











Notes on this Owner's Handbook

We have tried to make all the information in this Owner's Handbook easy to find. The quickest access to a particular topic or item is by consulting the detailed alphabetical index at the end. Consult the first chapter for an initial overview of your car.

When the time comes to sell your BMW, please remember to hand over this Owner's Handbook: it is an important part of the vehicle.

If you have any queries, BMW Service will be glad to advise you.

Symbols used

Indicates precautions that must be When you ordered your BMW, you followed precisely in order to avoid the possibility of personal injury and serious damage to the vehicle.

Contains information that will assist you in gaining the optimum benefit from your vehicle and enable you to care more effectively for your vehicle.

Refers to measures that can be taken to help protect the environ taken to help protect the environment.

- Marks the end of a specific item of information.
- * Identifies optional extras or specific national-market items of equipment, and also accessories.

Identifies systems or components which can be activated or adapted to suit an individual driver's requirements - Car Memory, Key Memory, see page 54.

However certain systems can only be activated or adjusted by BMW Service ◀

Your own car

chose various items of equipment. This handbook describes all models and equipment specifications which BMW offers within this particular model line.

This explains why the handbook may also contain other equipment specifications which you have not ordered. The differences can easily be identified by the asterisk * shown against optional extras.

If your BMW was supplied with equipment not described in this Owner's Handbook such as a radio or car phone, for example, you will receive supplementary owner's handbooks which you are also requested to read carefully.



© 2002 Bayerische Motoren Werke Aktiengesellschaft Munich/Germany Not to be reproduced, wholly or in part, without written permission from BMW AG, Munich. Order No. English/Thailand X/2002 Printed in Thailand Printed on environmentally friendly paper - bleached without chlorine, suitable for





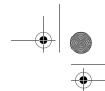
recycling.







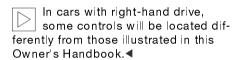






Status at time of printing

The high safety and quality standards of BMW vehicles are maintained by unceasing development work on designs, equipment and accessories. Because of this, your car may differ from the information supplied in the Owner's Handbook. Nor can errors and omissions be entirely ruled out. You are therefore asked to appreciate that no legal claims can be entertained on the basis of the data, illustrations or descriptions in this Owner's Handbook.



For your own safety

Use only parts and accessory products which BMW has approved for your car.

Parts and products which BMW has approved for your car have been checked for safety, function and suitability. BMW accepts product liability for them.

accessory products of any kind which it has not approved.

BMW is unable to assess each individual product of outside origin as to its suitability for use on BMW vehicles without safety risk. Nor can any such warranty be granted if an official inspection authority in your country has approved the product (for example by issuing a general operating permit), or if the German TÜV has approved it for use in this country. These agencies' tests cannot always take into account the full range of operating conditions applicable to BMW vehicles and may therefore be inadequate.

In short, the functional efficiency or road safety of your BMW, and also its value, may be affected if its specification is altered by installing parts not approved for it. Original BMW parts and accessories, other BMW-approved products and competent advice on all related matters are obtainable from BMW Service.◀

Symbol on components and assemblies

Recommends that you study the relevant section of this Owner's BMW cannot accept liability for parts or Handbook in connection with a particular part or assembly.







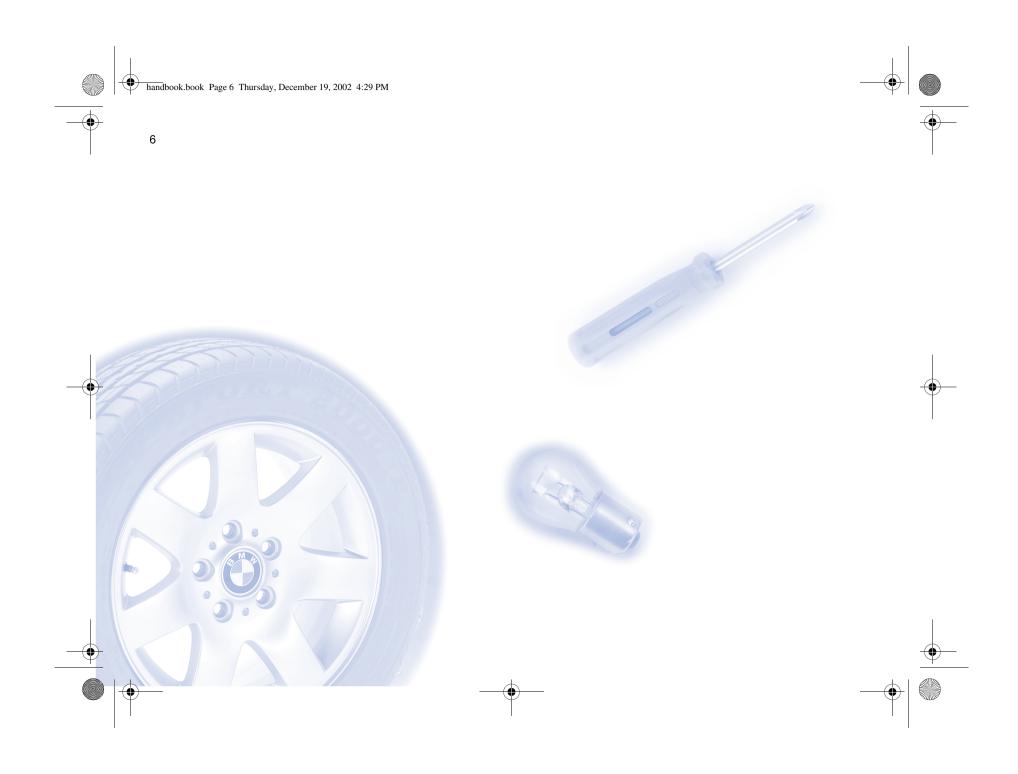


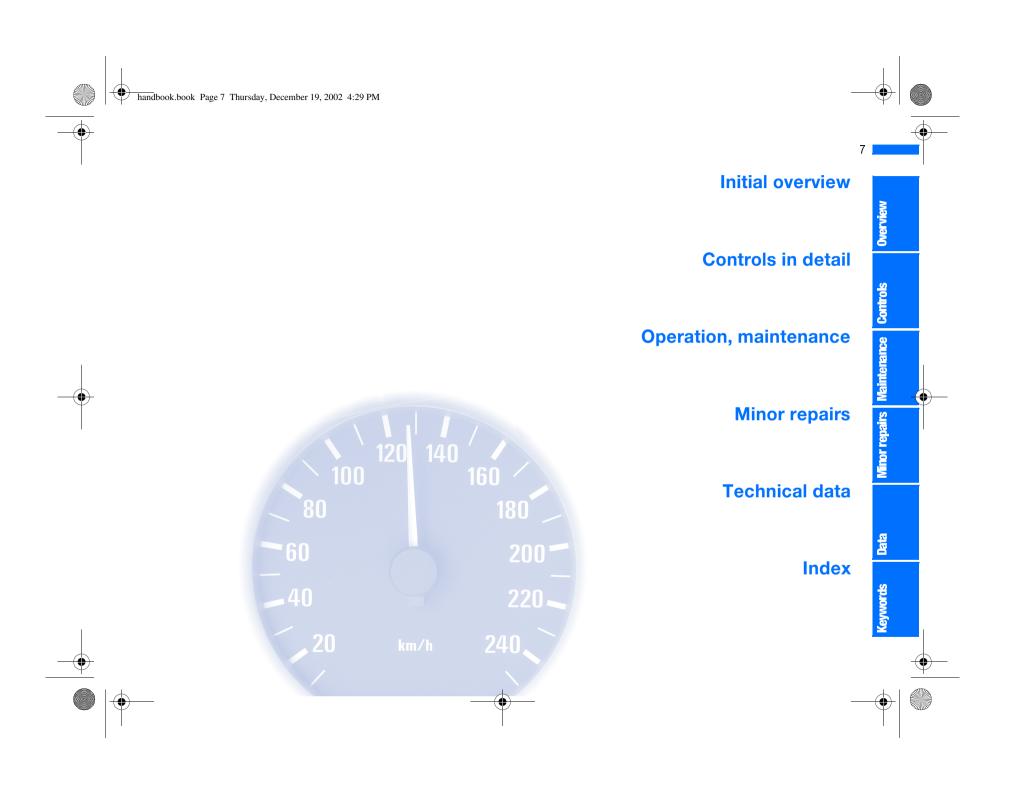




















Contents

Cockpit 14 Instrument panel 16 Telltale and warning lights 18 Multifunctional steering wheel MFL* 21 Warning triangle* 22 First aid kit* 22 Refuelling 22 Fuel grade 23 Tyre pressures 24

Opening and closing:

Keys 30 Central locking system 30 Opening and closing - with the remote control 31 Opening and closing - at the door lock 34 Opening and closing - from inside 35 Luggage compartment lid 36 Luggage compartment 37 Alarm system* 38 Electric windows 40

Sliding/tilt sunroof* 41

Adjusting:

Controls in detail

Correct seated position 43 Seats 43 Seat adjustment, mechanical 44 Seat adjustment, electric* 45 Lumbar support* 45 Head restraints 46 Seat belts 46 Seat and mirror memory* 48 Seat heating* 49 Steering wheel 50 Mirrors 50

Safety systems:

Airbags 52 Child safety 53 Car Memory, Key Memory 54

Driving:

Ignition switch 56 Starting the engine 56 Stopping the engine 58 Handbrake 59 Manual transmission 59 Sequential manual gearbox SMG* - BMW 325i, 330i 60 Automatic transmission with Steptronic* 63 Turn indicators/headlight flasher 66 Wipers/rain sensor* 66 Cruise control* 68

Everything under control:

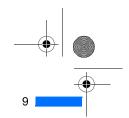
Odometer 70 Revolution counter 70 Energy control 70 Fuel gauge 71 Coolant thermometer 71 Service interval indicator 72 Check Control 73 Clock 74 On-board computer* 74













Controls in detail

Technical features for journey comfort and safety: Park Distance Control PDC* 76

Automatic Stability Control plus Traction ASC+T 77 DSC* - BMW 316i, 318i, 320i, 323i, 330i, 318d, 320d, 330d 79 DSC - BMW 325xi, 330xi, 330xd 81 Hill Descent Control HDC - BMW 325xi, 330xi, 330xd 83 Tyre pressure control (RDC)* 84

Lights:

Side lights/low-beam headlights 86 Instrument lighting 87 Headlight beam angle adjustment 87 High-beam headlights/parking lights 88 Fog lights 88 Interior lighting 89

Heating and air-conditioning systems:

Air conditioning 90 Automatic air conditioning* 94 Roller sunblind* 98

Practical interior equipment:

Glove box 99 Hi-fi system* 99 Storage compartments 100 Carphone* 101 Ashtray, front* 102 Ashtray, rear* 103

Loading and load-carrying:

Through-loading system* 104 Ski bag* 105 Loading 106 Roof rack* 108 Towing a trailer 108

Driving precautions: Operation, maintenance

Running in 114 Driving hints 114 Anti-lock Brake System ABS 115 Brakes 115

Wheels and tyres:

Tyre pressures 117 Condition of tyres 117 New tyres 118 Wheel and tyre combinations 119 Winter tyres 119

In the engine compartment:

Engine compartment lid 121 Essentials inside the engine compartment 122 Washer fluid 124 Engine oil 124 Coolant 126 Brake fluid 127

Maintenance:

The BMW Maintenance System 128

Laws and regulations:

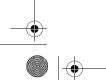
Rule of the road 129 OBD socket 129 Technical modifications 130

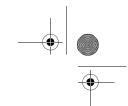












Minor repairs

Replacing parts:

Toolkit 134
Wiper blades 134
Lights and bulbs 134
Wheel-changing 139
Safety tyres* 142
Lockable wheel studs* 143
Battery 144
Fuses 144

Mutual aid:

Mobile Service 145 Starting with a flat battery 145 Tow-starting, towing away 147 Engine data 152
Fuel consumption, carbon dioxide/CO₂ emissions 153
Dimensions – BMW 316i, 318d 155
Dimensions – BMW 318i, 320i, 323i, 325xi, 330i, 330xi, 320d, 330d, 330xd 156
Weights 157

Performance 161

Filling capacities 163

From A to Z 166





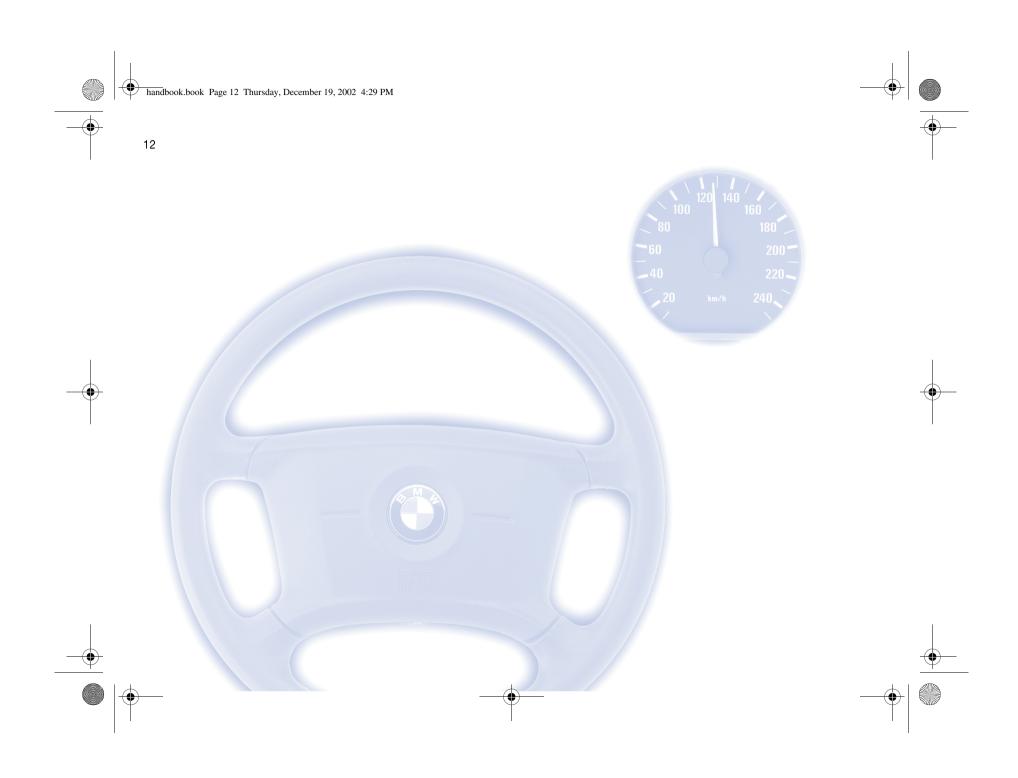


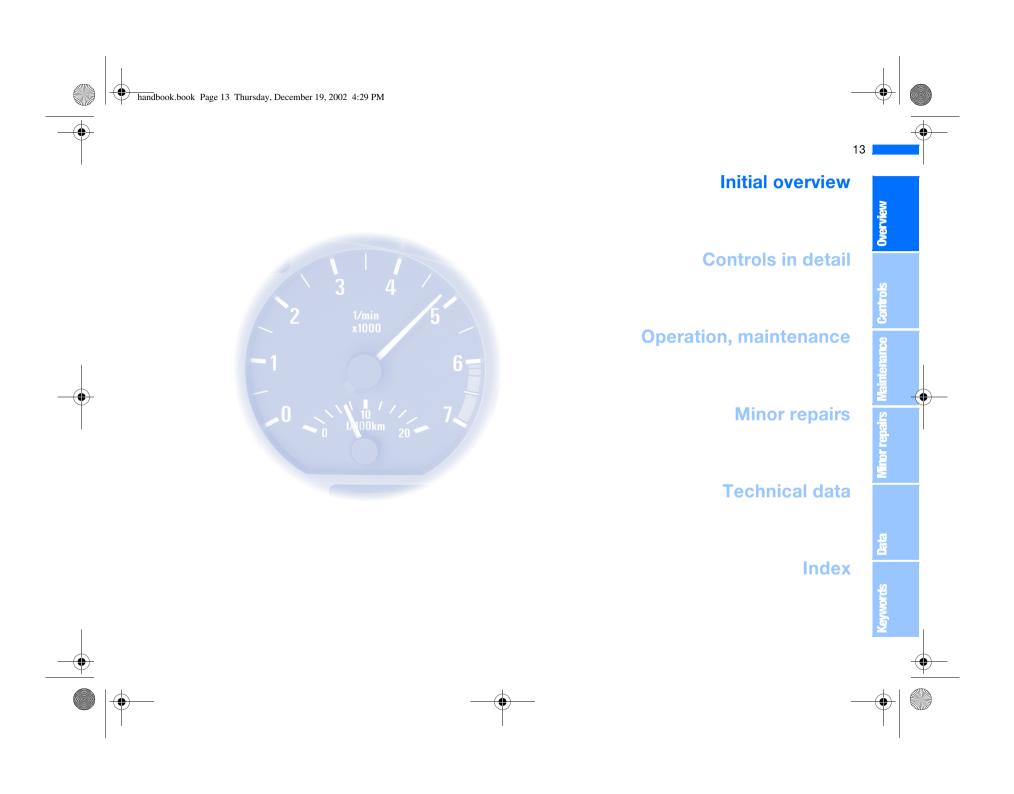


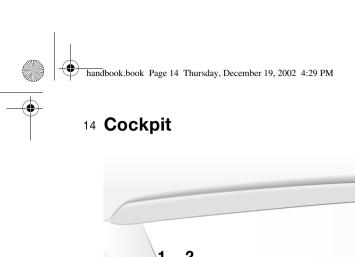


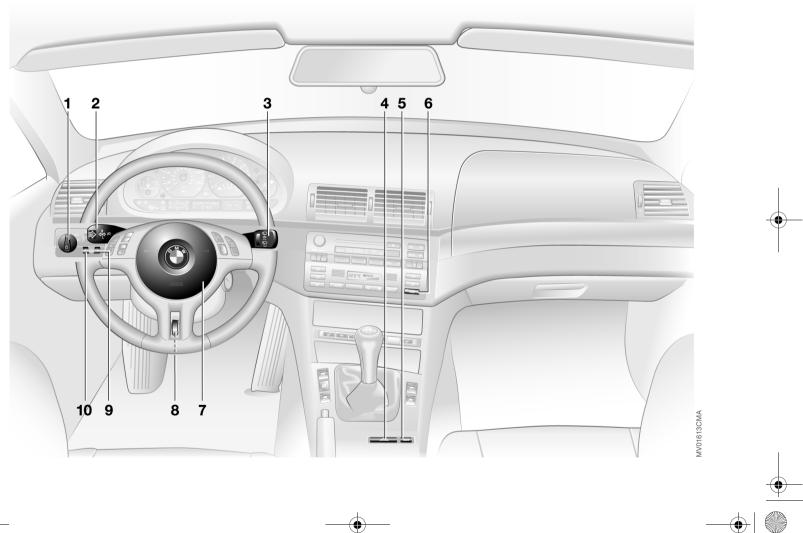






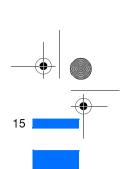








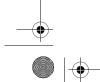
- Don-board computer 74
- 3 Wipers/rain sensor 66
- 4 Hazard warning flashers
- 5 Central locking system 30
- 6 Heated rear window 92, 97
- 7 Horn, entire surface
- 8 Adjusting steering wheel 50
- 9 Rear fog light 88
- 10 Fog lights 88



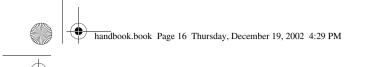


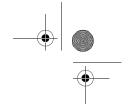




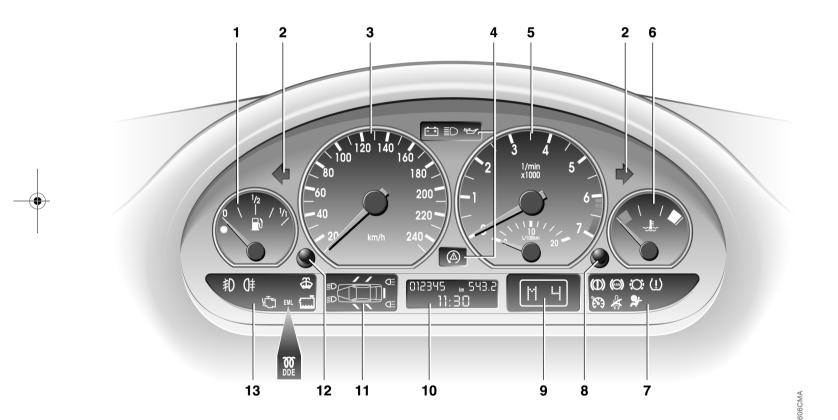








16 Instrument panel









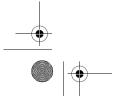


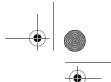




Instrument panel

- 1 Fuel gauge 71
- 2 Flashing turn indicator repeaters 20
- 3 Speedometer
- 4 Telltale and warning lights 18 to 20
- 5 Revolution counter and energy control 70
- 6 Coolant thermometer 71
- 7 Telltale and warning lights 18 to 20
- 8 Adjusting knob for
 - ⊳ Time 74
 - ▷ Service interval indicator 72
 - Doutside temperature display 75
- 9 Selector lever and program indicator for automatic transmission/sequential manual gearbox SMG 19, 62, 65
- 10 Display for
 - □ Trip meter/distance recorder 70
 - ⊳ Clock 74
 - ⊳ Service interval 72
 - Don-board computer 74
- 11 Display for Check Control 73
- 12 Trip distance control zeroing 70
- 13 Telltale and warning lights 18 to 20



















18 Telltale and warning lights

Technical equipment that monitors itself

The function of telltale and warning lights marked • is checked when the ignition is switched on. They light up just once, but for different lengths of time.

If a defect occurs in one of the systems, the corresponding light will remain on when the engine is started or will come on again during the journey. The correct response to this on your part is described below.

Red: stop immediately



Battery charge current The battery is not charging. There is a defect at the V-belt

for the alternator or in the alternator's charging circuit. Consult the nearest BMW Service.

If the V-belt is defective, do not continue the journey, otherwise the engine may overheat and be damaged. A defective V-belt also means more effort than usual is required to turn the steering wheel ◀



Engine oil pressure Stop immediately and switch off the engine. Check engine oil

level and top up if necessary. If the oil level is correct; consult the nearest BMW Service.

Do not continue the journey, as the engine may otherwise be damaged by inadequate lubrication.



Brake warning light Comes on even though the handbrake has been released:

check brake fluid level. Be sure to read the instructions on pages 115 and 127 before resuming your journey.



Tyre pressure control (RDC) In addition a warning signal is heard: the tyre is punctured or

otherwise damaged. Immediately reduce speed ready to stop, avoiding any pronounced braking and steering manoeuvres while doing so.

For more information, see page 84

Red and yellow: drive on, but exercise restraint



If the brake warning light comes on together with the yellow telltale lights for ABS and ASC+T/DSC:



The complete regulating system for ABS, CBC, ASC+T/DSC and ADB/ADB-X/DBC has failed.

Drive with care, looking at the

traffic situation well ahead, and avoid heavy brake applications. Have the system checked as soon as possible by BMW Service.

For more information, see page 77 ff

Red: as an important reminder



Brake warning light

The light is on while the handbrake is applied - an acoustic

signal sounds if the handbrake is not released before you pull away. For more information, see page 59



Fasten seat belts

Depending on version, accompanied by an acoustic signal.

Comes on for several seconds or, on certain versions, until the seat belt is worn.

For more information on seat belts, see page 46























Telltale and warning lights



Airbags •

Please arrange for the problem to be examined by

BMW Service.

For more information, see page 52

Orange: take car to nearest BMW Service



Automatic transmission/sequential manual gearbox

A fault has caused the transmission to switch to the emergency-run program. Please consult the nearest BMW Service.

For more information, see pages 60, 63

Yellow: have a check performed soon

Engine oil level If light comes on during journey: The oil level has dropped to the absolute minimum: top up the engine oil at the earliest possible opportunity. Do

not drive more than approx. 50 km (approx. 30 miles) before topping up the oil.

For more information, see page 124



Engine oil level

If light comes on when engine is switched off: top up the oil as soon as possible, for example at next

refuelling stop.

For more information, see page 124



Brake pads

Check the condition of your brake pads.

For more information, see page 59



Tyre pressure control (RDC) Check tyre pressures, see pages 24, 84



Automatic Stability Control plus Traction ASC+T/Dynamic Stability Control DSC

If the telltale light flashes:

The system is active, and regulates tractive and braking forces. Telltale light remains permanently on:

ASC+T has been switched off at the button and ADB is ready, or DSC is switched off at the button and DTC is readv.

Please consult the nearest BMW Service if a fault occurs.

For more information, see page 77 ff BMW 325xi, 330xi, 330xd:

DSC has been switched off, or it is defective. ADB-X is ready. If the telltale light does not go out the next time you press the DSC button, DSC and ADB-X are defective.

Please consult the nearest BMW Service

For more information, see page 77 ff



















20 Telltale and warning lights



Automatic Stability Control plus Traction ASC+T/Dynamic Stability Control DSC and brake warning light



Telltale lights remain permanently on:

ASC+T/ADB or DSC/DTC, as applicable, have been switched off at the button, or are defective.

Please consult the nearest BMW Service

For more information, see page 77 ff BMW 325xi, 330xi, 330xd:

DSC and ADB-X are defective. ADB-X cannot be switched off.

Please consult the nearest BMW Service.

For more information, see page 81



Dynamic Brake Control DBC • Fault in the DBC system. Normal brake action is not affected (no

restrictions).

Have the failed system repaired by BMW Service.

For more information, see page 115



Add washer fluid

The washer fluid level is too low; have it topped up at the next

opportunity.

For more information, see page 124



Engine •

Exhaust emission values have deteriorated. Please arrange for

the problem to be examined by BMW Service.



Engine electronics

Fault in the engine electronics.

You can continue to drive, but engine power is cut back and engine speed is reduced. Please arrange for the problem to be examined by BMW Service



Digital Diesel Electronics DDE If light comes on during journey: please arrange for the problem to be examined by BMW Service.



Add coolant

The coolant level is too low; top it up at the earliest opportunity.

For more information, see page 126

Yellow: for your information



Rear fog light

Comes on when rear fog light is in use.

For more information, see page 88



Diesel engine preheat Do not start the engine until the

light has gone out.

For more information, see page 57

Green: for your information



Flashing turn indicator

These flash when turn indicators are in use, including trailer flash-

ers if trailer is being towed.

Rapid flashing: the system has a fault. For more information, see page 66



Cruise control

Comes on when the system is switched on: ready to operate

using the multifunctional steering wheel.

For more information, see page 68



Fog lights

Comes on when fog lights are in use.

For more information, see page 88

Blue: for your information



High-beam headlights Comes on when the high head-

light beams are in use or the

headlight flasher is used.

For more information, see pages 66, 88























Multifunctional steering wheel MFL*

Integrated into the multifunctional steering wheel are buttons to permit the following functions to be performed quickly and without the driver's attention being distracted from the traffic:

- ▷ Cruise control
- Voice input system.

The systems in question must be switched on before they can be controlled using the multifunctional steering wheel.◀



Press briefly: accept call, start to dial, terminate call.

Hold down longer: switch voice input on and off.



Switch between telephone and radio, cassette, CD or MD.



Forward:

▶ Radio

Press briefly: search for transmitter in FM waveband

Hold down longer: station search

▷ CD/MD

Press briefly: skip to next track Hold down longer: search for track

Cassette

Press briefly: skip to next track or stop fast forward

Hold down longer: fast forward

Browse directory of names.



Back: same functions as forward.



Volume.



Cruise control: call up.



Cruise control: memorise and accelerate (+), decelerate and memorise (-)

Cruise control: activate/interrupt/deactivate.













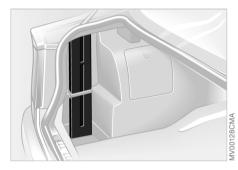








22 Warning triangle*



The warning triangle is stored at the left The first aid kit is under the front pasin a compartment of the luggage compartment.

Please note that you may be required by law to carry a warning triangle in the car.◀

First aid kit*



senger's seat.

To open: pull the handle and swing the lid down.

To close: swing the lid up.

Certain items in the first aid kit have a limited useful life. Check the expiry dates of the various items regularly and renew them in good time: the items are available in any chemist. Comply with legal requirements concerning the need to carry a first aid kit in the car.◀

Refuelling



Fuel filler flap

Lightly press the rear edge to open or close the fuel filler flap.

The fuel filler flap can be released manually if a fault occurs in the electrical system:

Pull the knob with the fuel pump symbol in the right-hand side panel of the luggage compartment.

Note the safety precautions displayed at garages and filling stations when handling fuel.













Refuelling

friendly

arrow, on the flap.

maturely

fuel tank dry.◀

time.



Simple and environmentally

zle is raised during refuelling,

back less effectively.

Place the screw cap in the holder, see

When refuelling, insert the filler nozzle fully into the filler neck. If the filler noz-

b the supply of fuel will be cut off pre-

If the pump nozzle has been operated

the fuel supply is shut off for the first

correctly, the fuel tank will be full when

In order to avoid damaging the catalytic converter, do not run the

block properties by the properties of t

(13.9 gal), including a reserve of approximately 8 litres (1.8 gal).

Closing the fuel filler cap:

Place the cap in position and turn it clockwise until it closes with a clearly audible click - bayonet lock.

Fuel tank capacity: approx. 63 litres

Fuel grade

Unleaded fuel

The engine runs only on unleaded petrol, which can also be sulphur-free. Since the engines have a knock control function, they can run on different grades of petrol.

The engine of your BMW is designed to

Super Plus/premium plus petrol octane number 98 RON.

