT' appears in the display - DO NOT switch off. At the end of the delay period, 'CODE' reappears in the display and you can then enter the correct code. Remember; the time delay period doubles each time an incorrect code is entered.*



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## ***Maintenance***

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- 184** Maintenance*
- 188** Bonnet Opening*
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- 209** Cleaning & Vehicle Care*
- 212** Identification Numbers*
- 214** Parts & Accessories*

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## Maintenance

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### **ROUTINE SERVICING**

The safety, reliability and performance of your car will depend partly on how well it is maintained.

Maintenance is the owner's responsibility and you must ensure that owner maintenance operations, oil services, inspections and brake fluid and coolant changes are carried out when required and according to the manufacturer's recommendations.

### **Oil services and inspections**

The service interval display in the instrument panel shows the next service type (Oil Service or Inspection) and the distance remaining before the next service is due. This display appears for 4 seconds every time the starter switch is initially turned to the second position.

The distance display commences at 24,150 km and progressively reduces in increments of 50 km as the car is driven, until zero is reached. The relevant service should be carried out after 12 months or as soon as the distance display shows zero (whichever is the sooner). After the completion of each service, the servicing dealer will reset the distance display to 24,150 km.

***NOTE:** Because the service interval display reduces in increments of 50 km, it is possible to undertake a short journey without triggering any movement from the display.*

While the oil services and inspections have nominal distance and time-related intervals of 24,150 km or 12 months, by measuring fuel consumption the car's monitoring system is also able to assess the owner's driving style and the type of motoring to which the car is subjected. These additional factors will affect the point at which the service should be carried out.

For example, a car subjected predominantly to short journey motoring, will consume more fuel, resulting in a more rapid deterioration of the engine oil. In this case, the service distance indicator will reduce more rapidly, reaching zero after the car has travelled as few as 19,000 or 20,000 km. Conversely, the driver of a car used mainly for long motorway journeys, driving carefully and within the speed limit, may well find that the service distance indicator does not 'zero' until the car has exceeded 24,150 km.

***NOTE:** If a service is not carried out (or the dealer fails to reset the display), the distance indicator, having reached zero, will then start to accumulate, but with minus values, indicating the distance by which a service is overdue.*

### **Service history**

This handbook includes a Service History section, which enables a record to be kept of all the oil services and inspections that are carried out on the car. This section of the book also provides a facility for the dealer to record brake fluid and coolant changes, as well as the fitting of replacement airbag modules and seat belt pretensioners.

Ensure your dealer signs and stamps the book after each oil service and inspection.

## Maintenance

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### **Brake fluid replacement**

The brake fluid requires replacement every two years, irrespective of the distance the car has travelled. Normally, the brake fluid change indicator on the instrument panel will commence illuminating (for four seconds every time the starter switch is initially turned to the second position) as soon as each two year period has elapsed (see 'Service interval display (3)', page 75).

However, if an impending oil service or inspection falls due within a period of up to 180 days prior to the brake fluid change becoming due, then the indicator will illuminate earlier. This will enable the dealer to combine the brake fluid change with the oil service or inspection, thereby avoiding the need for an additional dealer visit.

***NOTE:** Brake fluid replacement will be an additional cost.*

### **Coolant replacement**

The engine coolant (anti-freeze and water solution) needs to be replaced every four years regardless of the distance the car has travelled. Your dealer will replace the coolant at the scheduled oil service or inspection nearest to the conclusion of each four year period, to avoid the need for an additional dealer visit.

***NOTE:** Coolant replacement will be an additional cost.*

### **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 converters and engine.

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## Maintenance

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### OWNER MAINTENANCE

In addition to the routine services and inspections referred to previously, a number of simple checks must be carried out more frequently. You can carry out these checks yourself and advice is given on the pages that follow.

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

#### *Daily checks*

- Operation of lights, horn, direction indicators, wipers, washers and warning lights.
- Operation of seat belts and brakes.
- Look for fluid deposits underneath the car that might indicate a leak.

#### *Weekly checks*

- Engine oil level.

*NOTE: The engine oil level should be checked more frequently if the car is driven for prolonged periods at high speeds.*

- Coolant level.
- Brake fluid level.
- Power steering fluid level.
- Screen washer fluid level.
- Tyre pressures and condition.
- Operate air conditioning★.

### SPECIAL OPERATING CONDITIONS

If your car is frequently used in dusty conditions, or operated in extreme climates where sub-zero or very high ambient temperatures are normal, more frequent attention may need to be paid to servicing requirements. Contact an MG Rover dealer for advice.

## Maintenance

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### SAFETY IN THE GARAGE

 **Cooling fans may commence operating after the engine is switched off, and continue operating for a number of minutes. Keep clear of all fans while working in the engine compartment.**

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

- Keep your hands and clothing away from drive belts and pulleys.
- If the car has been driven recently, **DO NOT TOUCH** exhaust and cooling system components until the engine has cooled.
- **DO NOT TOUCH** electrical leads or components while the engine is running, or 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 underneath the car with a wheel changing jack as the only means of support.
- Ensure sparks and naked lights are kept away from the engine compartment.
- Wear protective clothing, including, where practicable, gloves made from an impervious material.
- Remove metal wrist bands and jewellery before working in the engine compartment.
- **DO NOT** allow tools or metal parts of the car to make contact with the battery leads or terminals.

### Poisonous fluids

 It is illegal to pollute drains, water courses or soil. Use authorised waste disposal sites to dispose of used oil and toxic chemicals.

Fluids used in motor vehicles are poisonous and should not be consumed or brought into contact with open wounds. These include: battery acid, anti-freeze, brake and power steering fluid, petrol, diesel, engine oil and windscreen washer additives.

For your own safety, **ALWAYS** read and obey all instructions printed on labels and containers.

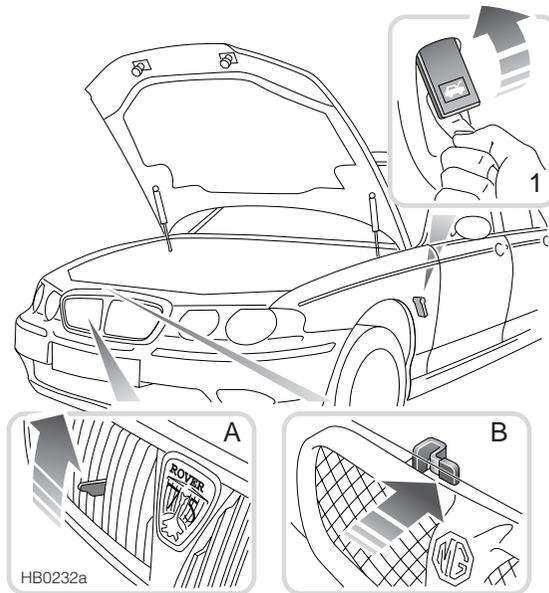
### Used engine oil

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

## Bonnet Opening

### BONNET OPENING

**!** *DO NOT drive with the bonnet retained by the safety catch alone.*



1. From inside the car, pull the bonnet release handle.
2. Release the bonnet safety catch. Dependent on the model, one of two different release mechanisms will be fitted:
  - A. Push the lever mounted on the bonnet locking platform towards the rear of the car.
  - B. Lift the lever, which protrudes through the front grille.
3. Raise the bonnet.

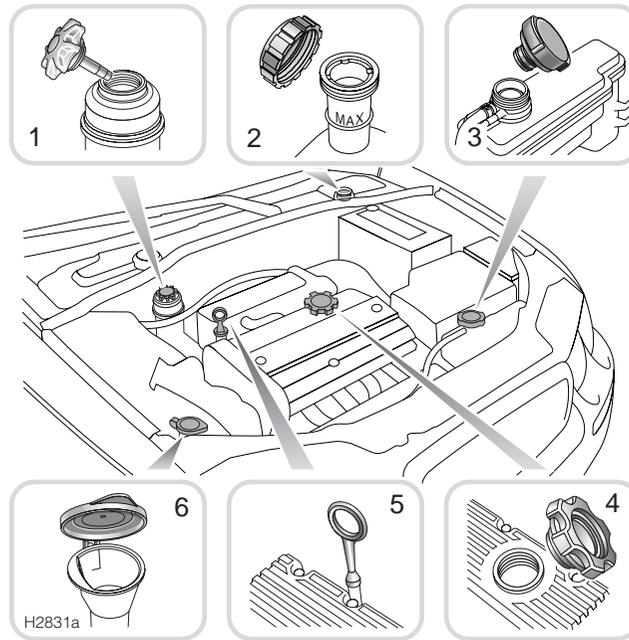
### Closing the bonnet

Lower the bonnet. When the bonnet is approximately 150 mm from its closed position, push down evenly using the palms of both hands on the leading edge of the bonnet on either side of the radiator grille.

After closing the bonnet, 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

### 1.8 PETROL ENGINES (including turbo)



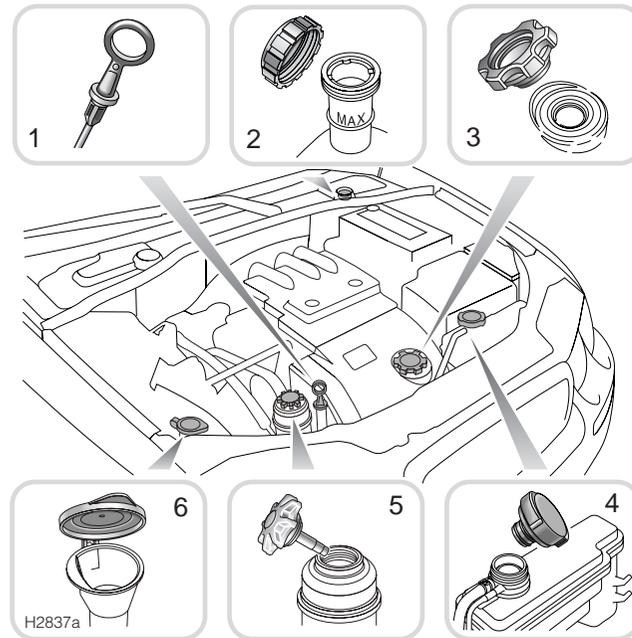
1. Power steering reservoir (black cap)
2. Brake reservoir (black cap)
3. Cooling system reservoir
4. Engine oil filler (yellow cap)
5. Engine oil dipstick (yellow)
6. Washer reservoir (blue cap)

4

**!** While working in the engine compartment, always observe the safety precautions listed under 'SAFETY IN THE GARAGE', page 187.

## Engine Compartment

### 2.0 & 2.5 PETROL ENGINE

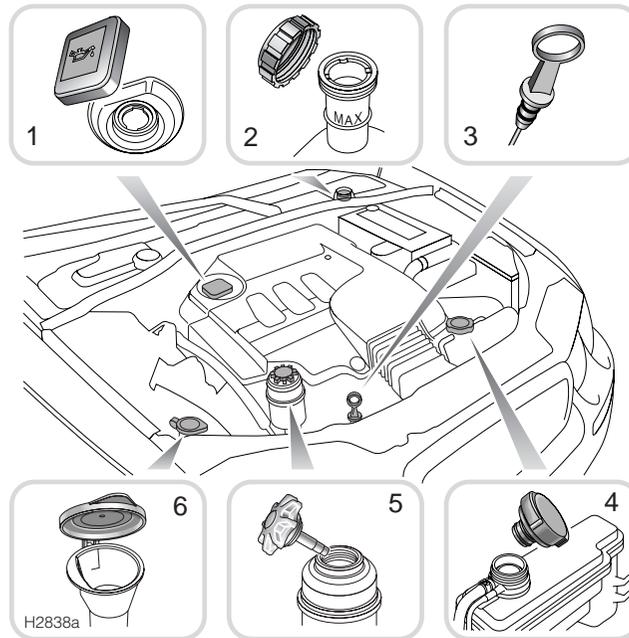


1. Engine oil dipstick (yellow)
2. Brake reservoir (black cap)
3. Engine oil filler (yellow cap)
4. Cooling system reservoir
5. Power steering reservoir (black cap)
6. Washer reservoir (blue cap)

**!** *While working in the engine compartment, always observe the safety precautions listed under 'SAFETY IN THE GARAGE', page 187.*

## Engine Compartment

### 2.0 DIESEL ENGINE



1. Engine oil filler (yellow cap)
2. Brake reservoir (black cap)
3. Engine oil dipstick (yellow)
4. Cooling system reservoir
5. Power steering reservoir (black cap)
6. Washer reservoir (blue cap)

4

**!** *While working in the engine compartment, always observe the safety precautions listed under 'SAFETY IN THE GARAGE', page 187.*

## Engine

### ENGINE OIL

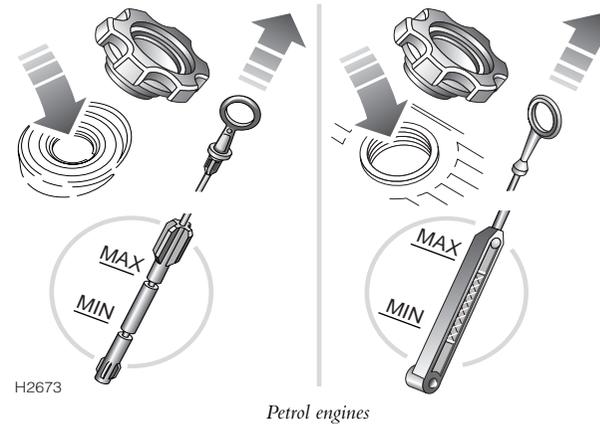
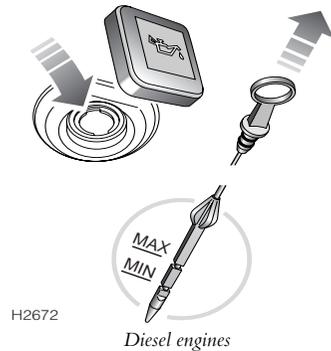
**!** *Driving the car with the engine oil level ABOVE the upper mark, or BELOW the lower mark on the dipstick, will damage the engine.*

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, wait for at least two minutes after switching off before checking the level.

**NOTE:** *Check the engine oil more frequently if the car is driven at high speeds for prolonged periods.*

#### Oil level check & top-up

**!** *Take care to avoid spilling engine oil onto a hot engine - a fire may result!*



1. Withdraw the dipstick and wipe the blade clean.
2. Slowly insert the dipstick and withdraw again to check the level, which should NEVER be allowed to fall below the lower mark on the dipstick.
3. To top-up, remove the oil filler cap and add oil to maintain a level between the upper and lower marks on the dipstick. As a general guide, if the level on the dipstick is:
  - nearer to the upper mark than the lower, add no oil.
  - nearer to the lower mark than the upper, add half a litre of oil.
  - at or below the lower mark, add one litre of oil.
4. Wait for five minutes and then recheck the level, adding more oil if necessary - DO NOT OVERFILL!
5. Finally, ensure the dipstick and filler cap are replaced.

## Engine

### Oil specification

Model/engine	Approved viscosity	Minimum oil specification		
		ACEA A1	ACEA A2	
'75' 1.8 petrol models †	10W/40	ACEA A1	ACEA A2	-
'75' 1.8 petrol turbo models	10W/40			ACEA A3
'75' 2.0 petrol models	10W/40		ACEA A2	-
'75' 2.5 petrol models	10W/40		ACEA A2	-
'75' 2.0 diesel models ††	10W/40 or 15W/40			ACEA A3 & B3
'ZT' 160 models	10W/40		ACEA A2	-
'ZT' 190 models	10W/40			ACEA A3
† For 1.8 (non-turbo) petrol engines, ACEA A1 or A2 oils can be used - the A1 specification may improve fuel economy. †† Oils for 2.0 litre diesel engines must meet both ACEA A3 and ACEA B3 specifications.				

To ensure optimum engine life and performance, oils used for topping-up and refilling the engine must match the minimum ACEA specifications shown in the table. Oils of a higher numerical specification can also be used (e.g. ACEA A3 oils can be used in place of ACEA A2 oils for 'ZT' 160 models), but oils of a lower numerical value must NEVER be used!

Oils manufactured to the specifications shown in the table are suitable for use in temperatures between -20°C to 30°C (if climatic temperature falls outside these limits, seek advice from your dealer).

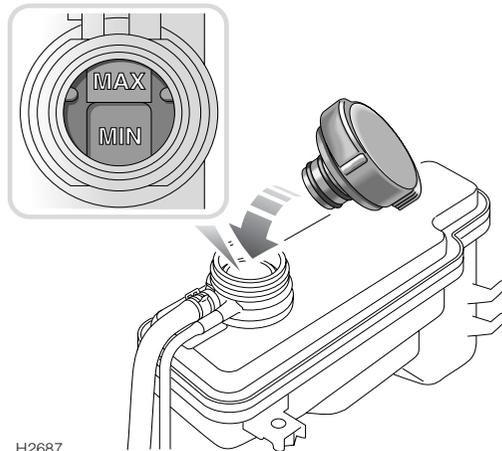
**NOTE:** *Mixing oil additives with the engine oil is not recommended and could damage the engine.*

## Cooling System

### COOLANT CHECK & TOP-UP

**!** *DO NOT remove the reservoir cap when the cooling system is hot - escaping steam or water could cause serious injury.*

The coolant level should be checked weekly when the cooling system is cold and with the car resting on level ground.



Remove the filler cap to check the level of the coolant. The level marking can only be viewed through the filler neck.

If it is necessary to remove the filler cap before the system has fully cooled, loosen the cap slowly, allowing the air pressure to escape gradually before removing the cap completely.

If the level is below the 'MAX' mark, top-up with a 50% mix of water and ethylene glycol based anti-freeze (containing no methanol) with Organic Acid Technology (OAT) corrosion inhibitors, meeting BTC coding type 4E.

