

Owner's Manual  
for Vehicle



**525i**

**530i**

**540i**

**sedan**

**sport wagon**

Congratulations, and thank you for choosing a BMW.

Thorough familiarity with your vehicle will provide you with enhanced control and security when you drive it. We therefore have this request:

Please take the time to read this Owner's Manual and familiarize yourself with the information that we have compiled for you before starting off in your new BMW. The manual contains important data and instructions intended to assist you in obtaining maximum satisfaction from your BMW's unique array of advanced technical features. It also contains information on vehicle maintenance designed to enhance operating safety while simultaneously helping you to maintain your BMW's value throughout an extended service life. For additional information refer to the supplemental manuals.

This Owner's Manual should be considered a permanent part of this vehicle. It should stay with the vehicle when sold to provide the next owner with important operating, safety and maintenance information.

We wish you an enjoyable driving experience.

**BMW AG**

# Contents

<b>Notes</b>	About this Owner's Manual	8
	Symbols used	8
	The individual vehicle	8
	Status at time of printing	9
	For your own safety	9
	Symbol on vehicle parts	10
	Service and Warranty	10
	Reporting safety defects	10

<b>Overview</b>	Cockpit	14
	Instrument cluster	15
	Indicator and warning lamps	19
	Steering wheel with multifunction buttons	22
	Warning triangle	23
	First-aid kit	23
	Refueling	24
	Fuel specifications	25
Tire inflation pressure	26	

<b>Controls and features</b>	<b>Locks and security systems:</b>	
	Keys	32
	Central locking system	32
	Opening and closing – via the door lock	33
	Opening and closing – via the remote control	34
	Opening and closing – from the inside	37
	Luggage compartment lid/ Tailgate	38
	Rear window	40
	Luggage compartment	42
	Alarm system	42
	Electric power windows	44
	Sliding/tilt sunroof	46
	<b>Adjustments:</b>	
	Sitting safely	48
	Seats	48
	Manually-adjusted seat	49
	Electric power seats	50
	Head restraints	52
	BMW active seat	52
Safety belts	53	
Seat, mirror and steering wheel memory	54	
Seat heating	55	
Adjusting steering wheel	56	
Steering wheel heating	56	
Mirrors	57	

**Passenger safety systems:**

- Airbags 59
- Transporting children safely 62
- Vehicle Memory, Key Memory 67

**Driving:**

- Steering/Ignition lock 68
- Starting the engine 68
- Switching off the engine 70
- Parking brake 70
- Manual transmission 71
- Automatic transmission 72
- Automatic transmission with Steptronic 75
- Indicator/Headlamp flasher 78
- Washer/Wiper system/Rain sensor 78
- Cruise control 80

**Everything under control:**

- Odometer, outside temperature display 82
- Tachometer 83
- Energy control 83
- Fuel gauge 83
- Coolant temperature gauge 84
- Service Interval Display 84
- Check Control 85
- Computer 88
- Multi-Information Display (MID) 89
- Digital clock in the MID 90
- Computer in the MID 93

**Technology for safety and driving convenience:**

- Park Distance Control (PDC) 98
- Automatic Stability Control plus Traction (ASC+T)/Dynamic Stability Control (DSC) 99
- Self-leveling suspension 101
- Tire Pressure Monitor (RDC) 101

**Lamps:**

- Parking lamps/Low beams 103
- Instrument lighting 104
- High beams/Standing lamps 104
- Fog lamps 104
- Interior lamps 105
- Reading lamps 105

**Controlling the climate for pleasant driving:**

- Air conditioning 106
- Automatic climate control 109
- Roller sun blind 114
- Parked-car ventilation system 114

**Cabin convenience:**

- BMW Universal Transmitter 115
- Glove compartment 118
- Storage compartments 118
- Cellular phone 119
- Beverage holder 119
- Ashtray, front 119
- Cigarette lighter 120
- Ashtray, rear 120