Run the engine on this petrol by preference, in order to achieve rated performance and petrol consumption.

You can also run the engine on:

▶ Premium-grade unleaded petrol – octane number 95 RON.

This fuel is also known as:

DIN EN 228 or Euro-Super.

The minimum grade is:

octane number 91 RON.

Never use petrol containing lead if the car is equipped with a catalytic converter, otherwise the oxygen sensor (lambda probe) and the converter will be damaged beyond repair. ◀





















24 Fuel grade

National-market specification for leaded fuel*

In addition to the fuel grades listed above, you can also fill the tank with leaded petrol.

The minimum approved grade is 91 RON.

Diesel engine

Diesel oil to DIN EN 590 standard.

Do not use rapeseed oil methylester (RME) or bio-diesel or you will risk damaging the engine.◀

Winter diesel

To ensure that the diesel engine operates reliably during the cold season of the year, it must be run on winter-grade diesel oil, which garages usually sell during the period in question. Fuel filter heating is installed as standard equipment to prevent the fuel from solidifying during operation.

Additives are not approved, because their use could result in damage to the engine.

Tyre pressures



Tyre pressures in bar - gauge pressure - are shown on the driver's door post (visible when the door is open).

Checking tyre pressures

All pressures are listed in bar (gauge pressure), with the equivalents in kPa and pounds per square inch, for tyres at ambient temperature, see tyre-pressure table below.

When towing a trailer, always use the values for the higher load.

Cars with tyre pressure control (RDC):

After correcting the tyre pressure, reactivate the system; see page 84.

Check tyre pressures regularly (at least every two weeks and before starting a long journey). Incorrect tyre pressures can adversely affect the car's roadholding and cause tyre damage, which could result in an accident. Also remember to check the pressure in the compact spare tyre or full-size spare tyre.

The spare wheel should be inflated to the highest pressure applicable for any of the car's tyres ◀

Make sure that only approved tvres are fitted

These tyre pressures apply to makes of tyre and tyre sizes approved by BMW and known to BMW Service. If other makes of tyre are fitted to the car, higher tyre pressures may be needed.



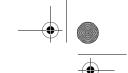














Tyre pressures

BMW	Tyres	max. 於 ‡ 於 ‡	於 * 於 * + * /む	
	Pressures in bar/kPa/psi			
316i 318d	All summer tyres	1.9/190/28 2.2/220/32	2.2/220/32 2.7/270/39	
	All winter tyres	2.1/210/30 2.4/240/35	2.4/240/35 2.9/290/42	
318i	All summer tyres	2.0/200/29 2.3/230/33	2.3/230/33 2.8/280/41	
	All winter tyres	2.2/220/32 2.5/250/36	2.5/250/36 3.0/300/44	
32 0 i	All summer tyres	2.1/210/30 2.5/250/36	2.5/250/36 3.0/300/44	
	All winter tyres	2.3/230/33 2.7/270/39	2.7/270/39 3.2/320/46	
320d	All summer tyres except 205/50 R 17 extra load	2.0/200/29 2.4/240/35	2.4/240/35 2.9/290/42	
	All winter tyres and the summer tyres 205/50 R 17 extra load	2.2/220/32 2.6/260/38	2.6/260/38 3.1/310/45	
323i 325xi	All summer tyres except 205/50 R 17 extra load	2.2/220/32 2.6/260/38	2.6/260/38 3.1/310/45	
	All winter tyres and the summer tyres 205/50 R 17 extra load	2.4/240/35 2.8/280/41	2.8/280/41 3.3/330/48	

All-year tyres should be inflated to the same pressures as summer tyres.

BMW 316i, 318d: the specified tyre pressures for summer and winter tyres 205/50 R 17 extra load are higher by 0.2 bar/20 kPa/3 psi.

BMW 323i, 325xi: when 225/40 R 18 tyres are fitted (front), specified tyre pressures are higher by 0.2 bar/20 kPa/3 psi.

















26 Tyre pressures

BMW	Tyres	max. **		* * * * + * / 🗅		
	Pressures in bar/kPa/psi					
330i 330xi	225/45 R 17 225/45 R 17 and 245/40 R 17 225/45 R 17 M+S	2.2/220/32	2.7/270/39	2.7/270/39	3.2/320/46	
	205/50 R 17 extra load 205/50 R 17 M+S extra load 225/40 R 18 and 255/35 R 18	2.4/240/35	2.9/290/42	2.9/290/42	3.4/340/49	
330d	225/45 R 17 225/45 R 17 and 245/40 R 17	2.2/220/32	2.6/260/38	2.5/250/36	3.0/300/44	
	All winter tyres and the following summer tyres 205/50 R 17 extra load, 225/40 R 18 and 255/35 R 18	2.4/240/35	2.8/280/41	2.7/270/39	3.2/320/46	
330xd	225/45 R 17 225/45 R 17 and 245/40 R 17	2.3/230/33	2.5/250/36	3.0/300/44	2.5/250/36	
	All winter tyres and the following summer tyres 205/50 R 17 extra load, 225/40 R 18 and 255/35 R 18	2.5/250/36	2.7/270/39	2.7/270/39	3.2/320/46	
All	Compact spare wheel	4.2/420/61				

All-year tyres should be inflated to the same pressures as summer tyres.

BMW 330xi: if the car is partly loaded with up to 4 occupants, increase the pressures of the front tyres by 0.2 bar/20 kPa/3 psi.

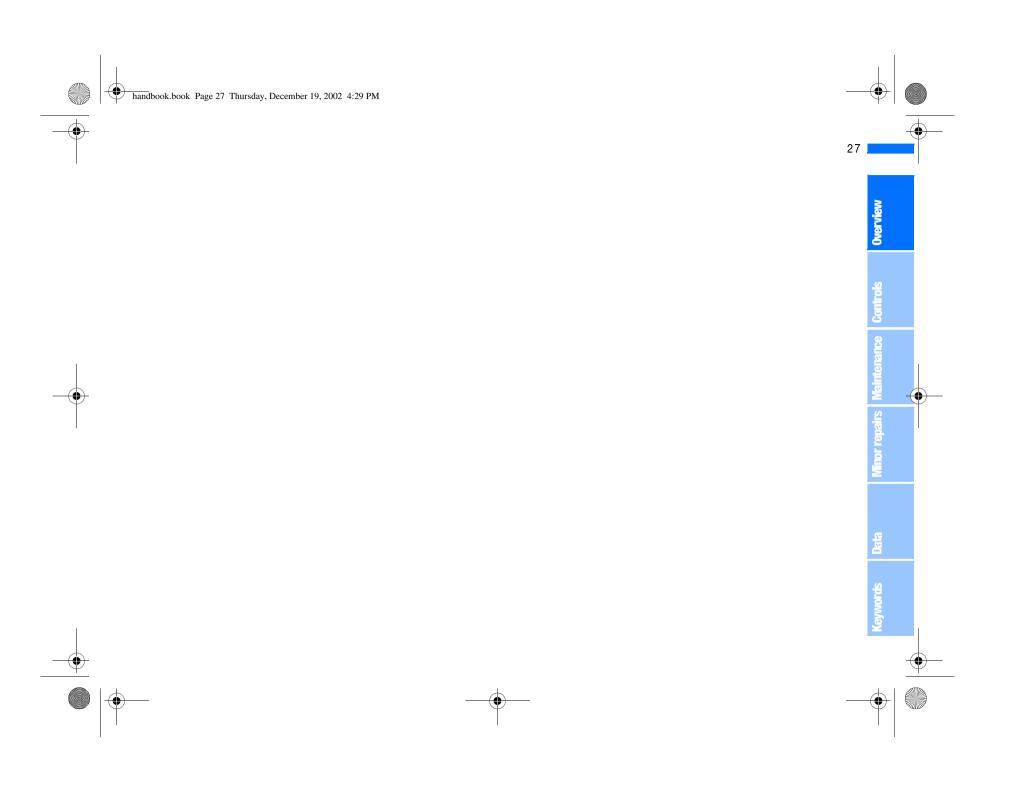


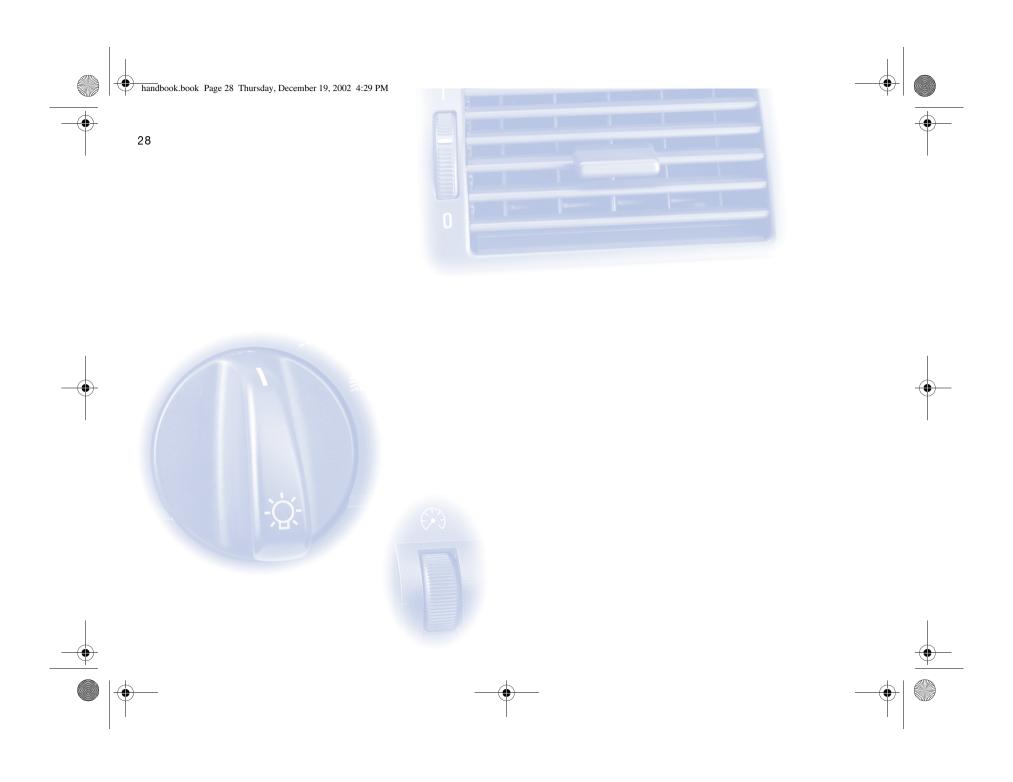


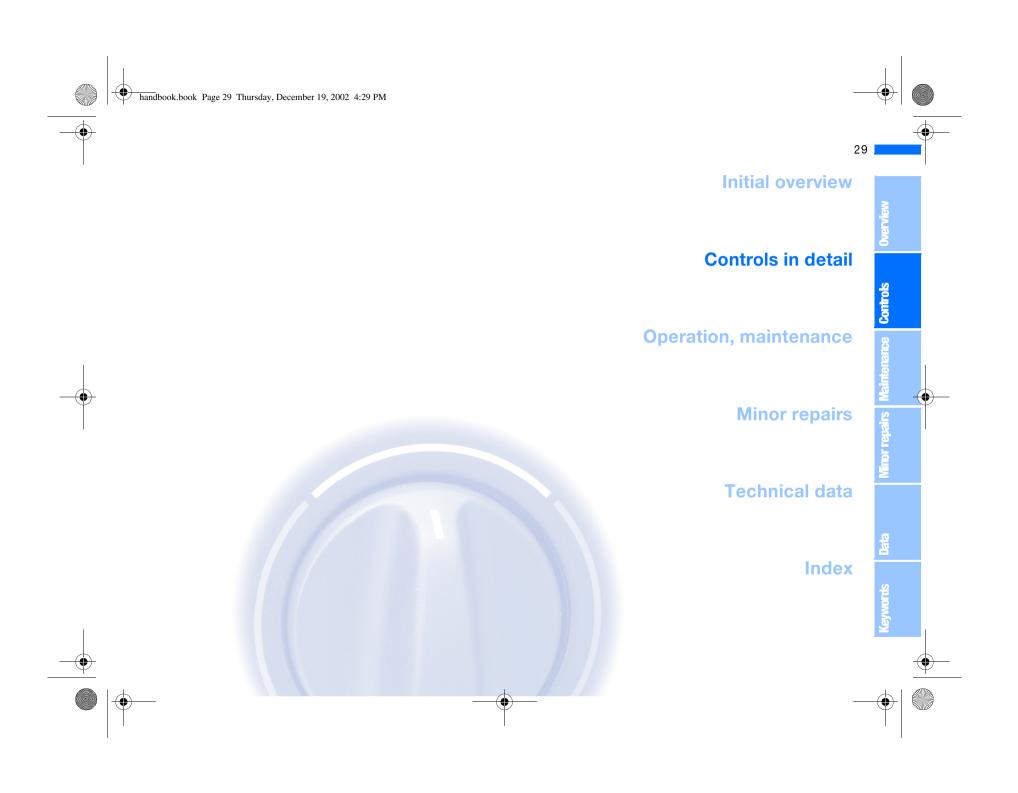












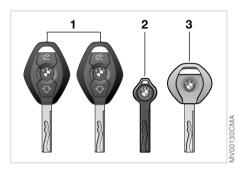








30 Keys



- 2 Spare key to be kept in a safe place, for instance in a purse or wallet. This key is not intended for regular use
- 3 Door and ignition key this key does not open the lock of the glove box: this can be useful for instance at a hotel or restaurant with car parking service

Central locking system

The principle

The central locking becomes active when the driver's door is closed. The following are locked and unlocked together:

- Doors

The central locking system can be operated

- from outside the car with the remote control or at the lock of the driver's door
- ▶ from inside, using the button provided.

Operating the central locking system from inside the car does not lock the fuel filler flap, see page 35. If it is operated from outside the car, the anti-theft system is activated at the same time. It prevents the doors from being unlocked either at the safety lock buttons or door handles. The alarm system is also activated or deactivated.

In the event of an accident, the central locking system is released automatically. In addition, the hazard warning flashers and the interior light are switched on.

The key set

1 Master keys with remote control – determine the functions of Key Memory, see page 54.

You can also use the coloured adhesive labels you received with the car as identifiers for the keys

Each master key incorporates a long-life battery which is automatically recharged in the ignition switch during the journey.

You should, therefore, use the master keys not normally in use to drive the car on a lengthy trip once a year or so, in order to recharge their batteries. ◀





















Opening and closing - with the remote control

The principle

The remote control is an extremely convenient way to lock and unlock your car. There are also two additional functions:

- Switch on interior light, see page 32 This function can help you locate your car if you have parked in a large underground garage, for example
- Dopen luggage compartment lid, see page 32 Opens slightly regardless of whether the lid was previously locked or unlocked.

When the car is locked/unlocked, the anti-theft system is activated/deactivated at the same time, the alarm system switched on/off, and the interior light switched on or off, accordingly.

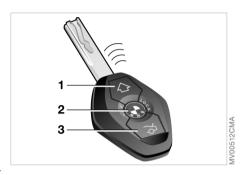
You can arrange for a signal to be provided as confirmation that the car has been locked correctly.◀

Master key with remote control

The doors can be locked from the inside by persons or animals in the passenger compartment. Always take the car keys with you so that the car can be opened from the outside. ◀

If the remote control is unable to lock the car, this means that the battery in the key is discharged. You should use the master key in question to drive the car on a lengthy trip in order to recharge its battery.

Prevent unauthorised use of the remote control, for example by handing over only the door and ignition key or the spare key to hotel staff, for example. In the event of faults, contact BMW Service, which can also supply replacement keys.◀



- 1 Unlocking, convenient opening and deactivating the alarm system
- 2 Locking and deadlocking, activating the alarm system, convenient locking, switching on interior lights, deactivating tilt sensor and movement detec-
- 3 Opening luggage compartment lid

















32 Opening and closing - with the remote control

On certain national market versions, the alarm system can only be operated from the remote control. On these cars, unlocking at the door lock triggers the alarm.

To switch off the alarm:



Press the button – unlock – or turn the ignition key to position 1.

For further details on the alarm system, see page 38ff. ◀

Unlocking



Press button.

On certain national-market versions, press the button twice, the first time to unlock the driver's door, the second time to release the remaining locks.

If you wish, you can have this special arrangement programmed for each specific remote control. ◀

Convenient opening



Hold down the button. The power windows and electric sliding/tilt sunroof will open.

Locking and deadlocking



Press button.

Do not lock the vehicle with the remote control if there is someone inside, because the doors cannot subsequently be unlocked from inside.◀

Convenient closure



Hold down the button. The power windows and electric sliding/tilt sunroof close.

Watch the closing movement to ensure that no-one is trapped. The closing procedure is interrupted as soon as the button is released. ◀

You can arrange for a signal to be provided as confirmation that the car has been locked correctly.

Cars with alarm system, see page 38: if convenient closure is interrupted, unlock the car and then repeat the convenient closure procedure. The tilt alarm sensor and the interior movement detector are not armed unless you do this.

Switching on interior light



Press the button with the car locked.

To switch off the tilt alarm sensor* and interior movement detector*



Press the button again immediately after locking the car.

For more information, see page 39.

Opening luggage compartment lid



Press button.





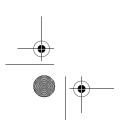


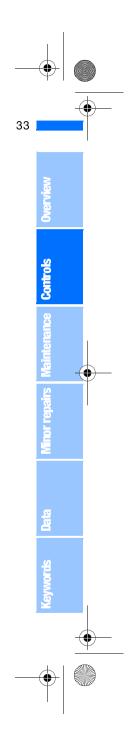


door lock or the lock of the luggage

compartment lid.







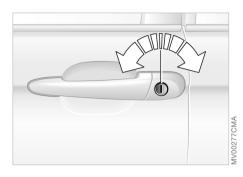








34 Opening and closing – at the door lock



Do not lock the car if there is someone inside, because the doors cannot be unlocked from inside.

You can arrange for a signal to be provided as confirmation that the car has been locked correctly. ◀

On certain national market versions, the alarm system can only be operated from the remote control. On these cars, unlocking at the door lock triggers the alarm.

To switch off the alarm:



Press the button – unlock – or turn the ignition key to position 1. For further details on the alarm system, see page 38.◀

Convenient operation

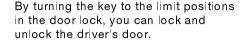
The electric windows and the sliding/tilt sunroof can also be operated at the door lock.

- ▷ To open: when the door is closed, turn the key in the door lock to the release position and hold it there
- ▷ To close: when the door is closed, turn the key to the locking position and hold it there.

Watch the closing movement to ensure that no-one is trapped. The movement is stopped when the key is released.◀

Manual operation

In the event of an electrical malfunction















Opening and closing - from inside



This button is used to operate the central locking system when the front doors are closed. This only locks or unlocks the doors and the luggage compartment lid, but does not engage the deadlocks.

If you wish, the central locking system can be set to engage as soon as the car is driven away. You can have this setting programmed as part of the Key Memory facility.

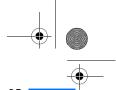
Unlocking and opening

- ▷ Either use the central locking button to unlock all doors at once, then pull the door handle above the armrest, or
- ▷ pull the door handle out twice at any door: the first pull will unlock the door, the second pull will open it.



- Either lock all doors by pressing the central locking button, or
- press the door safety buttons down. To avoid being shut out of the car accidentally, the driver's door cannot be locked with the safety button when it is open.

The doors can be locked from the inside by persons or animals in the passenger compartment. Always take the key with you, so that the car can be opened from the outside.



herview

Controls

Weimenan

Amor repairs

eywords









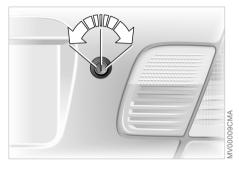


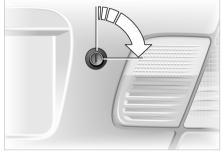






36 Luggage compartment lid









Only the master keys fit the lock of the luggage compartment lid, see page 30.

Locking separately

pressure point and take it out when horizontal.

and disconnects it from the central locking system. If you then hand over only door and ignition key, the luggage compartment lid cannot be opened, see page 30. This extra security can be useful, for instance, when arriving at a hotel.

Opening from outside

Turn the master key to the right past the Press the button in the strip handle, see arrow: the luggage compartment lid will open slightly.

This locks the luggage compartment lid When the lid is open, the luggage compartment is illuminated.

Manual operation

In the event of an electrical malfunction

Turn the master key fully to the left - the luggage compartment lid will open slightly.

The luggage compartment is locked again as soon as its lid is closed.











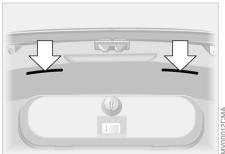








Luggage compartment lid



To close

Recessed handles in the luggage compartment lid lining, see arrows, make it easier to pull the lid down when closing

To avoid injuries, as with any closing process, ensure that the closing zone of the luggage compartment lid is unobstructed.◀

Keep the luggage compartment lid closed at all times when the car is being driven, to prevent exhaust fumes from entering the car.◀

Luggage compartment











gage compartment lid open, observe the following precautions: 1. Close all windows and the sliding/tilt

- sunroof
- 2. Set the air conditioning system or automatic air conditioning to a high rate of air flow, see page 90 or 94, as appropriate

Floor panel

To raise the floor panel, lift it at the ring and secure it with the flap to the rubber seal on the rain gutter, see arrow.







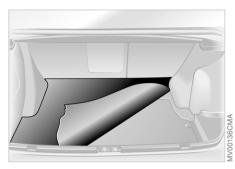








38 Luggage compartment



Floor mat

You can turn the floor mat over if necessary, for example when carrying dirty objects. The rubberised side can be washed down and has an anti-slip effect.

There are lashing points at the inside corners of the load area to which a load area net* or retaining straps can be attached when loads have to be secured.

See also under Loading, page 106.

Alarm system*

The principle

The alarm system is triggered:

- ▷ If a door, the engine compartment or the luggage compartment lid are opened
- ▷ If there is any movement inside the car interior movement detector
- ▷ If the car's inclination changes, for instance if it is jacked up to remove a wheel or if it is towed away
- ▶ If the power supply from the battery is interrupted.

Depending on the national-market version of the car, the alarm system indicates unauthorised entry or tampering in different ways:

- ► Hazard warning flashers switched on for approximately 5 minutes.

Activating and deactivating

Whenever the car is locked or unlocked, whether at the driver's door lock or with the remote control, the alarm system is activated or deactivated at the same time.

You can arrange for several signals to be provided as confirmation that the alarm has been activated or deactivated.



Even if the alarm system has been activated, you can open the luggage compartment lid by pressing the button on the remote control, see page 32. As soon as you reclose the lid, the luggage compartment is again protected by the alarm system.

On certain national market versions, the alarm system can only be operated from the remote control. Unlocking these cars at the door lock triggers off the alarm.

To switch off the alarm:



Press the button – unlock – or turn the ignition key to position 1.

For further details on the alarm system, see page 38.◀















Alarm system*



Alarm system telltale light

- The telltale light below the inside mirror flashes at a steady rate: the system is activated
- ▶ If the telltale light flashes when the system is being activated: doors, engine compartment or luggage compartment lid are not properly closed. Even if an item is not closed fully, the remaining items are protected and the telltale light begins to flash continuously after 10 seconds. However, the interior movement detector is not activated
- ▶ If the telltale light goes out when the system is deactivated: no attempt was made to tamper with the car during your absence
- ▶ If the telltale light flashes for 10 seconds when the system is deac-

tivated: an attempt was made to tamper with the car.

After the alarm has stopped, the telltale light once again flashes continuously.

Avoiding false alarms

The tilt alarm sensor and the interior movement detector can be switched off together. This avoids false alarms, for example due to the movements which occur if your car is in an elevator garage or on a train:



Perform the locking (activating) operation twice, by pressing the button on the remote control twice in succession or turning the key twice to the locking position.

The telltale light comes on briefly, then flashes continuously. The tilt alarm sensor and interior movement detector are then switched off until the system is deactivated again.

Interior movement detector

Before the interior movement detector can operate correctly, the windows and sunroof must be closed.

However, switch the interior movement detector off (see Avoiding false alarms)

by children or animals remain in the car b windows or the sunroof are to remain open.

The tilt alarm sensor and interior movement detector will be switched off inadvertently if the convenient closure movement of the windows and sunroof is interrupted within the first 10 seconds and restarted. In this case the complete system must be deactivated and reactivated.◀























After the ignition is switched off: you can still operate the electric windows for up to 15 minutes, unless a front door was opened and closed in the meantime.

When leaving the car, always take out the ignition key and close the doors, so that children cannot operate the electric windows and possibly injure themselves.



Opening and closing windows

From ignition key position 1

- Press the switch as far as the detent point: the window continues to move down for as long as the switch is operated
- Press the switch beyond the detent point: the window will move automatically. Press the switch again to halt the opening movement.

Close the window similarly by pulling the switch.

If the car is equipped with electric rear side windows* there are separate switches beneath them for the use of rear seat passengers.

For convenient opening and closure by the remote control or door lock, see pages 32 and page 34.

Protective function

There is a contact strip on the inside along the top edge of each window frame. If the contact strip is compressed as the window closes, the closing action is interrupted immediately and the window reopens slightly. Despite this protective function, make sure that the window is unobstructed when it is closed, since in extreme cases, for example with very thin objects, reliable contact with the strip may not be made.

The protective function can be overridden by pulling the switch past the stop and holding it down. ◀

Safety switch*

This prevents the electric rear side windows from being opened and closed at the switches on the rear doors, for instance by children.

Always press the childproof safety switch when children are on the rear seat. Careless closure of electric windows can cause injury.











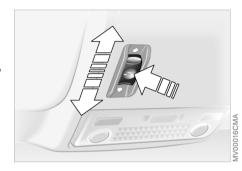






Always close the sliding/tilt sunroof carefully, so that injuries are avoided.

When leaving the car, always take out the ignition key and close the doors, so that children cannot operate the sunroof and possibly injure themselves. ◀



Raising - opening - closing

From ignition key position 1

You can operate the electric sunroof for up to 15 minutes after switching off the ignition, unless a front door was opened and closed in the meantime.

Raising/opening/closing: press down the switch and/or slide it in the desired direction to the detent position.

If you briefly press the switch in the "Raise" direction when the sunroof is open, the sunroof moves to the "Raised" limit position.

The deflector is pushed back slightly as the roof panel rises, and moves with the panel as it opens.

Do not force the deflector closed when the roof is raised, as this would damage the actuating mechanism.◀

For convenient opening and closure by the door lock or remote control, see pages 32 and page 34.

Automatic opening and closing

Press the switch beyond the initial detent position: the roof panel will move to the limit of its travel.

Touching the switch again halts the movement immediately.

Protective function

If the sliding/tilt sunroof encounters resistance

b when closing from the raised position b when closing from approximately the half-closed position

the closing operation is interrupted and the roof reopens slightly.



















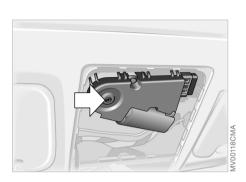




42 Sliding/tilt sunroof*

Despite this protective function, check that the roof panel can close without obstruction, since in extreme cases, e.g. with very thin objects, the closing force limiter may not trip reliably.

To deactivate this protective function, press the switch beyond its normal operating point and hold it down. ◀



Operate manually

If there is an electrical defect, the sliding/tilt sunroof can be operated manually.

- 1. Take out the interior light, reach into the aperture and press out the cover
- 2. Use the Allen key from the car's toolkit, see page 134, to move the sliding/tilt sunroof in the required direction.



















Correct seated position

You have to be comfortably seated in order to enjoy relaxed, fatigue-free driving. In conjunction with the seat belts and the airbags, a correct seating position enhances passive safety for the occupants if the car is involved in an accident. Comply with the following instructions in order not to detract from the protective capabilities of the car's safety systems.

Additional information on safety for children: see page 53.

Correct seated position with airbags

Keep back from the airbags. Always hold the steering wheel by its rim to minimise the risk of injuries to the hands and arms if the airbag is triggered. Do not interpose any other person, animals or objects between the airbags and the seated person. Do not use the cover of the front airbag on the passenger side as a storage tray, and do not permit the front-seat passenger to travel with their feet or legs on this cover.◀

See page 52 for details of the locations of the airbags and for other important information.

Seat belts must sit right

Never restrain more than one person with each seat belt; do not permit babies and small children to travel on the lap of another occupant. The belts should not be twisted and must be taut across the pelvis and shoulder, as close as possible to the body. They should not pass over hard or fragile objects. The seat belt must not run across the wearer's neck, nor should it be trapped or abraded by coming into contact with sharp edges or objects. If possible, avoid bulky clothing and take up slack in the lap belt frequently by pulling up the diagonal (shoulder) section. In the event of a head-on collision, the lap belt could otherwise slide over the hips and injure the lower part of the body. In addition, the restraining effect is reduced if the seat belt is slack against the wearer's body. Pregnant women should also wear the seat belt, making sure that the lap strap is well down on the hips and does not press on the abdominal region of the body.◀

See page 46 for instructions on operating the belt buckles.