*NOTE: When topping-up, avoid spillage on body panels - anti-freeze will damage painted surfaces.*

If the coolant level falls appreciably during a short period, suspect leakage or overheating and arrange for your dealer to examine the car.

Ensure the cap is tightened fully after topping-up.

## Cooling System

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### ANTI-FREEZE

**!** *Anti-freeze is poisonous and can be fatal if swallowed - keep containers sealed and out of the reach of children. If accidental consumption is suspected, seek medical attention immediately.*

**!** *Prevent anti-freeze coming into contact with the skin or eyes. If this occurs, rinse immediately with plenty of water.*

The anti-freeze content of the coolant must be maintained between 50% and 60% all year round (not just in cold conditions). 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 and the coolant completely renewed every four years, regardless of distance travelled.

**NOTE:** *DO NOT add rust inhibitors or other additives to the coolant - these may not be compatible with the coolant or engine components.*

### Coolant specification

Use **ONLY** a 50% mix of water and Havoline Extended Life Coolant (XLC), or any ethylene glycol based anti-freeze (containing no methanol) with Organic Acid Technology (OAT) corrosion inhibitors, meeting BTC coding type 4E.

In an emergency - and only if this type of anti-freeze is unavailable - top-up the cooling system with clean water, but be aware of the resultant reduction in frost protection. **DO NOT** top-up or refill with other anti-freeze formulations. If in doubt, consult a dealer.

## Brakes

### BRAKE FLUID

**!** Brake fluid is highly toxic - keep containers sealed and out of the reach of children. If accidental consumption of brake fluid is suspected, seek medical attention immediately.

**!** Prevent brake fluid coming into contact with the skin or eyes. If this occurs, rinse immediately with plenty of water.

**!** Take care not to spill brake fluid onto a hot engine - a fire may result.

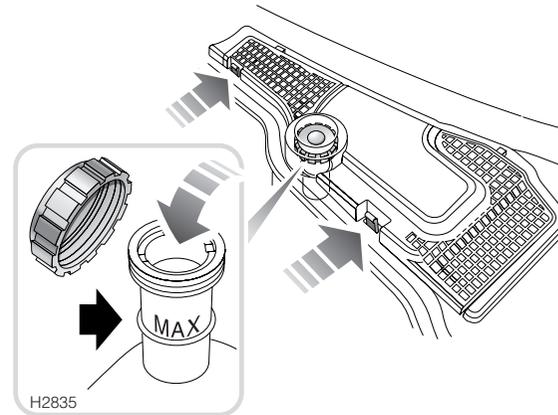
#### IMPORTANT

The brake fluid must be completely replaced every two years (see 'Brake fluid replacement', page 185).

### Check & Top-up

The level of fluid in the brake reservoir may fall slightly during use, as a result of brake pad wear and will need to be topped-up from time to time. If there is any appreciable drop in level over a short period, consult your dealer. **DO NOT drive if the fluid level is below the minimum mark on the reservoir.**

**!** Contact your dealer immediately if brake pedal travel is unusually long or if there is any appreciable drop in fluid level.



Remove the detachable mesh panel on the driver's side of the car to access the brake fluid reservoir. The fluid level can be seen through the reservoir neck and should be maintained as close to the 'MAX' mark as possible. DO NOT allow the level to drop below the 'MIN' mark.

## Brakes

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Wipe the cap clean to prevent dirt from entering the reservoir.  
Unscrew the cap and top-up the reservoir to the 'MAX' mark using a recommended fluid.

**NOTE:** 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.

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

### **Brake fluid specification**

Any proprietary brand of brake fluid (or brake and clutch fluid) meeting DOT 4 specification.

## Power Steering

### POWER STEERING FLUID

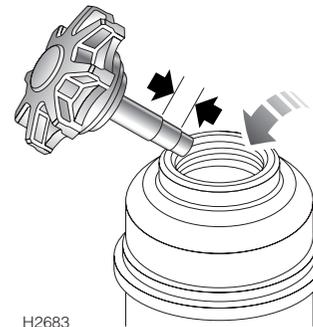
**!** *Power steering fluid is highly toxic – keep containers sealed and out of the reach of children. If accidental consumption of fluid is suspected, seek medical attention immediately.*

**!** *If power steering fluid should come into contact with the skin or eyes, rinse immediately with plenty of water.*

**!** *Take care not to spill power steering fluid onto a hot engine – a fire may result.*

### Check & Top-up

Check the fluid level every week. This should be done before the engine is started, when the system is cold and with the front wheels pointing straight ahead.



Wipe the filler cap clean to prevent dirt from entering the reservoir. Remove the filler cap and, using a clean lint-free cloth, wipe the dipstick clean. Refit the cap fully and remove again to check the fluid level. If necessary, top-up with a fluid meeting Dexron III specification until the level is between the upper and lower marks on the dipstick (see illustration). **DO NOT OVERFILL!**

**NOTE:** *Power steering 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.*

## Power Steering

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### **Fluid specification**

Use any fluid to Dexron III specification. Fluids manufactured to this specification are suitable for use in temperatures between -20°C to +30°C (if climatic temperature falls outside these limits, seek advice from your dealer).

***NOTE:** The colour of commercially available power steering fluids may differ from that used to fill the system during manufacture. This is not a cause for concern.*

### **Emergency operation**

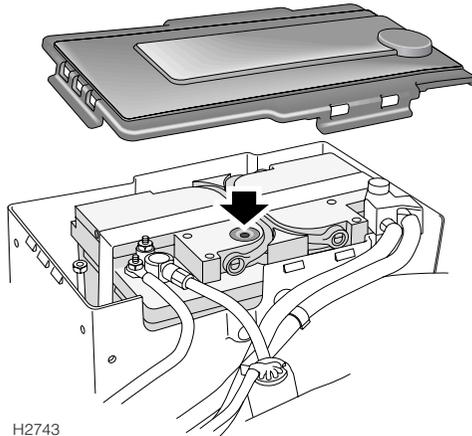
Any frequent or regular need to top-up the fluid should be investigated by a qualified dealer.

Under no circumstances should the car be driven with the fluid level below the lower mark on the dipstick, or if a rapid or significant loss of fluid is detected. However, 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 a short distance to the nearest dealer for examination.

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

## Battery

### BATTERY MAINTENANCE



To access the battery, unclip and remove the battery cover as shown in illustration.

The battery is designed to be maintenance free, so topping-up is unnecessary. On the top of the battery there is a battery condition indicator (arrowed in illustration). Examine the indicator periodically to check the battery's condition. When the indicator shows:

- GREEN - the battery is in a good state of charge.
- DARK (turning to black) - the battery needs charging.
- CLEAR (or light yellow) - the battery must be replaced. Do not charge the battery or jump start the car with the battery in this condition.

**NOTE:** If necessary, clean the top of the battery to ensure a clear view of the condition indicator. Use a torch if natural light is poor.

If the indicator shows clear or yellow, tap the indicator with a screwdriver to disperse any air bubbles - if the indicator colour is unchanged, the battery must be replaced.

### Battery safety

**!** Batteries contain sulphuric acid, which is both corrosive and poisonous. If spillage occurs:

- On clothing or the skin - remove any contaminated clothing immediately, flush the skin with large amounts of water, and seek medical attention urgently.
- In the eyes - flush with clean water immediately for at least 15 minutes. Seek medical attention urgently.
- Swallowing battery acid can be fatal unless **IMMEDIATE** action is taken - seek medical attention urgently.

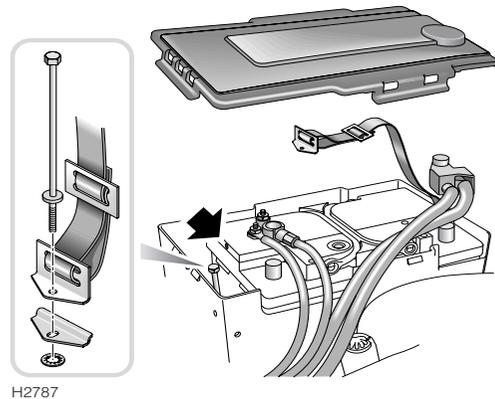
**!** Remove any metal wrist bands and jewellery before working in the engine compartment.

## Battery

### Battery disconnection and removal

#### IMPORTANT

- DO NOT reverse the polarity of the battery - the electrical system may be damaged if the battery leads are connected to the wrong terminals.
- Keep the battery upright at all times - damage will be caused if the battery is tilted more than 45°.
- NEVER run the engine with the battery disconnected, or disconnect the battery while the engine is running.



H2787

Before disconnecting or removing the battery, disarm the alarm, and ensure that the starter switch and all electrical equipment is turned off.

Disconnect the negative ('-') cable first and then the positive ('+') cable (when reconnecting, connect the positive cable first and then the negative cable).

**⚠ Do not allow the battery terminals or cables to make contact with tools or metal parts of the car.**

Remove the battery clamping plate retaining bolt; this will release the battery retaining strap and enable the clamping plate to be removed (see inset in illustration).

Use the attached carrying handles (if fitted) to lift the battery from the car.

#### Quick-release battery clamp\*

In some countries, the positive battery terminal is fitted with a quick-release clamp. Unscrew to release the clamp.

#### Battery replacement

Only fit a replacement battery of the same type and specification as the original - other batteries may differ in size and shape or have different terminal positions, which could cause damage to the battery, leaking acid, or fire.

When replacing, ensure the battery is fitted the right way round, with the terminal posts facing towards the left side of the car.

Make sure both the battery clamping plate and retaining strap are fitted securely; this will prevent the battery from moving in the event of an accident or sudden stop.

Finally, ensure the retaining strap does NOT cover the gas vent holes at each end of the battery (the front facing vent hole is identified with an arrow in the previous illustration).

## Battery

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### Battery disposal

 Used batteries are hazardous to the environment, and should be recycled. If in doubt seek advice about disposal from an MG Rover dealer or your local authority.

### Battery charging

 **DO NOT charge the battery if it is connected to the car - this may seriously damage the car's electrical system.**

 **DO NOT attempt to charge the battery if the battery condition indicator is clear or light yellow.**

 **DO NOT charge the battery if it is suspected of being frozen.**

As the battery ages, it may not retain its charge as effectively as when it was new. Cars that are used infrequently, or are used excessively for short journey motoring, or operation in cold climates, may need the battery to be charged regularly.

Always check the battery condition indicator before charging.

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

- Before charging, disconnect and remove the battery from the car - charging the battery with the cables connected may damage the car's electrical system.
- Make sure the battery charger leads are securely clamped to the battery terminals BEFORE switching on the battery charger. Do not move the leads once the charger is switched on.
- While charging, shield your eyes, or avoid leaning over the battery.

- Keep the area around the top of the battery well ventilated.
- Do not allow naked lights near the battery (batteries generate inflammable hydrogen during and after charging).
- The battery will be charged sufficiently once the battery condition indicator shows GREEN. When charging is finished, switch off the battery charger BEFORE disconnecting the leads from the battery terminals.

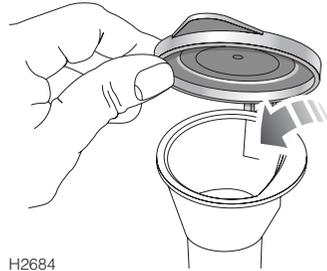
**NOTE:** *The battery will take longer to charge in a cold environment.*

After charging, leave the battery for one hour before reconnection to the car - this will allow time for explosive gases to disperse, thereby minimising the risk of fire or explosion.

## Washers

### WINDSCREEN WASHER TOP-UP

**!** *Some screenwash products are inflammable, particularly if high or undiluted concentrations are exposed to sparks. Do not allow screenwash to come into contact with naked flames or sources of ignition.*



H2684

The windscreen washer reservoir supplies both front and rear screen washer jets and headlight washer jets (where fitted).

Check the reservoir level every week. To ensure proper cleaning of the windscreen and to prevent freezing in cold weather, top-up with a mixture of water and a proprietary brand of screenwash. Preferably mix the recommended quantities of water and screenwash in a separate container before topping-up the system, and always follow the instructions on the container.

**NOTE:** *DO NOT use an anti-freeze or vinegar/water solution in the washer reservoir - anti-freeze will damage painted surfaces, while vinegar can damage the windscreen washer pump.*

Note that body panels may suffer discoloration as a result of screenwash spillage. Take care to avoid spillage, particularly if an undiluted or high concentration of screenwash is being used. If spillage occurs, wash the affected area immediately with water.

### WASHER JETS

Operate the washers periodically to check that the nozzles are clear and properly directed.

The windscreen washer jets are set during manufacture and should not need adjusting. However, if adjustment is ever necessary, insert a needle into the jet orifice and lever gently to position each jet so that the spray is directed towards the centre of the windscreen.

Should any jet become obstructed, insert a needle or thin strand of wire into the orifice to clear the blockage.

### HEADLIGHT WASHERS\*

The spray jets are set during manufacture and should not need to be adjusted.

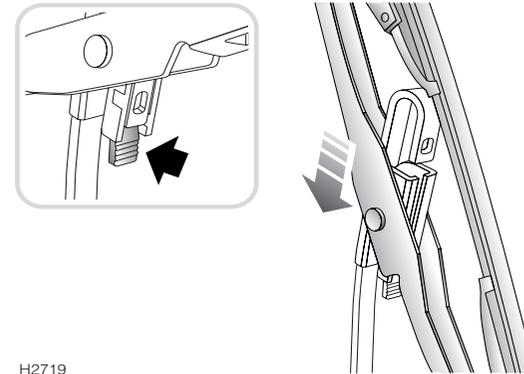
## Wipers

### WIPER BLADES

#### IMPORTANT

- Grease, silicon and petrol based products impair the blade's wiping capability. 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 screen, 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.
- Only fit replacement wiper blades that are identical to the original specification.

### Replacing windscreen wiper blades



H2719

Lift the wiper arm away from the windscreen and set the blade at 90° to the arm as shown. Disconnect the blade by pushing in the locking tab (arrowed in inset), setting the blade at 45° to the arm and sliding the blade down the arm.

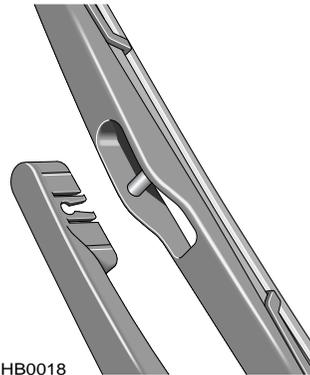
Fitting a replacement blade is a reversal of this process; position the new blade assembly on the wiper arm and slide the blade fully towards the hooked end of the arm until it locks in place. Check that the blade is securely locked before returning the wiper assembly to the windscreen.

**NOTE:** The wiper blade on the driver's side is equipped with an anti-lift airfoil.

## Wipers

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**Replacing the rear screen wiper blade (Tourer models only)**



HB0018

Lift the wiper arm away from the rear screen. The blade is a press fit onto the arm: Grasping the arm firmly with one hand, ease the blade away from the arm.

Fitting a replacement blade is a reversal of this process.

## Tyres

---

### CARING FOR YOUR TYRES

**⚠** ***DEFECTIVE TYRES ARE DANGEROUS! Do not drive if any tyre is damaged, is excessively worn, or is inflated to an incorrect pressure.***

Always drive with consideration for the condition of the tyres, and regularly 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 in the road
- Driving with under or over-inflated tyres

***NOTE:** If possible, protect tyres from contamination by oil, grease, fuel and other automotive fluids.*

### Tyre pressures

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

Under-inflated tyres wear more rapidly, can seriously affect the car's road handling characteristics and fuel consumption, as well as increasing the risk of tyre failure. Over-inflated tyres give a harsher ride, wear unevenly and are more prone to damage.

Check the pressures (including the spare wheel) at least every week, when the tyres are cold - be aware that it only takes approximately 1.6 km of driving to warm up the tyres sufficiently to affect the tyre pressures.

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), you should expect the pressures to have increased between 0.3 and 0.4 bar. In this circumstance, NEVER let air out of the tyres in order to match the recommended pressures.

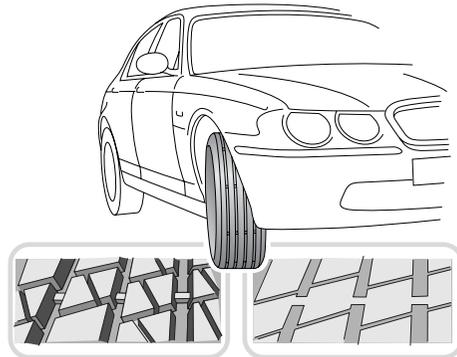
For the recommended pressures for cold tyres, see '*TYRE PRESSURES*', page 260.

### Valves

Keep the valve caps screwed down firmly - they prevent dirt from entering the valve. Check the valve for leaks (listen for a tell-tale hissing) when you check the tyre pressure.

# Tyres

## Tyre wear indicators



H2703a

Tyres fitted as original equipment 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.

**NOTE:** *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.*

The indicators provide warning that there is insufficient tread remaining to provide good traction, particularly on wet roads, and that the tyres no longer comply with legislation requiring a minimum tread depth of 1.6 mm.

For safety, a tyre **MUST** be replaced as soon as a wear indicator becomes visible.

## Punctured tyres

Your car is fitted with tubeless tyres, which may not leak if penetrated by a sharp object, provided the object 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, or repairs undertaken.

A puncture of this kind will eventually cause the tyre to lose pressure, which is why regular (and frequent) checking of tyre pressures is important. Punctured or damaged tyres must be permanently repaired or replaced as soon as possible.

## Replacement tyres

**!** **DO NOT** replace wheels with any type other than genuine **MG Rover parts**. Alternative wheels, which do not meet original equipment specifications may adversely affect the car's driving characteristics and should not be fitted.