**Loading and transporting cargo:**

- Through-loading system 121
- Ski bag 122
- sport wagon:
  - Cargo area 125
  - Roll-up cover 125
  - Partition net 125
  - Storage areas in the luggage compartment 126
- Cargo loading 128
- Roof-mounted luggage rack 129

# Contents

## Operation, maintenance

### Special operating instructions:

- Break-in procedures 132
- Driving notes 133
- Antilock Brake System 133
- Brake system 134

### Wheels and tires:

- Tire inflation pressure 135
- Tire condition 135
- Tire replacement 136
- Wheel and tire combinations 137
- Special characteristics of winter tires 138
- Snow chains 138

### Under the hood:

- Hood 139
- Engine compartment essentials 140
- Washer fluids 141
- Engine oil 142
- Coolant 144
- Brake fluid 145

### Maintenance:

- The BMW Maintenance System 146

### Laws and regulations:

- Technical modifications 147
- California Proposition 65 Warning 147
- OBD interface socket 148

## Owner service procedures

### Replacement procedures:

- Onboard tool kit 152
- Windshield wiper blades 152
- Lamps and bulbs 153
- Changing a wheel 158
- Battery 162
- Fuses 162

### Assistance, giving and receiving:

- Jump-starting 164
- Towing the vehicle 165

**Technical data**

- Engine specifications [170](#)
- Dimensions [171](#)
- Weights [173](#)
- Capacities [175](#)

**Index**

- Everything from A to Z [178](#)

## 8 Notes

### About this Owner's Manual

We have made every effort to ensure that you are able to find what you need in this Owner's Manual as quickly as possible. The fastest way to find certain topics is by using the detailed index at the end. If you are looking for a brief initial summary of the essentials, please turn to the first chapter.

Should you wish to sell your BMW at some time in the future, please remember to hand over the Owner's Manual to the new owner; it is an important part of the vehicle.

If you have any questions, your BMW center will be glad to advise you.

### Symbols used



Indicates precautions that must be 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 environment.

◀ Marks the end of a specific item of information.

\* Indicates special equipment, country-specific equipment and optional extras.



Identifies index entries that refer to owner service procedures or topics on vehicle maintenance.



Identifies systems or components, which can be activated or adapted to suit an individual driver's requirements ("Vehicle Memory", "Key Memory"). Refer to page 67. Activation and adjustments on some of these systems can be performed at your BMW center.

### The individual vehicle

On buying your BMW, you have decided in favor of a model with individualized equipment and features. This Owner's Manual describes all models and equipment that BMW offers within the same group.

We hope you will understand that equipment and features are included which you might not have chosen for your vehicle. You can easily identify any differences with the aid of the asterisk \* used to identify all optional extras and accessories.

If your BMW features equipment which is not described in this Owner's Manual, Supplementary Owner's Manuals are enclosed. We ask you to read these manuals as well.

## Notes

### Status at time of printing

BMW pursues a policy of continuous, ongoing development designed to ensure that our vehicles continue to embody the highest quality and safety standards combined with advanced, state-of-the-art technology. For this reason, it is possible that the features described in this Owner's Manual could differ from those on your vehicle. Nor can errors and omissions be entirely ruled out. We therefore request your understanding for the fact that we are unable to recognize any legal claims based on the data, illustrations or descriptions in this manual.

### For your own safety



Use unleaded gasoline only. Fuels containing up to and including 10 % ethanol or other oxygenates with up to 2.8 % oxygen by weight – i.e. 15 % MTBE or 3 % methanol plus an equivalent amount of co-solvent – will not void the applicable warranties covering defects in materials or workmanship. Field experience has indicated significant differences in fuel quality – volatility, composition, additives, etc. among gasolines offered for sale in the United States and Canada. The use of poor-quality fuels may result in driveability, starting and stalling problems, especially under certain environmental conditions, such as high ambient temperature and high altitude. Should you encounter driveability problems that you suspect could be related to the fuel you are using, we recommend that you respond by switching to a recognized high-quality brand. Failure to comply with these recommendations may result in unscheduled maintenance. Obey pertinent safety rules when you are handling gasoline. ◀