Before adjusting

Seats

Do not reposition the driver's seat while the car is in motion. The seat could move unexpectedly, leading to the driver losing control of the car, so that an accident could be caused. Do not recline the seat back too far when the car is being driven (this applies in particular to the front passenger), or there will be a risk of "submarining" under the seat belt, so that the belt loses its full protective effect. ◀

Adjusting the seats

- page 44
- ▷ Electrically adjustable seats, see page 45













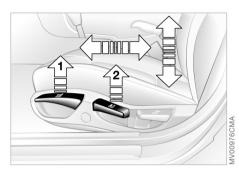


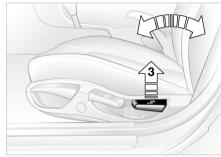


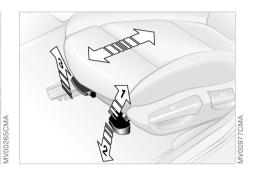




44 Seat adjustment, mechanical







Adjusting the seat

- 1 Forward/back Pull the lever up and slide the seat to the preferred position. After releasing the lever, slide the seat backwards or forwards very slightly until it engages correctly
- 2 Height Pull up the lever and apply your weight to the seat or allow it to rise

3 Seat back

Pull the lever and either apply your weight to the backrest or lean forward to relieve it of load

Adjusting BMW sport seat*

You can also adjust the seat base angle and the thigh support:

- 1 To tilt up: Pull the lever several times until the desired angle is obtained
- 2 To tilt down: Press the lever several times until the desired angle is obtained
- 3 Thigh support: Pull the lever and alter the thigh support's position to suit your requirements



















Seat adjustment, electric*



Adjusting the seat

- 1 Angle
- 2 Forward/back
- 3 Height
- 4 Seat back

The head restraint is manually adjustable, see page 46.

If you have BMW sport seats fitted in your car, you can also manually adjust the seat base angle and the thigh support, see page 44.

Comply with the adjusting instructions on page 43, or there may be a risk to your personal safety.







Adjusting

The seat back contour can be altered to provide more support to the curved (lumbar) section of the spine.

The upper edge of the pelvis and the spinal column are supported, to encourage an upright but relaxed seated position.

- Push the switch forward or back to increase or reduce the curvature of the support
- ▷ Press the switch at top or bottom: the curvature is increased at the top or bottom.









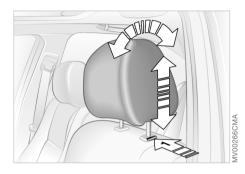












2. Press the button, see arrow 1, and take out the head restraint.

Installing - front

Push the head restraint into its mountings.

Seat belts

Wearing seat belts

Always wear the seat belt at all times on every journey. The airbags are additional safety devices, supplementing the seat belts: they must never be regarded as an alternative to wearing your seat belt.

To close

The seat belt buckle must be heard to engage.



Adjusting height: pull out or push in.



To reach the lowest position, press the button, see arrow 1.

Adjusting rake angle of the front head restraints: swing forwards or back.

Position the head restraint so that its centre is approximately at ear height, as otherwise there would be an increased risk of injury to the cervical vertebral column in the event of a crash.◀

Removing - front

1. Pull the head restraint up as far as possible













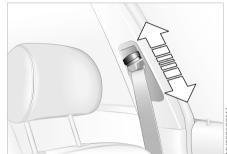






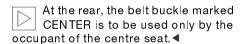
Seat belts





To open

- 1. Press the red button in the buckle
- 2. Hold the belt
- 3. Guide the belt back into the automatic reel.



Adjusting belt height

Use the seat belt height adjuster to vary the belt position to match your height:

▷ Slide the button up or down.

See also the instructions for adjusting the seats on page 43.

If damaged or subjected to severe loads in an accident: have the seat-belt system replaced by BMW Service and the belt anchorages checked, as otherwise the safety function is no longer ensured.◀





















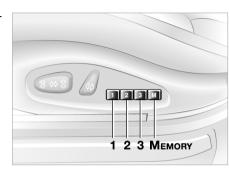




48 Seat and mirror memory*

You can memorise and call up three different driver's-seat and outside-mirror position settings.

The setting for the lumbar support is not stored in memory.◀



Memorising

- 1. Ignition key in position 1 or 2
- 2. Select a seat and outside-mirror position
- 3. Press the MEMORY button: the telltale light in the switch comes on
- 4. Press memory button 1, 2 or 3: the telltale light goes out.

Calling up

Do not call up a memorised setting while driving, as an unexpected seat movement could represent an accident risk.◀

Ignition key position 1:

▶ Press the appropriate memory button 1, 2 or 3 briefly.

The adjusting movement is interrupted immediately if a seat position adjustment switch or one of the memory buttons is pressed.

With the driver's door closed and the ignition key either removed or in position 0 or 2:

▶ Press memory button 1, 2 or 3 until the adjusting procedure has been completed.

If the MEMORY button was pressed accidentally: press the button a second time; the telltale light will go out.◀

You can have your car pro-grammed to ensure that your preferred seat and outside-mirror positions are selected whenever you unlock the car with your own personal remote control kev.◀

When this setting is used, make sure that the feat driver's seat is clear. Otherwise damage or injury could be caused by the seat if it moves backwards.◀













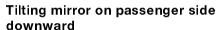






Seat and mirror memory*



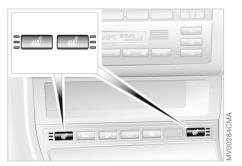


Automatic kerb viewer*

- 1. Set the mirror changeover switch 1 to the "driver's mirror" position
- 2. The mirror on the passenger side tilts slightly downward when you select reverse gear or selector lever position R. This gives you a view of the ground close to the side of the car as you reverse-park up to a kerb, for example.

You can deactivate this automatic function if you wish: simply move the mirror changeover switch to the "mirror on passenger side" position.

Seat heating*



The seat cushion and seat back can be heated when the ignition key is in position 2.

Obtain the desired heating output level by pressing the button as often as necessary.

You can switch the heating off directly even if a high output level is selected: Hold down the button slightly longer.

verview

omtrok

Vaintenance

Amor repairs

eywords









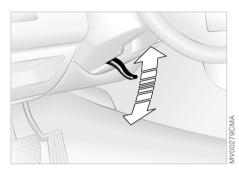




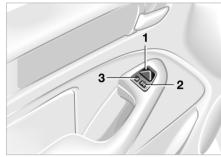




50 Steering wheel

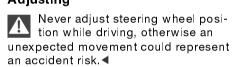


Mirrors



IVIII

Adjusting



- 1. Swing the clamp lever down
- 2. Pull, push or tilt the steering wheel until it matches your chosen seat position
- 3. Fold the lever back in to clamp the steering column in the new position.

Adjusting outside mirrors

- 1 Switch for adjustment in all four directions
- 2 Changeover switch for mirror on other side of car
- 3 Button* to fold the mirrors in and out Press the button once to fold the mirrors in and again to fold them out. This is a useful feature in car washes or very narrow streets, for example, and enables the mirrors to be returned to the correct position after having been folded forwards.

The mirrors can be folded in at a road speed up to 10 km/h (approx. 6 mph).◀

Adjusting manually

You can also adjust the mirrors manually:

Press at the edges of the glass.

For instructions on saving the mirror positions in memory, see Seat and mirror memory, page 48.

Curved mirror

The outer, aspherically curved section of the mirror displays a larger field of view, though slightly distorted, than the inner, convex section. In this way, the view to the rear is extended and the so-called blind spot is reduced in size.

The mirror on the passenger's side is more convex than the mirror on the driver's side, and therefore reflected objects are closer than they appear. It may be difficult to estimate the precise distance at which another vehicle is following your car. This also applies to the aspherical section of both outside mirrors.

Electric heating*

Both mirrors are heated automatically when the ignition key is in position 2.











Mirrors





Inside mirror

To reduce glare from the rear when driving after dark, turn the knob underneath the mirror.

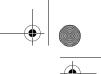
Car without alarm system: flick the small lever forward.

Interior mirror, automatic dip*

This mirror dims automatically and through an infinitely variable range and switches back automatically to the clear, non-dimmed setting if you select reverse gear or selector lever position

To ensure that the mirror functions correctly, always keep the photo-cells clean and unobstructed. One photo-cell is in the mirror glass, see arrow, the other is slightly offset on the rear of the mirror. Do not cover the area between interior mirror and windscreen, and do not affix adhesive labels or stickers of any kind to the windscreen directly in front of the mirror.











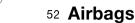


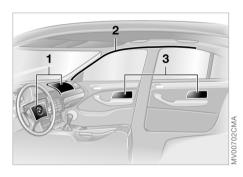












- 1 Front airbags on the driver and passenger sides
- 2 Head airbags on the driver and passenger sides, front
- 3 Side airbags on the driver and passenger sides, front and rear*

Protective effect

The front airbags provide protection in the event of a head-on collision, where the restraining effect of the seat belts alone would no longer be adequate. The head and side airbags protect you in the event of a side-on collision. The airbag will protect the seat occupant's body in the side chest (thorax) area.

See page 43 for information about correct seating position.

The airbags are not triggered off in minor accidents, in certain roll-over situations, or if the car is struck from the rear. ◀

Do not apply adhesive or any surface material to the airbag covers or modify them in any other way. Do not remove the airbag occupant restraint system. If the airbag occupant restraint system develops a fault, is shut down out of use or has been triggered off in an accident, have it checked, repaired and dismantled only by BMW Service. Never make any modifications to the individual components of the system or its wiring. This includes the upholstered covers on the steering wheel, dashboard, side panels on front and rear doors and roof struts as well as down the sides of the roof liners. Do not remove the steering wheel. In order to comply with valid safety regulations. have airbag generators scrapped only by BMW Service. Any careless or unskilled interference with the system could lead to its failure or to accidental triggering off with the risk of injury. Do not touch the individual components immediately after the system has been triggered, as surfaces are hot and can cause burns.◀

Even if all these instructions are complied with, injury to the face, arms or hands as a result of the airbag inflating cannot be entirely ruled out, depending on the circumstances in which an accident occurs. If the car's occupants are unduly sensitive to the ignition and inflation noise generated by the airbag systems, their hearing may be temporarily affected.

Telltale light



The telltale light in the instrument cluster confirms that the airbag system is ready to oper-

ate (from ignition key position 1 onwards).



 ➤ The telltale light lights up when the ignition key is turned to position 1 or further.

System defective:

▷ The telltale light does not go out after the engine has been started or comes on during the journey.

Have the system checked immediately by BMW Service if it develops a fault, because there is a risk of the airbags not inflating although the accident impact was in the relevant area and of sufficient severity.























Child safety

Children up to 12 years of age or less than 150 cm (approx. 4 ft 11 in) tall should be carried in the rear seats only, and only with suitable approved restraint systems; comply with local regulations.

Child restraint systems

BMW Service can supply suitable child restraint systems for every age group or weight class

In your BMW, all the seats except the driver's seat are basically suitable for the installation of universal child restraint systems for all age groups approved for the age group in question.

Note that if the centre rear seat is fitted with a lap belt, it is not suitable for installation of a child restraint system.

If you intend travelling with a child seated in the front passenger seat, the airbags on the passenger side have to be disabled before you install and use a child restraint system. BMW Service will gladly provide advice.

Do not permit children to occupy the front passenger's seat on their own, sitting on another person's lap, or in a child restraint system, as there is a danger of injury if the airbag is trigaered.

If the car is fitted with side airbags for rear-seat passengers, make sure that children do not lean out of their seats toward the side trim panels, as otherwise serious injury could result if the airbags are triggered.

Always comply with the instructions issued by the manufacturer of the child restraint system for installation and use, as otherwise the protective effect can be impaired.

After an accident, have all parts of the child restraint system and the seat-belt With through-loading system: system in question checked and, if necessary, replaced by BMW Service. ◀



ISOFIX child seat anchorage

Pull the protective cap of the outside anchorage point forward to remove. When reinstalling the cap, make sure the recess is at the top.

The protective cap is easier to remove if vou pull the rear-seat backrest halfway forward, see page 104.

By way of example, the illustration above shows the anchorages for an ISOFIX child seat system on the rear right seat.

Always comply with the manufacturer's safety instructions and instructions for use when installing the ISOFIX child seat system. ◀









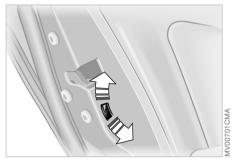


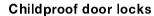






54 Child safety





Slide the safety lever down on the rear door:

This door can now only be opened from the outside.

Car Memory, Key Memory



How it works

You may often have wished that you could modify the operation of certain features of your car to suit your own individual preferences. When developing the car, BMW therefore incorporated a number of freely programmable options into the car, which BMW Service will be happy to set in accordance with your preferences.

There are Car Memory and Key Memory settings, the former relating to the car itself, the latter to your personal requirements. You can have up to four sets of basic settings programmed in for the use of four different persons. This presupposes that each person has ▷ Locking the vehicle after pulling his or her own remote control key.

By means of data exchange with the key, the car identifies the user when the car is unlocked and selects the preferred settings.

Coloured adhesive labels are supplied with the keys so that you can identify the master keys with remote-control functionality.

What can be selected

BMW Service will gladly inform you of the facilities available with Car Memory and Key Memory.

Examples for Car Memory:

- Several signals as confirmation for locking and unlocking the car, see pages 31, 34
- switch-off, see page 86
- dip circuit, see page 86
- ▷ Selecting units for displaying outside temperature and distance covered on the instrument panel.

Examples for Key Memory:

- □ Unlocking driver's door first, then all other locks, see page 32
- away, see page 35
- Automatic repositioning of the driver's seat and outside-mirror posi-







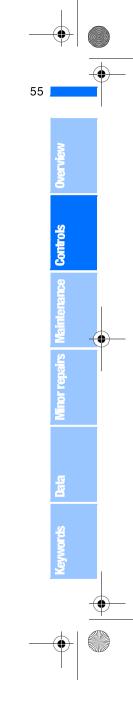




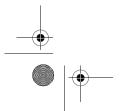




At the appropriate points in this Owner's Handbook you will find this symbol, as an indication that special settings as described above are available.







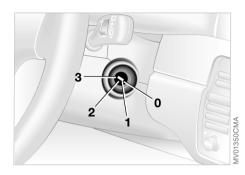








56 Ignition switch



- 0 Steering locked
- 1 Steering released
- 2 Ignition switched on BMW 318d, 320d, 330d, 330xd: engine preheat
- 3 Starting the engine

Steering locked

The key can only be inserted and removed in this position.

After removing the key, turn the steering wheel slightly if necessary until the steering lock engages.

The radio remains operational for approximately 20 minutes after the ignition has been switched off (ignition key in the 0 position or removed). The radio switches off with the ignition, but you can switch it on again.

Automatic transmission cars:
do not move the selector lever
away from position P, ignition key position 2, until the engine is running.
Before the ignition key can be returned
to position 0 or pulled out, the automatic transmission selector lever must
be moved to position P – interlock.

Steering released

Turn the key from 0 to 1 (move the steering wheel slightly if necessary) Various electrical consumers are now ready to operate.

Starting the engine

Do not allow the engine to warm up at a standstill, but drive off as soon as possible, using moderate engine speeds.

Never run the engine in an enclosed space. The exhaust gas contains carbon monoxide, which is colourless and odourless, but highly toxic. Inhaling exhaust gas constitutes a severe health risk and can lead to loss of consciousness with fatal consequences.

Do not leave the car unattended with the engine running, as it then constitutes a considerable potential hazard. Make sure that when driving or parking the car or when the engine is idling, no material which could catch fire easily – e.g. hay, leaves, grass etc. – can come into contact with the hot exhaust system. It could ignite and cause a fire, with the risk of severe injuries or damage. \blacktriangleleft

Cars with spark-ignition engine

Do not depress the accelerator pedal when starting the engine.

Allow the starter motor to run for a reasonable time, but not for more than about 20 seconds. As soon as the engine fires, release the ignition key.

















Starting the engine

If the engine does not start first time, for When the engine is warm: instance if it is very cold or very hot:

Depress the accelerator pedal halfway while starting the engine.

Cold starts at very low ambient temperatures, below approximately -15°C (5°F), at high altitude, above 1000 m (330 ft):

- On the first occasion, take longer over the starting operation, approx. 10 seconds
- Depress the accelerator pedal halfway while starting the engine.

Too frequent or lengthy operation of the starter at short intervals can result in damage to the catalytic converter.◀

Cars with diesel engine

When the engine is cold:

- until the "Preheat" telltale light goes out
- Start the engine. At extremely low temperatures, the starter motor may have to be run for 0 to 40 seconds.

▷ If the "Preheat" telltale light does not come on: the engine can be started immediately.

Movement of the accelerator pedal has no influence on the starting process.

Bleeding the diesel fuel system:

Even if the fuel tank has been run dry, the fuel system does not normally need to be bled.

If you nevertheless encounter difficulties in starting the engine:

Run the starter motor for approx. 20 seconds.

Manual transmission

- 1. Apply the handbrake
- 2. Move the gear lever to neutral
- 3. At low temperatures, depress the clutch pedal
- 4. Start the engine.

Automatic transmission

- 1. Depress the brake pedal
- 2. Move the selector lever to the P or N position
- 3. Start the engine.

Before leaving the car with the engine running, move the selector lever to P or N and apply the handbrake, to avoid any risk of the car beginning to move.

Do not leave the car unattended with the engine running, as this constitutes a potentially severe accident risk.◀

Sequential manual gearbox SMG

- 1. Depress the brake pedal
- 2. Move the selector lever to the neutral position N
- 3. Start the engine.

If the engine does not start, reselect the gear engaged beforehand (as shown by the indicator in the display) and then move the selector lever back to the neutral position N.

If the driver's door is opened while the engine is running, an acoustic signal sounds if the selector lever is in a drive position. If neither pedal is pressed and neither of the shift paddles nor the selector lever moved, the gear is automatically disengaged after approximately 2 seconds. If this happens you have to depress the brake pedal and

















58 Starting the engine

move the selector lever from the N position to the position corresponding to the direction in which you want to move off.◀

Before leaving the car with the engine running, move the selector lever to the N position and apply the handbrake.

Do not leave the car unattended with the engine running, as this constitutes a potentially severe accident risk.◀

Stopping the engine

Never take out the ignition key when the car is still moving, in order to prevent the steering lock from engaging.

When leaving the car, always remove the ignition key and lock the steering. When parking on a slope, apply the handbrake.◀

Manual transmission

Turn the ignition key back to 1 or 0.

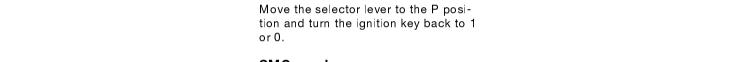
Automatic transmission

SMG gearbox

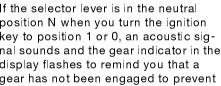
If the selector lever is in the R position or the • position when you turn the ignition key to position 1 or 0, a gear automatically remains selected.

If the selector lever is in the neutral position N when you turn the ignition key to position 1 or 0, an acoustic signal sounds and the gear indicator in the display flashes to remind you that a gear has not been engaged to prevent the car from moving.

The acoustic signal is switched off after approx. 4 seconds. A gear is engaged automatically if you move the selector lever to the • position within this time.

















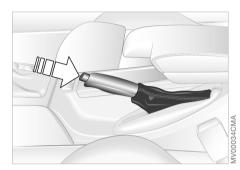








Handbrake



The handbrake is primarily intended for preventing a stationary vehicle from rolling away, and acts on the rear wheels.

Applying

The lever engages automatically and the telltale in the instrument cluster lights up in ignition setting 2, see page 18.

Releasing

Raise slightly, press the knob, see arrow, and move the lever down.

In exceptional cases, if the handbrake has to be used to slow or stop the car, do not pull the lever up too hard. Keep the knob on the lever held in all the time.

Too violent an application of the handbrake could over-brake the rear wheels and cause the rear of the car to skid. The brake lights do not come on when the handbrake is applied.

Vehicles with manual or SMG transmission:

When parking on a slope, apply the handbrake, because merely engaging first or reverse gear might not reliably prevent the car from rolling away. Automatic transmission cars: Select position P.◀

To avoid corrosion and prevent the brakes pulling to one side, apply the handbrake lightly from time to time when coasting to a standstill, for instance at a traffic signal, provided that it is safe to do so.

Manual transmission



Never try to prevent the car from rolling back on an uphill gradient by slipping the clutch; always apply the handbrake. Otherwise, slipping the clutch will cause rapid wear.◀

Reverse

Engage this gear only when the car is standing still. When the gear lever is pressed to the left, a detent has to be overcome.

The reversing lights then come on automatically in ignition key position 2.















60 Sequential manual gearbox SMG* - BMW 325i, 330i

The principle

The sequential manual gearbox SMG is an automated manual transmission in which an electro-hydraulic system actuates the clutch and shifts gear.

You operate the SMG by means of a selector lever in the centre console and two shift paddles on the steering wheel.

It offers you the following functions:

- ▷ Sequential, automated gearshift mode - cruise mode
- Choice of two driving programs (normal or sport) in sequential mode

- ▶ Dependability of positive gearshifts
- engine rpm
- engine rpm



Selector lever positions

R: Reverse

N: Neutral

Forward position with touch-shift functions:

- •: Sequential mode
- +: Upshifts in sequential mode
- -: Downshifts in sequential mode
- C: Cruise mode.

The SMG is operational from ignition key position 2 on.

When the car is at a standstill, a safety function requires you to depress the brake pedal if you want to move the selector lever to a drive position within approximately 2 seconds of selecting neutral - shiftlock function.

R Reverse

Engage this gear only when the car is standing still.

N Neutral

Always move the selector lever to this position before starting the engine.

Sequential mode

When you start the engine, the sequential mode is always activated as soon as you depress the brake pedal and move the selector lever to the forward position.

C Cruise mode

All forward gears are shifted automatically in cruise mode.

To change from sequential mode to cruise mode: lightly press the selector lever to the right toward "C".

Sharply press the accelerator all the way down for rapid acceleration (kickdown) when you want to overtake, for example.

Kick-down

You can achieve maximum acceleration and top speed using kick-down.





















Press the accelerator pedal down beyond the regular full-throttle position; increased resistance will be felt.



Shifting gear

Using the selector lever:

- □ Lightly press the selector lever in the "+" direction to shift up a gear
- ▷ Lightly press the selector lever in the "-" direction to shift down.

Using the shift paddles on the steering wheel:

- ▷ Pull either of the shift paddles to shift
- Push either of the shift paddles to shift down a gear.

To accelerate from higher gears, e.g. for overtaking, shift down manually.

In the following situations, the SMG in the sequential mode anticipates your intentions:

- ▷ The SMG performs up-shifts and down-shifts only at a suitable engine or road speed; for example, it will not shift down if the resulting engine speed would be too high
- ▶ When you brake the car to a standstill first gear is selected automatically so that all you have to do is press down gently on the accelerator pedal to pull away after being stopped by a traffic light, for example
- When the car's speed diminishes, without any action on your part the transmission will shift down automatically just before each gear's respective minimum speed is reached
- □ Under acceleration, the transmission gear's respective minimum automatically shifts up through the gears as each rpm limit is reached.





















62 Sequential manual gearbox SMG* - BMW 325i, 330i





Display in the instrument cluster

The gear currently engaged and the drive program you select are shown in the instrument cluster, as are faults if they occur.

Consult BMW Service if a fault is displayed.

Sport program

In sequential mode you have a choice of two programs to cover the range from smoothly dynamic to sporty driving.

To select the sport program: press the SPORT button.

The LED in the button lights up. Cruise mode is automatically deactivated.

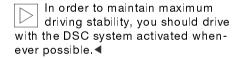
In order to maintain maximum driving stability, you should drive with DSC activated whenever possible.◀

Acceleration assistance

The acceleration assistant permits optimum racing-style acceleration on surfaces with good grip.

Using the acceleration assistant causes premature component wear, because this function places a very high strain on the car.

- 1. Select the sport program
- Press the DSC button, see page 79, and keep it pressed for longer than three seconds
- Quickly press the accelerator pedal all the way to the floor – kick-down. The engine is electronically balanced to achieve maximum pullaway rpm.



















Automatic transmission with Steptronic*

You can either drive the car as with a conventional automatic transmission, or shift between gears manually.

If you move the selector lever to the left, from position D into the M/S shift plane, this activates the sport-oriented programs in the automatic gearbox. As soon as you move the lever in the "+" or "-" direction, the Steptronic transmission's manual gear shift mode is activated. If you wish to return to fully automatic gear shifts, move the lever back to the right, to position D.



Selector lever positions

PRNDM/S+-

Moving the selector lever

A catch prevents selector lever positions R and P from being selected inadvertently, and is released by pressing the button on the front of the selector lever knob, see arrow.

Before moving the selector lever away from P or N with the car at a standstill, you must press the brake pedal down to release the lever - shiftock.

Keep the foot brake applied until you are ready to move off; this will prevent the car from creeping forwards when a gear is selected.◀

Before leaving the car with the engine running, move the selector lever to P or N and apply the handbrake, to avoid any risk of the car beginning to move.

Do not leave the car unattended with the engine running, as this constitutes a potentially severe accident risk.◀

P Park

Engage this gear only when the car is standing still. The driven wheels are locked.

R Reverse

Engage this gear only when the car is standing still.

N Neutral

Select only if the journey is interrupted for a fairly long time.

D Drive - automatic shift position

Use this position for all normal driving. The system shifts up through all forward gears.























64 Automatic transmission with Steptronic*

Kick-down

You can achieve maximum acceleration and top speed using kick-down with the selector lever in the D position.

Press the accelerator pedal down beyond the regular full-throttle position; increased resistance will be felt.



M/S Manual transmission and Sport program

When you move the lever from D to M/S, the sport program is activated and the gear display shows SD. This position is recommended if the car is to be driven in a sport-oriented manner.

When the lever is next moved, the automatic transmission will switch from the Sport program to the manual-shift mode.

If you move the lever in the "+" direction, the transmission shifts up; if you move it in the "-" direction, a downshift takes place. The gear display shows M1 to M5.

The AGS adaptive transmission control system performs upshifts and downshifts only at a suitable engine or road speed; for example, it will not shift down if the resulting engine speed would be too high. The instrument panel then shows the selected gear briefly, followed by the gear actually in use.

For rapid acceleration in the manual-shift mode – for example when overtaking – shift down manually or use kick-down to shift to a lower gear.◀

The selector lever can only be moved from M/S to the positions P, R and N if it has first been moved back to D.















Automatic transmission with Steptronic*



For towing away, tow-starting and jump-starting, see page 145 onwards.

Possible displays

PRNDSDM1M2M3M4M5

Shift electronics



If the telltale light comes on, this indicates a transmission system malfunction.

All lever positions can still be selected, but in the forward positions only certain gears are actually available when the car is driven.

Avoid excessive loads, and take the car to the nearest BMW Service.

Do not work in the engine compartment with the selector lever in a drive position, otherwise the car could begin to move unexpectedly.







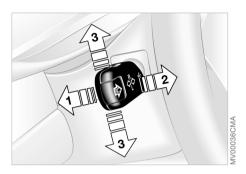


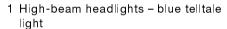






66 Turn indicators/headlight flasher





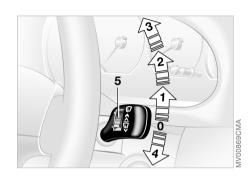
- 2 Headlight flasher blue telltale light
- 3 Flashing turn indicators green repeater lights with rhythmic ticking of flasher relay

To indicate a turn briefly

Move the lever lightly, only as far as the first detent. It will cancel when released.

If the repeater light flashes and the relay ticks more rapidly than usual, one of the car's flashing turn indicators must have failed (including turn indicators on a trailer if one is attached to the car).◀





- 0 Parked position of wipers
- 1 Intermittent wipe setting or rain sensor
- 2 Normal wiper speed
- 3 Fast wiper speed
- 4 Flick wipe
- 5 Knurled wheel for adjusting intermittent wipe interval or rain sensor sensitivity

Intermittent wipe

(not if the car has a rain sensor)

Turn knurled wheel 5 to select one of the four intermittent-wipe settings.

This is also varied automatically depending on your road speed.

















Wipers/rain sensor*

Rain sensor

The rain sensor is mounted on the windscreen, directly in front of the inside mirror.

Activating the rain sensor:

▶ From ignition key position 1, shift into lever setting 1. In any event, the wipers will now sweep across the windscreen once.

You can leave the lever in setting 1 continuously, then all you need to do is to activate the rain sensor from ignition key position 1.

To do this,

 b turn knurled wheel 5 briefly or ▷ clean windscreen, see picture on page 67, setting 1.

To adjust the sensitivity of the rain sensor: turn knurled wheel 5.

Deactivating the rain sensor: move the lever to the 0 position.

Deactivate the rain sensor in an automatic car wash, otherwise the car's wipers may operate and be damaged.◀

Normal wiper speed

The wipers change over to the intermittent wipe mode when the car comes to a standstill (not on cars with rain sensor).

Fast wiper speed

The wipers switch to normal speed when the car comes to a standstill (not on cars with rain sensor).



0 Parked position of wipers

1 Cleaning the windscreen and headlights*

Cleaning the windscreen and headlights*

Only operate the washers and cleaning equipment if certain the cleaning equipment if certain that the fluid will not freeze to the windscreen and interfere with the view ahead. A suitable additive should therefore be used, see page 124. Do not run the washer if the reservoir is empty, as this will damage the washer pump.◀

Fluid from the washer tank is sprayed on to the windscreen and the wipers are operated for a short time.



















68 Wipers/rain sensor*

If the car's lights are on, the headlights are also cleaned at suitable intervals.

Windscreen washer jets

The windscreen washer jets are heated automatically* in ignition key position 2.

Cruise control*

Above about 30 km/h (approx. 19 mph), you can memorise and call up the car's ory. road speed.

You can use cruise control when the engine is running and the system is activated

Activating the system

From ignition key position 2:

Press the button: the telltale light in the instrument cluster comes on, see page 20. You can then use cruise contro

Do not use cruise control on twisting roads, in heavy traffic which prevents a constant speed from being maintained or if the road surface is slippery (snow, rain, ice) or loose (stones, sand).◀

Deactivating the system

1/0

Press the button repeatedly until the telltale light in the instrument cluster goes out.

Turning the ignition key to the 0 position also deactivates cruise control.