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 comply with the original specification (see '**WHEELS & TYRES**', page 259). In addition, ensure that the load and speed ratings shown on the side wall of each tyre are the same as (or exceed) those of the original equipment. Contact your dealer for further information or assistance.

Always have replacement wheels and tyres balanced before use.

# Tyres

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## SNOW CHAINS

 **DO NOT fit unapproved snow chains - this could damage brake components.**

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

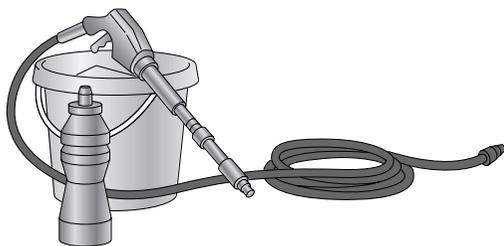
In use, always observe the following precautions:

- 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.
- DO NOT exceed speeds of 50 km/h.
- Avoid tyre damage and excessive chain wear by removing snow chains when driving on snow free roads.

## Cleaning & Vehicle Care

### WASHING YOUR CAR

**!** *Some high pressure cleaning systems will penetrate door, window and sunroof seals, and damage lock mechanisms. DO NOT aim water jets directly at components that might be easily damaged.*



HB0068

Road dirt, airborne pollutants and deposits from birds and trees can damage the paintwork. In order to preserve the paint finish, wash the car frequently and observe the following care points:

- DO NOT use hot water to wash the car.
- DO NOT use detergents or washing up liquid.
- In hot weather, DO NOT wash the car in direct sunlight.
- When using a hose, DO NOT aim the water directly at window, door or sunroof seals, or through wheel apertures onto the brake components.

If the car is particularly dirty, use a hose to flush grime and grit from the bodywork, prior to washing. Then, wash the car using cold or lukewarm water containing a good quality wash and wax shampoo. Always use plenty of water to ensure that grit is flushed from the surface and not ground into the paintwork.

After washing, rinse the bodywork with clean water and dry off with a chamois leather.

### Removing tar spots

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

### Cleaning the underside

From time to time, but particularly during winter months if salt has been used on the roads, use a hose to wash the underside of the car. Flush away accumulations of mud and thoroughly clean those areas where debris can easily collect (wheel arches and panel seams, for example).

### Engine compartment

The engine compartment must only be cleaned by steam cleaning.

**!** *DO NOT use a high pressure hose to clean the engine compartment - damage to the car's electronic systems may occur.*

4

### Automatic car washes

**!** *Automatic car washes may damage roof and boot mounted spoilers. Avoid using automatic car washes with brushes. Before using any automatic car wash, always check its suitability for your car. If in any doubt seek assistance from the car wash operator.*

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## Cleaning & Vehicle Care

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### **Body protection**

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

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. If in doubt, ask your MG Rover dealer for advice.

### **Polishing the paintwork**

Occasionally treat the paint surface with an approved polish containing the following properties:

- Very mild abrasives that will remove surface contamination without removing or damaging the paint.
- Filling compounds that will fill scratches and reduce their visibility.
- Wax to provide a protective coating between the paint and the elements.

If possible, avoid applying polish or wax products to window glass and rubber seals.

### **Wiper blades**

Wash in warm soapy water. DO NOT use spirit or petrol based cleaners.

### **Windows and mirrors**

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

*Windscreen:* In particular, clean the outside of the screen with glass cleaner after washing the car with wash and wax products, and before fitting new wiper blades.

*Rear screen:* Clean the inside with a soft cloth, using a side to side motion to avoid damaging the heating elements. DO NOT scrape the glass or use abrasive cleaning compounds - this will damage the heating elements.

*Mirrors:* Wash with soapy water. Use a plastic scraper to remove ice. DO NOT use abrasive cleaning compounds or metal scrapers.

## Cleaning & Vehicle Care

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### CLEANING THE INTERIOR

#### Plastic materials

Clean plastic-faced materials with diluted upholstery cleaner, then wipe with a damp cloth.

**NOTE:** *DO NOT* polish dashboard components - these should remain non-reflective.

#### Carpet and fabrics

Clean with diluted upholstery cleaner - test a concealed area first.

#### Leather

Clean leather trim with warm water and a non-detergent soap. Dry and polish the leather with a dry, clean, lint-free cloth.

**NOTE:** *DO NOT* use petrol, detergents, furniture creams or polishes as cleaning agents.

#### Instrument pack, clock, audio system and navigation displays

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

#### Audio system detachable control panel

Periodically clean the electrical contacts on the back of the control panel and the matching contacts on the audio unit with a clean, dry, lint-free cloth. Use methylated spirits if available.

#### Airbag module covers

To prevent damage to the airbag SRS, the following areas should be cleaned sparingly with a damp cloth and upholstery cleaner **ONLY**:

- Steering wheel centre pad.
- Area of dashboard containing the passenger airbag.
- Area of roof lining and front pillar finishers which enclose the side head impact protection modules.

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

#### Seat belts

Extend the belts, then use warm water and a non-detergent soap to clean. Allow the belts to dry naturally; **DO NOT** retract them or use the car until they are completely dry.

 **DO NOT** use bleaches, dyes or cleaning solvents on seat belts.

## Identification Numbers

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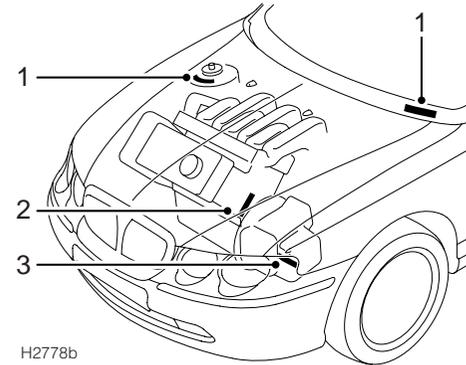
### IDENTIFICATION NUMBERS

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

#### Body number

The body number is stamped on a metal plate located in the luggage compartment, to the left of the spare wheel housing and beneath the floor trim panel (all models).

### Identification number locations

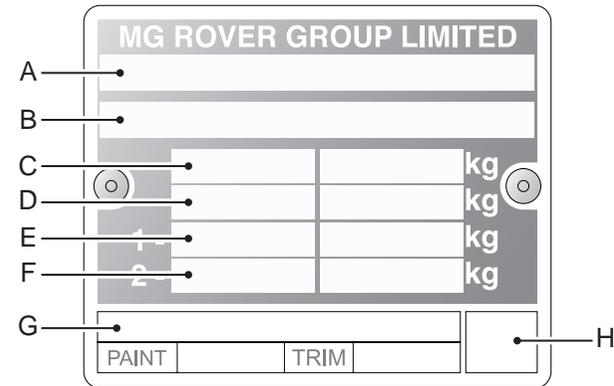


1. Vehicle identification number (VIN)
2. Engine number
  - 1.8 petrol models:* Stamped horizontally into the centre front face of the cylinder block.
  - 2.0 & 2.5 petrol models:* Stamped vertically into the right side of the cylinder block (when viewed from the front).
  - Diesel models:* Stamped vertically into the flange between the engine casing and gearbox.
3. Gearbox number
  - On a label attached to either the front or upper face of the gearbox housing.

## Identification Numbers

### Vehicle identification number

The VIN (and recommended maximum vehicle weights) is stamped on a plate at the foot of the left hand door pillar and also stamped into the top of the right hand front suspension mounting, 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 through the bottom left hand corner of the windscreen.



HB0002

The VIN plate on the door pillar contains the following information:

- A. Vehicle Identification Number (VIN)
- B. Type approval
- C. Gross vehicle weight (where required)
- D. Gross train weight (where required)
- E. Maximum front axle load (where required)
- F. Maximum rear axle load (where required)
- G. Derivative name
- H. Smoke coefficient number (where required)

## Parts & Accessories

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### PARTS & ACCESSORIES

**!** *The fitting of parts and accessories that have not been approved by MG Rover, or the carrying out of non-approved alterations or conversions, may be dangerous and could affect the safety of the car and occupants, and also invalidate the terms and conditions of the car's warranty.*

Your car has been carefully designed and manufactured to exude luxury, class and style.

To ensure your future driving pleasure and safety, we strongly recommend that only MG Rover approved parts are fitted to your car. Genuine MG Rover parts and accessories are the only components approved by MG Rover to meet rigorous original equipment standards for fitment and performance.

To enhance your motoring pleasure, a comprehensive and versatile range of quality accessories is available. This wide range of genuine MG Rover products is an integral part of the car's design and development programme and will help to guarantee continued reliability, safety and performance.

**!** *An airbag SRS is fitted to your car, ALWAYS consult an MG Rover dealer before fitting any accessory.*

Genuine MG Rover parts are the ONLY parts built to original equipment specifications AND approved by MG Rover designers; this means that every single part and accessory has been thoroughly tested by the same engineering team that designed and built the car. As a result, all genuine MG Rover parts and accessories are guaranteed for twelve months, regardless of distance travelled.

**!** *It is extremely hazardous to fit parts or accessories where installation requires the dismantling of, or addition to, either the electrical or fuel systems.*

A full list and description of all accessories is available from your MG Rover dealer.

### Travelling abroad

In some 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.

## ***Emergency Information***

- 216** *Emergency Starting*
- 219** *Vehicle Recovery*
- 222** *Puncture Repair & Wheel Changing*
- 233** *Fuse Replacement*
- 237** *Bulb Replacement*

## Emergency Starting

### USING BOOSTER CABLES

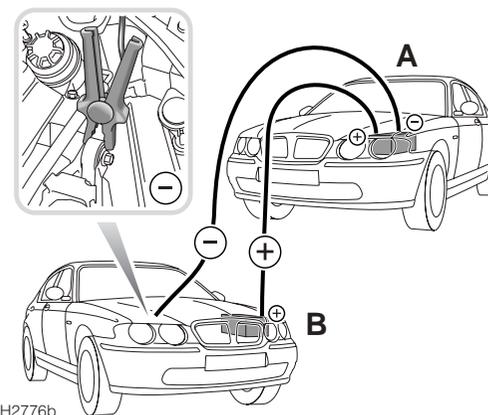
**⚠** During normal use, batteries emit explosive hydrogen gas, sufficient to cause severe explosions capable of causing serious personal injury - ensure sparks and naked lights are kept well away from the engine compartment.

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!

**⚠** DO NOT disconnect the discharged battery. Make sure that BOTH batteries are of the same voltage (12 volts), and that the booster cables are approved for use with 12 volt car batteries.

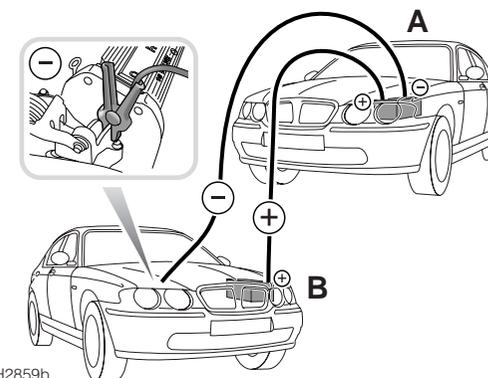
If the battery from a donor vehicle is to be used, the vehicles should be parked with their battery locations adjacent to one another. Ensure that the two vehicles do not touch.

Apply the handbrakes and ensure that the gear levers on both vehicles are in neutral ('P' - Park for vehicles with automatic transmission).



H2776b

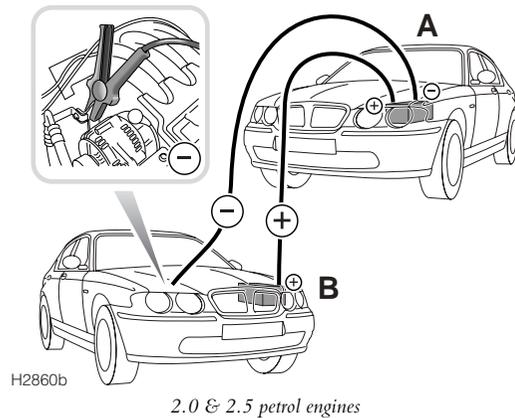
Diesel engine



H2859b

1.8 petrol engine

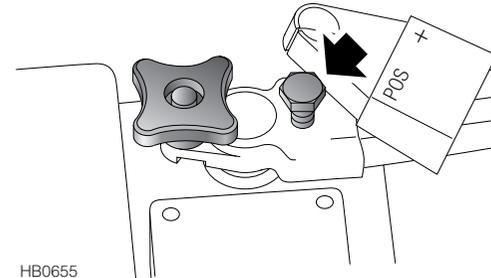
## Emergency Starting



### Starting the car

Turn off the starter switch and ALL electrical equipment of BOTH vehicles, then follow the instructions that follow:

**!** *Ensure that each booster cable connection is securely made and that there is no risk of the clips accidentally slipping from the battery terminals (as a result of engine vibration, for example); this could cause sparking, which could lead to fire or explosion.*



Positive battery terminal connection with quick-release clamp\* fitted

1. Connect the RED booster cable between the positive (+) terminals of both batteries.

**NOTE:** *On cars fitted with a quick-release battery clamp, it may not be possible to connect the booster cable securely to the terminal. In this case, attach the booster cable to the head of the bolt provided (arrowed in illustration).*

2. Connect the BLACK booster cable from the negative (-) terminal of the donor battery (A) to a good earth point (an engine mounting or other unpainted surface, for example), at least 0.5 m from the battery and well away from fuel and brake lines on the disabled vehicle (B) (see illustrations).

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

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

## Emergency Starting

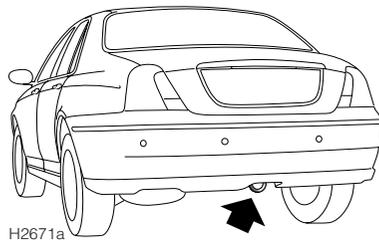
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4. Now start the engine of the vehicle with the discharged battery (DO NOT crank the engine for more than 15 seconds).
5. Once both engines are running normally, allow them to idle for two minutes before switching off the engine of the donor vehicle 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.
6. Disconnecting the booster cables must be an exact reversal of the procedure used to connect them, i.e. disconnect the BLACK cable from the earth point on the disabled vehicle FIRST.

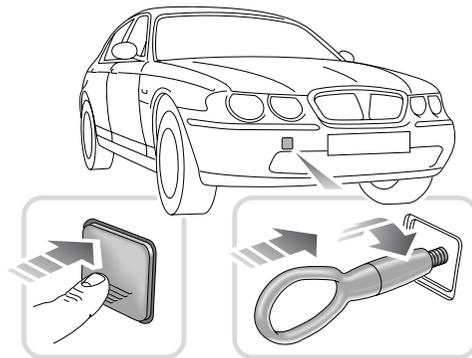
## Vehicle Recovery

### TOWING EYES

**!** *DO NOT use a tow rope that is twisted - any untwisting force could unscrew the front towing eye.*



H2671a



H2670b

Your car is equipped with a fixed towing point at the rear and a removable towing eye at the front. The front towing eye is stored in the tool kit beneath the loadspace floor when not in use.

To fit the front towing eye, remove the small cover set into the front bumper by pressing firmly on the bottom left corner, then screw the towing eye into its mounting behind the bumper (see illustration). Ensure the towing eye is fully tightened!

**NOTE:** *The towing eye cover may be secured to the bumper by a plastic cord. If this is not the case, store the cover in the glove box where it will not be lost.*

Both towing points are intended for use by qualified recovery specialists to assist in the recovery of your car should a breakdown or accident occur. They are not designed for towing other vehicles, and must NEVER be used to tow a trailer or caravan.

**!** *DO NOT use the towing point to tow a trailer or caravan.*

## Vehicle Recovery

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### 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, abide by the following procedure.

#### *Before being towed:*

 **DO NOT remove the starter key or turn the starter switch off while the car is being towed on four wheels – this will prevent the steering wheel from being turned.**

1. Turn the starter key to the first position to unlock the steering and then to the second position to enable the brake lights, wipers and direction indicators to be operated if necessary. If, due to an accident or electrical fault, it is considered unsafe to turn the starter switch to the first position, disconnect the battery before turning the switch.
2. Place the gear lever in neutral ('N' for cars with automatic transmission).
3. Release the handbrake.

#### *While being towed observe the following:*

- Without the engine running, greater effort will be required to operate the brake pedal and turn the steering wheel. Longer stopping distances will also be experienced.
- While towing for recovery, the towing vehicle should never exceed 50 km/h.

### Automatic transmission cars

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

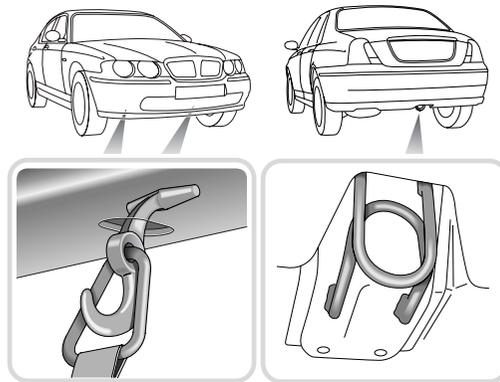
If these facilities are unavailable and it is ESSENTIAL for the car to be towed on all four wheels, adhere strictly to the following:

- DO NOT allow the car to be towed further than 50 km.
- Restrict the towing speed to a maximum of 50 km/h.

## Vehicle Recovery

### Transporter or trailer lashing

**!** *DO NOT use the lashing points to tow your car behind another vehicle, or use the lashing points to tow a trailer or caravan.*



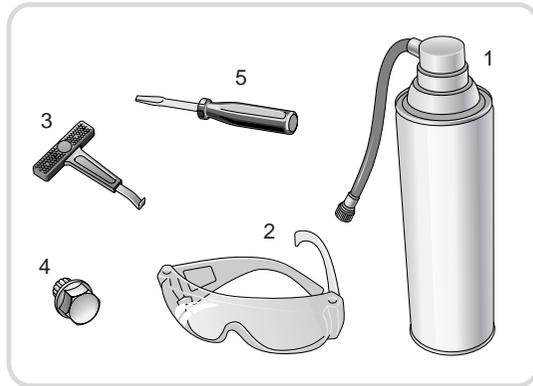
H2788c

If your car is to be transported on the back of a trailer or transporter, use the recommended lashing points at the front and rear of the car only. **DO NOT** secure lashing hooks, 'T' bars or trailer fixings to any other part of the car.