**Important safety information!** For your own safety, use genuine parts and accessories approved by BMW. When you purchase accessories tested and approved by BMW and Original BMW Parts, you simultaneously acquire the assurance that they have been thoroughly tested by BMW to ensure optimum performance when installed on your vehicle. BMW warrants these parts to be free from defects in material and workmanship. BMW will not accept any liability for damages resulting from installation of parts and accessories not approved by BMW. BMW cannot test every product from other manufacturers to verify if it can be used on a BMW safely and without risk to either the vehicle, its operation, or its occupants. Original BMW Parts, BMW Accessories and other products approved by BMW, together with professional advice on using these items, are available from all BMW centers.

Installation and operation of non-BMW approved accessories such as alarms, radios, amplifiers, radar detectors, wheels, suspension components, brake dust shields, telephones – including operation of any portable cellular phone from within the vehicle without using an externally-mounted antenna – or transceiver equipment, eg., CBs, walkie-talkie, ham radio or similar accessories, may cause extensive damage to the vehicle, compromise its safety, interfere with the vehicle's electrical system, or affect the validity of the BMW Limited Warranty. See your BMW center for additional information. ◀



Maintenance, replacement, or repair of the emission control devices and systems may be performed by any automotive repair establishment or individual using any certified automotive part. ◀

### Symbol on vehicle parts



Indicates that you should consult the relevant section of this Owner's Manual for information on a particular part or assembly.

### Service and Warranty

This manual is supplemented by a Service and Warranty Information Booklet for US models or a Warranty and Service Guide Booklet for Canadian models.

We recommend that you read this publication thoroughly.

Your BMW is covered by the following warranties:

- ▷ New Vehicle Limited Warranty
- ▷ Rust Perforation Limited Warranty
- ▷ Federal Emissions System Defect Warranty
- ▷ Federal Emissions Performance Warranty
- ▷ California Emissions Control System Limited Warranty

Detailed information about these warranties is listed in the Service and Warranty Information Booklet for US models or in the Warranty and Service Guide Booklet for Canadian models.

### Reporting safety defects

The following only applies to vehicles owned and operated in the US.

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration NHTSA in addition to notifying BMW of North America, LLC, P.O. Box 1227, Westwood, New Jersey 07675-1227, Telephone (800) 831-1117.