The stored speed is cleared from mem-

Maintaining speed, memorising speed, accelerating

Briefly press the "+" button:

The car's actual speed is maintained and memorised. Each time the button is pressed briefly again, road speed is increased by approx. 1 km/h (0.6 mph).

Hold down the "+" button:

The car accelerates without the accelerator pedal being touched. As soon as you release the button, the speed the car has reached will be maintained and memorised.

If engine braking alone is insufficient on a downhill gradient, the controlled speed may be exceeded. It may also prove impossible to maintain with the available engine power on uphill gradients.◀











Cruise control*

Decelerating



Briefly press the "-" button:

Every time you press the button, road speed drops by approx. 1 km/h (0.6 mph) if you are already using the cruise control.

Hold down the "-" button:

The car slows down by automatically cutting the throttle if you are already running on cruise control. As soon as you release the button, the speed the car has reached will be maintained and memorised.

Interrupting cruise control

1/0

When activated, press the button: the telltale light remains lit. You can restore cruise control at any time by calling up the last speed stored in memory.

In addition, you interrupt the cruise control function automatically:

- ▶ When braking
- ▶ When operating the clutch or when moving the automatic transmission selector lever from D to N

▷ If the car exceeds the speed setting for a lengthy period (for example when you depress the accelerator) or fails to reach it.

Calling up speed stored in memory



Press the button:

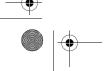
The speed last memorised is recalled and maintained once it has been reached again.

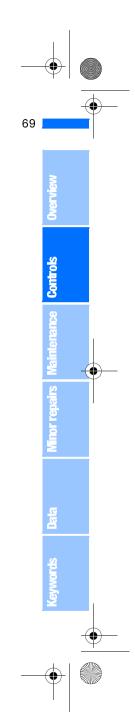




















70 Odometer



- 1 Odometer
- 2 Trip distance recorder

Odometer (distance recorder)

You can activate the displays shown on this figure in ignition setting 0 by pressing the button, see arrow, on the instrument cluster.

Trip distance recorder

To reset to zero, press the knob, see arrow, in ignition key position 1 or beyond.

Revolution counter



Never allow the engine to run in the red zone of the revolution counter, see arrow.

In this zone the fuel supply is interrupted to protect the engine.

Energy control



Shows momentary fuel consumption. This enables you to check how economical and environmentally friendly your current driving style is.

As the car comes to a standstill, the pointer returns to zero.



















If the warning light remains lit continuously, there are still approx. 8 litres (1.8 gal) of fuel in the tank.

Fuel-tank capacity approx. 63 litres (13.9 gal).

Certain vehicle positions, e.g. driving uphill for prolonged periods, may cause slight fluctuations in the fuel gauge reading.

Add fuel in good time, or there is a risk of running the tank dry and causing damage to the engine or the catalytic converter.◀

The warning light comes on briefly as an operating check when the ignition is switched on.

Coolant thermometer



Blue

The engine is still cold. Drive at moderate engine and road speeds.

Red

As a functional check, the warning light comes on briefly when the ignition is switched on.

If light comes on during journey:

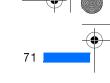
The engine is too hot. Switch it off immediately and allow it to cool down.

Check coolant level, see page 126.

Between the coloured zones

Normal operating temperature. The needle may move up as far as the beginning of the red zone.























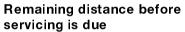


72 Service interval indicator



A flashing reminder and a "-" preceding the number means that the car has passed the scheduled service by the distance shown. Please make an appointment with BMW Service for the work to be performed.





The displays shown in the picture appear in ignition key position 1 and beyond, and for a few seconds after the engine has been started.

Together with the OIL SERVICE or INSPECTION reminder, the next scheduled service work and the distance remaining before the service is due are shown.

The remaining distance is calculated on the basis of the way the car has so far been driven.

Brake fluid renewal

You can obtain a display of the month and year in which the next brake fluid renewal is due by pressing the button, see arrow, on the instrument cluster while the next service indication is visible. Each time the button is pressed, the display alternates between the next service and the date for brake fluid renewal.

When brake fluid renewal falls due, the clock symbol also lights up. Please make an appointment with BMW Service for the work to be performed.















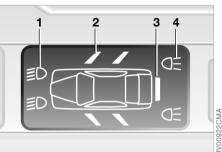




Service interval indicator

Periods during which the battery was disconnected are ignored by the display. Make sure that brake fluid is renewed every two years, regardless of whether this is confirmed by the display, see also page 127.◀





The following information or operating conditions are shown as symbols from ignition key position 2 onwards until the malfunction has been eliminated:

- 1 Check low- and high-beam headlights and parking lights
- 2 Door open
- 3 Luggage compartment lid open
- 4 Check rear light or brake light

At the end of a journey, when the driver's door is opened and the lights are left on, an acoustic reminder sounds.

DAM

ntrole

/aintenance

Vinor repairs

Data

eywords















74 Clock

You can set the display of the radio to show the clock at all times, see operating instructions for radio.

The procedure for setting the time as shown by the clock and in the car radio display is as follows.



On-board computer*





From ignition key position 1 onward and with the time visible in the display in the instrument cluster.

Forwards: turn button to right.

Back: turn button to left.

The longer you hold the knob in the turned position, the faster the adjustment.

Altering display mode: press the knob briefly.

Each time the knob is pressed the display mode changes from 12- to 24-hour clock or back.

Ignition key in position 0: the time is displayed for a few seconds when you press the left knob.

Calling up functions

Using the button in the turn indicator lever, from ignition key position 1, you can call up on-board computer information in the instrument cluster display unit. Every time you press the button towards the steering column, another function is displayed on screen (i.e. scrolling function).

The sequence of displays is:

Time, outside temperature, average fuel consumption, range before refuelling, average speed.

From ignition key position 1, the most recent setting appears on the display.





















Outside temperature

page 94.

Ice warning

short time



You can change the unit of measure-

perature display while it is visible by

instrument cluster. The °C/°F unit of measure used in the temperature dis-

play of the automatic air conditioning

system changes automatically, see

If the outside temperature drops to

approx. +3°C (37°F), the on-board

computer automatically displays the

outside temperature. An acoustic warn-

ing sounds and the display flashes for a

ment (°C/°F) used for the outside tem-

pressing the right adjusting knob on the

Note that the ice warning does not rule out the possibility of ice forming on the road at temperatures higher than +3°C (37°F), for example on bridges or where the road is in shadow.◀



Average fuel consumption

If you hold the button on the turn indicator lever in for a longer period, the average fuel consumption will be recalculated from this time onwards.

Range before refuelling

The probable range before refuelling is determined on the basis of your driving style and the amount of fuel remaining in the tank

Average speed

If you hold the button in the flashing turn indicator in for a longer period, the average speed will be recalculated from this time onwards.

Periods spent at a standstill with the engine switched off are disregarded.

































76 Park Distance Control PDC*

The principle

PDC assists you when reversing the car into a parking space. An audible warning signal tells you how far you are from obstructions behind the car. To do this. four ultrasonic sensors in the back bumper measure the distance to the nearest object. The range of the sensors at the two rear corners ends approx. 60 cm (approx. 2 ft) behind the bumper. The two centre sensors have a range of approx. 1.50 m (approx. 5 ft). In ignition key position 2, the system is activated automatically after approx. 1 second when reverse gear is selected or the automatic transmission selector lever moved to R. It is switched off when the lever is moved out of reverse gear or away from position R. If you are towing a trailer, of course, the system cannot make the appropriate measurements and therefore deactivates itself as soon as the towbar is fitted into the towing hitch.

Audible warning signals

The distance from an obstruction is indicated by an intermittent audible signal. The closer the car approaches the obstruction, the more rapid the sequence of signals. When the distance is less than 30 cm (approx. 12 in), the signal becomes continuous.

The signal is interrupted after approx. 3 seconds if the distance from the obstacle remains constant during this time, for instance when reversing parallel to a wall.

If a continuous signal at a pitch higher than usual is heard when the system is first activated, it is malfunctioning. Have the cause traced and rectified by BMW Service.

The PDC cannot act as a substitute for your personal assessment of obstructions. The sensors have certain dead areas in which objects cannot always be detected. In addition, the

detection of obstacles can reach the physical limits of ultrasonic measurement, e.g. trailer towbars and couplings or thin and tapering objects.

Note that loud sources of noise, for

Note that loud sources of noise, for instance if the volume of the radio is too high, could prevent you from hearing the PDC signal. ◀

Keep the sensors clean and free from ice, so that they always operate reliably.

Do not spray the sensors for any length of time with a high-pressure cleaning jet. Keep such jets at least 10 cm (approx. 4 in) away from the sensors. ◀



















Automatic Stability Control plus Traction ASC+T

The principle

ASC+T optimises dynamic stability and traction, particularly when moving away from a standstill and when cornering.

The ASC+T system is ready to operate each time the engine is started.

ASC+T incorporates the functions of Automatic Differential Brake ADB and Cornering Brake Control CBC.

You will find further details on ASC+T in the "Technical items of interest" brochure.





The telltale light in the instrument cluster goes out shortly after the ignition is switched on, see page 19.

If the telltale light flashes:

ASC+T is controlling drive and braking forces.

If the telltale light remains permanently on:

The button has been pressed to deactivate ASC+T; ADB is ready. There is no indicator to show when ADB is in action.



The telltale light and the brake warning light remain permanently yellow:



ASC+T and ADB have been switched off at the button, or are defective.

The car is operational without ASC+T. If a fault occurs, please consult BMW Service



Deactivating ASC+T/activating ADB

Briefly press the ASC button: the telltale light remains permanently on.

ASC+T is deactivated; ADB is ready.

In the following exceptional situations it may be best to activate ADB for a short time:

▷ If the car has to be rocked out of a hollow or a soft surface, or started in deep snow or on a loose surface

▷ If snow chains are fitted.

In order to maintain maximum driving stability, you should drive with the ASC+T system activated whenever possible.◀















78 Automatic Stability Control plus Traction ASC+T

Deactivating ASC+T and ADB

Keep the ASC button pressed for at least 3 seconds; the telltale light and the yellow brake warning light remain permanently on.

Under these circumstances no stabilityor traction-improving manipulation of engine or brakes takes place.

In order to maintain maximum driving stability, you should drive with the ASC+T system activated whenever possible.◀



Briefly press the button a second time;

Not even ASC+T can overcome the laws of physics. The the laws of physics. The driver is always responsible for matching his or her style of driving to the prevailing conditions. The extra safety potential offered by this system must never be understood as an invitation to take additional risks.◀



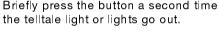










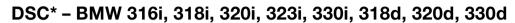












The principle

Dynamic Stability Control DSC is designed to maintain driving stability in critical situations.

The DSC system is in operation whenever the engine has been started.

DSC incorporates the functions of Dynamic Traction Control DTC and Cornering Brake Control CBC.

You will find further details on DSC in the "Technical items of interest" brochure.

Telltale light



The telltale light in the instrument cluster goes out shortly after the ignition is switched on,

see page 19.

If the telltale light flashes:

DSC is controlling drive and braking forces.

If the telltale light remains permanently on:

DSC has been switched off at the button; DTC and DBC are ready.

There is no indicator to show when DTC is in action.



The telltale light and the brake warning light remain permanently yellow:



DSC, DTC and DBC have been switched off at the button, or are defective.

Note, however, that the vehicle remains operational without DSC. If a fault develops you should consult BMW Service as soon as possible.



Deactivating DSC/activating DTC

Briefly press the DSC button: the telltale light remains permanently on.

DSC is deactivated; DTC is ready.

In the following exceptional situations it may be best to activate DTC for a short time:

- ▶ If the car has to be rocked out of a hollow or a soft surface, or started in deep snow or on a loose surface
- ▶ If you are driving on snow-covered gradients, in deep snow, or on hardpacked snow
- ▷ If snow chains are fitted.

Traction is boosted by reducing the stabilising influences.















80 DSC* - BMW 316i, 318i, 320i, 323i, 330i, 318d, 320d, 330d

Deactivating DSC and DTC

Press and hold down the DSC button for at least 3 seconds; the telltale light and the yellow brake warning light remain permanently on.

Under these circumstances no stabilityor traction-improving manipulation of engine or brakes takes place.

In order to maintain maximum driving stability, you should drive with the DSC system activated whenever possible.◀

Reactivating DSC

Briefly press the button a second time; the telltale light or lights go out.

Not even DSC can overcome the laws of physics. The distance of always responsible for matching his or her style of driving to the prevailing

conditions. The extra safety potential offered by this system must never be understood as an invitation to take additional risks.

When DTC is in ready mode DSC is deactivated and DTC contributes to a limited extent to stabilising the car. Make no modifications to the DSC system. All work on the DSC should be entrusted only to skilled, authorised personnel.◀























DSC - BMW 325xi, 330xi, 330xd

The principle

Dynamic Stability Control DSC is designed to maintain driving stability in critical situations.

The DSC system is in operation whenever the engine has been started.

DSC incorporates the functions of Automatic Differential Brake ADB-X and Cornering Brake Control CBC.

You will find further details on DSC in the "Technical items of interest" brochure.

Telltale light



The telltale light in the instrument cluster goes out shortly after the ignition is switched on,

see page 19.

If the telltale light flashes:

DSC is controlling drive and braking forces.

If the telltale light remains permanently on:

The button has been pressed to deactivate DSC; ADB-X is ready.

There is no indicator to show when ADB-X is in action.

If the telltale light does not go out the next time you press the DSC button, DSC and ADB-X are defective and the stabilising functions are no longer at your disposal.

Note, however, that the vehicle remains operational without DSC. If a fault develops you should consult BMW Service as soon as possible.



Switching off DSC

Press the DSC button: the telltale light remains permanently on.

DSC is deactivated, ADB-X is parameterised for maximum forward momentum.

You may find it advisable to deactivate DSC temporarily under the following exceptional circumstances:

▷ If the car has to be rocked out of a hollow or a soft surface, or started in deep snow or on a loose surface

▷ If snow chains are fitted.

In order to maintain maximum driving stability, you should drive with the DSC system activated whenever possible.

Overview

huntrole

ntenance

Ainor repairs

eywords













82 DSC - BMW 325xi, 330xi, 330xd

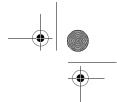
Reactivating DSC

Press the button a second time; the telltale light will go out.

Not even DSC can overcome the laws of physics. The driver is always responsible for matching his or her style of driving to the prevailing conditions. The extra safety potential offered by this system must never be understood as an invitation to take additional risks.

When DSC is deactivated it does not contribute to stabilising the car. Make no modifications to the DSC system. All work on the DSC should be entrusted only to skilled, authorised personnel.◀







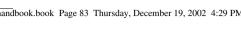


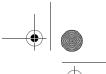














The principle

HDC is a system that reduces speed on steep downhill gradients, making your BMW even easier to control under these conditions.

Without any intervention on your part, the car's speed is kept down to about twice walking pace.

You can activate HDC at speeds less than approximately 35 km/h (22 mph). On a descent, the car automatically reduces speed from under approx. 35 km/h (22 mph) to about twice walking pace - approx. 12 km/h (7.5 mph) and then maintains this constant speed.

You can press the brake pedal or open the throttle to vary the car's speed in a range from approximately 5 km/h (3 mph) to 25 km/h (15.5 mph).

You also have the option of setting a speed in this range using the +/- buttons of the cruise control system.

HDC is automatically deactivated when the car accelerates to a speed of approximately 60 km/h (37 mph).



Activating the system

Hill Descent Control HDC - BMW 325xi, 330xi, 330xd

Press the HDC button: the green telltale light in the button comes on.

The telltale light flashes when the car is automatically braked.

Deactivating the system

Press the button a second time; the telltale light goes out.

HDC is deactivated automatically when the car's speed increases to approx. 60 km/h (37 mph) or when the ignition is switched off.

Using HDC

Cars with manual shift:

Use HDC in first gear and in reverse. because the engine's braking effect diminishes in higher gears.

Cars with automatic transmission: you can use HDC with the selector lever in any drive position.

In the event of a fault

The telltale light in the button goes out while HDC is active or fails to come on when HDC is activated:

HDC temporarily unavailable on account of high brake temperatures.



The DSC telltale light comes on as well:

Failure in the HDC and DSC system. Visit BMW Service and have the system repaired.



















84 Tyre pressure control (RDC)*

The principle

RDC monitors tyre pressures at all four wheels, both at a standstill and when the car is being driven. The system reports any sudden loss of pressure in one or more tyres.

To enable the system to "recognise" the correct tyre pressures, first compare these with the specified values in the table, see page 24, and correct them if necessary. Then activate the system.



rect value.

This warning light in the instrument cluster tells you if the tyre pressure departs from the cor-



Initialising the system

- 1. Turn the ignition key to position 2, but do not start the engine
- Keep the button pressed until the telltale light on the instrument panel remains on for several seconds
- After the car has been driven for several minutes, the RDC system
 accepts the current tyre pressures as
 the nominal values which it is to
 monitor.

Do not repeat this process until you have corrected the tyre pressure. Otherwise RDC remains automatically in ignition key position 2 and therefore operates during every journey.

If there is a loss of tyre pressure

If tyre pressure sinks significantly after a period (this is perfectly normal in all tyres), the yellow telltale light comes on.

This is to remind you that the tyre pressure should be corrected to the specified value again as soon as possible.

If you are asked by the system to check tyre pressures shortly after correcting them, the corrected pressure values were not plausible. Please check the tyre pressures again and correct them to the values specified in the tyre pressure table. After this, reactivate the system. \blacktriangleleft

With a burst tyre

If a puncture or similar tyre failure occurs, and pressure drops suddenly, the red warning light comes on. In addition a warning signal is heard.

Immediately reduce speed and stop at the first safe opportunity. Avoid pronounced braking and steering manoeuvres while doing so. Change the defective wheel with its tyre, see page 139.













Tyre pressure control (RDC)*

The compact spare wheel is only intended for temporary use after a tyre failure and therefore has no RDC electronic monitoring function. The spare wheel with the same dimensions as the car's other wheels and tyres has the necessary RDC electronics fitted and, when fitted to the car, is also monitored when the system is active.◀

The RDC system is unable to register sudden tyre damage caused by external influences.◀

Have your tyres changed by BMW Service

BMW Service has full information on how to handle RDC and is equipped with the necessary special tools.◀

Faults

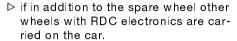
RDC can be subjected to interference by outside equipment or devices which use the same radio frequency.

While the fault persists, the yellow warning light is on.

The warning light also comes on

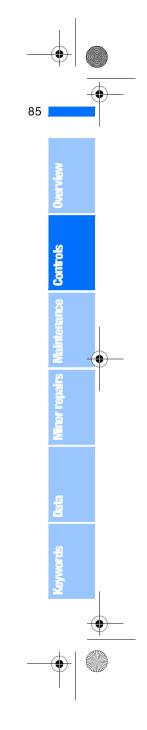
in the event of a system fault

 if a wheel not equipped with RDC is fitted to the car



Consult BMW Service if necessary.













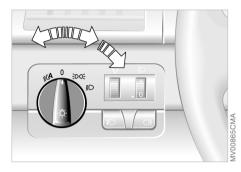








86 Side lights/low-beam headlights



Lights-on warning

When you turn the ignition switch back to the 0 position and open the driver's door, an audible warning is heard for a short time as a reminder if you have not switched off the lights.

Daylight dim-dip circuit*

If desired, the light switch can remain in the second position:

When the ignition is turned off, the car's lights go out.

You can have the daytime dipped headlight setting selected on your car.◀

Side lights



The lights are on all round the EDGE car. You can use these lights as position lights when the car is parked. See page 88 for parking with

the sidelights on one side of the car on.

Low-beam headlights



If the low-beam headlights are switched on and the ignition is switched off, only the parking

lights remain lit.

Delayed switch-off: Operate the headlight flasher after parking the car and turning the lights off: the low-beam headlights come on for a brief period. You can have this function deactivated if you prefer. ◀

Automatic headlight control*



When the switch is in this position the low-beam headlights are switched on and off automati-

cally in accordance with changes in ambient light, for example in tunnels, at dusk or dawn, and when it is raining or snowing.

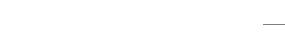
The car's exterior lights remain on if you switch on the fog lights while the headlights are on after being switched on by the automatic headlight control system.◀

The automatic headlight control system cannot act as a substitute for your personal assessment of the prevailing lighting conditions. The sensors are unable to see fog, for example. Switch on the lights manually in situations such as this, as otherwise your safety and that of other road users could be endangered.◀

You can have the sensitivity of the automatic headlight control system selected on your car.◀











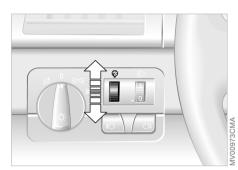






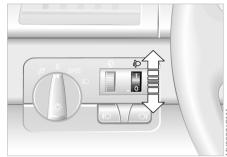


Instrument lighting



To vary the lighting intensity, turn the knurled wheel.

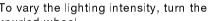
Headlight beam angle adjustment



Xenon headlights*

Cars with xenon headlights are equipped with automatic beam angle adjustment





Halogen headlights

When the car is carrying a load, reduce the headlight beam angle, otherwise oncoming traffic will be dazzled.◀

Values after the / apply when towing a trailer

0/1 = 1 or 2 occupants without luggage

1 / 1 = 5 occupants with luggage

1 / 2 = 5 occupants with luggage

2 / 2 = 1 occupant, luggage compartment full

Comply with permitted rear axle load, see page 157.









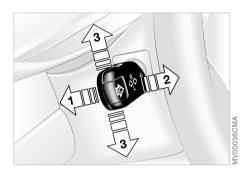








88 High-beam headlights/parking lights



- 1 High-beam headlights blue telltale light
- 2 Headlight flasher blue telltale light
- 3 Parking lights

Right-hand or left-hand parking lights*

You also have the option of leaving your car parked with the side lights on one side on as position lights - comply with applicable national legislation:

With the ignition key in position 0, move the lever to the appropriate turn indicator position (left/right) and allow it to remain there.

Fog lights



Fog lights*



The green telltale light on the instrument panel comes on when the fog lights are in use.

Rear fog light



The yellow telltale light on the instrument panel comes on when the rear fog light is in use.

Please comply with local legislation concerning the use of front and rear fog lights.

If automatic headlight control is active, the low-beam headlights are switched on automatically when you switch on the fog lights.◀











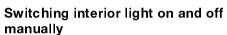




Interior lighting







Press button 1 briefly.

Hold the button down for approx. 3 seconds if you want the interior light permanently off.

Briefly press the button to cancel this mode.

Reading lights, front*

Turn each light on and off at the adjacent switch 2.



Reading lights, rear

Turn each light on and off at the adjacent switch.

To protect the battery, all lights inside the car are switched off about 15 minutes after the ignition key has been turned to 0.◀





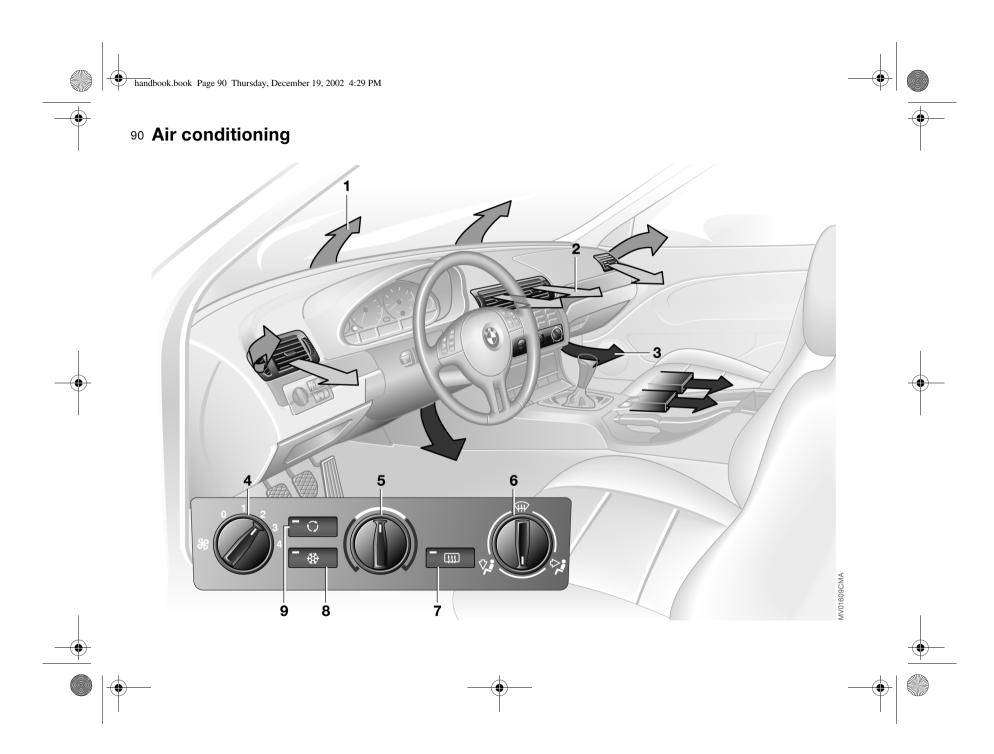










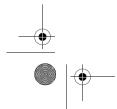


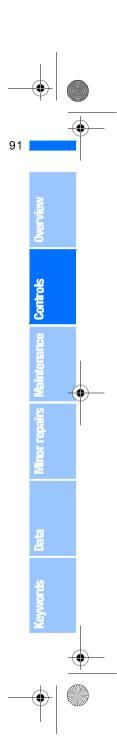


Air conditioning

- 1 Airflow to windscreen and side windows
- 2 Air to the upper body area 93
- 3 Air to the footwell
- 4 Air supply/blower 92
- 5 Temperature 92
- 6 Air distribution 92
- 7 Heated rear window 92
- 8 Air-conditioning mode 92
- 9 Recirculated air mode 92















92 Air conditioning

Air supply/blower



You can select blower speeds 1 to 4. The greater the incoming flow of air, the more effective heating and ventilation will

be. In position 0, the blower and the heating are switched off. The supply of air is shut off in position 0.

Temperature



To raise the temperature inside the car, turn to the right, red. The temperature of the air entering the car is

maintained at a constant level.

Air distribution



You can direct the flow of air toward the windows \(\frac{\pi}{W} \), toward the upper-body area \(\frac{\pi}{A} \) and into the footwell \(\frac{\pi}{A} \).

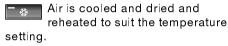
Any intermediate setting is possible. In the *** position a small amount of air continues to reach the windows in order to prevent them from fogging over.

Heated rear window

When the heated rear window is switched on, the telltale light comes on. The heated rear window is switched off automatically.

If the outdoor temperature is below approx. 4°C (39°F), the rear window heater switches on automatically within 5 minutes of the engine being started. ◀

Air-conditioning mode



Depending on weather conditions, the windscreen may fog over momentarily when the engine is started. Switching on the air conditioning helps prevent the windows misting over.

Moisture condensate forms when the air conditioning is in operation; this condensation is discharged underneath the car. Traces of water on the ground are therefore normal. ◀

Recirculated air mode

If there are strong smells outside the car, you can temporarily switch off the supply of outside air. The air inside the car is then recirculated.

If the windows mist up in recirculating mode, switch this mode off and, if necessary, also increase the airflow.



















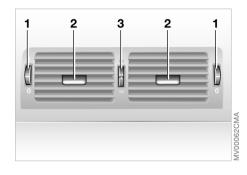
Air conditioning

Draught-free ventilation

erences:

variable range

the air flow



The air outlets for the upper body area can be adjusted to suit the user's pref-

1 Knurled wheels for opening and clos-

ing the outlets through an infinitely

2 Levers for adjusting the direction of

3 Use knurled wheel 3 to blend the required amount of cool air into the airflow to the upper body area

Micro-filter

The micro-filter in the ventilation system traps dust and pollen in the air entering the car. It is renewed when BMW Service carries out routine maintenance work. If the airflow is noticeably less than usual, this may indicate that the filter should be renewed earlier.



Defrosting and demisting windows

- 1. Turn the rotary blower switch to settina 4
- 2. Turn the temperature selector fully to the right, red
- 3. Rotary switch for airflow direction in setting \
- 4. To defrost the rear window, switch on rear window heating.





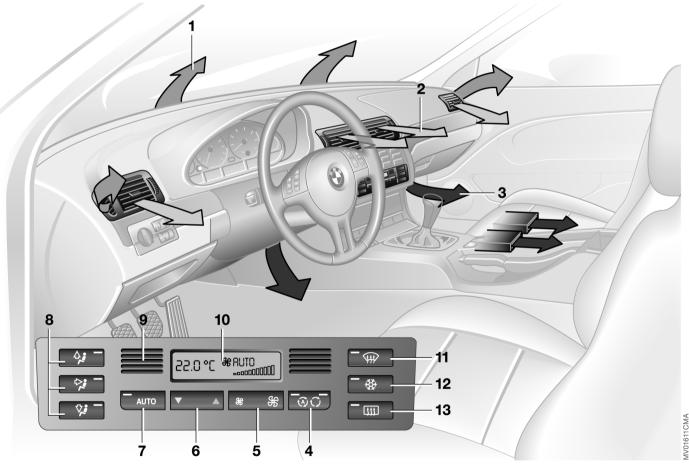
























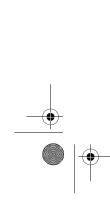


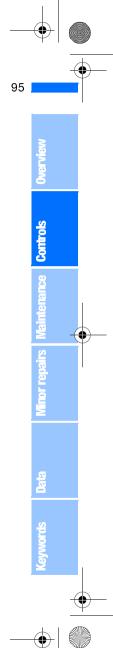


Automatic air conditioning*

- 1 Airflow to windscreen and side windows
- 2 Air to the upper body area 97
- 3 Air to the footwell
- 4 Recirculated air mode/Automatic recirculated air control (AUC) 97
- 5 Air supply/blower 96
- 6 Temperature 96
- 7 Automatic air distribution and supply 96
- 8 Individual air distribution 96
- 9 Interior temperature sensor keep unobstructed
- 10 Temperature display 96, air supply 96
- 11 Defrosting and demisting windows 96
- 12 Air-conditioning mode 96
- 13 Heated rear window 97















96 Automatic air conditioning*

A pleasant interior temperature

Press AUTO key 7 to switch on the automatic mode. Select the interior temperature which you find most agreeable.