**NOTE:** *The rear towing hook doubles as a lashing point.*

## Puncture Repair & Wheel Changing

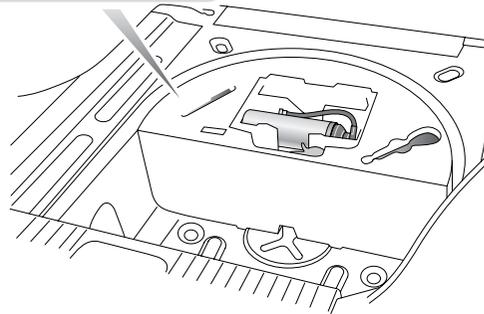
### INSTANT TYRE REPAIR (ITR) COMPONENTS\*



1. Tyre sealant canister.
2. Safety goggles.
3. Wheel bolt cover removal tool\*.
4. Locking wheel bolt removal tool\*.
5. Screwdriver\*.

**NOTE:** ITR is standard equipment for most cars and is designed to provide a temporary repair solution for most tyre tread punctures.

For information on how to use ITR, please refer to 'INSTANT TYRE REPAIR (ITR)\*', page 225.

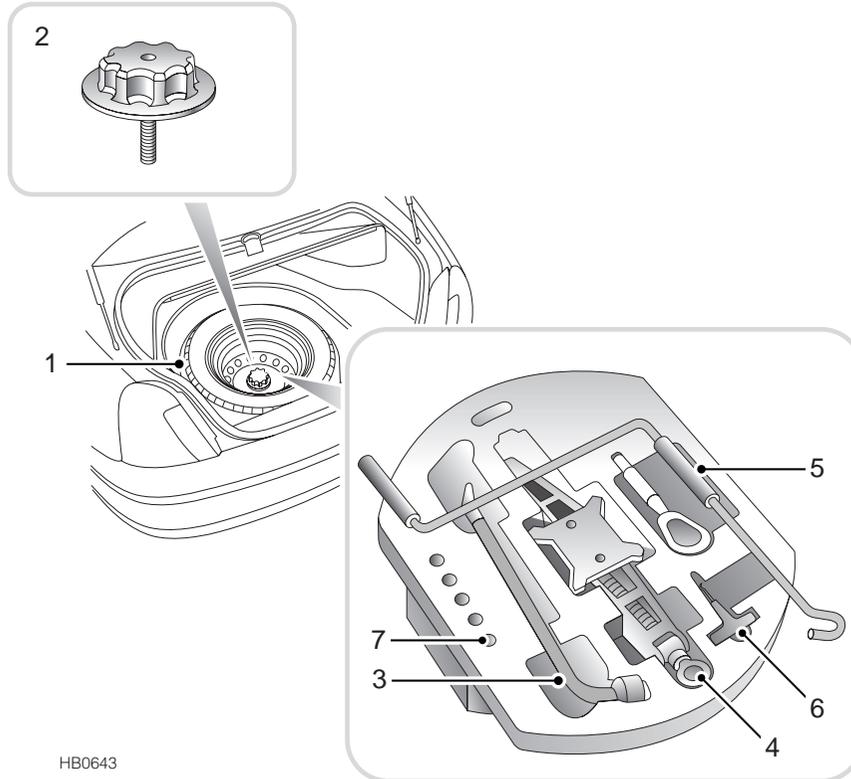


HB0639

**!** *ALWAYS read and obey all instructions and warnings printed on the tyre sealant canister.*

## Puncture Repair & Wheel Changing

### SPARE WHEEL & TOOLS (Saloon)\*



HB0643

1. Spare wheel.
2. Spare wheel clamp.
3. Wheel bolt spanner.
4. Jack.
5. Jack handle.
6. Wheel bolt cover removal tool\*.
7. Locking wheel bolt removal tool\*.

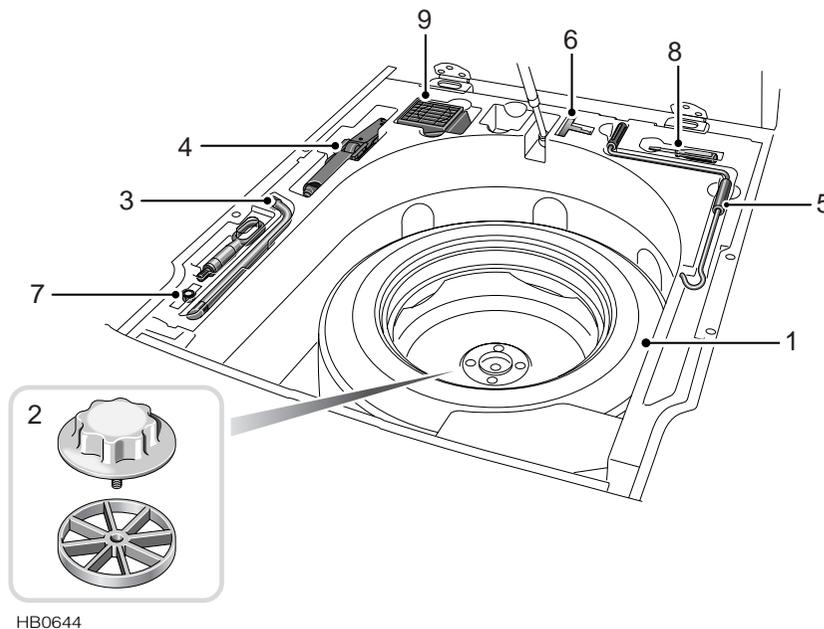
**NOTE:** The fitment of a space saver or full size spare wheel and associated tools is available as an option at the time of manufacture and replaces the Instant Tyre Repair (ITR) system.

If a spare wheel is supplied, the specification will vary according to model type. If a space saver spare wheel is supplied, remove the spacer (fitted beneath the spare wheel clamp) before stowing a full size road wheel.

For information on how to change the wheel, please refer to 'CHANGING A WHEEL', page 227.

## Puncture Repair & Wheel Changing

### SPARE WHEEL & TOOLS (Tourer)\*



HB0644

1. Spare wheel.
2. Spare wheel clamp.
3. Wheel bolt spanner.
4. Jack.
5. Jack handle.
6. Wheel bolt cover removal tool\*.
7. Locking wheel bolt removal tool\*.
8. Screwdriver.
9. Wheel chock.

**NOTE:** The fitment of a space saver or full size spare wheel and associated tools is available as an option at the time of manufacture and replaces the Instant Tyre Repair (ITR) system.

If a spare wheel is supplied, the specification will vary according to model type. If a space saver spare wheel is supplied, remove the spacer (fitted beneath the spare wheel clamp) before stowing a full size road wheel.

For information on how to change the wheel, please refer to 'CHANGING A WHEEL', page 227.

## Puncture Repair & Wheel Changing

### INSTANT TYRE REPAIR (ITR)\*

ITR provides a temporary solution to enable you to reach a dealer or tyre specialist, where the tyre must be repaired or replaced. Have the tyre repaired or replaced as soon as possible.

Always choose a safe place to stop, away from the main thoroughfare. Always ask your passengers to get out of the car and wait in a safe area away from other traffic.

**NOTE:** Switch on the hazard warning lights to alert other road users.

### SAFETY PRECAUTIONS

**!** Read the directions and warnings on the sealant canister beforehand and wear the safety goggles supplied when using the sealant.

**!** The tyre sealant contains fluorocarbons and solvents which are harmful if swallowed or inhaled and are irritating to the eyes.

- If swallowed, **DO NOT** induce vomiting – seek medical assistance immediately.
- If inhaled, breathe fresh air. If breathing is adversely affected, seek immediate medical assistance.
- If in contact with the eyes, immediately flush the eyes with water for 15 minutes. If irritation persists, seek medical assistance.
- **DO NOT** breathe gas/fumes/vapour/spray from the canister. Inhalation of canister vapours may cause drowsiness and dizziness.

**!** Keep the tyre sealant canister out of the reach of children. Store the canister in its correct location beneath the loadspace floor; temperatures in other locations may exceed safe storage conditions.

**!** **DO NOT** puncture or incinerate the canister, or expose to heat, flame or direct sunlight – this may cause the canister to rupture.

**!** Under no circumstances should speeds of 45 km/h be exceeded, when driving with a tyre repaired using ITR, until the tyre is inflated to its correct pressure. Once the tyre is correctly inflated, the car must **NOT** be driven at speeds exceeding 80 km/h.

### Using ITR

1. Inspect the deflated tyre for cause of puncture. If possible, remove foreign bodies (e.g: screws and nails) from the tread.

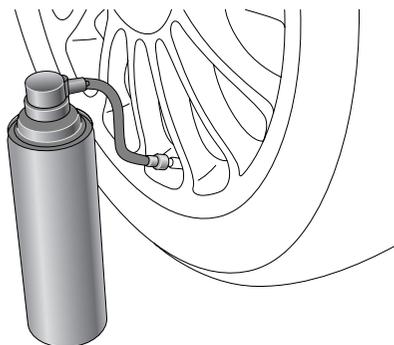
**NOTE:** The system can be used to repair small punctures in the tread only. In the event of side wall or severe tread damage, seek assistance from the breakdown services.

2. Remove the tyre sealant canister and the safety goggles from the rear loadspace and put on the safety goggles.

**NOTE:** If the ambient temperature is below 0° C, warm the canister inside the car, using the car heating system.

3. Remove the valve cap from the punctured tyre.
4. Vigorously shake the canister (for approximately 30 seconds), then screw the filler tube clockwise onto the tyre valve.

## Puncture Repair & Wheel Changing



HB0604

5. Hold the canister upright and flip up the protective cap.
6. Press the button to inflate the tyre. Hold the canister stationary to avoid straining the filler tube.
7. Empty the ENTIRE contents of the canister into the tyre. When the sealant stops flowing through the tube, release the button and unscrew the tube from the valve.

**NOTE:** If tyre sealant comes into contact with the car's paintwork, wash the area with water as soon as possible.

8. If the wheel rim is clear of the ground, drive the car IMMEDIATELY for approximately 6 km to spread the sealant evenly inside the tyre. Drive gently and DO NOT exceed 45 km/h. If the wheel rim does not lift from the ground, DO NOT drive the car; seek assistance from the breakdown services.

9. Drive immediately to a service station and inflate the tyre to the correct pressure (see 'TYRE PRESSURES', page 191). If the required pressure cannot be reached, then the tyre is too severely damaged and you should seek assistance from the breakdown services. **DO NOT DRIVE THE CAR!**
10. If the correct tyre pressure was achieved, continue driving. Drive carefully and do not exceed 80 km/h. At the earliest opportunity, have the tyre repaired or replaced by a dealer or tyre specialist and replace the used canister of tyre sealant.

**!** Always inform the tyre repairer that tyre sealant has been used. If the tyre is to be subsequently deflated, only do so in a well ventilated area.

### Replacing the sealant canister

Always replace a used or out of date tyre sealant canister with one of the same type and capacity. Where possible, return the canister to an MG Rover dealer for safe disposal and to obtain a replacement.

## Puncture Repair & Wheel Changing

### CHANGING A WHEEL

If possible, choose a safe place to stop away from the main thoroughfare. Always ask your passengers to get out of the car and wait in a safe area away from other traffic.

Switch on the hazard warning lights and use a warning triangle (if available) to alert other road users.

Before changing a wheel, ensure the front wheels are in the straight ahead position, apply the handbrake and engage 1st gear (select 'P' for automatic gearbox cars). Observe the following precautions:

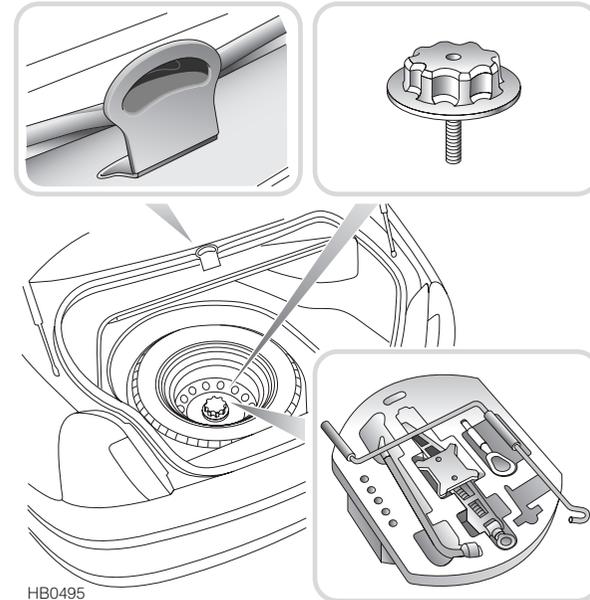
- Ensure the jack is positioned on firm, level ground; NEVER on soft ground, or over metal gratings or manhole covers. DO NOT place additional material between the jack and the ground, this may jeopardise the safety of the jacking operation.
- If jacking on a slope is essential, place chocks at the front and rear of the wheel diagonally opposite the one to be removed.
- NEVER jack the car with passengers inside or with a caravan or trailer connected!

**NOTE:** The stowage compartment set into the inside of the tailgate on Tourer models is designed to accommodate the accessory warning triangle available from MG Rover dealers.

#### **Important information for owner's of MG ZT models equipped with a space saver spare wheel.**

Because your vehicle has an uprated braking system fitted, it is not possible to use the space saver wheel on the front hubs. In the event of a front wheel puncture, you will be required to fit the space saver wheel to a rear hub and use the wheel removed from the rear to replace the punctured front wheel.

### Accessing the spare wheel and tools - Saloon models



HB0495

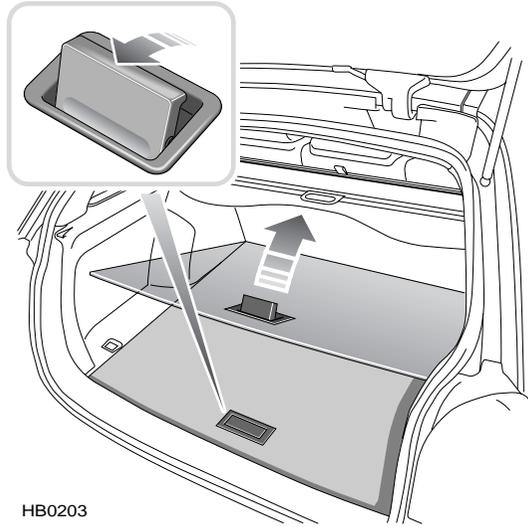
Raise the carpeted floor panel, using the lifting handle (set into the floor) and hook the handle over the boot drain channel.

Remove the tool tray and unscrew the spare wheel clamp. Lift the wheel from the boot.

5

## Puncture Repair & Wheel Changing

### Accessing the spare wheel and tools - Tourer models



HB0203

Raise the recessed handle set into the rear of the loadspace floor and raise the floor.

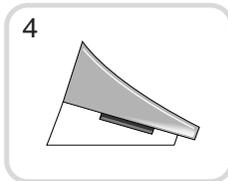
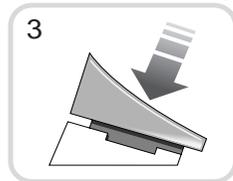
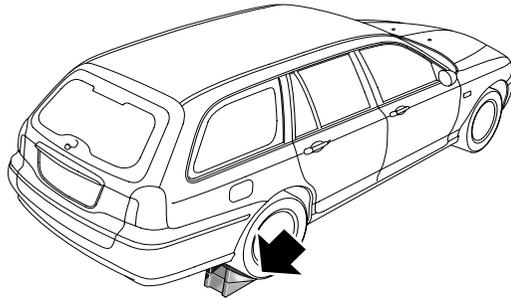
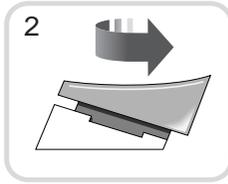
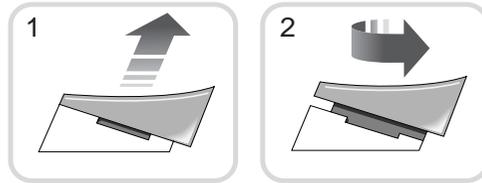


HB0028b

Remove the underfloor storage tray and unscrew the spare wheel clamp. Lift the wheel from the loadspace.

## Puncture Repair & Wheel Changing

### Using the wheel chock (Tourer models only)



HB0044a

On Tourer models, to ensure adequate stability, even on level ground, it is essential to chock one of the road wheels before raising the car from the ground.

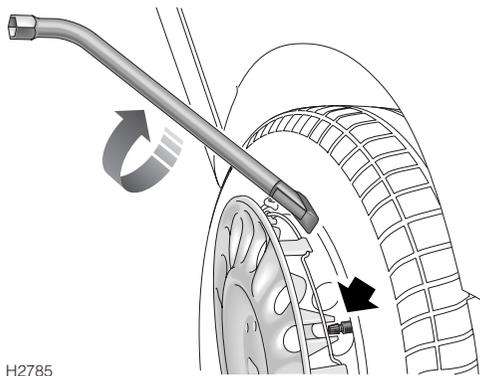
Before positioning the chock, it must be assembled, as follows:

1. Pull the two halves of the chock slightly apart.
2. Rotate one half of the chock 180°.
3. Push the two halves back together.

Always chock the wheel diagonally opposite the one to be removed - chocking the front of a front wheel, or the back of a rear wheel, as shown.