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

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





## Overview

Controls and features

Operation, maintenance

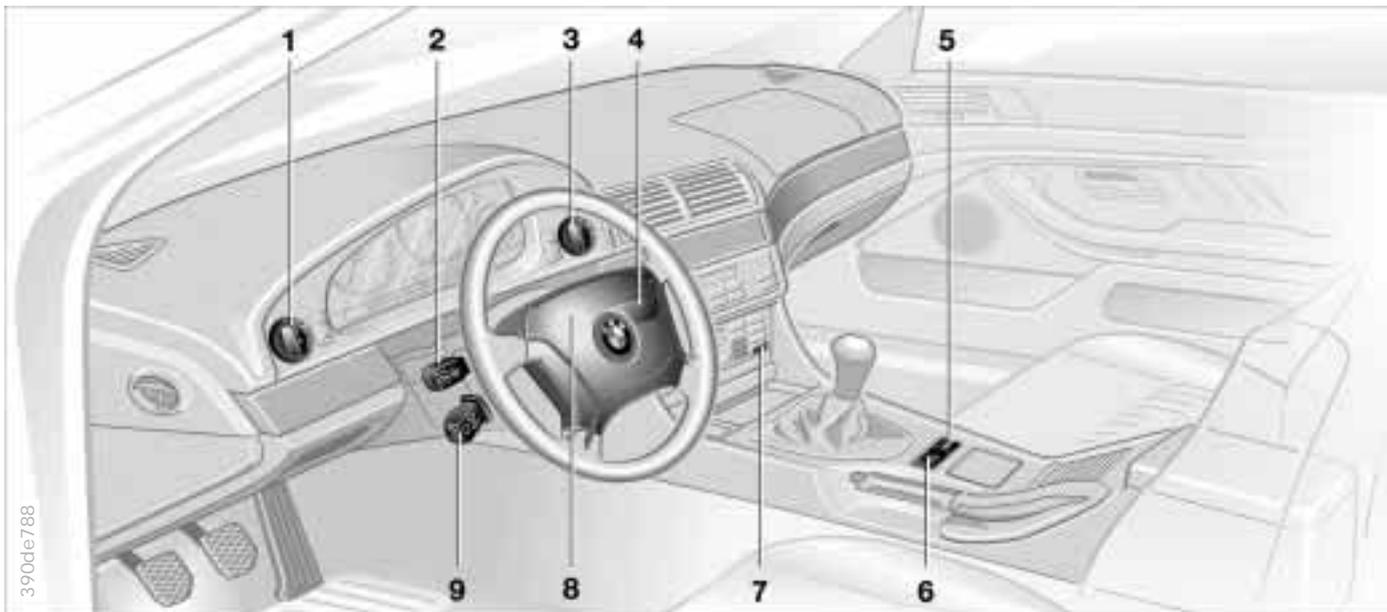
Owner service procedures

Technical data

Index



## 14 Cockpit



1 Parking lamps/Low beams [103](#)

2 ▷ Turn signal indicators [78](#)

▷ Standing lamps [104](#)

▷ High beams [104](#)

▷ Headlamp flasher [78](#)

▷ Computer [88](#)

3 Fog lamps [104](#)

4 Washer/Wiper system [78](#)

5 Central locking system [32](#)

6 Hazard warning flashers

7 Rear window defroster [107, 112](#)

8 Horn, the entire surface

9 Adjusting the steering wheel [56](#)



- |  |  |   |
|--|--|---|
| 1 Fuel gauge <a href="#">83</a>                                | 5 Tachometer and Energy Control <a href="#">83</a>     | 8 Selector lever and program display for automatic transmission* <a href="#">72, 75</a> |
| 2 Indicator lamp for turn signal indicators <a href="#">21</a> | 6 Coolant temperature gauge <a href="#">84</a>         | 9 Service Interval Display <a href="#">84</a>   |
| 3 Speedometer  | 7 Indicator and warning lamps <a href="#">19 to 21</a> |   |
| 4 Indicator lamp for high beams <a href="#">21</a>             |  |   |

## 16 Instrument cluster



10 Display for the computer – operation via the turn signal lever, refer to page 88:  
▷ Outside temperature  
▷ Average fuel consumption  
▷ Cruising range  
▷ Average speed

11 Indicator lamp for Automatic Stability Control plus Traction (ASC+T)/Dynamic Stability Control (DSC)\* 21  
12 Indicator lamp for self-leveling suspension\* 21

13 Odometer and trip odometer 82  
14 Indicator for Check Control 85  
15 Reset trip odometer to zero 82  
16 Indicator and warning lamps 19 to 21



1 Fuel gauge [83](#)

2 Indicator lamp for turn signal indicators [21](#)

3 Speedometer

4 Indicator lamp for high beams [21](#)

5 Tachometer and Energy Control [83](#)

6 Coolant temperature gauge [84](#)

7 Indicator and warning lamps [19](#) to [21](#)

8 CHECK button [85](#)

9 Selector lever and program display for automatic transmission\* [72](#), [75](#)

## 18 Instrument cluster\*



- 10 Outside temperature display [82](#)
- 11 Indicator lamp for Automatic Stability Control plus Traction (ASC+T)/ Dynamic Stability Control (DSC)\* [21](#)
- 12 Trip odometer [82](#)
- 13 Check Control display [85](#)
- 14 Odometer [82](#)
- 15 Service Interval Display [84](#)
- 16 Reset button for trip odometer [82](#)
- 17 Indicator and warning lamps [19 to 21](#)

# Indicator and warning lamps

## Technology that monitors itself

The system runs a check on the warning and indicator lamps marked by "●" each time you switch on the ignition. They each light up once for different periods of time.