Details of the full range of settings and how to obtain them are given below.

Your car is programmed so that your preferred automatic air conditioning settings are called up whenever you unlock the car with your personal remote-control key.◀

Automatic air distribution and supply

The AUTO program handles the setting of air distribution for you and also adapts your temperature preferences to suit ambient conditions (summer, winter).

Individual air distribution



You can adjust air distribution and override the AUTO program if you prefer, this has no effect on automatic air supply. Air

flows to the windows , to the upperbody area , and to the footwell .

You can switch automatic air distribution on again by pressing the AUTO button.

Temperature

The displayed values are a guide to the actual interior temperature. 22 °C (equivalent to 72 °F) is recommended as a pleasant setting, whether or not the air conditioning is in operation. During the journey, the chosen temperature is reached as quickly as possible - in summer and in winter and maintained at a constant value.

You can change the unit of measure (°C/°F) of the reading, see page 75.

Air supply - blower

😨 🙀 You can vary the air supply by pressing the left or right half of the button. This will shut down the automatic air supply; the word AUTO disappears from the display. The automatic air distribution function remains in operation. You can switch automatic air supply on again by pressing the AUTO button.

If you press the left half of the button at the lowest blower speed, all the displays go out: the blower, heater and air conditioning are switched off and the air supply is closed. The system is switched on again by pressing any automatic air conditioning button.

Defrosting and demisting windows

This program removes ice and condensation guickly from the windscreen and from the side windows.

Air-conditioning mode

Air is cooled and dried and reheated to suit the temperature setting.

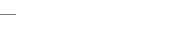
Depending on weather conditions, the windscreen may fog over momentarily when the engine is started. Switching on the air conditioning helps prevent the windows misting over.

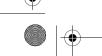
Moisture condensate forms when the air conditioning is in operation; this condensation is discharged underneath the car. Traces of water on the ground are therefore normal.













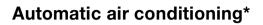












Automatic recirculated air control Heated rear window **AUC**

If there are strong smells or pollutants outside the car, you can temporarily switch off the supply of outside air. The air inside the car is then recirculated.

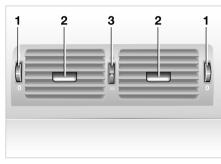
Obtain the desired operating mode by pressing the button as often as neces-

- ▷ Telltale lights off: permanent airflow from outside the car
- ▶ Left telltale light on AUC operation: the system identifies pollutants in the outside air and shuts off the supply if necessary. The air inside the car is then recirculated. After this, the automatic system switches between outside air supply and recirculated air according to the available air quality
- supply is permanently shut off. The air inside the car is recirculated.

If the windows mist up in recirculating mode, switch it off and, if necessary, increase the airflow. ◀

Tittle When the heated rear window is switched on, the telltale light comes on. The heated rear window is switched off automatically.

If the outdoor temperature is below approximately 4°C (39°F), the rear window heater switches on automatically within 5 minutes of the engine being started.◀



Draught-free ventilation

The air outlets for the upper body area can be adjusted to suit the user's preferences:

- 1 Knurled wheels for opening and closing the outlets through an infinitely variable range
- 2 Levers for adjusting the direction of the air flow
- 3 Use knurled wheel 3 to blend the required amount of cool air into the airflow to the upper body area









handbook.book Page 98 Thursday, December 19, 2002 4:29 PM



98 Automatic air conditioning*

Micro-filter/activated charcoal filter

The micro-filter in the ventilation system traps dust and pollen in the air entering the car. The activated charcoal filter in addition removes gaseous pollutants from the air entering the car. This combined filter is renewed by BMW Service during routine maintenance work. If the airflow is noticeably less than usual, this may indicate that the filter should be renewed earlier.







Roller sunblind*



From ignition key position 1 onward, press the button to operate.

The picture shows the control layout on cars with a complete equipment specification. The layout can vary according to the items of equipment fitted to your car.













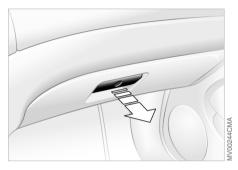








Glove box



To open

Pull the handle. The light inside the glove box comes on.

To close

Swing the lid up.

After using the glove box, close the lid without delay, so that it cannot cause injury in the event of an accident ◀

Locking

Lock with a master key. The glove box can only be unlocked with a master key.

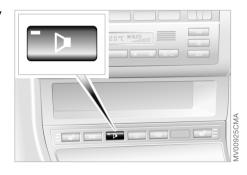
If you only hand over the door key and ignition key, for example to hotel staff (see page 30), this will prevent unauthorised access to the glove box.◀

Rechargeable hand light*

This is inside the glove box, on the left. The light is protected against overcharging and can therefore remain in the socket when it is not in use.

Always switch the light off before inserting it into the socket, otherwise the battery could be run flat and damaged.

Hi-fi system*



harman kardon hi-fi system

Each time you press the button, the special acoustic effect is either switched off or on.

When it is switched on, it suggests a listening area much larger than the car's interior, with an improved stereo effect at all seats.

If only a poor radio signal is received, the system will tend to switch between stereo and mono reception too frequently. It should then be switched off.









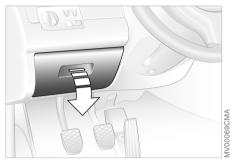




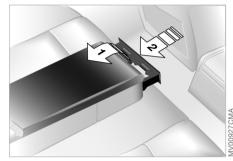




100 Storage compartments









There is a storage compartment at the left of the steering column. To open it, swing the lid down.

Close the storage compartment immediately after use, otherwise the lid could cause injury in the event of an accident.◀

Centre armrest, front

To open: press the button, see arrow, and swing up.

Other storage compartments and oddments nets*

There are other storage compartments in the front doors and in the centre console. There are nets* on the backs of the front seats.

Centre armrest, rear*

Without through-loading system:

The rear centre armrest has a storage compartment, a holder for two cans (beverages) and a holder for a litter bag.



2 Holder for cans: press











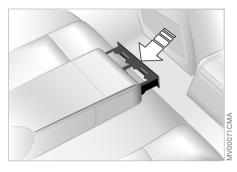








Storage compartments





Car phone*









Centre armrest, rear*

With through-loading system:

The rear centre armrest has a holder for ▷ Two fold-out power sockets in the two cans (beverages) and a holder for a litter bag.

Stowage package*

For your convenience, you have:

- rear centre console
- ▷ A spectacles compartment*, not shown, in the centre console.

Hands-free device

On cars prepared for telephone installation* or fitted with a communication package*, the trim panel for the handsfree microphone is in the roof lining, close to the interior light.

For further information on the car phone, see the telephone operating instructions





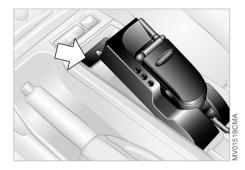






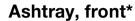


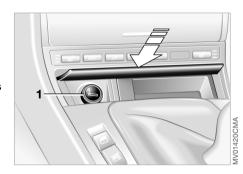
102 Car phone*

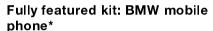


Make sure that the back of the mobile phone is against the shell, in order to ensure that the buttons on the side can be used.◀

See the separate operating instructions for information on how to use the mobile phone.







Inserting:

- 1. Press button, see arrow. The shell is released and pivots upward
- 2. Plug the adapter into the mobile phone
- 3. Push the mobile phone into the shell from the front, while guiding the cable through the cutout
- 4. Push the shell down until it engages.

There can be up to three buttons on the left side of the shell. You can use these buttons to operate the phone without removing it from the shell.

To empty

Press the edge of the open lid, see arrow: the ashtray will pop up and can be removed.

On cars with non-smoker fittings, the insert is removed in the same way.

Cigarette lighter

Hold the hot cigarette lighter only by its knob, otherwise you may suffer burns.

The cigarette lighter remains operational when the ignition key has been removed. For this reason, do not leave children in the car unattended.

Press in the cigarette lighter 1. The cigarette lighter can be removed when it pops back out.















Ashtray, front*

Cigarette lighter socket

This can be used for a hand light, vacuum cleaner or similar device, provided that it runs on 12V DC and its power consumption does not exceed 200 watts. Make sure that the socket is not damaged by attempting to insert plugs of the wrong pattern.

Non-smoker's equipment

On cars with non-smoker fittings, the socket is at the same point.

To access the socket: lift the cover.

Ashtray, rear*

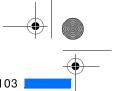


To empty

Press the edge of the open roller shutter in the opening direction, see arrow. the ashtray will pop up and can be removed.

On cars with non-smoker fittings, the insert is removed in the same way.





verview

Controls

Waintenan

Thor repairs

<u>e</u>











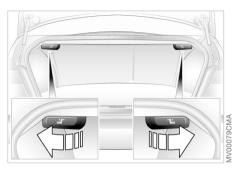








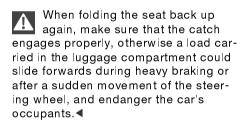
104 Through-loading system*



1. To release, pull the appropriate lever, 2. When released, the rear seat back see arrow

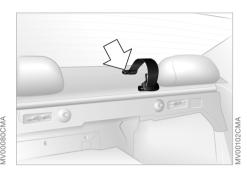


moves forward slightly. Reach into the gap and fold it down.



There are lashing points at the inside corners of the load area to which a load area net* or retaining straps can be attached when loads have to be secured.

See also under Loading, page 106.



Centre 3-point seat belt, rear seat*

You can roll up the 3-point seat belt for the rear seat before you fold back the through-loading system:

▷ Release the belt and insert the belt tongue at the end of the belt into the adapter on the rear parcel shelf, see arrow.



















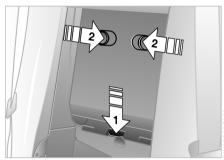




Ski bag*

Up to four pairs of standard skis or two snowboards can be carried safely and kept clean.

With the ski bag extended, plus the available space in the luggage compartment, you can carry skis up to 2.10 pm (6 ft 10 in) long. However, because of the narrowing of the ski bag, only two pairs of skis longer than 2.10 m (6 ft 10 in) can be carried.



1. Swing out the centre armrest, detach

the cover over the opening at the top

(it is secured by a burr fastener) and

3. Press the locking levers together (see arrows 2) and swing the cover

4. Lay out the ski bag between the front seats. The zip fastener simplifies access to the contents of the bag, and makes drying it out easier

place it on the armrest 2. Press the button accessible from inside the car, see arrow 1: this will unlock the loading flap in the luggage

compartment

forwards

Loading

side of the rear window shelf with the magnetic retainers.

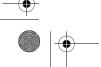
To stow away the ski bag, follow the













5. Inside the luggage compartment, secure the loading flap to the under-

opposite procedure.







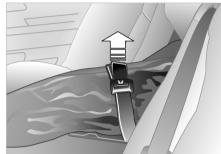






106 Ski bag*





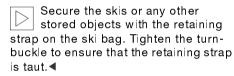
Loading

Cars with through-loading system:

- 1. Swing out the centre armrest, detach the cover over the opening at the top (it is secured by a burr fastener) and place it on the armrest
- 2. Press button 1 down and swing the cover forwards
- 3. Lay out the ski bag between the front seats. The zip fastener simplifies access to the contents of the bag, and makes drying it out easier
- 4. Press catch button 2: this unlocks the flap in the luggage compartment.

To stow away the ski bag, follow the opposite procedure.

Securing the load



Make sure that the skis are clean before they are before they are inserted into the bag, and that any sharp edges on them or their bindings do not damage or pierce the ski bag.◀

Loading

Always stow the local and secure it so that it cannot are set if the Always stow the load correctly endanger the car's occupants if the driver has to brake heavily or swerve. Do not exceed the car's gross weight limit or the axle load limits (see page 157) as this could render the car unsafe as well as constitute a legal offence.

Do not carry heavy or hard objects loose in the occupant area, in case they are thrown around and endanger the occupants when the car is braked heavily or during a sudden avoidance manoeuvre.











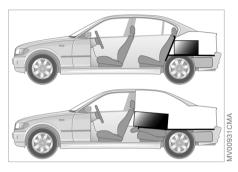




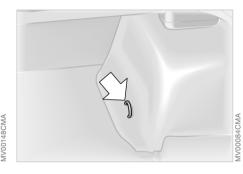




Loading







Loading

If you carry heavy or bulky loads in your BMW:

- far forward and as low as possible, directly behind the seat backs or the front bulkhead of the luggage compartment
- ▶ Wrap protective material around sharp corners and edges
- Do not stack loads higher than the seat backs

▶ If a very heavy load is carried and the Securing the load rear seat is unoccupied, the outer seat belts can be attached to the buckles on the opposite side of the car, see picture.

- ▷ For smaller and lighter loads, turn the rubberised anti-slip side of the floor mat uppermost or secure them with a luggage compartment net* or retaining straps, see page 38
- means of lashing* and securing large or heavy loads. There are lashing eyes (see arrow) at the inside corners of the luggage compartment to which retaining straps or similar can be attached

Please note the information supplied with load securing equipment.













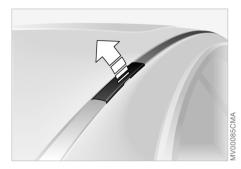








108 Roof rack*



A special roof rack system is available as an accessory for your BMW. If it is used, please comply with the installation instructions supplied.

Mounting points

Access to the mounting points:

Use the tool supplied with the roof rack system to open the caps, see arrow.

Loading and driving hints

Loaded roof racks significantly alter the driving and steering characteristics of your car by raising the centre of gravity.

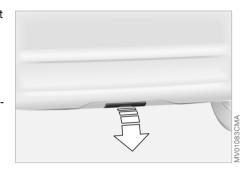
When loading the roof rack, ensure that the specified roof load limit, the car's gross weight limit and the axle loads are not exceeded. The relevant figures are shown in the "Technical data" section, page 157.

The roof load must be uniformly distributed and should not be too large in area. Heavy items of luggage should always be placed at the bottom. Make sure that there is sufficient clearance for raising the sunroof and that no objects extend back far enough to be struck by the luggage compartment lid when it is opened.

Secure loads to the roof rack so that they cannot shift or fall off during the journey, and thus endanger following traffic

Drive smoothly and avoid violent acceleration, braking or cornering. The roof rack and roof load increase the car's surface area exposed to the wind: fuel consumption will be higher and the loads on the roof structure of the car more severe.

Towing a trailer



Cover flap*

Removing:

Reach into the recess at the bottom of the trailer tow hitch cover flap and pull it off to the rear and down, see arrow.

For attaching and removing the bar. please see the separate instructions.

Installing:

Insert the flap into its guide and press it up.

Trailer tow hitch*

If a trailer tow hitch is fitted by the manufacturer, the vehicle will also be equipped with uprated suspension* at the rear as standard.













109

EW.

untrole

/aintenance

Tinor repairs

E E

eywords

Towing a trailer

If a trailer tow hitch is retrofitted, it must be of a type approved by BMW and be expertly installed by BMW Service. It is best to have uprated suspension fitted as well.

BMW does not approve any other suspension systems offered by the automotive trade.

See the manufacturer's instructions for information about upkeep and installation of the removable tow hitch.

If a trailer tow hitch is installed, the self-regenerating action of the rear bumper system may not be able to take effect. ◀

Nose weight

In Germany: a minimum nose weight of 25 kg (55 lb) is stipulated by law.

Permissible nose weight, see page 157.

The trailer's nose weight affects the towing vehicle, and must not lead to the car's gross weight limit or rear axle load limit being exceeded if a trailer is being towed. The car's payload limit is reduced by the weight of the trailer tow hitch and, if a trailer is being towed, by its nose weight. The gross weight limit for the combined car and trailer must not be exceeded.

Towing a trailer

The permissible trailer load and nose weights (towbar downthrust) are stated in "Technical Data", see page 157. The trailer load limit is also entered in the car's registration papers. Consult BMW Service regarding increased trailer weights.

Loading:

When loading the trailer, make sure that the weight is kept as low as possible and stowed if possible close to the axle.

A low centre of trailer gravity makes the outfit much more stable and safe to drive.

Do not exceed either the trailer's gross weight or the specified trailer load limit for the car. The smaller value is the limit which should be adhered to.

Gradients:

In the interests of safety and to avoid holding up other traffic, do not attempt to climb gradients steeper than 12%. If an application is made to tow a heavier trailer, the limit is 8%, see page 157.

Downhill gradients:

Take particular care on downhill gradients, because a trailer's tendency to fishtail, or swing from side to side, is more pronounced on a downhill slope:

on the approach to the downslope, always shift down to the next-lower gear, if necessary as far as 1st gear, and drive down the hill slowly.

Maximum speed:

The maximum speed limit when towing a trailer is 80 km/h (50 mph) in Germany, and similar speed limits apply in other countries also.

If the trailer begins to swing from side to side, the outfit can only be stabilised by immediately and sharply applying the brakes. Do not try to counter the trailer's action by turning the steering wheel unless absolutely necessary, and keep all movements of the steering wheel as gentle as possible.

Tyre pressures:

Check the car's and the trailer's tyre pressures most carefully. For the trailer, comply with the manufacturer's recommendations.

Outside mirrors:

Legislation prescribes two outside mirrors which bring both rear corners of the trailer into your field of view. Suitable mirrors can be obtained from BMW Service.





















110 Towing a trailer

Electrical system

When towing a caravan, avoid operating electrical equipment for excessive periods at a time; this will limit the drain on the car's battery.

Before starting a journey, check that the trailer's rear lights are operating correctly.





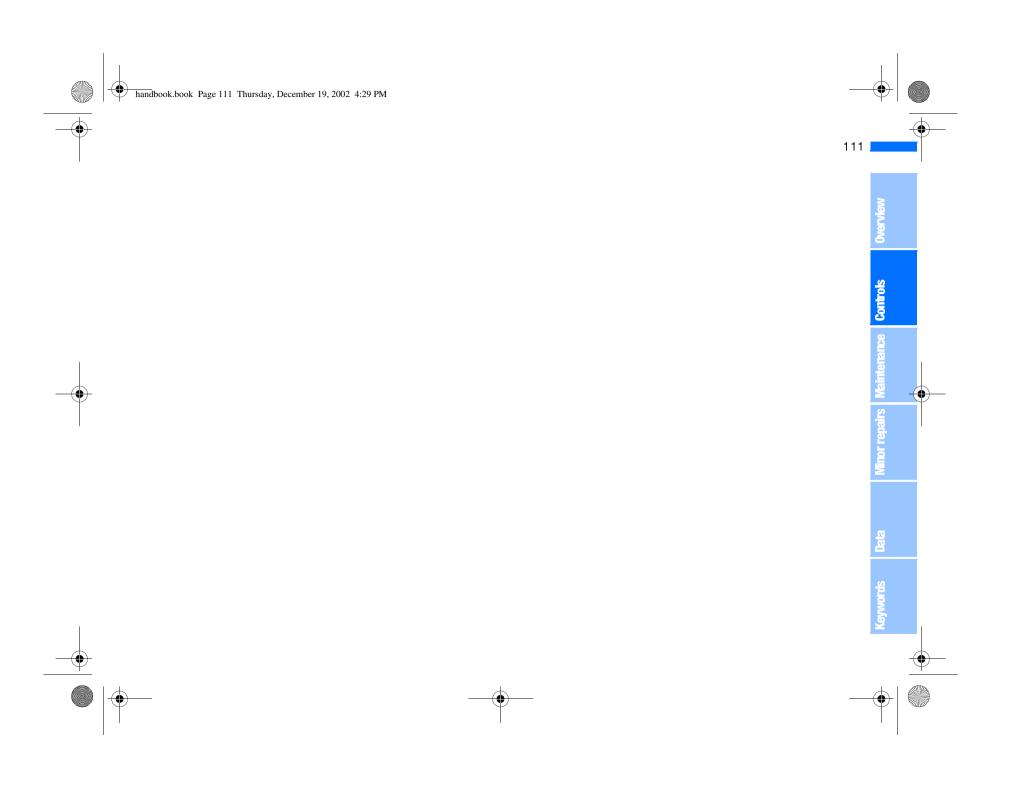




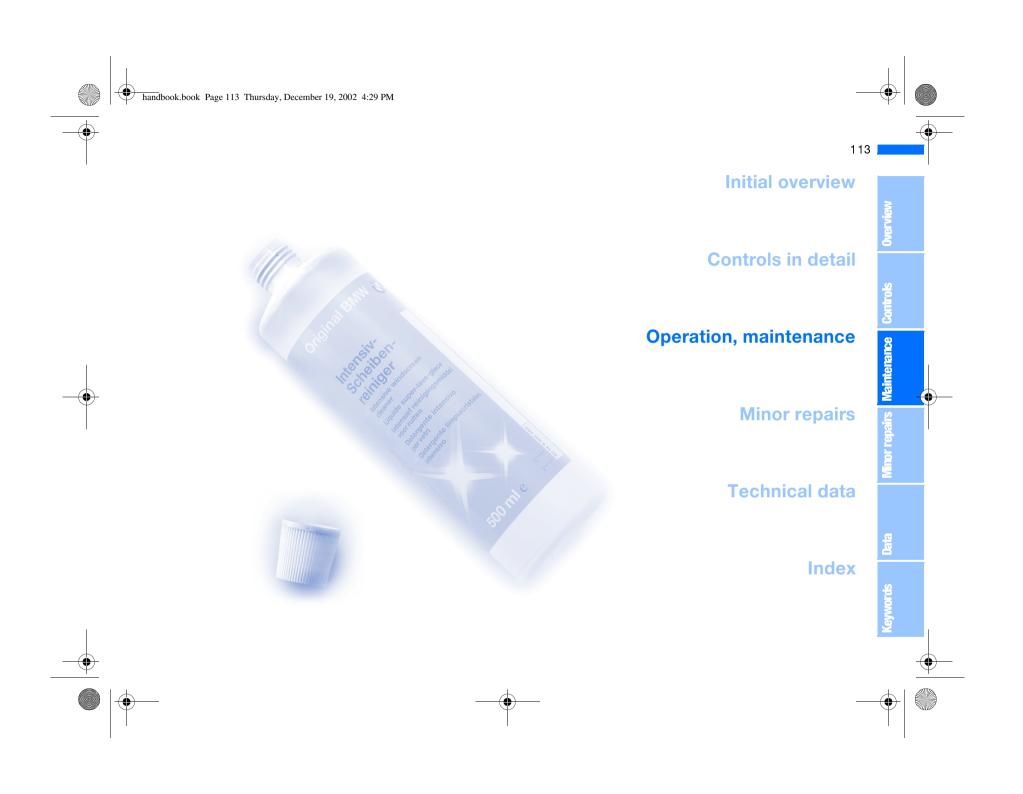




















114 Running in

Please comply with the following instructions, which are intended to ensure that your car achieves its optimum operating life and economy.

Engine and final drive

Up to 2000 km (approx. 1250 miles):

Drive at varying road and engine speeds, but do not exceed the following maximum values:

- Cars with spark-ignition engine 4-cylinder engine: 4500 rpm or 150 km/h (approx. 90 mph) 6-cylinder engine: 4500 rpm or 160 km/h (approx. 100 mph)
- Cars with diesel engine: 3500 rpm or 150 km/h (approx. 90 mph).

Avoid full throttle and do not use the automatic transmission kick-down.

From a distance reading of 2000 km (approx. 1250 miles) onwards, engine and road speeds can be gradually increased

Comply with these running-in instructions again if an exchange engine or final drive is fitted later in the car's life.

Tvres

New tyres do not achieve their full road grip immediately, for production reasons. You should therefore drive in a restrained manner for the first 300 km (approx. 200 miles).

Brakes

Brake pads and discs do not achieve a favourable wear and contact pattern until the car has covered about 500 km (approx. 300 miles).

Clutch

The clutch has to be bedded in over about 500 km (approx. 300 miles). Engage the clutch gently during this running-in period.

Driving hints

Brakes: do not rest your foot on the brake pedal while the car is in motion. Even slight continuous pressure on the brake pedal could cause overheating, brake pad wear or even brake system failure.

Aguaplaning: when driving on wet or slushy surfaces, reduce speed to prevent a wedge of water from forming between the tyre and the road. This situation means that the tyre can actually lose contact completely with the road surface, so that the car can neither be steered nor can the brake be properly applied.

Water on the road: when there is water on the roads, only drive through to a max. depth of 30 cm (12 in), and no faster than a walking pace, otherwise damage to the engine, electrical system and transmission may be caused. Rear-window shelf: do not place heavy or hard objects on the shelf, or these could injure the car's occupants when the brakes are applied.

Coat hooks: items of clothing hung from the hooks must not obstruct the driver's view. Do not hang heavy objects from the hooks, otherwise they could endanger the car's occupants in the event of sudden braking or avoidance action. ◀



















Anti-lock Brake System ABS

The principle

ABS prevents the wheels from locking when the brakes are applied, and thus increases active safety.

With ABS in action, the car achieves the shortest possible braking distances for the prevailing conditions - straight-line braking or cornering, on asphalt, ice, wet roads etc.

Braking with ABS

You use ABS most effectively by applying maximum brake pressure in situations which call for this (full braking).

The brake pedal pulsates and the noise of the hydraulic control system is audible, warning the driver that the ABS is active.

Dynamic Brake Control DBC

DSC incorporates the DBC functionality, see page 79.

When you apply the brakes rapidly this system automatically ensures maximum brake-servo boost, thus helping minimise braking distance in an emergency. The advantages of ABS are also utilised.

While braking is in progress, do not reduce the pressure applied to the brake pedal. DBC is deactivated when you release the brake pedal.

Cornering Brake Control CBC

CBC is a development based on ABS. When the brakes are applied on a corner when lateral acceleration is high, or tion, note that higher brake pedal presduring a lane change, it further improves the car's stability and makes it easier to steer.

Brake fluid level

Brakes

If the brake fluid level is too low and if brake pedal travel is longer than usual, one of the two hydraulic brake circuits may have failed.

Visit your nearest BMW Service. When driving the car in this condisure and longer brake pedal travel may be necessary. Modify your driving style accordingly.◀

Disc brakes

If the car covers only short distances, stands out of use for lengthy periods and is only used infrequently or gently, corrosion and dirt will affect the brake discs and pads more severely, because the minimum loads needed to achieve the desired self-cleaning effect of the disc brakes were not reached.

When the brakes are applied, corroded discs tend to judder, and even lengthy brake applications usually fail to eliminate this effect entirely.

















116 Brakes

In damp weather or heavy rain it is advisable to apply the brakes from time to time. When doing so, make sure that no other road-user is endangered. The resulting heat dries the brake discs and pads. Full braking power will subsequently be available when needed.

When descending long or steep hills, select the gear or range which calls for a minimum amount of braking. This avoids brake overload. Bear the enginespeed limits in mind: see page 70.

Never drive with the clutch pedal depressed, with the shift lever or selector lever* in neutral, or while the engine is switched off, otherwise engine braking action will not be present with the transmission in neutral and there will be no power assistance for the brakes and steering while the engine is switched off.

BMW 325xi, 330xi, 330xd: always have the brakes checked by BMW Service, as otherwise parts of the all-wheel drive could be damaged.

Brake pads

For your own safety: use only brake pads approved for your car by the manufacturer. The manufacturer cannot assess the suitability of unapproved brake pads and therefore cannot warrant road safety.













Tyre pressures

Information for your safety

The factory-approved radial-ply (braced tread) tyres have been chosen to match vour car's performance and to ensure driving safety and the desired standard of ride comfort.

The condition of the tyres and maintenance of the correct tyre pressures not only influence tyre life but are also decisive factors in ride quality and above all in road safety

Incorrect pressures are often a cause of tyre problems. They also have a considerable effect on the roadholding of your BMW.

Check tyre pressures regularly (see page 24) - including your BMW's compact or full-size spare wheel - at least every two weeks and before you start a long journey. Incorrect tyre pressures can adversely affect the car's roadholding and cause tyre damage, which could result in an accident.◀

Condition of tyres



Tyre tread - tyre damage

Inspect the tyres frequently for damage, the presence of foreign objects, unusual wear and sufficient tread depth.

Tread depth should, if possible, not be allowed to drop below 3 mm (approx. 1/8 in), despite the fact that European legislation, for example, specifies a minimum tread depth of only 1.6 mm (approx. 1/16 in). Below a tread depth of 3 mm (approx. 1/8 in) there is a risk of aquaplaning at fairly high road speeds even if the water is not very deep. There are wear indicators in the tread (see arrows) at points around the circumference of the tyre, as indicated by the letters "TWI" - for Tread Wear Indicator – on the shoulder of the tyre.

They become visible when the tread wears to 1.6 mm (approx. 1/16 in), indicating that the minimum tread depth allowed by law has been reached.

Do not continue driving with a flat tyre. If air pressure is lost from a tyre, this seriously affects the car's handling and braking, and could cause the driver to lose control. Avoid overloading the car, as this could cause the tyres' load capacity limit to be exceeded. Otherwise you could overheat the tyres and cause internal damage to them in the short to medium term.

This could lead to sudden pressure

Unusual vibration while the car is being driven could indicate a tyre fault or some other defect on your car. This can be caused by driving over kerbstones. for example. The same applies to any other unusual road behaviour, such as pulling severely to the right or left. In such cases, reduce speed immediately.

