## Puncture Repair & Wheel Changing

### Removing the wheel trim (steel wheels only)

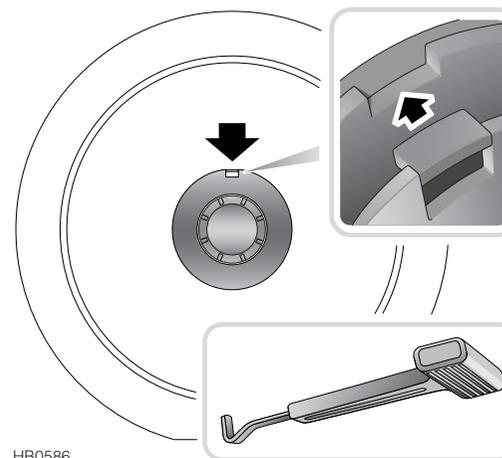


H2785

Slide the flat, wedge, end of the wheel wrench behind the edge of the wheel trim (see illustration). Then, working carefully around the wheel, apply a twisting action to the tool to prise the trim from the wheel.

**NOTE:** When refitting the wheel trim, ensure that the valve stem is located between the valve stem guides (plastic lugs arrowed in illustration).

### Removing the wheel bolt cover (alloy wheels)\*



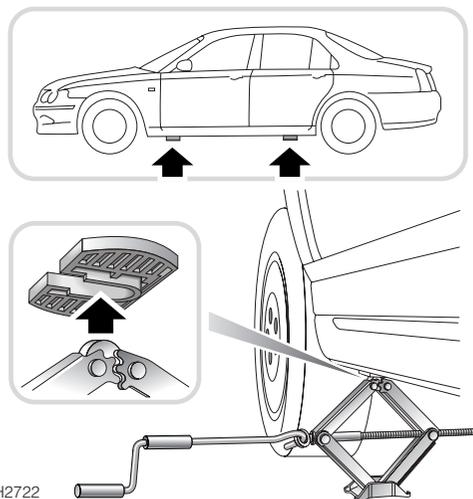
HB0586

Insert the hooked end of the removal tool into the small rectangular aperture in the wheel bolt cover (arrowed in illustration). Pull the cover from the wheel to gain access to the wheel bolts.

## Puncture Repair & Wheel Changing

### Positioning the jack

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



Position the jack on firm level ground under the jacking point nearest the wheel to be removed. Note that the domed head of the jack must fit into the corresponding recess in the sill plate (see inset in illustration).

**!** *Never jack the car using any jacking points other than the designated points shown. Serious damage to the car could result.*

Turning the jack screw by hand, raise the jack until the jack head fits snugly into the recess in the sill plate. Ensure that the base of the jack is in full contact with the road surface

### Changing the wheel

**!** *Avoid accidental contact with any underbody parts, especially hot exhaust system components.*

1. Before raising the car, use the wheel wrench to slacken each of the wheel bolts half a turn anti-clockwise (refer to the pages that follow for information about locking wheel bolts).
2. Attach the jack handle and turn the jack screw clockwise to raise the car until the tyre is clear of the ground.
3. Remove the wheel bolts and place them in the tool tray to prevent them from being lost.
4. Remove the road wheel.

*NOTE: Avoid placing wheels (and wheel trims) face down on the ground - the surface may be scratched.*

5. Fit the spare wheel and tighten the wheel bolts until the wheel is seated firmly against the hub.
6. Lower the car and remove the jack, then FULLY tighten the wheel bolts in a diagonal sequence.
7. Refit the wheel bolt cover or the wheel trim (steel road wheels only). When refitting a wheel trim, ensure that the valve stem is located between the valve stem guides (plastic lugs arrowed in wheel trim removal illustration). Then, working around the circumference of the wheel, use firm pressure with the flat of the hand to press the wheel trim into position.

*NOTE: The wheel trim must not be fitted to the space saver spare wheel.*

## Puncture Repair & Wheel Changing

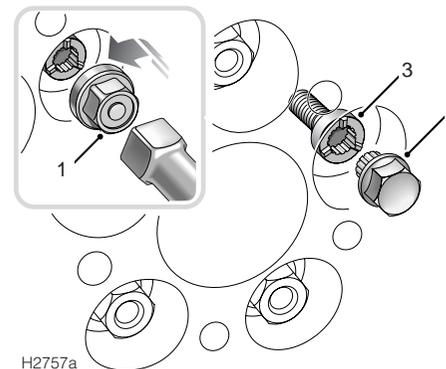
8. Finally, return the tools to the tool tray and the wheel (face down) to the well in the loadspace floor.

**!** *Always check the tyre pressure after changing a wheel, and have the tightness of the wheel bolts checked by a dealer as soon as possible!*

### The following precautions must be observed when the space saver spare wheel is in use:

- The space saver spare wheel is for temporary use only. It must be replaced by the normal sized wheel as soon as possible.
- Only one space saver wheel is to be used on the car at any one time.
- A maximum speed of 80 km/h must be observed.
- The inflation pressure of the space saver tyre must be maintained at 4.2 bar.
- The use of snow chains is NOT permitted on the space saver spare wheel.
- **DRIVE CAUTIOUSLY**; the space saver tyre is smaller in size and higher in pressure than a regular tyre. It will cause a harsher ride and may have less traction on some road surfaces.

### LOCKING WHEEL BOLTS\*



Cars with alloy wheels are fitted with one locking wheel bolt to each wheel. These are similar to standard wheel bolts, but have a removable cap (1) and can only be removed using the special adaptor (2) provided in the tool kit.

**NOTE:** A code number is stamped on the underside of the adaptor. Ensure the number is recorded on the Security Information card and quote this number if a replacement is required.

### Removing the locking wheel bolt

1. Use the wheel wrench to twist the wheel bolt cap (1) slightly anti-clockwise and remove.
2. Insert the adaptor (2) firmly into the locking wheel bolt (3).
3. Using the wheel wrench, unscrew the wheel bolt and adaptor.

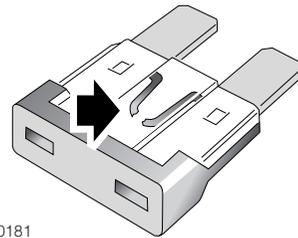
Keep the adaptor in the space provided in the tool tray.

## Fuse Replacement

### FUSES

Fuses are simple circuit breakers, which protect the car's electrical equipment by preventing the electrical circuits from being overloaded.

A blown fuse may be indicated when the item of electrical equipment it protects, stops working.



HB0181

Check a suspect fuse by removing it from the fuse box and looking for a break in the wire inside the fuse.

Only replace a fuse with one of the same, or lower rating.

### Fuse boxes

There are two fuse boxes; the passenger compartment fuse box, located behind the front passenger glove box and the other in the engine compartment. The location and value of each fuse, is shown on the charts attached to the underside of the fuse box covers. They are also shown on the following pages.

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

### Fuse colours

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

ORANGE	5 amp
BROWN	7.5 amp
RED	10 amp
BLUE	15 amp
YELLOW	20 amp
CLEAR	25 amp
GREEN	30 amp

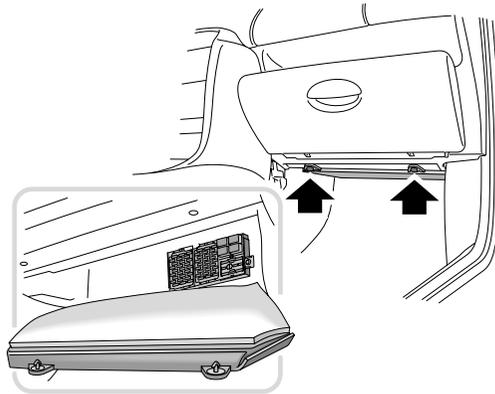
### Spare fuses

A separate module containing spare fuses of varying values is attached to one side of the passenger compartment fuse box. The module contains:

- Five mini-size fuses suitable for the passenger compartment fuse box.
- Four larger fuses suitable for the engine compartment fuse box.
- A double-ended fuse extraction tool, suitable for removing both mini-size and larger fuses.

## Fuse Replacement

### PASSENGER COMPARTMENT FUSE BOX



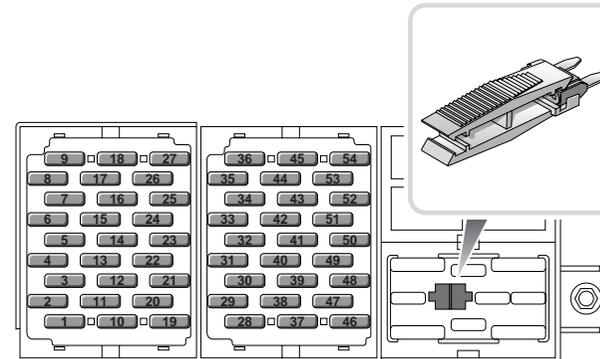
H2813a

The passenger compartment fuse box is located behind the front passenger glove box.

**NOTE:** A coin or flat-bladed screwdriver is needed to remove the closure panel beneath the glovebox in order to be able to access the fuse box.

To remove the fuse box cover, depress the two catches arrowed in the illustration.

### Checking or renewing a fuse



HB0668

1. Turn off the starter switch and all electrical equipment.
2. Press the removal tweezers (located in the fuse box) onto the head of the fuse and pull to remove. A blown fuse can be recognised by a break in the wire.
3. Replace a blown fuse with another of the same, or lower rating. Note that there are a number of spare fuses located along the lower side of the fuse box.

If a replacement fuse fails almost immediately, refer the problem to your dealer.

## Fuse Replacement

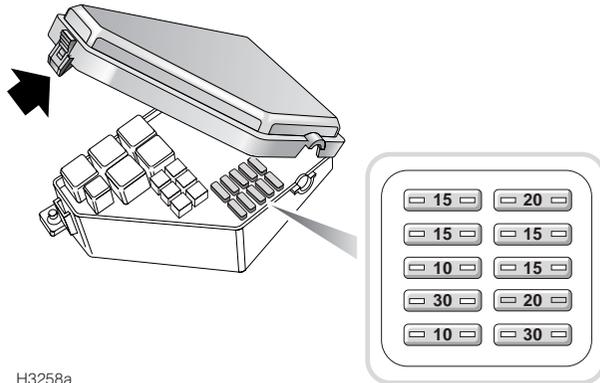
### Passenger compartment fusebox fuse specifications

Fuse number	Rating (AMPS)	Circuit protected
1	20A	Central door locking
2	10A	Parking aid, rear sunblind, rain sensor
3	15A	Cigar lighter
4	10A	Screen washer pump
5	-	Accessories socket
6	-	Accessories socket
7	10A	Interior lights
8	5A	Engine immobilisation
9	5A	Clock, seats, diagnostics
10	10A	Engine management
11	5A	Mirrors, ATC controls
12	5A	Airbag SRS
13	5A	Light switch module, immobiliser, clutch/brake pedal switch
14	5A	Alternator, oil temperature sensor (diesel)
15	5A	Instruments
16	5A	Instruments
17	5A	Wipers
18	5A	Heated washers, mirror
19	10A	Traction control
20	-	Not used
21	10A	ABS
22	-	Towing accessory
23	5A	Reverse lights
24	5A	Engine cooling (turbo)
25	5A	Light switch module
26	10A	Cruise control

Fuse number	Rating (AMPS)	Circuit protected
27	5A	ATC, seat belt sensor
28	30A	Fuel pump
29	5A	Instruments
30	20A	Rear windows
31	15A	Horn
32	5A	Remote door locking, interior lights
33	15A	Audio system
34	5A	Air recirculation, windows
35	30A	Windows
36	5A	Alarm sounder, immobiliser
37	5A	Fuel burning heater
38	20A	Engine cooling (turbo)
39	5A	Fuel burning heater
40	20A	Sunroof
41	10A	Fuel burning heater
42	15A	Rear wiper
43	-	Not used
44	30A	Power washer
45	15A	Alarm sounder
46	-	Not used
47	30A	Traction control
48	-	Not used
49	20A	Heated seats
50	-	Not used
51	30A	Seat memory
52	-	Not used
53	30A	Seat memory
54	-	Not used

## Fuse Replacement

### ENGINE COMPARTMENT FUSES



H3258a

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

**Owners are advised against removing or replacing the fusible links identified on the underside of the fuse box lid. Failure of any of these items should be investigated by a qualified technician.**

Fuse number	Rating (AMPS)	Circuit protected
1	15A	Exhaust gas recirculation, injection pump, pressure regulator (diesel models) Oxygen sensors (petrol models), Engine management (all models)
2	20A	Ignition coils (petrol models), Engine management (all models)
3	15A	Camshaft and oxygen sensors (petrol models)
4	15A	Automatic transmission, air conditioning, cooling fan, cruise control (diesel models)
5	10A	Engine management (petrol models)
6	15A	Front fog lights
7	30A	Anti-lock brakes
8	20A	Fuel burning heater (diesel models)
9	10A	Air conditioning
10	30A	Wipers and washers

## Bulb Replacement

### REPLACING BULBS

Check the operation of all exterior lights before you drive the car.

Before replacing any bulb, turn off the lighting switch to avoid any possibility of a short circuit.

**NOTE:** Only replace bulbs with the same type and specification.

### Halogen bulbs

With the exception of cars equipped with Xenon light units, Halogen bulbs are used for all headlight dipped and main beams. This type of bulb may shatter in use if the glass has been scratched, or contaminated with oil or perspiration. Take care NOT to touch the glass with your fingers; always use a cloth to handle the bulb. If necessary, clean the glass with methylated spirits to remove fingerprints.

### Xenon light units

Some cars in the model range are fitted with Xenon dipped headlight units. Xenon lights provide significantly improved visibility, especially during adverse weather and driving conditions.

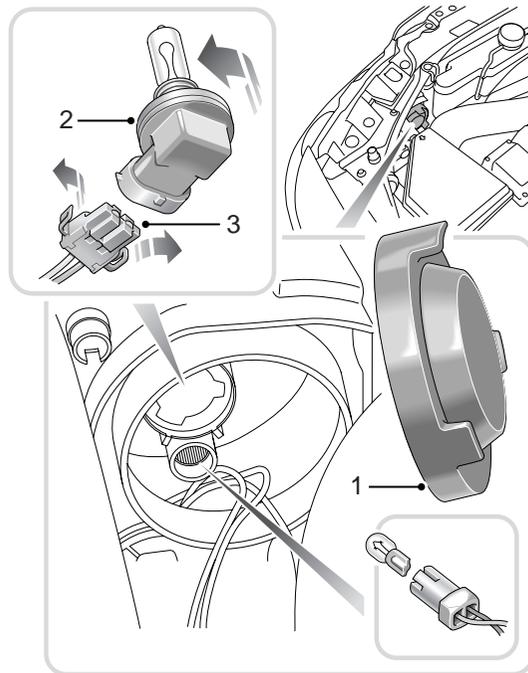
The operational life of a Xenon light is significantly longer than that of a conventional or Halogen bulb. However, the very high voltage required to ignite the gas and metal vapour used to power Xenon lights could cause very serious injury. Replacement or maintenance of Xenon light units should only be carried out by qualified personnel.

### Replacement bulbs

Bulb	Watts
Headlight dipped beam	H7 55
Headlight main beam (for cars with Halogen dipped beam headlights)	H1 55
Headlight main beam (for cars with Halogen Projector blue vision, or Xenon dipped beam headlights)	H9 65
Sidelights	5
Front fog lights	55
Direction indicators (amber)	21
Side repeater lights (amber)	5
Reverse lights	21
Rear fog guard lights	21
Tail lights	5
Brake lights	21
Number plate lights	5
Courtesy lights	3
Map reading lights	3
Loadspace light (Saloon)	10
Loadspace light (Tourer)	5
Underfloor loadspace light (Tourer)	5
Glovebox light	5
Vanity mirror light	1.2

## Bulb Replacement

### HEADLIGHT AND SIDELIGHT - Cars with Xenon dipped beam and Halogen main beam lights



HB0048a

#### Inboard headlights (main beam)

**Replacement bulb:** H9 65 watt.

The main beams are powered by Halogen bulbs, which can be replaced by the owner, provided the bulb handling precautions shown at the start of the bulb replacement section are observed.

1. Remove the rubber cover from the rear of the headlight.
2. Twist the bulb (and bulb holder) one eighth of a turn anti-clockwise to release from the light unit.
3. Release the clips on either side of the electrical connector (see inset) and detach from the bulb. When refitting, note that the connector fits one way round only.

Replacement of the bulb is a reversal of the above process.

#### Sidelight

**Replacement bulb:** 5 watt.

On cars equipped with Xenon headlights, the sidelight bulbs are positioned inside the inboard headlight units. The sidelight bulb holder is immediately below the main beam headlight bulb (see inset in bottom corner of illustration).

With the circular rubber cover removed from the back of the light unit, pull the sidelight bulb holder from the light unit and pull the bulb to remove.

#### Outboard headlights (dipped beam)

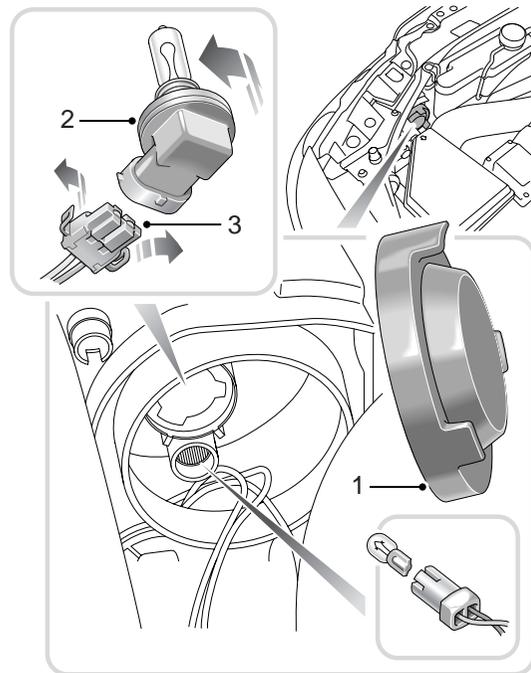
**⚠ High voltage is required to power Xenon lights and could cause very serious injury. Replacement or maintenance should only be carried out by qualified personnel.**

## Bulb Replacement

### HEADLIGHT AND SIDELIGHT - Cars with Halogen Projector (blue vision) lights

#### Inboard headlights (main beam)

Replacement bulb: H9 65 watt.