If a fault should occur in one of these systems, the corresponding lamp does not go out after the engine is started or it lights up while the vehicle is moving. The following section describes how you should respond.

## Red: stop immediately



**Battery charge current ●**  
The battery is no longer being charged. This indicates a defect in the alternator drive belt or in the charging circuit of the alternator. Please contact the nearest BMW center.



**You should never attempt to continue driving with a defective drive belt, as the engine could overheat and sustain serious damage. If the drive belt is defective, increased steering effort is also required. ◀**



**Engine oil pressure ●**  
May be accompanied by the message "STOP!ENGINE OIL-PRESS" in the Check Control\*: stop the vehicle immediately and switch off the engine. Check the engine oil level; top up as required. If the oil level is correct: please contact the nearest BMW center.



**Do not continue driving, as the engine could sustain serious damage from inadequate lubrication. ◀**



**Tire Pressure Monitor (RDC)\* ●**  
Accompanied by an acoustic warning signal: a flat tire has occurred. Reduce vehicle speed immediately and stop the vehicle. Avoid hard brake applications. Do not oversteer. For additional information: refer to page [101](#)



**Parking brake\*/Brake system hydraulic circuits ●**  
Comes on when you engage the parking brake. For additional information: refer to page [70](#)

Comes on although the parking brake is released: have the brake fluid level checked. Before continuing your journey, be sure to read the notes on pages [134](#) and [145](#)

Also comes on with the message "CHECK BRAKE LININGS" in the Check Control.



**Parking brake warning lamp\*/ Brake system hydraulic circuits for Canadian models.**

## 20 Indicator and warning lamps

### Red: as important reminder



Parking brake\*

Comes on when you engage the parking brake.

For additional information: refer to page [70](#)



Parking brake warning lamp\* for Canadian models.



Please fasten safety belts ●

Accompanied by warning tone and message\* in the Check Control. Remains on until the safety belts are fastened.

For additional information on safety belts: refer to page [53](#)



Airbags ●

Please have the system inspected by your BMW center.

For additional information: refer to page [59](#)

### Yellow: please have checked at your earliest opportunity



Antilock Brake System (ABS) ●

ABS has been deactivated in response to system malfunction.

Conventional braking efficiency is available without limitations. Please have the system inspected by your BMW center.

For additional information: refer to page [133](#)



Antilock Brake System (ABS)

warning lamp for Canadian models.



Engine oil level\*

Comes on while driving: the engine oil level has fallen to the absolute minimum; refill as soon as possible. Do not drive more than approx. 30 miles (50 km) until you do.

For additional information: refer to page [142](#)



Engine oil level\*

Comes on after the engine has been switched off: add engine oil at your earliest opportunity (when you stop to refuel).

For additional information: refer to page [142](#)



Automatic transmission\*

Because of a malfunction, the automatic transmission shifts only in the emergency program. Please consult the nearest BMW center.

For additional information: refer to pages [74](#) and [77](#)



Brake pads\* ●

Have the brake pads checked.

For additional information: refer to page [134](#)



Dynamic Brake Control (DBC)\* ●

Malfunction in DBC system.

Conventional braking efficiency is available without limitations.

Have the system repaired by your BMW center at the earliest possible opportunity.

For additional information: refer to page [100](#)



Dynamic Brake Control (DBC)

warning lamp for Canadian models.



Tire Pressure Monitor (RDC)\* ●

Check the tire inflation pressure: refer to pages [26](#), [101](#)

## Indicator and warning lamps



**Self-leveling suspension\* ●**  
The self-leveling suspension system is inactive. Please consult the nearest BMW center. For additional information: refer to page [101](#)



**Automatic Stability Control plus Traction (ASC+T)/Dynamic Stability Control (DSC)\* ●**

ASC+T/DSC has been deactivated, either manually at the button or automatically in response to a system malfunction. In the event of a malfunction, have the system checked by your BMW center.