Proceed carefully to the nearest BMW Service or tyre dealer, or have the car towed there so that it can be checked or its wheels and tyres inspected. All forms of tyre damage, which could in the worst case lead to sudden and total loss of pressure, represent a risk of serious or even fatal injury to the car's occupants and to all other road users. ◀

To maintain the car's good road behaviour, always fit tyres of the same make and tread pattern to all wheels.

Do not use retreaded tyres, as these could have adverse effects on the car's safety. They may differ in internal construction or have aged sufficiently to cast doubt on their durability.◀

New tyres

Age of tyres

A tyre's date of manufacture is shown as part of the inscription on the tyre

DOT ... 0802 means that the tyre was manufactured in week 8 of 2002.

BMW recommends tyre replacement after not more than 6 years, even if tyres up to 10 years old may still be suitable.

Safety tyres*

A safety tyre consists of the self-supporting tyre and a special wheel rim. The tyre is reinforced, so even if it deflates it remains controllable and the car is conditionally drivable. The car is equipped with a tyre pressure monitoring system (RDC), which indicates tyre deflation.

For further details on the tyre pressure monitoring system RDC, see page 84.



























Wheel and tyre combinations

Choosing the correct tyres

Use only wheels and tyres approved by BMW for your vehicle, because even if the nominal sizes are the same, manufacturing tolerances and other factors could cause the tyres to contact the bodywork and this, in turn, could result in serious accidents. If BMW has not approved the wheels and tyres it cannot assess their suitability or provide any guarantee of road safety. ◀

For each size of tyre BMW tests certain makes, and approves those that it certifies as roadworthy. You can obtain information on approved makes from BMW Service, Always comply with national regulations: some countries, for example, require special entries in the vehicle's registration papers.

The correct wheel and tyre combination has an effect on various systems which could otherwise malfunction, for example ABS, AGS, ASC+T/DSC and ADB/ADB-X/DBC. For this reason, only use tyres of the same make and tread design and, for example after a tyre failure, have the approved combination of wheel and tyre fitted to the car again as soon as possible.◀

Tyre storage

Store wheels and tyres in a cool, dry and preferably dark place when not in use. Protect tyres against contamination from oil, grease and fuel.

Winter tyres

The correct tyres

BMW recommends you to fit winter tyres (M+S radial-ply) if the car is used for driving in wintery conditions. Although there are tyres with an M+S marking for use all the year round, and their performance in winter is better than that of summer tyres with H, V, W, Y or ZR speed codes, they do not normally match the performance of winter tvres.

In the interests of reliable directional stability and steerability, fit winter tyres of the same make and tread pattern to all four road wheels.

Note the speed limit applicable to these tyres

In Germany: a warning notice stating the maximum permitted speed with winter tyres fitted must be displayed in the driver's field of view if the car is capable of a speed higher than that permitted for the winter tyres (please check for similar local legislation). Tyre dealers and BMW Service points can supply these labels.













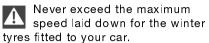








120 Winter tyres



Lack of expert knowledge or incorrect handling of tyres can cause damage and lead to accidents.

All work on tyres should therefore be carried out only by experts.

BMW Service will gladly place its specialised knowledge and facilities at your disposal.◀

Tyre condition and tyre pressures

Below a tread depth of 4 mm (3/16 in), winter tyres become noticeably less suitable for winter driving conditions and should therefore be replaced for safety reasons.

Keep to the specified tyre pressures and have the wheels and tyres rebalanced each time the wheels are changed or new tyres fitted.

Snow chains*

Fine link BMW snow chains may be fitted to either summer or winter tyres, but only to both rear wheels.

BMW 325xi, 330xi, 330xd: only under extreme circumstances - vehicle stuck on one side or if a tyre is inaccessible is it permissible to fit a chain to one rear wheel for a short time.

When fitting, comply with the manufacturer's instructions.

Snow chains cannot be fitted to tyres of the following sizes:

225/50 R 16

225/45 R 17

245/40 R 17

255/35 R 18















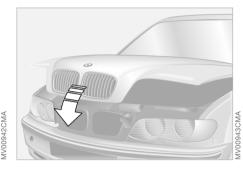












Unlocking

Pull the lever at the left under the dash- Pull the release lever and open the lid. board.

Do not work on the car unless you possess the appropriate specialised knowledge. If unfamiliar with the regulations which have to be complied with, have the work performed by BMW Service; incorrect handling of parts and materials could represent a safety risk for the car's occupants or other road users.◀

To open

To close

Allow the engine hood to drop from a height of approx. 30 cm (12 in) such that it is clearly heard to engage.

To avoid injuries, check each time the engine compartment lid is closed that the contact area is unobstructed.

If you notice during the journey that the engine compartment has not been properly closed, stop the car at the earliest possible moment and close it correctly.◀



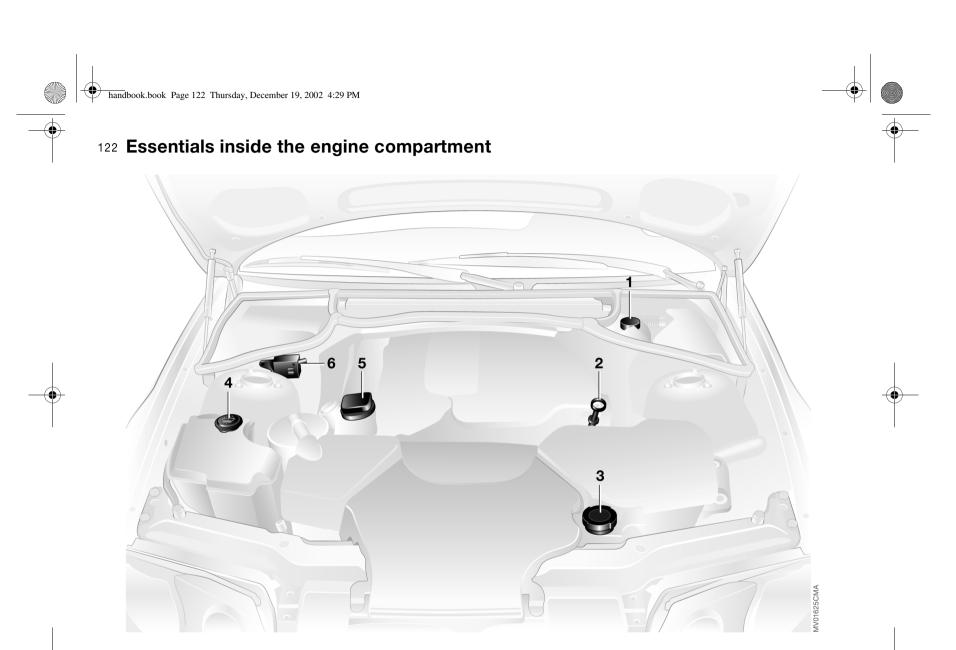


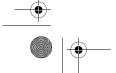












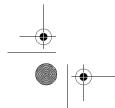


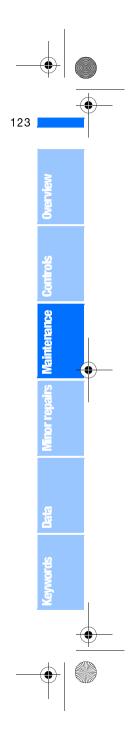


Essentials inside the engine compartment

- 1 Brake fluid reservoir 127
- 2 Engine oil dipstick 124
- 3 Coolant level-equalizing tank 126
- 4 Reservoir for headlight cleaning system and windscreen washer 124
- 5 Engine oil filler cap 125
- 6 Jump-start connection point 145











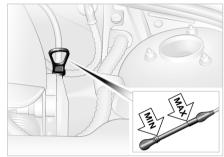




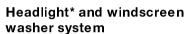
124 Washer fluid



Engine oil



The gap between the two notches on the dipstick is equivalent to about 1 litre (1.8 Imp. pints) of oil. Do not fill beyond the upper mark on the dipstick. Adding too much oil will harm the engine.



Capacity approx. 5.3 litres (9.3 lmp. pints).

Fill with water and – when required – with a suitable additive according to manufacturer's instructions.

It is best to mix the water and additive before filling the washer fluid tank.◀

Screenwash used in washer fluid is flammable. Keep it away from possible ignition sources and store it only in the carefully sealed original packs, inaccessible to children. Comply with the instructions on the container.

Checking engine oil level

- 1. Make sure the car is standing level
- 2. Switch off the engine, which should be at its regular operating temperature
- 3. After about 5 minutes, pull out the dipstick and wipe it clean with a lint-free cloth, a paper tissue or similar
- 4. Carefully push the dipstick fully into its tube, then pull it out again
- 5. The oil level must be between the two marks on the dipstick.

Like fuel consumption, engine oil consumption depends on driving style and operating conditions.







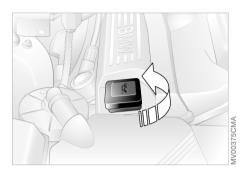












Adding engine oil

Do not add oil until the oil level has dropped to just above the lower mark on the dipstick, but do not permit the oil level to drop below this mark.

BMW engines are designed not to need separate additives in the engine oil, and indeed adding these substances could even be harmful in certain circumstances. The same applies to the manual transmission, automatic transmission, final drive and power steering.◀

In laboratory tests, prolonged contact with used oils has caused cancer. For this reason, always wash the affected skin areas thoroughly with soap and water after work.

Keep all oils, greases etc. in a place which is inaccessible to children and always read and comply with warnings on the containers.◀

When disposing of used oil, comply with the relevant environmental protection laws.◀

Approved engine oils

The quality of the engine oil is a decisive factor for the correct operation and ▷ Preferred: BMW Longlife-01 long life of your car's engine. BMW has ▷ Alternatively: BMW Longlife-98, conducted extensive tests before approving certain grades of engine oil.

BMW Service can provide details of the oils specifically approved by BMW for your car's engine. ◀

Alternative oils

If, in exceptional cases, you are unable to purchase one of these grades of oil, vou can top up the oil level in between oil changes, if only a small amount of oil is needed, with other oils. One of the following categories must be printed on the container of the oil you use:

Spark-ignition engines

- ▶ Preferred: BMW Longlife-01: or, for BMW 316i, 318i, BMW Longlife-01 FE
- ▷ Alternatively: BMW Longlife-98, BMW Longlife or ACEA A3.

Diesel engines

- BMW Longlife, ACEA A3/B3 or ACEA A3/B4.



















126 Coolant

Do not top up the cooling system while the engine is hot otherwise you may scald yourself on the resultant coolant steam.

To avoid the risk of subsequent damage, use only long-life antifreeze and corrosion inhibitor free from nitrites and amino compounds, and approved by the manufacturer. BMW Service is familiar with these products.

Antifreezes and corrosion inhibitors are hazardous to health. Store it in sealed original packs, inaccessible to children. Long-life antifreeze and corrosion inhibitor contains ethylene glycol, which is inflammable. For this reason, do not spill long-life antifreeze and corrosion inhibitor on hot parts of the engine; they could ignite and cause burns. ◀



When disposing of used long-life antifreeze and corrosion inhibitor, comply with the relevant environmental protection laws.

Checking coolant level

Correct coolant level with engine cold, approx. 20 °C (68 °F):

- Turn the cap of the expansion tank slightly counter-clockwise until it starts to open, then allow the pressure to escape before opening it fully
- The coolant level is correct when the upper end of the red float rod is level with the edge of the filler pipe or protruding by no more than 2 cm (3/4 in), in other words as far as the second mark on the float rod, see diagram beside filler neck
- 3. Top up the coolant if necessary. Top up slowly until the correct level is reached do not overfill.















Brake fluid



Telltale light



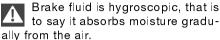
The brake warning light comes on even though the handbrake has been released:

The brake fluid level is too low, see page 18.

Topping up brake fluid

Ask BMW Service to restore the correct brake fluid level or to trace and rectify the cause of any brake fluid loss; BMW Service is aware of and will use the brake fluid grades - DOT 4 - recommended by the manufacturer.

Loss of brake fluid may be evident as increased brake pedal travel. Comply with the instructions on page 115.

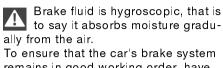


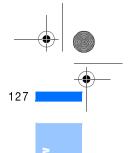
remains in good working order, have the brake fluid renewed every two years by BMW Service; see also page 72 and the Service Booklet.

Brake fluid is hazardous to health, and also attacks the car's paintwork. Store it in sealed original packs, inaccessible to children.

Do not spill brake fluid; add it only up to the MAX mark on the reservoir. If it comes into contact with hot parts of the engine, brake fluid may ignite and cause burns.◀

When disposing of old brake fluid, comply with the relevant environmental protection laws.◀























128 The BMW Maintenance System



The BMW Maintenance System is designed to uphold the car's road safety and operating reliability - and to save the customer as much money as possible.

Please remember that regular maintenance is not only essential to ensure that your car remains safe, but also to enhance its resale value.

Service interval indicator

Whereas conventional systems call for maintenance when a fixed distance in kilometres/miles has been covered, the BMW Maintenance System has for many years now taken the car's operating conditions into account as well, since one kilometre is by no means the same as another. 100,000 kilometres

completed exclusively in the form of short journeys cannot be equated with 100,000 kilometres made up of long main-road journeys only.

The maintenance routines based on actual use of the car consist of the Oil Service and Inspections I and II.

The principle of determining maintenance intervals according to load effectively covers all the operating conditions to which the car is likely to be exposed. Cars used very infrequently far less than 10,000 km (approx. 6000 miles) per year - should nonetheless have their engine oil changed at least every 2 years, since engine oil ages regardless of the loads imposed on it.

Service Booklet

For further information on maintenance points and the scope of maintenance work, please refer to the car's Service Booklet.

Depending on the circumstances in which the car is used, it may be worthwhile to inspect it for damage caused by stones flung up from the road, in order to guard against subsequent corrosion.

Have maintenance and repair work carried out by BMW Service. Make sure that maintenance work is confirmed in the Service Booklet after it has been carried out. These entries are evidence that your car has been serviced regularly and correctly, and are also the basis of any warranty claims.◀

















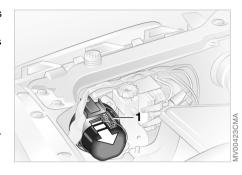


Rule of the road

When entering another country involves a switch to driving on the other side of the road, adopt the following measures to avoid dazzling oncoming traffic with the headlights.

Cars with halogen headlights

To avoid dazzling oncoming traffic, BMW Service can supply masking tape. Follow the instructions supplied with the tape.



Cars with xenon headlights

- 1. Turn the ignition key to position 0
- 2. Press the retainer and remove the caps at the rear of each headlight, see arrow
- 3. Left headlight: push lever 1 down. Right headlight: push lever 1 up.

When you return to the country of registration or enter a country in which vehicles are driven on the same side of the road as in the country of registration:

▶ Left headlight: push lever 1 up

OBD socket



The socket for On-Board Diagnosis is on the driver's side, at the left under the fascia, and concealed by a cover. The cover is marked OBD.

Components that have a decisive effect on exhaust emissions can be tested at this interface with a suitable device.















handbook.book Page 130 Thursday, December 19, 2002 4:29 PM



130 Technical modifications

Light-emitting diodes - LEDs

Controls, displays and other equipment items inside your car have light-emitting diodes (LEDs) behind a cover as their light source. These LEDs are similar to conventional lasers and are classified by law as "Class 1 light-emitting diodes".

Do not remove the cover or expose the eyes directly to the unfiltered light source for several hours at a time, as this could cause irritation to the iris. ◀





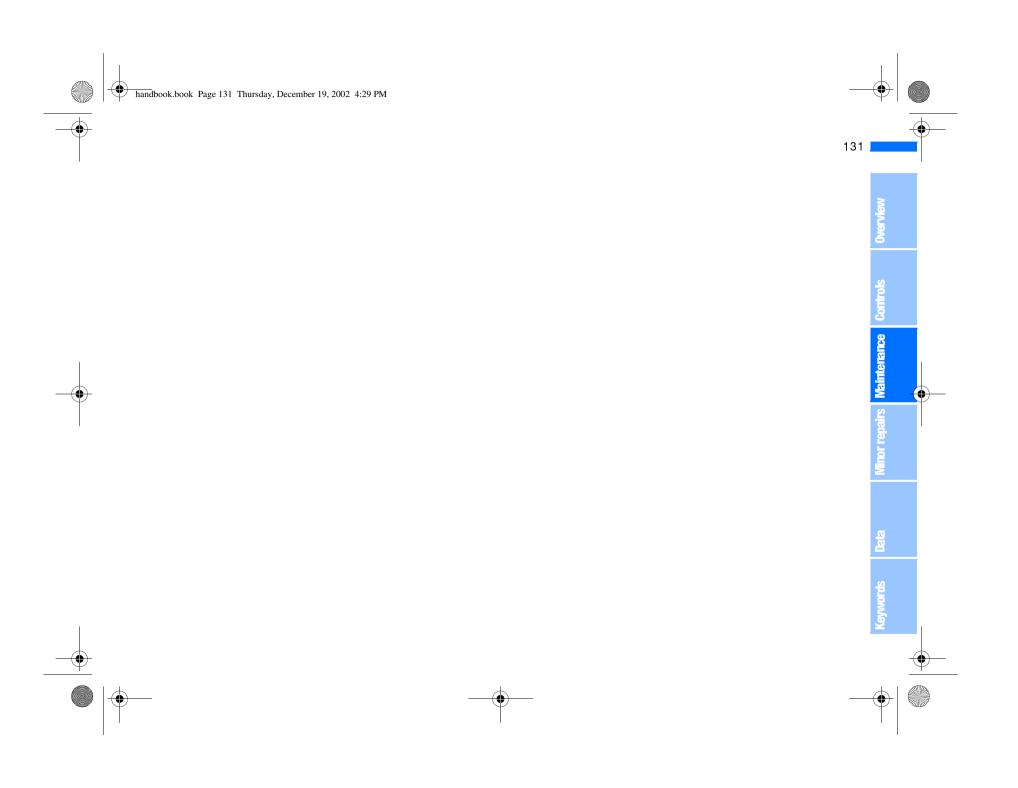


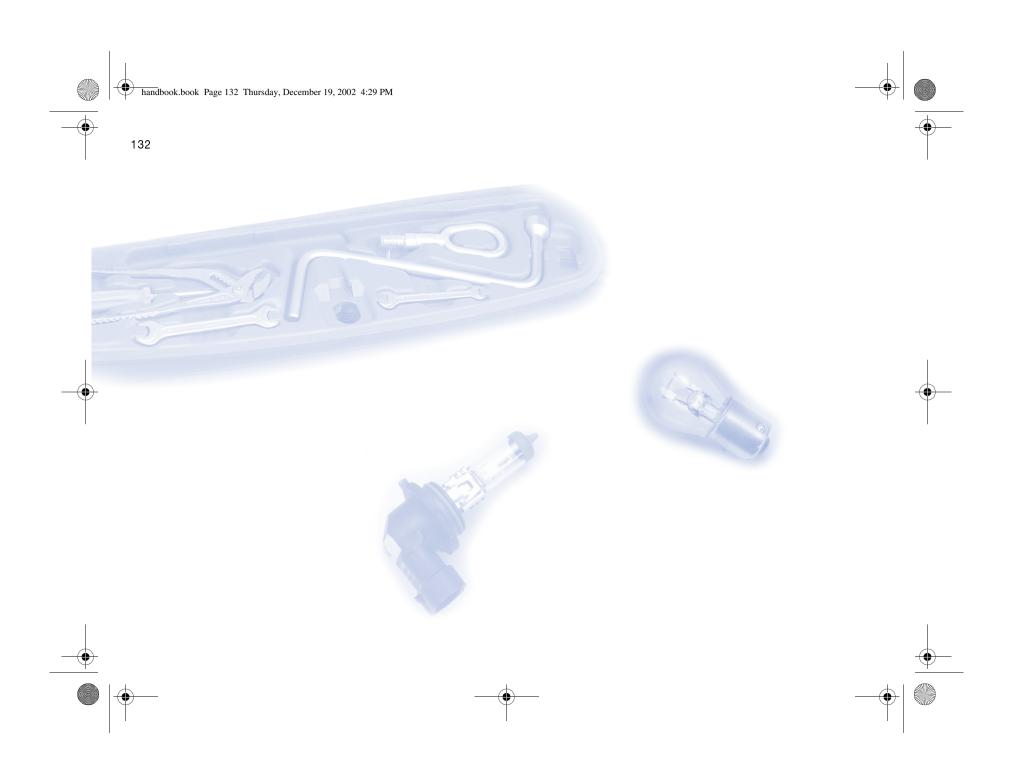


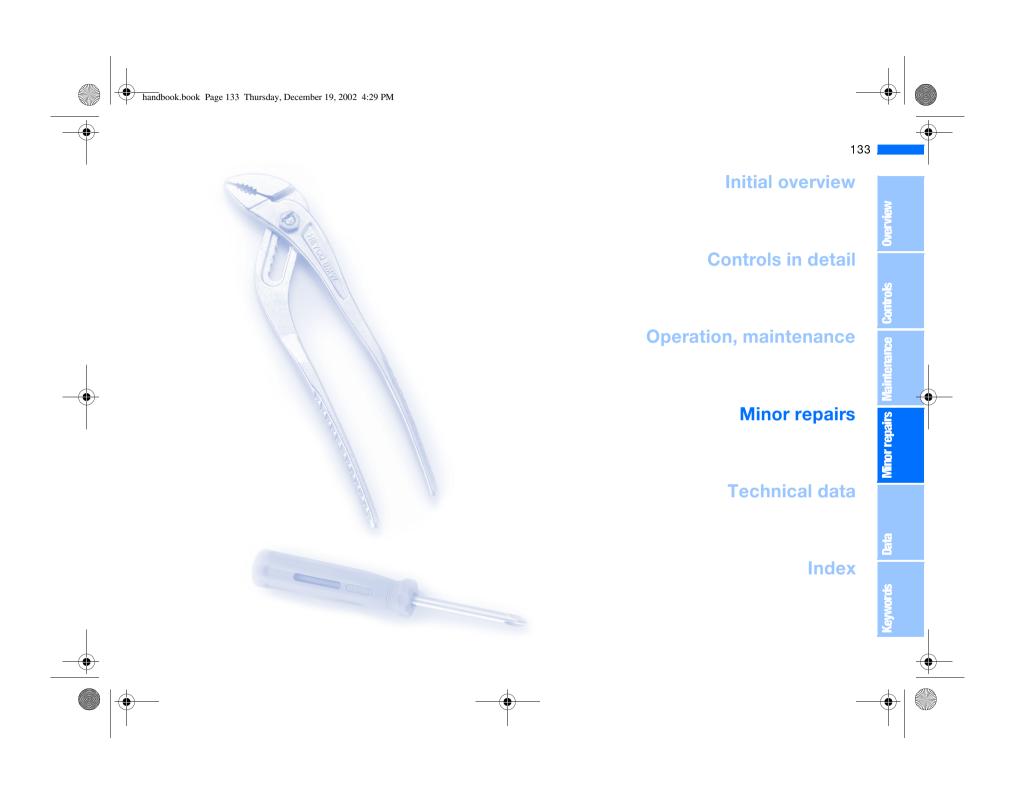












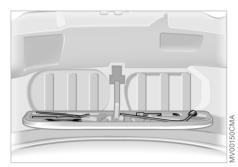








134 **Toolkit**



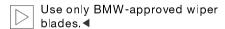
The toolkit is located in the luggage compartment lid.

Unscrew the wing bolt to remove.

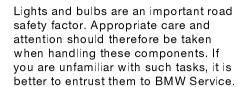
Wiper blades



- 1. Switch off the ignition
- 2. Lift the wiper arm completely clear
- 3. Turn the wiper blade sideways and pull the safety retaining spring, see arrow
- 4. Fold the wiper blade back in and disengage it by moving it towards the windscreen
- 5. Pull the wiper blade off upwards, past the wiper arm
- 6. Insert the new wiper blade and press it in until it engages with an audible click.



Lights and bulbs



Do not touch the glass of a new bulb with the fingers, because even slight amounts of dirt or grease will then be burned into the bulb and reduce its working life. Use a clean tissue, cloth or similar, or hold the bulb by its base ◀

A spare bulb box is available from BMW Service

Before any work is done on the electrical system, switch off the affected consumer equipment or disconnect the negative terminal from the battery, to prevent any risk of short-circuits occurring.

Observe any instructions supplied by the bulb manufacturer, to avoid causing injury or damage when changing bulbs.◀







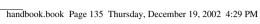








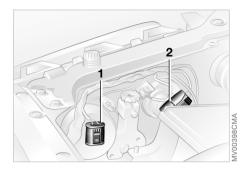








Lights and bulbs



Low-beam and high-beam headlights

Left side of the engine compartment:

- 1 Low-beam headlight
- 2 High-beam headlight

H7 bulb, 55 watts

The H7 bulb is pressurised, so wear goggles and gloves. There is otherwise a risk of physical injury if the bulb is damaged.◀

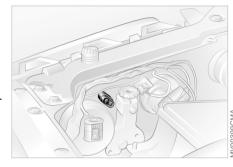
- 1. Press the two catches at the front. turn the unit counterclockwise and remove the bulb holder
- 2. Pull out the bulb and change it.

See the brochure entitled Car care for information on care of the headlights.◀

Xenon headlights

The operating life of these light units is extremely long and the likelihood of failure very low, provided that they are not switched on and off a very great number of times. If a xenon headlight should nonetheless fail, switch on the fog lights and continue the journey with great care, provided that local legislation does not prohibit this.

In view of the high voltages that are present, all work on any part of 1. Turn the bulb holder to the left and the xenon lighting system including bulb changing should only be performed by skilled personnel, as otherwise there is a risk of possibly fatal injury.◀



Side and parking lights

5 watt bulb

Left side of the engine compartment:

- take it off
- 2. Pull out the bulb and change it.











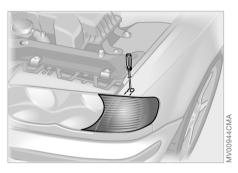


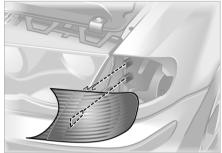


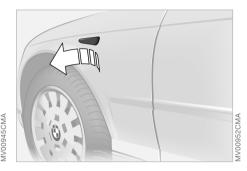




136 Lights and bulbs







Front turn indicator

- 21 watt bulb
- 1. Insert a screwdriver through the opening at the top and slacken the screw until the light can be pulled forward and removed
- 2. Pull off the plug
- 3. Press the bulb in gently, turn it in the OPEN direction (see the mark on the housing) until it can be removed, and insert the replacement bulb
- 4. Reconnect the plug

- 5. Insert the two lugs and the centering pin on the light in the guides on the car's body
- 6. Push the light back in and press it carefully into position
- 7. Tighten the securing screw.

Side turn indicator repeater*

5 watt bulb

- 1. Press the light forward, see arrow, with the fingertip at its rear edge and take it out
- 2. Press the bulb in slightly, turn to the left and remove.









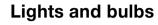


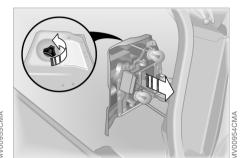














- 1 Brake light red
- 2 Reversing light white
- 3 Rear fog light red
- 4 Tail light red
- 5 Turn indicator yellow

Bulbs: 21 watts

Right luggage-compartment recess: Bulbs in rear side panel:

All bulbs are integrated into a central bulb holder.

- 1. Remove the screws securing the bulb holder, see arrow, part-view, and take it off
- 2. Take off the power supply cable and set the bulb holder down on a suitable surface, for example on the floor of the luggage compartment
- 3. Press the bulb in slightly, turn it to the left, take it out and insert the new
- 4. Reconnect the power supply cable
- 5. Reinstall the bulb holder, see arrow, part-view











Bulbs in luggage compartment lid:

1. Use a screwdriver to take out the two clips

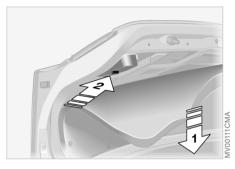




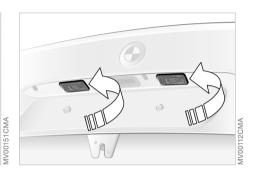


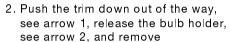


138 Lights and bulbs









- 3. Press the bulb in slightly, turn it to the left, take it out and insert the new bulb
- 4. Press the bulb holder back into place until it is heard to engage
- 5. Reattach the trim with the clips.

Centre brake light

This is an LED strip at the rear window. 5 watt bulb Please consult BMW Service if a fault occurs.

Licence plate lights

- 1. Insert a screwdriver blade into the cutout and press to the left, see arrows; this will release the light glass
- 2. Change the bulb.















39



Wheel-changing



Safety precautions in the event of a puncture or tyre failure:

Park the car as far as possible from the traffic flow, and on a firm surface.

Switch on the hazard warning flashers.

Engage the steering lock in the straightahead position, apply the handbrake and select first or reverse gear or selector lever position P.

puncture. Certain r sions are equipped spare wheel* of the car's road wheels.

All occupants must leave the car and be remove the floor panel, see page 37.
led to a point where they are not exposed to risk, for example behind a crash barrier at the side of the road.
If necessary, set up the warning triangle or a flashing warning light at a sufficient distance to the rear. Comply with national legislation.

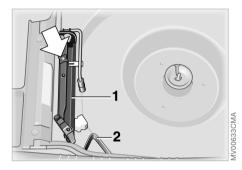
Change a wheel only on a flat, level and high-grip surface. If the surface is soft or slippery (snow, ice, tiles etc.), the car or the supporting jack could slip away to one side.