HB0048a

1. Remove the rubber cover from the rear of the headlight.
2. Twist the bulb holder one eighth of a turn anti-clockwise to release from the light unit.
3. Release the clips on either side of the electrical connector (see inset) and detach from the bulb. When refitting, note that the connector fits one way round only.

Replacement of the bulb is a reversal of the above process.

#### Sidelight

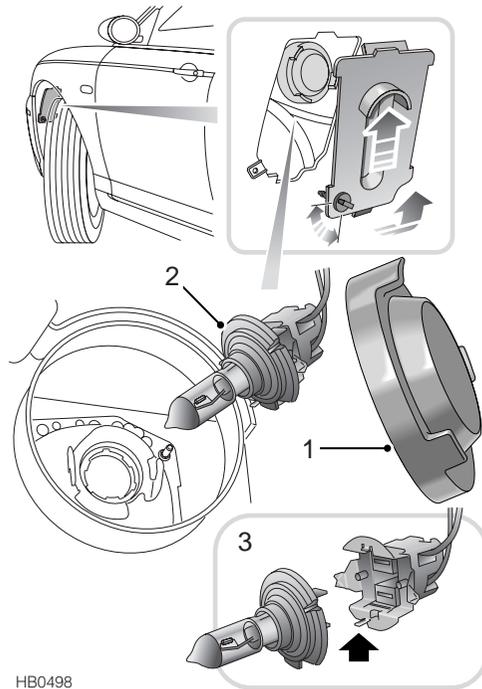
Replacement bulb: 5 watt (blue vision).

The sidelight bulb holder is immediately below the inboard headlight bulb (see small inset on previous illustration). With the circular rubber cover removed, pull the bulb holder from the light unit and pull the bulb to remove it from the holder.

## Bulb Replacement

### Outboard headlights (dipped beam)

**Replacement bulb:** H7 55 watt (blue vision).



Turn the front wheels to full left or right lock. This provides room to reach into the wheel arch to remove the headlight access panel.

Rotate the turnbuckle a quarter turn to left or right to release the access panel (see upper inset). Push the panel up as far as it will go and then disengage the bottom of the panel to remove.

1. With the access panel removed, reach behind the headlight and pull to remove the rubber cover.
2. Twist the bulb holder one-eighth of a turn anti-clockwise to release the assembly from the light unit.
3. Pull the bulb from the bulb holder.

Replacement of the bulb is a reversal of the removal process. However, the following points should be noted:

- It is essential that the bulb is refitted correctly. Note the square tab on the bulb mounting plate and its relationship with the tab projecting from the mounting plate on the bulb holder (arrowed in lower inset). The bulb **MUST** be fitted the correct way round, with both mounting plates in full contact.
- Similarly, the bulb holder assembly must be fitted into the light unit the correct way round in order for the bayonet pins to engage. Present the bulb holder assembly to the light unit with the square tab on the bulb mounting plate (referred to above) pointing towards the ground.

### Replacing the access panel

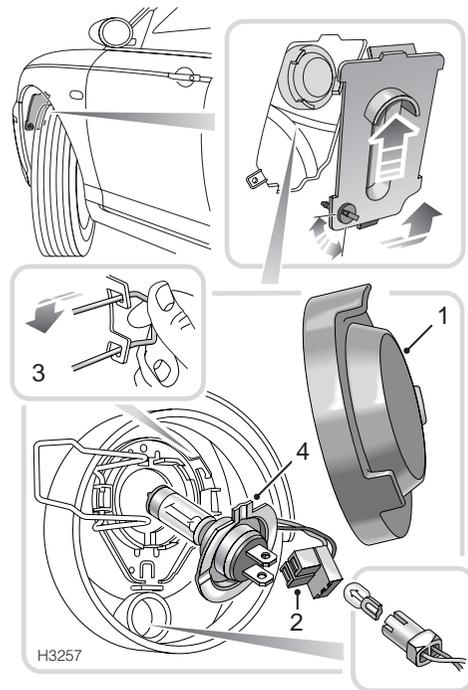
Clip the protrusion at the top of the access panel into the aperture in the wheel arch liner and push the panel upwards as far as it will go. The smaller protrusion at the bottom of the panel can then be clipped into the corresponding cut-out at the bottom of the wheel arch liner aperture. Finally, engage the turnbuckle screw and turn a quarter turn to left or right to fully secure the access panel.

## Bulb Replacement

### HEADLIGHT AND SIDELIGHT - Cars with Halogen lights

#### Outboard headlights (dipped beam)

**Replacement bulb:** H7 55 watt.



Turn the front wheels to full left or right lock. This will provide room for you to reach into the wheel arch to remove the headlight access panel.

Rotate the turnbuckle a quarter turn to left or right to release the access panel (see upper inset). Push the panel up as far as it will go and then disengage the bottom of the panel to remove.

1. With the access panel removed, reach behind the headlight and pull to remove the rubber cover.
2. Pull the electrical connector from the back of the headlight bulb.
3. Unhook the wire securing clip.
4. Remove the bulb.

When replacing the bulb, the following tips will make the job easier.

- Always remove the electrical connector BEFORE unhooking the wire securing clip.
- Examine the illustration carefully to see how the wire securing clip (3) works.
- Before replacing the electrical connector, refer to the illustration to check which way round the connector needs to be to enable it to fit onto the spade-type contacts on the bulb.

Replacement of the bulb is a reversal of the removal process.

**NOTE:** When replacing the bulb, ensure the squared tab on the bulb mounting plate (4) is vertically aligned. Insert the new bulb fully and hold in this position while fitting the wire securing clip, and before attaching the electrical connector.

5

## Bulb Replacement

### Sidelight

**Replacement bulb:** 5 watt.

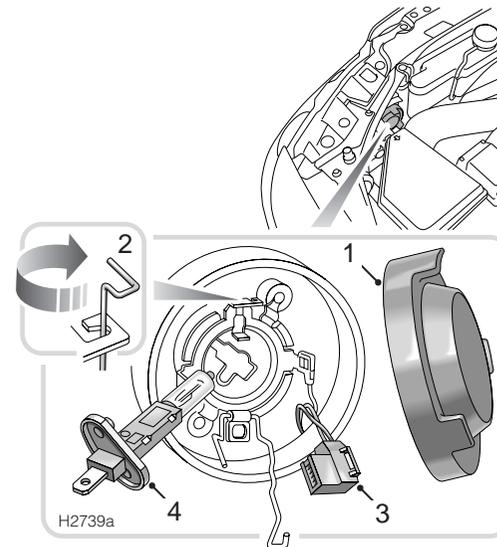
The sidelight holder is immediately below the headlight bulb (see small inset on previous illustration). With the circular rubber cover removed, pull the bulb holder from the light unit and pull the bulb to remove it from the holder.

### Replacing the access panel

Clip the protrusion at the top of the access panel into the aperture in the wheel arch liner and push the panel upwards as far as it will go. The smaller protrusion at the bottom of the panel can then be clipped into the corresponding cut-out at the bottom of the wheel arch liner aperture. Finally, engage the turnbuckle screw and turn a quarter turn to left or right to fully secure the access panel.

### Inboard headlights (main beam)

**Replacement bulb:** H1 55 watt.

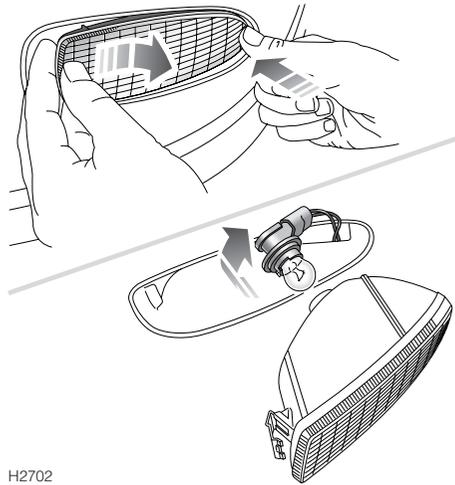


1. Remove the rubber cover from the rear of the headlight.
2. Unhook the wire securing clip (see small inset in illustration) and pivot it away from the rear of the bulb.
3. Detach the electrical connector from the rear of the bulb.
4. Remove the bulb.

## Bulb Replacement

### FRONT DIRECTION INDICATORS (oval-shaped)

**Replacement bulb:** 21 watt (amber).



H2702

Using hand pressure, push the bottom of the outboard corner of the lens very firmly towards the REAR of the car; at the same time, push the inboard side of the lens firmly towards the SIDE of the car. This will disengage the securing spring and enable the light unit to be pulled from the front of the bumper.

Alternatively, use a flat-bladed screwdriver to carefully lever the inboard side of the light unit from the bumper aperture.

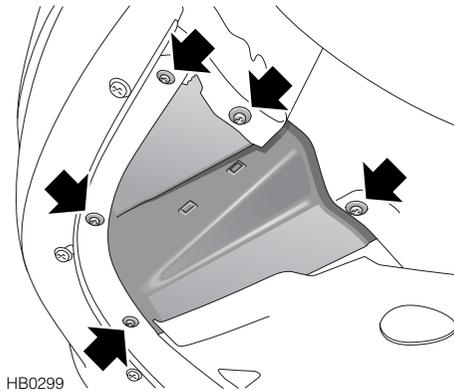
Twist the bulb holder a quarter turn anti-clockwise to release it from the light unit. Push and twist the bulb one eighth of a turn to release.

When replacing the light unit, insert the outboard side first (nearest the side of the car), then carefully ease the inboard side of the light into the aperture. Be sure it 'clicks' securely into position.

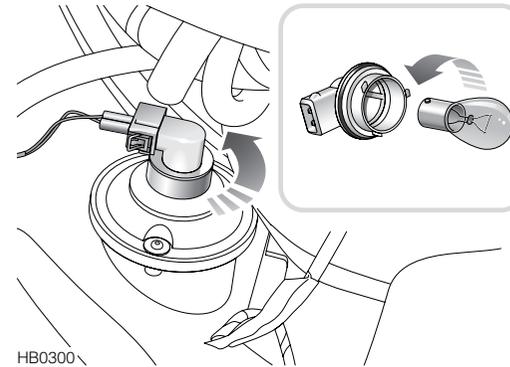
## Bulb Replacement

### FRONT DIRECTION INDICATORS (circular type)

**Replacement bulb:** 21 watt (amber).



To access the light unit, the small panel immediately below the relevant light must be removed from the underside of the car. This is held in place by five Philips type screws, which must be removed before the panel can be released (see illustration for location of the five screws).



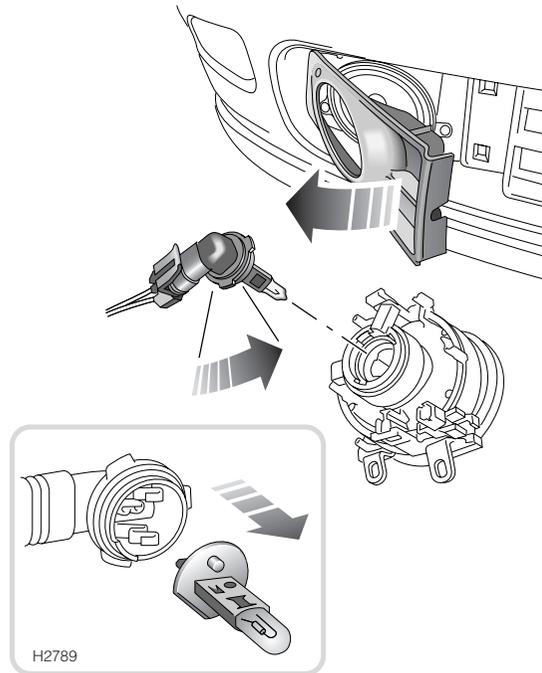
Detach the electrical connector from the rear of the bulb holder by squeezing the clips on both sides of the connector and pulling the connector away from the light unit.

Twist the bulb holder a quarter turn anti-clockwise to release it from the light unit. Push and twist the bulb one eighth of a turn to release.

## Bulb Replacement

### FRONT FOG LIGHTS (oval-shaped)

**Replacement bulb:** H1 55 watt.



Pull the inboard side of the fog light surround away from the front of the car - see illustration (gentle leverage using a flat-bladed screwdriver behind the surround may be necessary).

Remove the three retaining screws and pull the light unit forward away from the bumper. Twist the bulb holder an eighth of a turn anti-clockwise to release it from the rear of the light unit. Holding only the metal part of the bulb, pull to remove it from the bulb holder.

**NOTE:** It may be necessary to insert the blade of a small screwdriver under the metal flange at the base of the bulb, and use as a lever to separate the bulb from the holder.

When replacing the bulb, note that the circular flange has a flat on one side. The flat must align with the lug on the matching face of the bulb holder. Similarly, note the three tabs on the perimeter of the bulb holder (one small and two large); correct alignment of the tabs will ensure the holder is replaced the right way round.

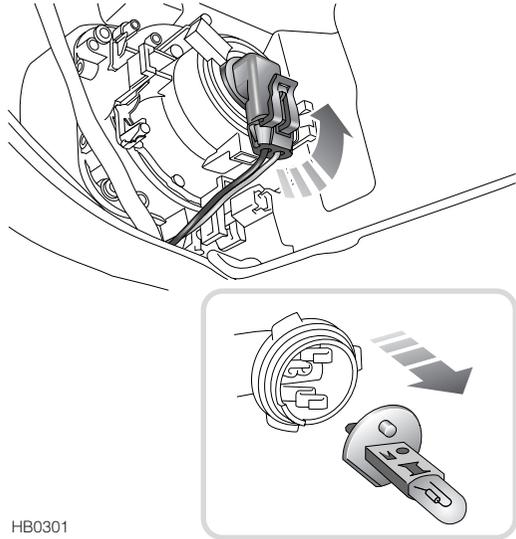
**!** During use, Halogen headlight bulbs may shatter if the glass has been scratched, or contaminated with oil or perspiration. **DO NOT touch the glass.** If handled, clean with methylated spirits and a clean cloth.

## Bulb Replacement

### FRONT FOG LIGHTS (circular type)

**Replacement bulb:** H1 55 watt.

To access the light unit, the small access panel immediately below the relevant light must be removed from the underside of the car. Refer to 'FRONT DIRECTION INDICATORS (circular type)', page 244 for information on how to remove this panel.



Detach the electrical connector from the rear of the light unit by lifting the lever on the side of the connector and pulling the connector downward. Twist the bulb holder an eighth of a turn

anti-clockwise to release it from the rear of the light unit. Holding only the metal part of the bulb, pull to remove it from the bulb holder.

**NOTE:** It may be necessary to insert the blade of a small screwdriver under the metal flange at the base of the bulb, and use as a lever to separate the bulb from the holder.

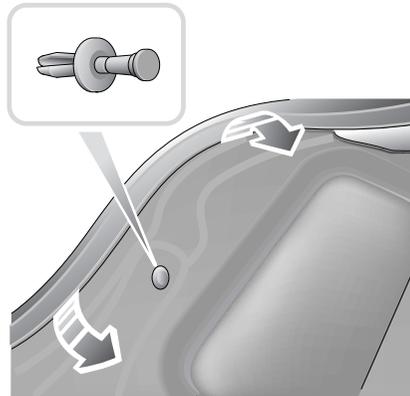
When replacing the bulb, note that the circular flange has a flat on one side. The flat must align with the lug on the matching face of the bulb holder. Similarly, note the three tabs on the perimeter of the bulb holder (one small and two large); correct alignment of the tabs will ensure the holder is replaced the right way round.

**!** During use, Halogen headlight bulbs may shatter if the glass has been scratched, or contaminated with oil or perspiration. **DO NOT touch the glass. If handled, clean with methylated spirits and a clean cloth.**

## Bulb Replacement

### REAR LIGHTS (Saloon)

To access the bulbs, it is necessary to detach one of the scrivet fixings and fold back the boot lining.

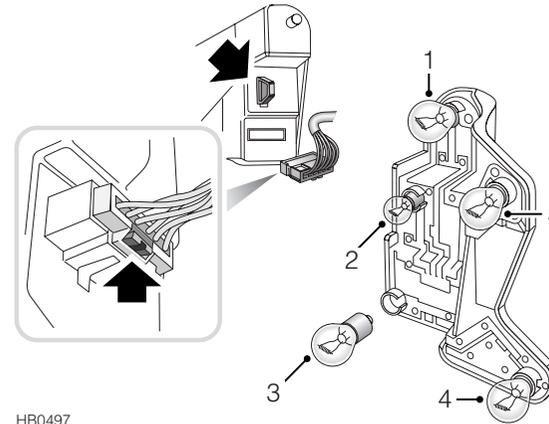


HB0496

*To remove the fixing:* Use pliers or the flat blade of a screwdriver to lever the head of the fixing away from the boot lining. The fixing can then be pulled from its mounting position.

*To replace the fixing:* Fully open the fixing by pulling the head away from the body (see inset). Align the fixing with the holes in the boot lining and bodywork, then push the head fully in.

Detach the electrical connector from the rear of the light unit by depressing the release catch on the underside (see inset in following illustration), at the same time pulling the connector free.