Position the car's jack on a firm surface. Never place wooden blocks or similar under the jack, or the maximum lifting capacity may be exceeded.

When the car has been jacked up, do not lie under it or start the engine since either could lead to potentially fatal accidents.◀

Your BMW has a compact spare wheel* for temporary use in the event of a puncture. Certain national-market versions are equipped with a conventional spare wheel* of the same size as the car's road wheels.

To remove the spare wheel from the luggage compartment fully remove the floor panel, see page 37.



What you need

To avoid rattling noises later, please make a note of the positions of the tools when they are removed, and reattach them in the same positions later.

Car jack 1

Lift up the floor panel in the luggage compartment, see page 37, and unscrew the red wing nut, see arrow. After using the jack, retract it fully, swing the crank handle back in and clip it securely

Chock 2

Stowed behind the jack on the end wall of the luggage compartment. To remove, loosen the wing nut

Overview

Controls

o-meneture/

Amor repairs

eywords







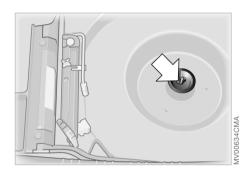








140 Wheel-changing

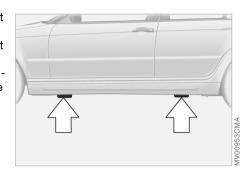


- ▷ Spare wheel or compact spare wheel - stowed beside the jack Unscrew the wing nut, see arrow, by hand, remove the retainer and lift out the wheel
- Wheel stud wrench in the car's toolkit, under the luggage compartment lid, see page 134.

Procedure

- 1. Note the safety precautions on the previous page
- 2. Prevent the car from rolling away: place the wheel chock behind the front wheel on the side opposite to where the wheel is to be removed (or in front of the front wheel on a

- downhill gradient). If the car cannot be moved to a point on a less severe gradient, you must protect it reliably against rolling away
- 3. Full-width wheel covers*: insert fingers into the vent holes and pull the cover off
- 4. Slacken the wheel studs by 1/2 turn. If the car has light-alloy wheels*, see the description of lockable studs on page 143



- 5. Offer the jack up to the mounting point nearest to the wheel that is to be removed, see arrows, with the base of the jack vertically beneath the mounting point and with its entire surface in contact with the ground; when the jack is raised by turning the handle, its head must enter the rectangular recess in the mounting point, see detail in next picture
- 6. Continue to turn the crank handle until the wheel you wish to change is lifted clear of the ground
- 7. Take out the wheel studs and remove the wheel





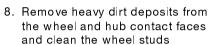




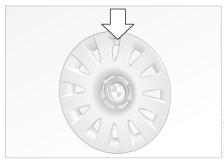


Wheel-changing





- 9. Fit the spare wheel or compact spare wheel, insert at least two screws on opposite sides of the hub and screw them in
- 10. Insert and screw in the remaining wheel studs, then tighten them all, working across the hub rather than round it
- 11. Lower the car and remove the jack
- 12. Firmly tighten the studs alternately on opposite sides of the hub



- 13. Full-width wheel covers*: place the cover in position so that the valve cutout, see arrow, is aligned with the tyre valve, then press the cover on to the wheel with both hands
- 14. Correct the tyre pressure at the earliest opportunity. Cars with tyre pressure control (RDC): After fitting the spare wheel and correcting the tyre pressure, reactivate the system; see page 84.

Prevent dirt from entering the tyre valves by attaching screw-on dust caps. Dirt in the tyre valve can often lead to a gradual loss of pressure.

Use only the genuine BMW fullwidth wheel cover, otherwise the cover may work loose. The full-width wheel cover must not be attached to the compact spare wheel, otherwise it could be damaged.◀

Use the jack only for wheelchanging. Never attempt to raise a different type of vehicle or any other load with the jack, or injury and damage to property could result.

For safety reasons, have the wheel stud tightening torque checked without delay, using a suitable calibrated torque wrench - correct tightening torque = 100 Nm.◀

When replacing a wheel in the spare wheel well, make sure that the central threaded rod in the well is not bent or damaged.

If the car is fitted with alloy wheels not of original BMW pattern, note that different wheel studs may be needed.

Have a flat tyre repaired as soon as possible, and the wheel and tyre rebalanced before fitting.

















BMW 318i, 320i, 318d, 320d

Only BMW-approved balance weights for allov wheels are to be used on the black-painted aluminium (lightweight) spare wheel. Do not attempt to use hammer-on steel balance weights on these wheels.

Driving with the compact spare wheel fitted

Drive very carefully and do not exceed a road speed of 80 km/h (50 mph).

You must expect the car's road behaviour to be different, for example braking action, braking distances or different self-steering effects when close to the handling limit.

These changes in road behaviour become more evident if the car's other wheels are fitted with winter tyres.

Only one compact spare wheel is to be fitted at a time. Fit a conventional wheel and tyre again at the earliest possible opportunity. Make sure that the tyre pressures are correct: see page 24.◀

Safety tyres*



The symbol identifying safety tyres is a circle with the letters RSC (short for "Runflat System Component") on the tyre sidewall. A safety tyre consists of the self-supporting tyre and a special wheel rim. The tyre is reinforced, so even if it deflates it remains controllable and the car is conditionally drivable. The car is equipped with a tyre pressure monitoring system (RDC), which indicates tyre deflation.

On account of the reinforced sides, you cannot usually tell whether a safety tyre is deflated simply by looking at it.◀

With a burst tyre

If a puncture or similar tyre failure occurs, the red warning icon lights up. In addition a warning signal is heard.

For further details on the tyre pressure monitoring system RDC, see page 84.

Carefully reduce speed to below 80 km/h (50 mph), avoiding pronounced braking and steering manoeuvres while doina so.

If you cannot immediately see which tyre is defective, check the pressure in all four tyres.

Have a new tyre fitted by BMW Service. For safety reasons, do not have safety tyres repaired. BMW Service has full information on how to handle safety tyres and is equipped with the requisite special tools.◀

Please consult your BMW Service when it is time to have summer or winter tyres fitted.◀

Resuming a journey despite a damaged tyre

Under certain circumstances and depending on load and the severity of tyre damage, a car fitted with safety tyres can be driven at speeds up to















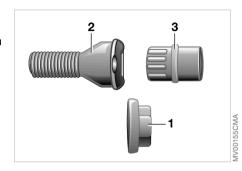


Safety tyres*

80 km/h (50 mph) even if a tyre deflates. The figures below show you roughly how far a car can be driven with safety tyres partially or fully deflated:

- ▷ Tyre pressure 0 bar (0 psi): approx. 150 km (90 miles)
- □ Tyre pressure 0.5–1 bar (7.3– 14.5 psi): approx. 500 km (300 miles)
- ▷ Tyre pressure higher than 1 bar (14.5 psi): approx. 1000 km (600 miles).

Lockable wheel studs*



1. Turn cap 1 slightly to the left with the wheel stud wrench, and take it off 2. Take adapter 3 out of the tookit and insert it into the wheel stud 3. Unscrew wheel stud 2.

After inserting and tightening the wheel stud again, remove the adapter and

The cap is located correctly if the M of the BMW badge is over a raised section on the wheel stud when

1 Cover cap

To remove:

2 Wheel stud for adapter 3 Adapter - in toolkit

press on the stud cap.

pressed on.◀

The code number is embossed on the front of the adapter. Please make a careful note of this number and keep it in a safe place, in case the adapter is ost.

































144 Battery

Maintenance

The battery is completely maintenancefree, which means that in moderate climatic conditions the original acid filling is sufficient for the battery's entire operating life.

Please consult BMW Service if you have any questions about the battery. The battery is completely maintenance-free, so the data below is for information only.◀

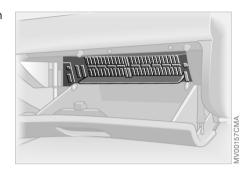
Do not disconnect battery leads while the engine is running, otherwise excess current will destroy the vehicle electronics system.◀

Recharging the battery

Always charge the battery in the car with the engine stationary, using the connections in the engine compartment. For the positions of these connections, see the section on jump starting on page 145.

Dispose of old batteries only to an authorised collection return them to a BMW Service. Batteries filled with acid should be transported and stored upright. Protect batteries against falling over when in transit.◀

Fuses



The fuses are located behind a panel in the glove box; the panel is held in place by two quick-release latches.

Po not repair burned and replace them with fuses with dif-Do not repair burnt out fuses or ferent colours or ampere ratings, otherwise overloaded electrical wires can cause a fire in the vehicle.◀





















Mobile Service

BMW Group's Mobile Service (Emergency Service) is there to assist you in the event of a breakdown, at any time of the day, at weekends and on public holidays.

The telephone numbers of the Mobile Service centre in your country are listed in the "Service Contact" brochure.

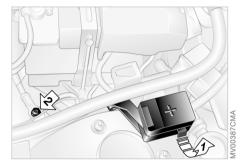
Starting with a flat battery

Do not use the spray products sold as starting aids.

If the car's own battery is flat, the engine of your BMW can be started by using two jump leads from another vehicle's battery. Conversely, you can also jump-start another vehicle with vour BMW. Use only jump leads with fully insulated battery-post clips.

Do not touch any electrically live parts when the engine is running, or a fatal accident may occur. Do not depart from the procedure described below, otherwise personal injury could result or one or both vehicles be damaged.◀

- 1. Check that the other vehicle's battery has a voltage of 12 V. This information is on the battery label
- 2. Switch off the engine of the donor vehicle and all consumers in both vehicles - with the exception of the hazard warning lights of the donor vehicle
- 3. Make sure that the bodies of the two vehicles do not touch - risk of shortcircuit



4. Your BMW's jump-starting connection in the engine compartment acts as the positive terminal of the battery. The protective cap on your BMW's jump-starting connection is marked "+". Open the cap by pulling the tab, see arrow 1.

Begin by connecting the clip on one end of the jump lead to the positive terminal of the discharged battery. then connect the other end to the positive terminal of the donor battery

5. Use the second jump lead to connect the negative terminals of the batteries in the two vehicles. Make the first connection to the negative terminal of the donor battery or to earth (ground) on the engine or body of the



















146 Starting with a flat battery

donor vehicle, and then to the negative terminal or earth (ground) on the engine or body of the vehicle which you wish to start.

On your BMW a special nut is provided for this purpose, see arrow 2

Always maintain the correct order when attaching the inventor otherwise there is a risk of sparks occurring at the battery and causing injury.◀

- 6. Start the engine of the donor vehicle and allow it to run for a few minutes at a fast idle speed
- 7. Start the engine of the other vehicle in the usual way. If an initial attempt to start the engine fails, wait several minutes until the flat battery has been recharged to a slightly greater degree
- 8. Allow the engines to run for a few minutes before disconnecting the jump leads
- 9. Disconnect the jump leads in the opposite order from that in which they were originally attached.

If necessary, have the battery checked and recharged by BMW Service.













Towing eye

The screw-in towing eye is kept in the toolkit and must always be carried on the car. It can be screwed in at the front or the rear of the car, and is only to be used for towing on a firm road surface.

Access to the holes for the towing eye

Front:

Press the cover off by inserting a screwdriver into the cutout at the top.



Rear:

Press the cover off by inserting a screwdriver into the cutout at the top.

Screw the towing eye in fully to avoid the risk of its thread being damaged.

Do not tow the car away or lash it down at any of the suspension components, as these could be damaged and render the car unsafe when it is subsequently driven.◀

Avoid offset towing and make sure that the tow-rope is taut when the towing vehicle pulls away.◀

Using a towbar

The towing eyes of both vehicles should be on the same side.

If it is impossible to avoid attaching the towbar at an angle, note the following:

- when cornering
- ▶ The angled towbar generates lateral forces

Do not tow a vehicle heavier than your own, as there is otherwise a risk of losing control.◀

Tow-starting

Cars with catalytic converter should only be tow-started if the engine is cold. It is always preferable to use jump leads.

- 1. Switch on the hazard warning flashers (comply with local regulations)
- 2. Turn the ignition key to position 2
- 3. Select 3rd gear
- 4. Keep the clutch pedal down. When the car is moving, gradually release the clutch pedal. After the engine has fired and is running, depress the clutch pedal again
- 5. Switch off the hazard warning flashers.



















148 Tow-starting, towing away

Have the cause of starting problems traced and rectified by BMW Service.

Automatic transmission cars: these cars cannot be towstarted ◀

For starting with a flat battery, see page 145.

Towing away

- 1. Ignition key in setting 1 to enable brake lights, headlight flashers, horn and windscreen wipers to be activated
- 2. Switch on the hazard warning flashers (comply with local regulations)

If the car's electrical system has failed, the car must be rendered identifiable to following vehicles, for instance by placing a notice or the warning triangle in the rear window.

Make sure that the ignition key is turned to position 1 even if the electrical system has failed, so that the steering lock does not engage and make the car impossible to steer. When the engine is not running, there is drive shaft if the front axle is raised or no power assistance and the brake servo is out of action. The steering and brakes will require extra effort to operate.◀

Automatic transmission cars:

- 1. Set the selector lever to N
- 2. Maximum towing speed: 70 km/h (approx. 43 mph)
- 3. Maximum towing distance: 150 km (approx. 90 miles).

BMW 325xi, 330xi, 330xd: towing away, one set of wheels clear of the ground

- 1. Manual-shift gear lever or selector lever in neutral
- 2. Stop the engine
- 3. Maximum towing speed: 50 km/h (approx. 30 mph)

4. Maximum towing distance: 150 km (approx. 90 miles).

If the car has to be towed for a longer distance, remove the rear the front drive shaft if the rear axle is raised, as otherwise the transfer box will be damaged.◀

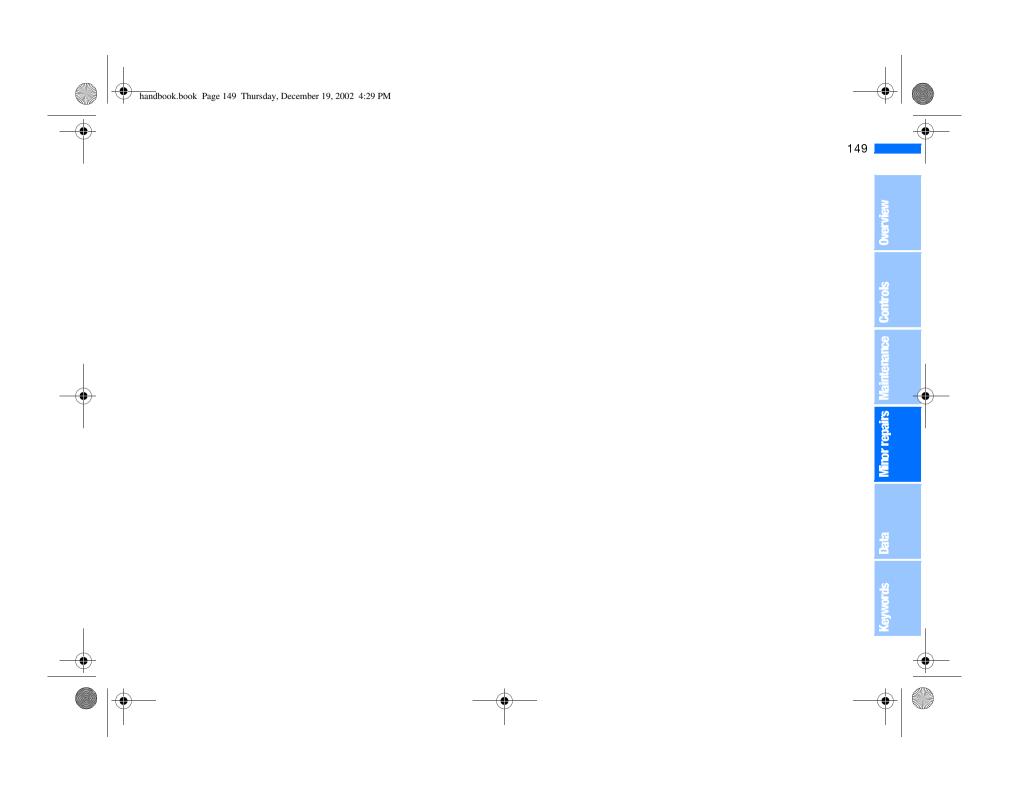


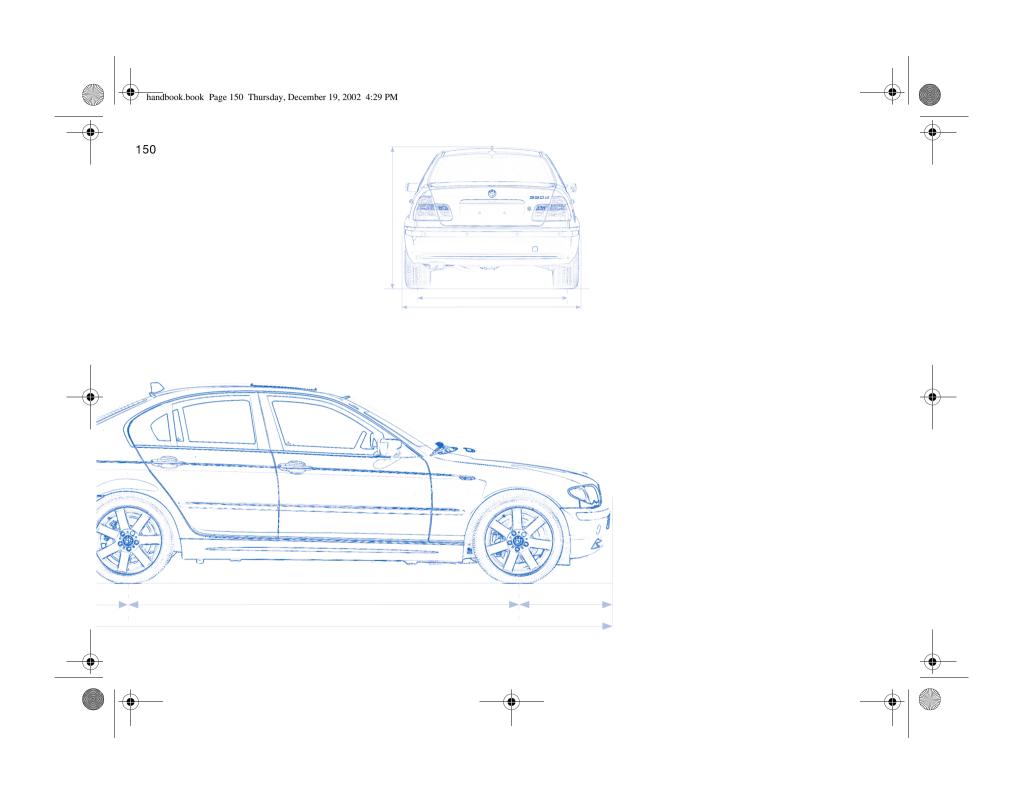


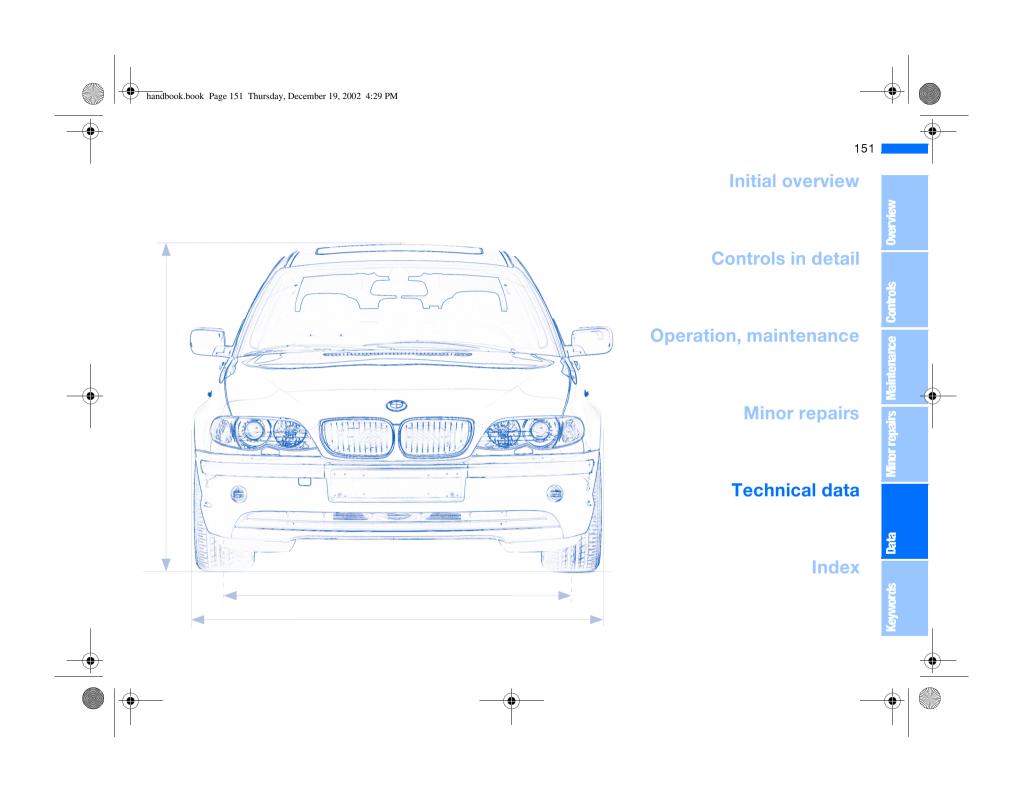




















152 Engine data

		BMW 316i	BMW 318i	BMW 320i	BMW 323i
Displacement	СС	1796	1995	2171	2394
Number of cylinders		4	4	6	6
Max. power output	kW/bhp	85/115	105/143	125/170	135/184
at engine speed	rpm	5500	6000	6100	5800
Max. torque	Nm	175	200	210	240
at engine speed	rpm	3750	3750	3500	3600
Compression ratio	ε	10.5	10.2	10.8	10.5
Stroke	mm	81	90	72	72
Bore	mm	84	84	80	84
Mixture preparation			Digital Mot	or Electronics DMI	Ξ

		BMW 330i/330xi	BMW 318d	BMW 320d	BMW 330d/330xd
Displacement	СС	2979	1951	1995	2926
Number of cylinders		6	4	4	6
Max. power output	kW/bhp	161/219	85/115	110/150	135/184
at engine speed	rpm	5800	4000	4000	4000
Max. torque	Nm	300	265	330	390
at engine speed	rpm	3500	1750-2500	2000	1750-3200
Compression ratio	ε	10.2	19.0	17.0	18.0
Stroke	mm	89.6	88	90	88
Bore	mm	84	84	84	84
Mixture preparation		DME	D	igital Diesel Electro	nics DDE























		BMW 316i	BMW 316i	BMW 318i	BMW 318	BMW 320i
		5-sp. manual	Automatic	5-sp. manual	Automatic	5-sp. manua
Urban	litres/100 km (mpg)	9.9 (28.5)	10.9 (25.9)	10.2 (27.7)	11.2 (25.2)	12.2 (23.2)
Extra-urban	litres/100 km (mpg)		6.4 (44.1)	5.5 (5 ^{1.4})	6.3 (44.8)	6.9 (4 ⁰ .9)
Combined	litres/100 km (mpg)	7.1 (39.8)	8.0 (35.3)	7.2 (39.2)	8.1 (34.9)	8.9 (31.7)
CO ₂ emissions	grams/km (oz/mi)	172 (9.8)	194 (11.Ó)	175 (9.9)	196 (11.1)	213 (12.1)

		BMW 320i	BMW 323i	BMW 323i	BMW 325xi	BMW 325x
		Automatic	5-sp. manual	Automatic	5-sp. manual	Automatic
Urban	litres/100 km (mpg)	13.1 (21.6)	12.7 (22.2)	15.6 (18.1)	13.2 (21.4)	14.2 (19.9)
Extra-urban	litres/100 km (mpg)	7.3 (38.7)	6.9 (40.9)	7.5 (37.7)	7.5 (37.7)	8.0 (35.3)
Combined	litres/100 km (mpg)	9.4 (30.0)	9.0 (31.4)	10.5 (26.9)	9.6 (29.4)	10.3 (27.4)
CO ₂ emissions	grams/km (oz/mi)	226 (12. 8)	221	240 `	230 (13.1)	247 (14.0)

		BMW 330	BMW 330i	BMW 330xi	BMW 330xi
		5-sp. manual	Automatic	5-sp. manual	Automatic
Urban	litres/100 km (mpg)	12.8 (22.1)	14.0 (20.2)	13.3 (21.2)	14.4 (19.6)
Extra-urban	litres/100 km (mpg)	6.9 (40.9)	7.0 (40.3)	7.4 (38.2)	7.8 (36.2)
Combined	litres/100 km (mpg)	9.1 (31.0)	9.6 (29.4)	9.6 (29.4)	10.3 (27.4)
CO ₂ emissions	grams/km (oz/mi)	218 (12.4)	230 (13.1)	229 (13.Ó)	246 (14.0) [°]











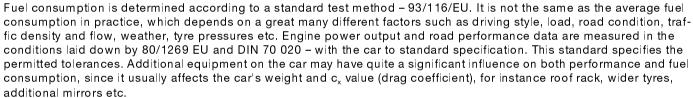






		BMW 318d	BMW 320d	BMW 320d	BMW 330d	BMW 330d
		5-sp. manual	5-sp. manual	Automatic	5-sp. manual	Automatic
Urban	litres/100 km (mpg)	7.4 (38.2)	7.6 (37.2)	9.7 (29.1)	9.2 (30.7)	11.1 (25.4)
Extra-urban	litres/100 km (mpg)	4.5 (62.8)	4.4 (64.2)	5.4 (52.3)	5.3 (53.3)	6.2 (45.6)
Combined	litres/100 km (mpg)	5.6 (50.4)	5.5 (51.4)	6.9 (40.9)	6.7 (42.2)	8.0 (35.3)
CO ₂ emissions	grams/km (oz/mi)	149 (8.5)	148 (8.4)	185 (10.5)	178 (10.1)	213 (12.1)

		BMW 330xd	BMW 330xd
		5-sp. manual	Automatic
Urban	litres/100 km (mpg)	10.1 (28.0)	12.0 (23.5)
Extra-urban	litres/100 km (mpg)	6.2 (45.6)	6.8 (41.5)
Combined	litres/100 km (mpg)	7.6 (37.2)	8.7 (32.5)
CO ₂ emissions	grams/km (oz/mi)	202 (11.5)	232 (13.2)



BMW 325xi, 330xi, 330xd: power can be tested only on a suitable dynamometer.

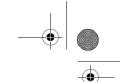






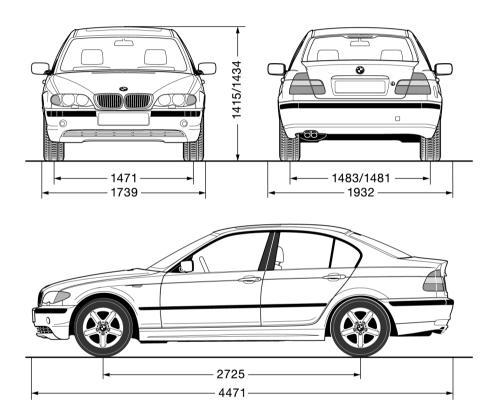




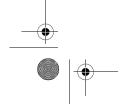


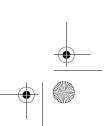


156 Dimensions - BMW 318i, 320i, 323i, 325xi, 330i, 330xi, 320d, 330d, 330xd



All dimensions in millimetres. The values after the "/" apply to the BMW 325xi, 330xi, 330xd. Minimum turning circle \varnothing 10.5 m, 34 ft 6 in/10.9 m, 35 ft 9 in.













Weights

		BMW 316i	BMW 318i	BMW 320	BMW 323	BMW 325xi				
Weight empty, ready for road, with 75 kg (165 lb) load, fuel level 80 %, excluding optional extras										
with manual transmission with automatic transmission	kg (lb)	1385 (3053)	1395 (3075)	1465 (3230)	1485 (3274)	1575 (3472)				
	kg (lb)	1415 (3120)	1425 (3142)	1500 (3307)	1520 (3351)	1605 (3539)				
Permissible gross weight with manual transmission with automatic transmission trailer towing with manual transmission with automatic transmission	kg (lb)	1810 (3990)	1820 (4012)	1890 (4167)	1910 (4211)	2000 (4409)				
	kg (lb)	1840 (4056)	1850 (4079)	1925 (4244)	1945 (4288)	2030 (4475)				
	kg (lb)	1885 (4156)	1895 (4178)	1965 (4332)	1985 (4376)	2075 (4575)				
	kg (lb)	1915 (4222)	1925 (4244)	2000 (4409)	2020 (4453)	2105 (4641)				
Front axle load limit	kg (lb)	880 (1940)	890 (1962)	920 (2028)	930 (2050)	1005 (2216)				
Rear axle load limit trailer towing	kg (lb)	1005 (2216)	1005 (2216)	1045 (2304)	1050 (2315)	1085 (2392)				
	kg (lb)	1120 (2469)	1120 (2469)	1160 (2557)	1165 (2568)	1195 (2634)				



Comtrols

interiance

Amor ronsing

4

Punnining















158 Weights

		BMW 316i	BMW 318i	BMW 320i	BMW 323i	BMW 325xi
Towing loads according to EU opera	ting per	mit – acc. to fa	ctory specificati	ion and legally p	permitted in Ger	many.
BMW Service will have details of pos	ssible in	creases. Note a	and comply with	n different value	s in certain cou	ntries.
unbraked – manual/	kg	670/670	680/680	720/720	720/720	720/720
automatic transmission	(lb)	(1477/1477)	(1499/1499)	(1587/1587)	(1587/1587)	(1587/1587)
braked, gradients up to 12 %	kg	1250/1400	1400/1500	1600/1600	1600/1600	1700/1700
	(lb)	(2756/3086)	(3086/3307)	(3527/3527)	(3527/3527)	(3748/3748)
braked, gradients up to 8 %	kg	1600/1600	1600/1600	1700/1700	1700/1700	1800/1800
– cert. required	(lb)	(3527/3527)	(3527/3527)	(3748/3748)	(3748/3748)	(3968/3968)
Trailer nose weight	kg	75	75	75	75	75
	(lb)	(165)	(165)	(165)	(165)	(165)
Roof load	kg	75	75	75	75	75
	(lb)	(165)	(165)	(165)	(165)	(165)
Luggage compartment capacity acc.	litres	440	440	440	440	440
to VDA test	(cu.ft)	(15.5)	(15.5)	(15.5)	(15.5)	(15.5)

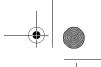
If you make full use of the quoted trailer load limit on gradients up to 12 % and also wish to load the car itself up to its permissible gross weight limit, you are recommended not to drive up gradients steeper than 10 %. Do not exceed either the axle load limits or the car's gross weight limit.















		BMW 330i	BMW 330xi	BMW 318d	BMW 320d	BMW 330d	BMW330xd
Weight empty, ready for road,	with 75 kg	(165 lb) load,	fuel level 80	%, without op	tional extras		
with manual transmission with automatic transmission	kg (b) kg (b)	1505 (3318) 1540 (3395)	1595 (3516) 1615 (3560)	1470 (3197) -	1490 (4167) 1505 (3318)	1595 (3516) 1610 (3549)	1695 (3737) 1715 (3781)
Permissible gross weight with manual transmission with automatic transmission	kg (lb) kg (lb)	1930 (4255) 1965 (4332)	2020 (4453) 2040 (4497)	1895 (4178) -	1915 (4222) 1930 (4255)	2020 (4453) 2035 (4486)	٠,
trailer towing with manual transmission with automatic transmission	kg (lb) kg (lb)	2005 (4420) 2040 (4497)	2095 (4619) 2115 (4663)	1970 (4277) -	1990 (2623) 2005 (4420)	2095 (4619) 2110 (4652)	٠,
Front axle load limit	kg (lb)	935 (2061)	1010 (2227)	905 (1995)	915 (2017)	1000 (2205)	1065 (2348)
Rear axle load limit trailer towing	kg (b) kg (b)	1075 (2370) 1190 (2623)	1095 (2414) 1205 (2657)	1035 (2282) 1150 (2535)	1060 (2337) 1175 (3472)	1100 (2425) 1215 (2679)	1120 (2469) 1245 (2745)



















160 Weights

		BMW 330i	BMW 330x	BMW 318d	BMW 320d	BMW 330d	BMW330xd			
Towing loads according to EU operating permit – acc. to factory specification and legally permitted in Germany. BMW Service will have details of possible increases. Note and comply with different values in certain countries.										
unbraked – manual/	kg	730/730	730/730	720	720/720	750/750	750/750			
automatic transmission	(lb)	(1609/1609)	(1609/1609)	(1587)	(1587/1587)	(1653/1653)	(1653/1653)			
braked, gradients up to 12 %	kg	1700/1700	1800/1800	1600	1600/1600	1800/1800	1800/1800			
braked, gradients up to 8 % – cert. required	(b) kg (b)	(3748/3748) 1800/1800 (3968/3968)	`1800/1800´	(3527) 1700 (3748)	(3527/3527) 1800/1800 (3968/3968)	(3968/3968) 1800/1800 (3968/3968)	(3968/3968) 1800/1800 (3968/3968)			
Trailer nose weight	kg	75	75	75	75	75	75			
	(lb)	(165)	(165)	(165)	(165)	(165)	(165)			
Roofload	kg	75	75	75	75	75	75			
	(lb)	(165)	(165)	(165)	(165)	(165)	(165)			
Luggage compartment capacity acc. to VDA test	litres	440	440	440	440	440	440			
	(cu.ft)	(15.5)	(15.5)	(15.5)	(15.5)	(15.5)	(15.5)			

If you make full use of the quoted trailer load limit on gradients up to 12 % and also wish to load the car itself up to its permissible gross weight limit, you are recommended not to drive up gradients steeper than 10 %. Do not exceed either the axle load limits or the car's gross weight limit.

















-			BMW 316	BMW 318i	BMW 320i	BMW 323i	BMW 325xi
Speed limit with automa	tic transmission	km/h (mph) km/h (mph)	206 (128) 200 (124)	2 18 (135) 2 14 (133)	226 (140) 223 (139)	231 (144) 223 (139)	234 (145) 231 (144)
Acceleration							
from 0 to	100 km/h (0 to 62 mph)	s	10.9/11.9	9.3/10.2	8.2/9.3	8.6	7.4/8.5
80 to	120 km/h (50 to 75 mph) in 4th gear	S	11.1	9.2	8.6	-	8.1

			BMW 330i	BMW 330xi	BMW 318d	BMW 320d	BMW 330d
1		km/h (mph) km/h (mph)	250 (155) 247 (153)	247 (153) 242 (150)	204 (127)	216 (134) 213 (132)	227 (141) 227 (141)
Acceleration							
from 0 to	100 km/h (0 to 62 mph)	s	6.5/7.0	6.6/7.4	10.7	8.9/9.1	7.8/8.2
80 to	120 km/h (50 to 75 mph) in 4th gear	s	6.9	7.0	9.3	7.5	6.9



Controls

Maintenance

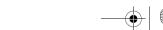
Minnr ronoire

22.2

PARTITION











handbook.book Page 162 Thursday, December 19, 2002 4:29 PM









				BMW 330xd
Speed limit km/h (r		km/h (mph)	224 (139)	
with automatic transmission		km/h (mph)	224 (139)	
Accelera	ation			
from 0	to	100 km/h (0 to 62 mph)	s	8.5/8.8
80	to	120 km/h (50 to 75 mph) in 4th gear	S	7.2





















163



Filling capacities

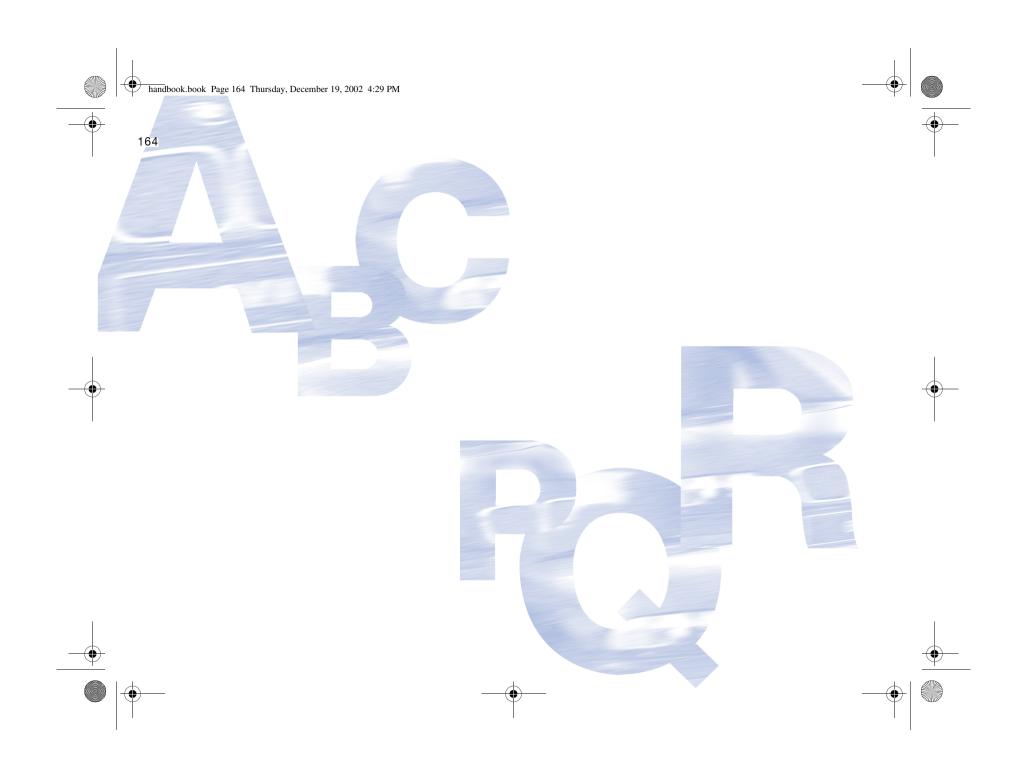
	Litres (Imp. units)	Note	
Fuel tank including reserve of	approx. 63 (13.9 gal) approx. 8 (1.8 gal)	Fuel grade, see page 23	
Windscreen washer/ headlight cleaning system	approx. 5.3 (9.3 pt)	For more details see page 124	
Cooling system, incl. heater circuit	7.0 (12.3 pt) - BMW 316i, 318i 8.4 (14.8 pt) - BMW 318d, 320i, 323i, 325xi, 330i, 330xi 9.3 (16.4 pt) - BMW 320d 10.2 (17.9 pt) - BMW 330d, 330xd	For more details see page 126	
Engine oil with filter renewal	4.25 (7.5 pt) - BMW 316i, 318i 5.0 (8.8 pt) - BMW 318d 5.5 (9.7 pt) - BMW 320d 6.5 (11.4 pt) - BMW 320i, 323i, 330i, 330xd 6.2 (10.9 pt) - BMW 325xi, 330xi 6.75 (11.9 pt) - BMW 330d	Longlife oil for spark-ignition or diesel engines. Oil grades, see page 124	
Manual transmission, automatic transmission, transfer box and final drive	_	Permanently filled, no oil changes	

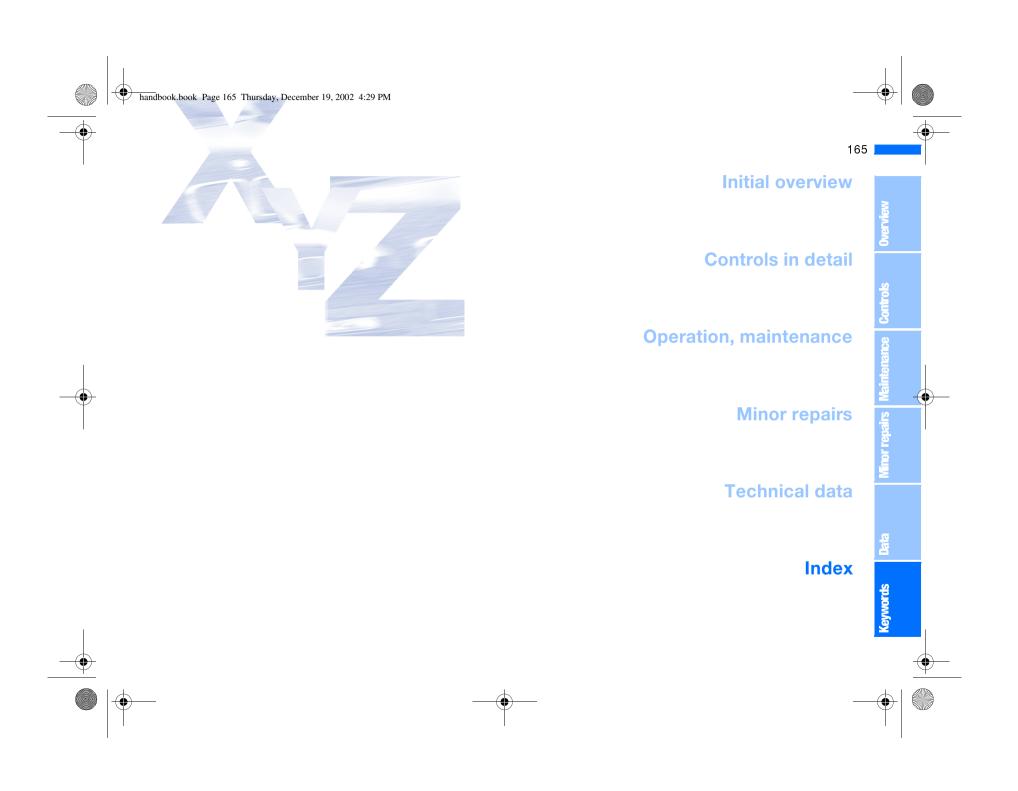




















From A to Z

ABS (Anti-lock Brake System) 18, 115 Acceleration 161 Accessories 5 Activated charcoal filter 98 ADB Automatic Differential Brake 77 Air conditioning 90 Air distribution 92, 96 Air supply 92, 96 Air vents 90, 94 ventilation 90, 94 Airbags 52 Air-conditioning mode 96 Alarm system 38 Alternative oils 125 Anti-freeze adding 126 Anti-lock Brake System ABS 18, 115 Anti-trap protection 40 Approved engine oils 125 Aguaplaning 114, 117 Armrest 100 ASC+T Automatic Stability Control plus Traction 18, 19, 77 Ashtray front 102 rear 103

AUC. automatic recirculated air control 97 Automatic air conditioning 94 Automatic car wash, see brochure on car care Automatic Differential Brake **ADB 77** Automatic dip control 86 Automatic headlight control 86 Automatic recirculated air control AUC 97 Automatic speed reduction for descents, see HDC 83 Automatic Stability Control plus Traction ASC+T 18, 19.77 Automatic transmission with Steptronic 63 Average fuel consumption 75 Average speed 75 Avoiding false alarms 39 Axle loads 157 В

Backrest adjustment 44

Battery charge current 18

charging 144

Battery

flat 145

BMW Maintenance System 128 BMW Sport seat 44, 45 Bore 152 Bottle holder, see Can holder 100 Brake hydraulics 18 Brake lights changing bulbs 137 Brake pads 18 Brakes faults 115 Breakdown service, see Mobile Service 145 Bulbs, changing 134 С Car Memory 54 Car phone 101 see separate operating instructions

Beaker holder, see Can

Beam throw adjustment 87

Belt height adjustment 47

Beverages holder, see Can

holder 100, 101

holder 100

Blower 92, 96

Black ice 75

Car wash, see brochure on car care Cassette player, see operating instructions for radio CBC Cornering Brake Control 18, 115 CD player, see operating instructions for radio Central locking button 35 Central locking system 30 Centre 3-point seat belt. rear seats 104 Centre armrest 100 Centre brake light 138 Check Control 73 Child restraint systems 53 Child safety 53 Child seat 53 Cigarette lighter 102 Clock 74 setting, see also operating instructions for radio and on-board monitor CO₂ emissions 153 Cockpit 14 Code, see operating instructions for radio Compartments 100 Compression ratio 152 Computer 74











Connecting vacuum cleaner 103 Consumption 75, 153 Controls 14 Coolant 126, 163 Coolant thermometer 71 Cooling system 163 Copyright 4 Cornering Brake Control CBC 18, 115 Cover flap 108 Cruise control 68

D

Data engine 152 performance 161 technical 152 weights 157 Daylight dim-dip circuit 86 DBC Dynamic Brake Control 115 Defogging windows 96 Defrost position 96 Defrosting windows 96 Deicing, windows 96 Delayed switch-off 86 Diesel fuel 24 Digital clock 74 Dimensions 155, 156 Dipstick, engine oil 124 Displacement 152

Display lighting 87 Displays 16 Door keys 30 Doors emergency operation 34 locking and unlocking 31 Driving hints 114 DSC Dynamic Stability Control 19, 79 DTC Dynamic Traction Contro| 79 Dynamic Brake Control **DBC 115** Dynamic Stability Control DSC 19.79 Dynamic Traction Control DTC 79

Ε

Econometer 71 Electric seat adjustment 45 Electrical consumer failure 144 Electrical defect sliding/tilt sunroof 42 Electrical malfunction fuel filler flap 22 Emergency actuation sliding/tilt sunroof 42 Emergency operation doors 34 fuel filler flap 22

Energy control 70 Engine starting 56 stopping 58 Engine compartment 122 Engine compartment lid release 121 Engine coolant 163 adding 126 Engine data 152 Engine oil capacity 163 consumption 124 quality 125 topping up 124 Engine oil grades 125 Engine oil level 18 checking 124 Engine oil pressure 18 Engine preheat 56 Engine rpm 152 Eyes, for towing 147

Failure indications 73 Filling capacities 163 First aid 22 First aid kit 22 Flat tyres 139 Fog lights 88 Folding rear seat backrests 104

Front seat adjustment 43 Fuel 23 consumption 153 preparation 152 Fuel additives 24 Fuel consumption 75 Fuel filler flap 22 release after electrical malfunction 22 Fuel gauge 71 Fuel grade 23 Fuel level indicator 71 Fuel reserve indicator 71 Fuel tank capacity 163 Fully featured kit for mobile phone 102 Fuses, replacing 144

G

Glove box 99 Grilles 90, 94 Gross weight 157

Halogen headlights 87 Hand light 99 Handbrake 59 Hands-free device 101 harman kardon hi-fi system 99 Hazard warning flashers 14

















HDC (Hill Descent Control) 83 Head airbags 52 Head restraints 46 Headlight adjustment. RHD/LHD traffic 129 Headlight cleaning system 124, 163 Headlight control 86 Headlight flasher 88 Headlights 86 Heated rear window 92, 97 Heating and ventilation 94 Heavy loads 107 High-beam headlights 20. 66,88 replacing bulbs 135 Hill Descent Control HDC 83 Holder for cans 100, 101 for litter bag 101 Horn 14 Hydraulic brake assistant, see DBC

Ice warning 75 Ignition keys 30 Ignition switch 56 Imprint 4 Inside mirror 51 **INSPECTION 72**

Instrument cluster 16 Instrument lighting 87 Instrument panel 14, 16 Interior light remote control 32 Interior lighting 32, 89 Interior mirror automatic dip 51 Interior movement detector 38 deactivating 39 Interlock 56 Intermittent wipe 66 ISOFIX child seat anchorage 53

J Jack 139

Key Memory 54 Keys 30 with remote control 30

L Lashing eyes 107 Lashing loads 107 Licence plate light changing bulb 134, 138 Light switch 86 Lights-on warning 86 Litter bag holder 100, 101

Load in car, headlight beam adjustment 87 Loading 106 Loads, securing 107 Loads, towed 157 Lockable wheel studs 143 Locked steering wheel 56 Long-life oils 125 Low-beam headlights 86 replacing bulbs 135 Luggage compartment 36 capacity 157 floor mat 38 floor panel 37 locking separately 36 remote control 32 Luggage compartment lid 36 emergency opening and closing 36 emergency operation 36 Luggage compartment lights 36 Lumbar support 45

М M+S tyres 119 Maintenance 72, 128 Manual transmission 59 MC player, see operating instructions for radio MD player, see operating instructions for radio

Memory 48 Micro-filter 93, 98 Microphone 101 Mirror automatic dip 51 Mirror heating 50 Mirror memory 48 Mirrors 50 Mobile phone, fully featured kit 102 Mobile Service 145 Modifications technical 5, 130 Monitoring system for tyre pressures 84 Multifunctional steering wheel MFL 21 Multipurpose switch 66

Navigation system, see separate operating instructions New tyres 118 Non-smoker's equipment 103 Nose weight 109, 157

OBD socket 129 Obstruction warning system PDC 76

















Odometer 70 Oil capacity 163 quality 125 Oil additives 125 Oil change intervals see Service Booklet Oil consumption 124 Oil dipstick 124 Oil filter renewal 163 Oil grades 125 Oil level checking 124 warning light 18 Oil pressure, warning light 18 OIL SERVICE 72 On-board computer 74 On-board monitor, see separate operating instructions Outside mirrors 50 Outside temperature display 75

Park Distance Control PDC 76 Parking aid 76 Parking brake 59 Parking light changing bulb 135

Parking lights 88 PDC (Park Distance Control) 76 Performance 152, 161 Petrol 23 Pollen 93, 98 Power output 152 Pressure monitoring system for tyres 84 Pressures 117 Protective function 40 Punctures 117

R Radiator 163 anti-freeze 126 Radio remote control key 30 Radio, see separate operating instructions Rain sensor 67 Range before refuelling 75 RDC (tyre pressure control) 84 Reading lights front 89 rear 89 Rear fog light 88 changing bulb 137 Rear lights 137 changing bulb 137 Rear seat backrests

folding 104

Rear-view mirrors 50 Recirculated air mode 92, 97 Reclining seats 43 Refuelling 22 Remote control 31 Replacement key 31 Replacing bulbs 134 Replacing wiper blades 134 Restraint system 53 Reverse 59 Reversing light 59 changing bulb 137 Revolution counter 70 RHD/LHD traffic, headlight adjustment 129 Roadside assistance, see Mobile Service 145 Roller sunblind 98 Roller sunblind, sun roller blind 98 Roof load 157 Roof rack 108 Running in 114

S Safety lock buttons 35 Safety tyres 118, 142 Seat adjustment electric 45 mechanical 44 Seat belt height adjustment 47

Seat belts 47 Seat heating 49 Seat memory 48 Seat. adjusting 43 Securing the load 107 Selector lever, automatic transmission 63 Seguential manual gearbox SMG 60 Service Booklet 128 Service interval indicator 72. 128 Servicemobile, see Mobile Service 145 Settings, configuring 54 Shiftlock 63 Side airbags 52 Side lights 86 Ski bag 105 Sliding/tilt sunroof 41 closing (electrical defect) 42 convenient opening and closing 34 Snow chains 120 Socket 103 for On-Board Diagnosis 129 Spare key 30 Spare wheel 139 Special oils 125 Speed limit 161

















Starting problems 145, 147 adjusting 50 Steering wheel with multiple functions 21 Steptronic 63 Stopping the engine 58 Storage compartments 100 Stratified interior temperatures 93, 97 Stroke 152 Summer diesel 24 Sunroof remote control 31 Symbols 4

Т Tank capacity 163 Tank display 71 Technical data 152 Technical modifications 5, 130 Telephone preparation 101 Telephone, see separate operating instructions Telltale and warning liahts 18 Telltale light, battery charge 18 Temperature display outside temperature 75 Temperature gauge engine coolant 71 Temperature, adjusting 92, 96 Thigh support, adjusting 44 Third brake light 138 Through-loading system 104 Tilt alarm sensor 32 remote control 32 switching off 39 Toolkit 134 Tools 134 Topping up brake fluid 127 Topping up washer fluid 124. 163 Torch 99 Torque 152 Towing 147 Towing a trailer 108 Towing a trailer or caravan 108 Towing away 147 Towing eyes 147

Tow-starting 147

Track 155, 156 Traction control see DSC 79 Trailer tow hitch 108 Tread depth, tyres 117 Trip distance recorder 70 Trunk see Luggage compartment 36 Turn indicator repeaters 20 Turn indicators 66 changing bulb 136 Turning circle 155, 156 Tyre changing 139 Tyre damage 117 Tyre pressure control (RDC) 84 Tyre pressure monitoring system 84 Tyre pressures 24, 117 checking 24 Tyre tread 117 Tyre wear indicators 117 Tyres 24, 117

Unladen weight 157

v Vacuum cleaner connecting 103 Vehicle height 155, 156 Vehicle length 155, 156 Vehicle weight 157 Vehicle width 155, 156 Ventilation 90, 94 Ventilation outlets 90, 94 Ventilation, draught-free 93, 97 Voice input 21

Warning light "Fasten safety belt" 18 Warning lights 18 Warning signals 73 Warning triangle 22 Washer fluid topping up 124, 163 Water on road flooding 114 Wear indicators in tyres 117 Weights 157 Wheel covers 140 Wheel stud wrench 139 Wheel studs 140 lockable 143 Wheelbase 155, 156 Wheel-changing 139 Wheels and tyres 119 Window controls, safety switch 40 Window lifts

electric 40



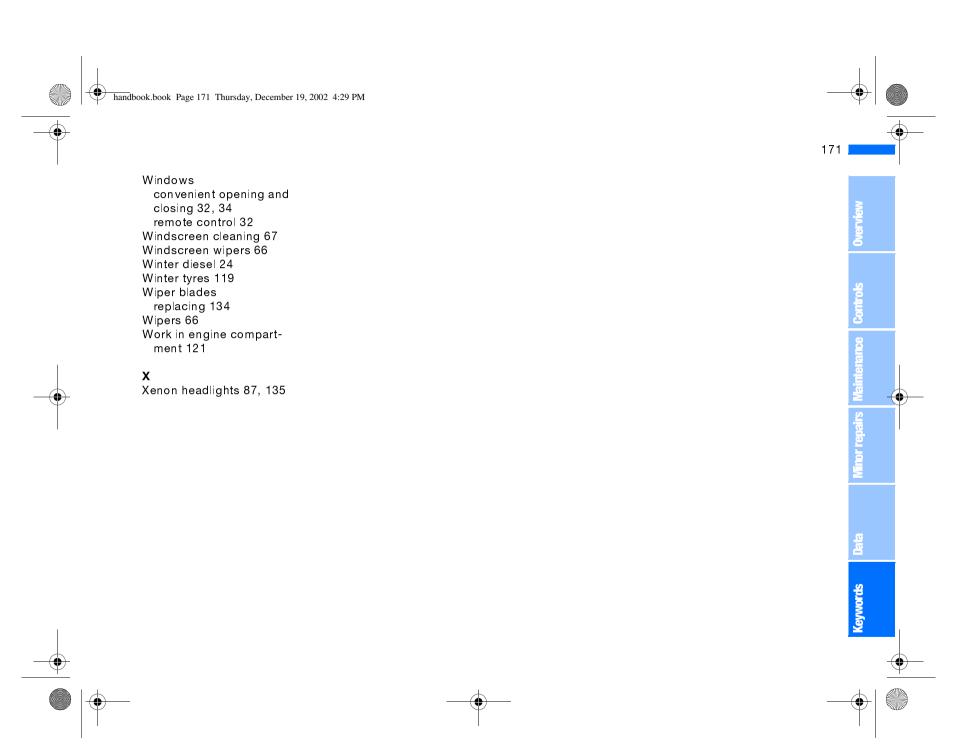


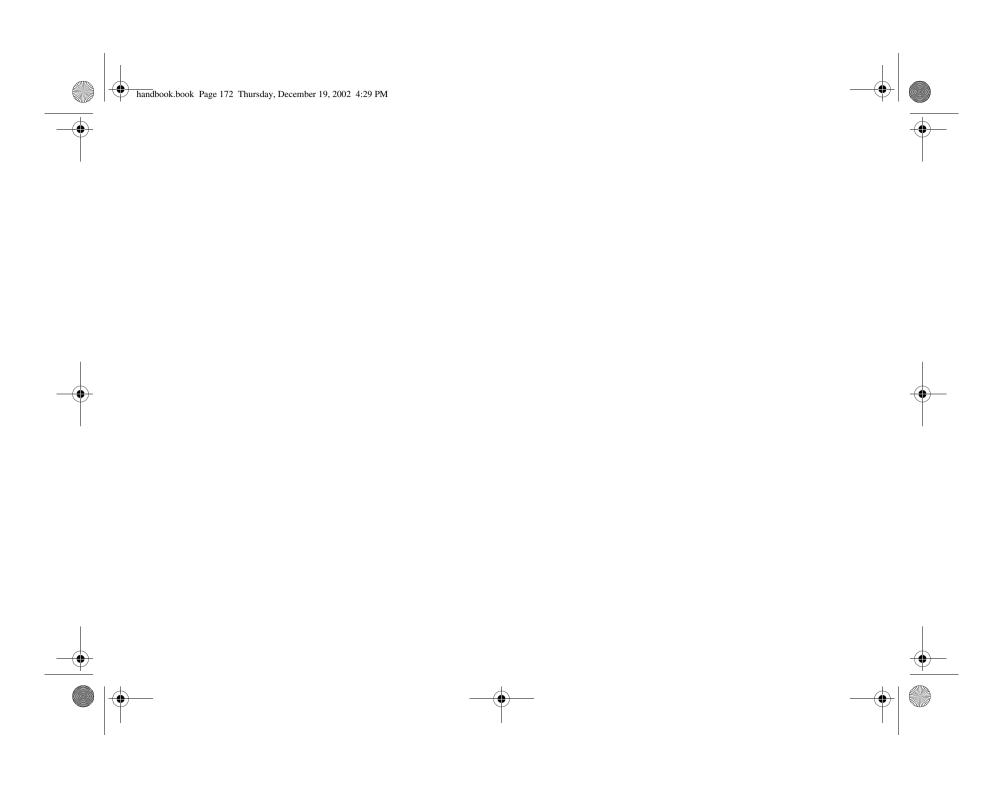




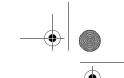














Refuelling stop

BMW recommends (= Castrol /

So that you always have access to the data you need when refuelling, you are recommended to write the values for your car into the table shown here. Use the index to find the information you need.

Fuel

Designation

Enter the fuel grade you prefer to use here.

Engine oil

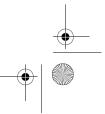
Grade

The quantity of oil between the two dipstick marks is approx. 1 litre (1.75 pints).

Tyre pressures

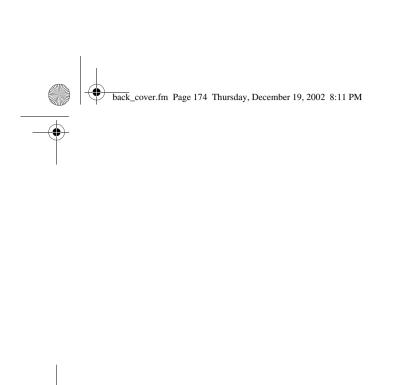
	Summer tyres		Winter tyres	
	front	rear	front	rear
Jp to 4 persons				
5 persons or 4 plus luggage				

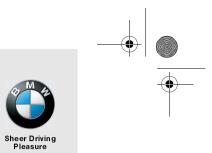












More about BMW

www.bmw.com