HB0497

### Replacement bulbs:

1. Brake light 21 watts
2. Tail light 5 watts
3. Fog guard light 21 watts
4. Reversing light 21 watts
5. Direction indicator light 21 watts (amber)

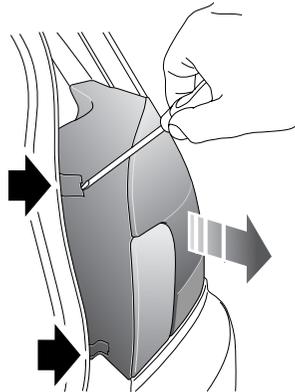
Press the lever (arrowed in main illustration) towards the side of the car to release the light unit. Remove light unit from the car.

Push and twist the bulbs anti-clockwise to remove.

**NOTE:** When replacing the light unit, locate the upper part of the light unit first then ease the lower half into position. Make sure the release catch 'clicks' into position to securely retain the light unit.

## Bulb Replacement

### REAR LIGHTS (Tourer)

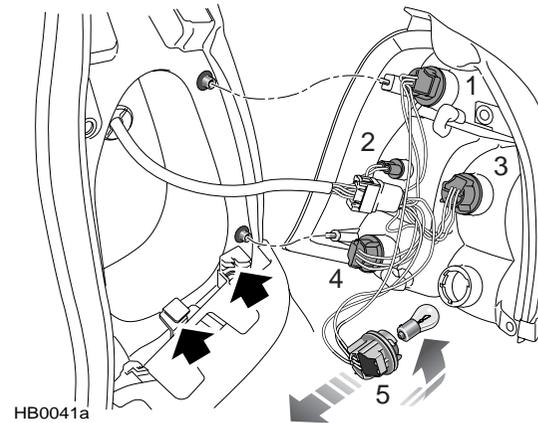


HB0019a

With the tailgate open, use the flat-bladed end of the screwdriver (supplied in the tool kit) to prise open the two flaps on the inboard side of the light unit (where indicated in illustration), to reveal two retaining screws.

Fully release both screws until the light unit can be pulled away from the rear of the car, then detach the electrical connector.

To replace the light unit, align the two metal pins protruding from the rear with the corresponding bushes on the car. Push the light unit firmly onto the car, taking care to ensure that the two plastic lugs (at the base of the light unit) fit smoothly into the receiver guides (arrowed in second illustration) on the car.



HB0041a

#### Replacement bulbs:

1. Brake light 21 watts
2. Tail light 5 watts
3. Direction indicator light 21 watts (amber)
4. Fog guard light 21 watts
5. Reversing light 21 watts

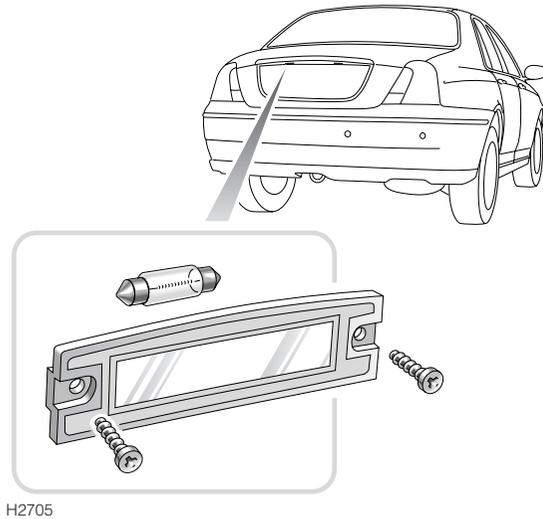
Twist the bulb holders one eighth of a turn anti-clockwise to remove them from the rear of the light unit. With the exception of the (smaller) tail light bulb, which is a push/pull fit, push and twist the bulbs anti-clockwise to remove.

**NOTE:** The amber direction indicator bulb has off-set bayonet pins and can only be fitted one way round.

## Bulb Replacement

### NUMBER PLATE LIGHTS (Saloon)

Replacement bulb: 5 watt.



H2705

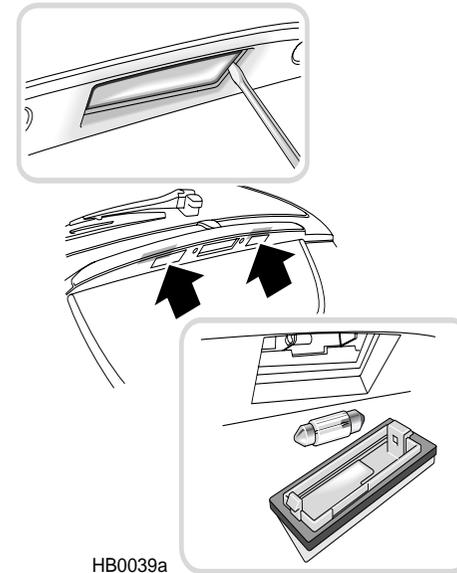
There are two number plate lights. On saloon models, remove the two securing screws and the lens to access each bulb.

Pull the bulb to remove.

**NOTE:** When replacing, ensure the lens is fitted the correct way round; the curved face should point towards the rear.

### NUMBER PLATE LIGHTS (Tourer)

Replacement bulb: 5 watt.



HB0039a

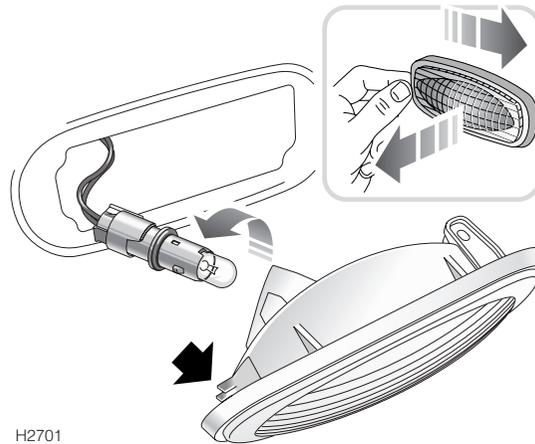
To access a bulb, use a small flat-bladed screwdriver to ease the lens from the underside of the applique (see upper inset - the lever action of the screwdriver will compress the spring retaining clip and enable the lens to be pulled free). Prise the connectors apart to remove the bulb.

When replacing the lens, fully insert the end opposite to the spring clip, then push the side with the spring clip into place.

## Bulb Replacement

### SIDE REPEATER LIGHTS

**Replacement bulb:** 5 watt (amber).



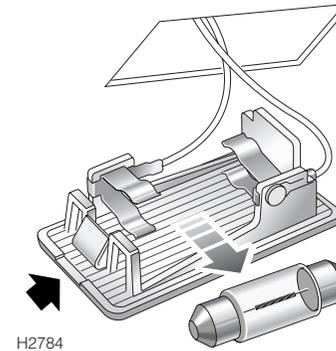
Push the lens firmly towards the front of the car to release the light unit, then withdraw the light from the wing.

Twist anti-clockwise to release the bulb holder from the light unit. Pull to remove the bulb from its socket.

When refitting the light unit, first locate the two tabs (arrowed in illustration), ensuring that they are pointing towards the rear of the car, then push the remainder of the light unit into the aperture.

### GLOVEBOX LIGHT

**Replacement bulb:** 5 watt.

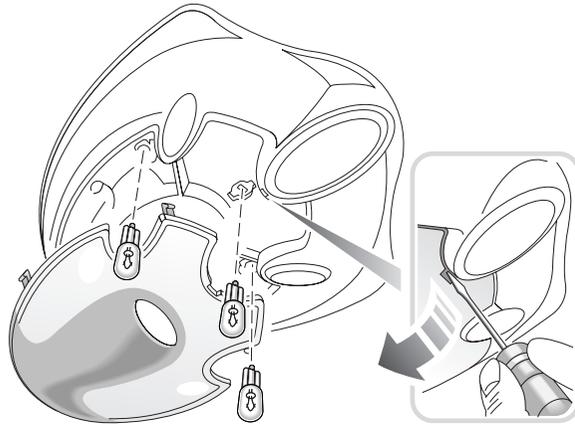


Insert a small flat-bladed screwdriver (preferably with a short handle, due to limited access) into the indent on the left hand side of the light unit, and carefully prise the unit from the glovebox panel. Remove the bulb from its clips.

## Bulb Replacement

### FRONT COURTESY & MAP READING LIGHTS

Replacement bulb: 3 watt



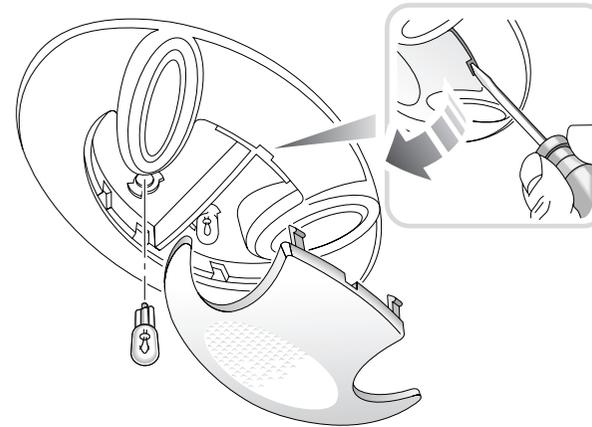
H2695

Insert a small flat-bladed screwdriver into the indent at the rear of the lens (see inset) and gently prise the lens from the light unit. Pull the bulbs from their mountings to remove.

When replacing the lens, locate the single 'prong' at the front of the lens first, then carefully flex the lens to locate and position the remaining four prongs into the light unit. Push the lens upwards into the light unit until it 'clicks' into position.

### REAR COURTESY LIGHTS

Replacement bulb: 3 watt



H2694

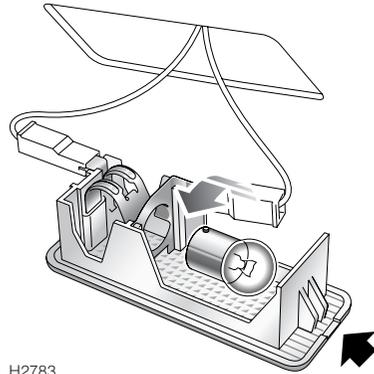
Insert a small flat-bladed screwdriver into the indent at the rear of the lens (see inset) and gently prise the lens from the light unit. Pull the bulbs from their mountings to remove.

When replacing, locate and position the 'prongs' at the front of the lens first, then carefully push the rear of the lens into the light unit until it 'clicks' into position.

## Bulb Replacement

### BOOT LIGHT (Saloon)

Replacement bulb: 10 watt

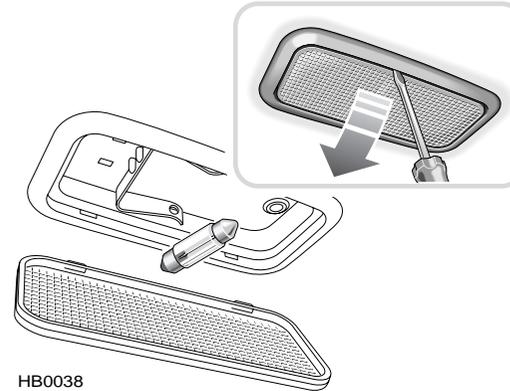


H2783

Insert a small flat-bladed screwdriver into the indent on one of the narrow sides of the lens (see arrow in illustration) and carefully prise the unit from its location. Push and twist the bulb to remove.

### LOADSPACE LIGHT (Tourer)

Replacement bulb: 5 watt



HB0038

Insert a small flat-bladed screwdriver into the indent on the rear edge of the lens (see inset) and carefully prise the lens from the light unit. Gently spread the flexible contacts to release the bulb.

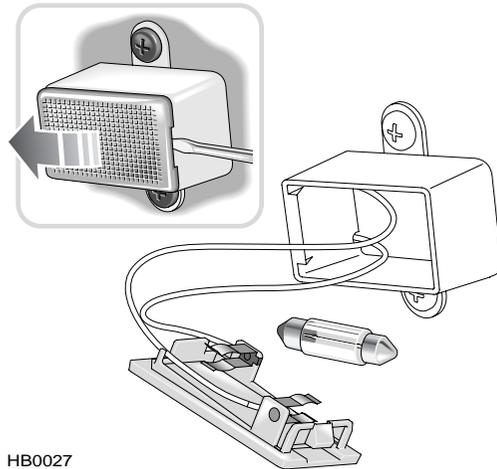
When replacing, locate one side of the lens, then push firmly on the other side, until the lens 'clicks' into position.

## Bulb Replacement

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### UNDERFLOOR LOADSPACE LIGHT (Tourer)

**Replacement bulb:** 5 watt



HB0027

Insert a small flat-bladed screwdriver into the indent on one of the short sides of the lens (see inset in illustration) and carefully prise the lens and bulb carrier from its location. Ease open one of the bulb connectors and pull the bulb to remove.

5



***Technical Data***

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- 256** *Technical Data*
- 271** *Fuel Consumption*
- 274** *Declaration of Conformity*

## Technical Data

### ENGINES

#### 1.8 litre petrol

Fuel	UNLEADED 95 RON to EN 228 specification is recommended †
Capacity	1796 cm <sup>3</sup>
Firing order	1-3-4-2
Idle speed	750 ± 50 rev/min
Bore	80 mm
Stroke	89.3 mm
Number of cylinders	4 in-line
Compression ratio:	
- Turbo engines	9.2:1
- Non-turbo engines	10.5:1
Ignition system	MEMS3 breakerless, electronic
Spark plugs	GSP 66527
Spark plug gap	1.0 mm ± 0.05
† Unleaded fuels of 95 - 98 RON can be used.	

#### 2.0 litre petrol

Fuel	UNLEADED 95 RON to EN 228 specification is recommended †
Capacity	1997 cm <sup>3</sup>
Firing order	1-6-5-4-3-2
Idle speed	750 ± 50 rev/min
Bore	80 mm
Stroke	66.2 mm
Number of cylinders	6 V-arrangement
Compression ratio	10.5:1
Ignition system	Siemens engine management system
Spark plugs	GSP 66527
Spark plug gap	1.0 mm ± 0.05
† Unleaded fuels of 95 - 98 RON can be used.	

## Technical Data

### 2.5 litre petrol

Fuel	UNLEADED 95 RON to EN 228 specification is recommended †
Capacity	2497 cm <sup>3</sup>
Firing order	1-6-5-4-3-2
Idle speed	750 ± 50 rev/min
Bore	80 mm
Stroke	82.8 mm
Number of cylinders	6 V-arrangement
Compression ratio	10.25:1
Ignition system	Siemens engine management system
Spark plugs	GSP 66527
Spark plug gap	1.0 mm ± 0.05
† Unleaded fuels of 95 - 98 RON can be used.	

### 2.0 litre diesel

Fuel	Diesel to EN 590 specification
Capacity	1951 cm <sup>3</sup>
Firing order	1-3-4-2
Idle speed	780 ± 50 rev/min
Bore	84.0 mm
Stroke	88.0 mm
Number of cylinders	4 in-line
Compression ratio	18.0:1

## Technical Data

### CAPACITIES

Fuel tank (usable)	64.8 litres
Engine oil (and filter) refill:	
1.8 petrol engines	4.5 litre
2.0 & 2.5 petrol engines	5.2 litre
2.0 diesel engines	6.8 litre
Manual gearbox fill from dry	
Automatic gearbox fill from dry	not applicable
Automatic gearbox refill	4.0 litre
Cooling system fill from dry:	
1.8 petrol engines	6.2 litre
2.0 & 2.5 petrol engines	7.5 litre
2.0 diesel engines	8.2 litre
Washer reservoir	
	6.0 litres

### ELECTRICAL

<b>Battery type:</b>	
1.8 litre petrol engines with manual transmission	H5, sealed for life
All other engines	H6, sealed for life
<b>Battery rating:</b>	
1.8 litre petrol engines with manual transmission	63 amp/hr
All other engines	75 amp/hr
Voltage and polarity	
	12 V, negative (-) earth

## Technical Data

### WHEELS & TYRES

#### Wheel size and type

Type	Size
Steel wheels	6.0J x 15 or 6.5J x 15
Alloy wheels:	
15" wheels	6.5J x 15
16" wheels	6.5J x 16
17" wheels	7.0J x 17
18" wheels	7.5J x 18
Spare wheels:	
space-saver steel †	4.0J x 16
regulation steel*	6.0J x 15, or 6.5J x 15
Road wheel bolt torque	125 Nm
† The space-saver spare wheel is for temporary use only, with maximum road speed limited to 80 km/h. Only one space-saver spare wheel should be used at any one time.	

#### Tyre specification

Wheel size	Tyre
6.0J x 15 (steel)	195/65 R15 91V or
6.5J x 15 (steel & alloy)	195/65 R15 91H †
6.5J x 15 (alloy & steel spare)	195/65 R15 91V or
	195/65 R15 91H †
6.5J x 15 (alloy & steel spare)	205/65 R15 94V
6.5J x 16 (alloy)	215/55 R16 93W or
	215/55 R16 93V
7.0J x 17 (alloy)	225/45 ZR17 90W
7.5J x 18 (alloy)	225/45 ZR18 91V
4.0J x 16 (space-saver)	T125/90 R16 98M (space-saver)
† 1.8 and diesel models only	

## Technical Data

### TYRE PRESSURES

Normal driving conditions (up to maximum GVW)

Model		Tyre pressures - bar							
		1.8	2.0	2.5	160	180	190	2.0 Diesel	CDTi
<b>Saloon derivatives</b>									
- Manual transmission	Front	2.1	2.1	2.1	2.2	-	2.2	2.2	2.2
	Rear	1.9	1.9	1.9	2.2	-	2.2	2.1	2.2
- Automatic transmission	Front	2.1	2.1	2.1	-	2.2	-	2.2	2.2
	Rear	1.9	1.9	1.9	-	2.2	-	2.1	2.2
<b>Tourer derivatives</b>									
- Manual transmission	Front	2.2	2.2	2.2	2.2	-	2.2	2.3	2.2
	Rear	2.2	2.2	2.2	2.2	-	2.2	2.3	2.2
- Automatic transmission	Front	2.2	2.3	2.3	-	2.2	-	2.3	2.2
	Rear	2.2	2.3	2.3	-	2.2	-	2.3	2.2
<b>All derivatives</b>									
- Space saver spare †	All	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
† The space-saver spare wheel is for temporary use only, with maximum road speed limited to 80 km/h. Only one space-saver spare wheel to be used at any one time.									

## Technical Data

### Speeds above 160 km/h

Model		Tyre pressures - bar							
		1.8	2.0	2.5	160	180	190	2.0 Diesel	CDTi
<b>Saloon derivatives</b>									
- Manual transmission	Front	2.2	2.6	2.6	2.2	-	2.2	2.5	2.2
	Rear	2.1	2.5	2.5	2.2	-	2.2	2.3	2.2
- Automatic transmission	Front	2.2	2.6	2.6	-	2.3	-	2.5	2.3
	Rear	2.1	2.5	2.5	-	2.2	-	2.3	2.2
<b>Tourer derivatives</b>									
- Manual transmission	Front	2.3	2.6	2.6	2.2	-	2.2	2.5	2.2
	Rear	2.2	2.5	2.5	2.2	-	2.2	2.3	2.2
- Automatic transmission	Front	2.3	2.6	2.6	-	2.3	-	2.5	2.3
	Rear	2.2	2.5	2.5	-	2.2	-	2.3	2.2

### High payload

Model		Tyre pressures - bar							
		1.8	2.0	2.5	160	180	190	2.0 Diesel	CDTi
<b>Tourer derivatives with self levelling suspension only</b>									
- Manual transmission	Front	2.2	2.2	2.2	-	-	-	2.3	-
	Rear	2.3	2.3	2.3	-	-	-	2.3	-
- Automatic transmission	Front	2.2	2.3	2.3	-	2.3	-	2.3	-
	Rear	2.3	2.3	2.3	-	2.3	-	2.3	-

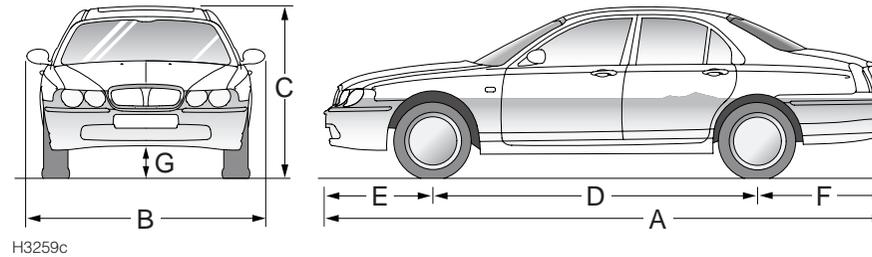
## Technical Data

### Towing

Model		Tyre pressures - bar							
		1.8	2.0	2.5	160	180	190	2.0 Diesel	CDTi
<b>Saloon derivatives</b>									
- Manual transmission	Front	2.1	2.1	2.1	2.2	-	2.2	2.2	2.2
	Rear	2.3	2.3	2.3	2.2	-	2.2	2.3	2.2
- Automatic transmission	Front	2.1	2.1	2.1	-	2.2	-	2.4	2.2
	Rear	2.3	2.3	2.3	-	2.2	-	2.3	2.2
<b>Tourer derivatives</b>									
- Manual transmission	Front	2.2	2.2	2.2	2.2	-	2.2	2.3	2.2
	Rear	2.3	2.3	2.3	2.2	-	2.2	2.3	2.2
- Automatic transmission	Front	2.2	2.3	2.3	-	2.2	-	2.3	2.2
	Rear	2.3	2.3	2.3	-	2.2	-	2.3	2.2

## Technical Data

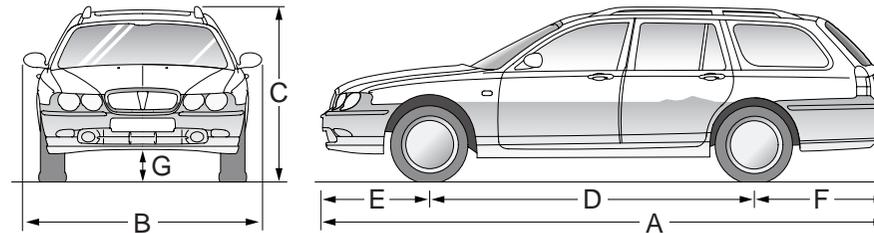
### DIMENSIONS (Saloon)



Overall length - A	4747 mm
Overall width (inc. mirrors) - B	1970 mm
Overall height (sunroof closed) - C	
- 75 models	1424 mm
- ZT models	1417 mm
Wheelbase - D	2746 mm
Front overhang - E	914 mm
Rear overhang - F	1087 mm
Ground clearance (between axles) - G	155 mm
Maximum overhang of coupling point	1157 mm
Turning circle	11.36 m
Approach angle	18.6°
Departure angle	19.5°

## Technical Data

### DIMENSIONS (Tourer)



HB0043b

Overall length - A	4792 mm
Overall width (inc. mirrors) - B	1970 mm
Overall height (with roof bars) - C	
- 75 models	1477 mm
- ZT-T models	1470 mm
Wheelbase - D	2746 mm
Front overhang - E	914 mm
Rear overhang - F	1131 mm
Ground clearance (between axles) - G	155 mm
Maximum overhang of coupling point	1208 mm
Turning circle (kerb to kerb)	11.36 m
Approach angle	18.6°
Departure angle	19.5°

## Technical Data

### WEIGHTS

**NOTE:** When towing, the maximum laden weight can be increased by up to 100 kg and the rear axle load can be increased by 15%, provided road speed is limited to a maximum of 100 km/h.

#### Rover 75 Saloon models

		1.8	1.8 Turbo	2.0 V6	2.5 V6	2.0 CDTi
Approximate unladen vehicle weight †						
- Manual transmission	kg	1400 - 1515	1415 - 1530	1470 - 1590	1470 - 1590	1510 - 1635
- Automatic transmission	kg	1430 - 1550	1450 - 1570	1505 - 1625	1505 - 1625	1530 - 1655
Maximum laden vehicle weight						
- Manual transmission	kg	1940	1940	2000	2000	2030
- Automatic transmission	kg	1940	2000	2000	2000	2030
Maximum front axle load						
- Manual transmission	kg	1010	1010	1070	1070	1100
- Automatic transmission	kg	1070	1070	1100	1100	1100
Maximum rear axle load						
- all models	kg	1000	1000	1000	1000	1000
† Unladen vehicle weight is calculated with no occupants and fuel tank 90% full.						

## Technical Data

### MG ZT Saloon models

		<b>160 (1.8 Turbo)</b>	<b>160 (2.0 V6)</b>	<b>180 (2.5 V6)</b>	<b>190 (2.5 V6)</b>	<b>130 (2.0 CDTi)</b>
Approximate unladen vehicle weight †						
- Manual transmission	kg	1440 - 1580	1485 - 1625	-	1485 - 1625	1535 - 1620
- Automatic transmission	kg	-	-	1520 - 1660	-	1570 - 1655
Maximum laden vehicle weight						
- Manual transmission	kg	1940	2030	-	2030	2030
- Automatic transmission	kg	-	-	2030	-	2030
Maximum front axle load						
- Manual transmission	kg	1010	1100	-	1100	1100
- Automatic transmission	kg	-	-	1100	-	1100
Maximum rear axle load						
- all models	kg	1000	1000	1000	1000	1000
† Unladen vehicle weight is calculated with no occupants and fuel tank 90% full.						

## Technical Data

### Rover 75 Tourer models

		1.8	1.8 Turbo	2.0 V6	2.5 V6	2.0 CDTi
Approximate unladen vehicle weight - Standard suspension †						
- Manual transmission	kg	1460 - 1565	1475 - 1580	1535 - 1645	1535 - 1645	1560 - 1665
- Automatic transmission	kg	1495 - 1600	1510 - 1615	1570 - 1675	1570 - 1675	1590 - 1700
Approximate unladen vehicle weight - Self levelling suspension †						
- Manual transmission	kg	1465 - 1570	1480 - 1585	1540 - 1650	1540 - 1650	1565 - 1670
- Automatic transmission	kg	1500 - 1605	1515 - 1620	1575 - 1680	1575 - 1680	1595 - 1705
Maximum laden vehicle weight - Standard suspension						
- Manual transmission	kg	1980	1980	2050	2050	2090
- Automatic transmission	kg	2010	2010	2090	2090	2120
Maximum laden vehicle weight - Self levelling suspension						
- Manual transmission	kg	2050	2050	2130	2130	2150
- Automatic transmission	kg	2080	2080	2150	2150	2180
Maximum front axle load						
- Manual transmission	kg	990	990	1060	1060	1100
- Automatic transmission	kg	1030	1030	1100	1100	1100
Maximum rear axle load						
- Standard suspension	kg	1060	1060	1060	1060	1060
- Self levelling suspension	kg	1100	1100	1100	1100	1100
† Unladen vehicle weight is calculated with no occupants and fuel tank 90% full.						

## Technical Data

### MG ZT Tourer models

		160 (1.8 Turbo)	160 (2.0 V6)	180 (2.5 V6)	190 (2.5 V6)	130 (2.0 CDTi)
Approximate unladen vehicle weight †						
- Manual transmission	kg	1505 - 1635	1550 - 1680	-	1550 - 1680	1585 - 1670
- Automatic transmission	kg	-	-	1585 - 1715	-	1620 - 1705
Maximum laden vehicle weight						
- Manual transmission	kg	2010	2090	-	2090	2090
- Automatic transmission	kg	-	-	2090	-	2120
Maximum front axle load						
- Manual transmission	kg	1030	1100	-	1100	1100
- Automatic transmission	kg	-	-	1100	-	1100
Maximum rear axle load						
- Standard suspension	kg	1060	1060	1060	1060	1060
† Unladen vehicle weight is calculated with no occupants and fuel tank 90% full.						

## Technical Data

### TOWING WEIGHTS

#### Rover 75 models

		1.8	1.8 Turbo	2.0 V6	2.5 V6	2.0 CDTi
Maximum trailer weight (unbraked)						
- all models	kg	750	750	750	750	750
Maximum trailer weight (braked)						
- Manual transmission	kg	1200	1450	1450	1600	1600
- Automatic transmission	kg	1400	1450	1600	1600	1600
Maximum nose weight (Tow hitch downward load) †						
- all models	kg	100	100	100	100	100
Maximum roof rack load						
- Saloon models	kg	80	80	80	80	80
- Tourer models	kg	100	100	100	100	100
Gross train weight = maximum laden vehicle weight + maximum trailer weight						
† To increase stability, it is recommended that you adjust the nose weight to the maximum limit, when loading to the maximum trailer weight						

**NOTE:** The maximum towing weights shown are to an industry defined standard and represent the maximum weight that can be towed by the car, allowing it to restart efficiently on a 12% gradient at sea level. Any extra weight, such as luggage and/or passengers should be deducted from the maximum towing weight.

## Technical Data

### MG ZT & ZT-T models

		160 (1.8 Turbo)	160 (2.0 V6)	180 (2.5 V6)	190 (2.5 V6)	130 (2.0 CDTi)
Maximum trailer weight (unbraked)						
- all models	kg	750	750	750	750	750
Maximum trailer weight (braked)						
- Manual transmission	kg	1450	1600	-	1600	1600
- Automatic transmission	kg	-	-	1600	-	1600
Maximum nose weight (Tow hitch downward load) †						
- all models	kg	100	100	100	100	100
Maximum roof rack load						
- Saloon models	kg	80	80	80	80	80
- Tourer models	kg	100	100	100	100	100
Gross train weight = maximum laden vehicle weight + maximum trailer weight						
† To increase stability, it is recommended that you adjust the nose weight to the maximum limit, when loading to the maximum trailer weight						

**NOTE:** The maximum towing weights shown are to an industry defined standard and represent the maximum weight that can be towed by the car, allowing it to restart efficiently on a 12% gradient at sea level. Any extra weight, such as luggage and/or passengers should be deducted from the maximum towing weight.

## Fuel Consumption

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### **FUEL CONSUMPTION**

The fuel consumption figures shown have been calculated using a standard testing procedure (the new EC test procedure from Directive 99/100/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.

### **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 50 km/h with an average speed of 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 120 km/h and the average speed 63 km/h. The test is carried out over a distance of 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.*

## Fuel Consumption

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### FUEL CONSUMPTION FIGURES

#### Saloon models

	URBAN	EXTRA-URBAN	COMBINED	CO <sub>2</sub>
	l/100km	l/100km	l/100km	g/km
1.8 - manual	10.6	6.1	7.8	185
1.8 - automatic	12.6	7.5	9.4	224
1.8T (turbo) - manual	11.3	6.1	8.0	193
1.8T (turbo) - automatic	12.8	6.6	8.9	214
2.0 V6 - manual	13.9	7.0	9.6	228
2.0 V6 - automatic	15.0	7.5	10.3	245
2.5 V6 - manual	14.0	7.0	9.6	229
2.5 V6 - automatic	15.5	7.5	10.5	249
160 (1.8 Turbo) - manual	11.4	6.2	8.1	194
160 (2.5 V6) - manual	13.6	7.0	9.4	225
180 - automatic	16.0	7.9	10.9	259
190 - manual	14.4	7.4	9.9	239
2.0 CDT (diesel) - manual	7.7	4.7	5.8	163
2.0 CDT (diesel) - automatic	10.0	5.2	6.9	190
2.0 CDTi 130 (diesel) - manual	8.1	4.4	5.8	163
2.0 CDTi 130 (diesel) - automatic	10.0	5.2	6.9	190

## Fuel Consumption

### Tourer models

	<b>URBAN</b>	<b>EXTRA-URBAN</b>	<b>COMBINED</b>	<b>CO<sub>2</sub></b>
	<b>l/100km</b>	<b>l/100km</b>	<b>l/100km</b>	<b>g/km</b>
1.8 - manual	10.6	6.1	7.8	185
1.8 - automatic	12.6	7.5	9.4	224
1.8T (turbo) - manual	11.3	6.1	8.0	193
1.8T (turbo) - automatic	12.8	6.6	8.9	214
2.0 V6 - manual	13.9	7.0	9.6	228
2.0 V6 - automatic	15.6	7.7	10.6	254
2.5 V6 - manual	14.0	7.0	9.6	229
2.5 V6 - automatic	15.8	7.6	10.6	254
160 (1.8 Turbo) - manual	11.4	6.2	8.1	194
160 (2.5 V6) - manual	13.6	7.0	9.4	225
180 - automatic	16.2	8.1	11.1	264
190 - manual	14.4	7.4	9.9	239
2.0 CDT (diesel) - manual	7.7	4.7	5.8	163
2.0 CDT (diesel) - automatic	10.0	5.2	6.9	190
2.0 CDTi 130 (diesel) - manual	8.1	4.4	5.8	163
2.0 CDTi 130 (diesel) - automatic	10.0	5.2	6.9	190

## Declaration of Conformity

**DECLARATION OF CONFORMITY**

**CE 0682** 

This declaration is the responsibility of the manufacturer, authorised representative within the Community:  
Crommlech Electronics Ltd  
Dunmore Road, L20 0CC, Galway, Ireland  
This certificate applies to the complete product specified as:  
**RECEIVER DEVICES PART No. 1824**

Complies with the essential requirements of R&T E.U. Directive 1999/5/EC, on the application of the law of the Member States relating to **Radio Spectrum Matters: EMC and Electromagnetic**  
This Declaration applies to all specimens manufactured in accordance with the technical description set out in the scope of Crommlech Electronics Ltd. Keep this documentation on the premises of the relevant national authorities of any Member State for inspection purposes.

Assessment of compliance of the product with the requirements relating to the essential requirements set out in Article 3 R&T E.U. was based on Annex 1 of the Directive 1999/5/EC and the following standards:

Radio Spectrum	EN 501 229-1
EMC	EN 550 220
Safety	EN 60950

 The designated product Part No.1824 has not been subject to harmonised assessment. This device is licence exempt and distributed in the European countries which will apply the R&T E.U. Directive Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and UK.

Tuam, Ireland    22/03/2004  
 Alan Moran

HB0199

## Declaration of Conformity

**DECLARATION OF CONFORMITY**

**CE 0165** 

This declaration is the responsibility of the manufacturer, authorized representative within the Community:  
**VALEO Sécurité** Habitat 42, Rue de Corbusier 94042 CRETEIL - France

This certifies that  
**The Remote Control Systems and Immobiliser systems**  
Valis01 / Valis03 and Valis03

Complies with the essential protection requirements of R&TTE Directive 1999/5/EC on the approximation of the laws of the Member States relating to *Radio Spectrum Matters, EMC and Electrical Safety*. This declaration applies to all specimens manufactured in accordance with the technical documentation described in the annex II. Valeo Sécurité Habitat keeps this documentation at the disposal of the relevant national authorities of any Member State for inspection purposes. Assessment of compliance of the product with the requirements relating to the essential requirements set in Article 3 R&TTE was based on Annex II and Annex IV of the Directive 1999/5/EC and the following standards:

**Radio Spectrum:** EN 300 220 & EN 300 330  
**EMC:** 89/34/EEC, 1997/24/EC  
**Safety:** EN 60968

 The designated products Valis01 - Valis03 and Valis03 are not submitted in harmonised standards.  
 These devices are licence exempt and distributed in the European countries which will apply the R&TTE directive. All EC-EFTA Countries.

(Place Date) (Signature)

*checked as follows:* 

HB0200



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