For additional information: refer to page [99](#)



**Engine electronics\***  
There is a fault in the electronic engine-management system.

You can continue to drive with reduced engine output and engine speed. Please have the system inspected by your BMW center.



**Service Engine Soon ●**  
If the indicator lamp comes on either continuously or intermittently, this indicates a fault in the emissions-related electronic systems. Although the vehicle remains operational, you should have the systems checked by your BMW center at the earliest possible opportunity. For additional information: refer to page [148](#)



**Service Engine Soon warning lamp for Canadian models.**



**Check Filler Cap\* ●**  
This indicator lamp comes on when the fuel filler cap is loose or missing. Close the filler cap tightly: refer to page [25](#)

### Green: for your information



**Turn signal indicators**  
Flashes when the turn signal indicators are on. Rapid flashing indicates a system malfunction. For additional information: refer to page [78](#)



**Cruise control**  
Lights up when the system is switched on: available for operation via the multifunction steering wheel. For additional information: refer to page [80](#)



**Front fog lamps**  
Lights up whenever you switch on the front fog lamps. For additional information: refer to page [104](#)

### Blue: for your information



**High beams**  
Lights up when the high beams are on or the headlamp flasher is actuated. For additional information: refer to pages [78](#) and [104](#)

## 22 Steering wheel with multifunction buttons

The controls integrated within the multifunction steering wheel (MFL) and the sports steering wheel\* have been designed to allow you to operate a number of accessories both quickly and safely, without taking your eyes from the road:

- ▷ selected control functions for the radio along with CD and cassette player
- ▷ recirculated-air control of the air conditioner system or the steering wheel heating\* (MFL only)
- ▷ the cruise control
- ▷ selected phone functions\* and voice entry\*.

 The controls are active only when the corresponding systems and accessories are switched on. ◀



Press briefly:  
Receive a phone call, initiate dialing, terminate a call.  
Extended pressure:  
Activate/deactivate voice entry.



Switch between phone and radio, cassette and CD.



Forward:

- ▷ Radio  
Press briefly: station scan in FM band  
Extended pressure: search function
- ▷ CD  
Press briefly: track scan  
Extended pressure: search function in track
- ▷ Cassette  
Press briefly: stop track scan or fast forward  
Extended pressure: fast forward
- ▷ Phone  
Scan personal phone book.



Reverse: functions as forward.



Volume



Cruise control: to select a stored setting.



Cruise control: store and accelerate (+) or decelerate and store (-).

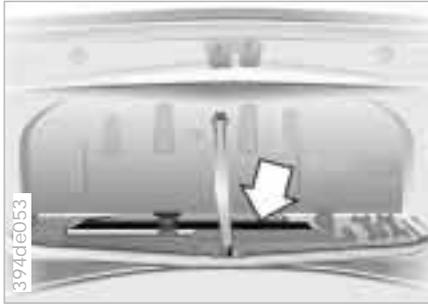


Cruise control: activate/interrupt/deactivate.



Recirculated-air mode and automatic recirculated-air control (AUC) or steering wheel heating: activate/deactivate.

## Warning triangle\*



The hazard warning triangle is readily available, stored in the onboard tool kit mounted on the inside of the luggage compartment lid/tailgate. To open the container, loosen the wing screw.

 Always observe all legal regulations requiring a warning triangle to be carried in the vehicle. ◀

## First-aid kit\*

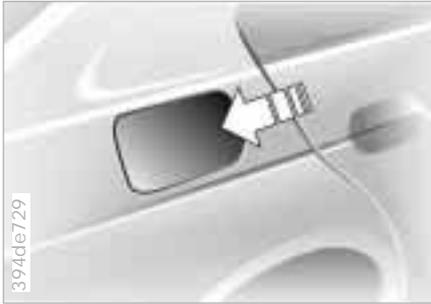


The first-aid kit is located under the front passenger's seat.

To remove: lift the release lever on the front (arrow) and pull the first-aid kit forward out of its support.

To store: place the first-aid kit into the support, then push back until the button engages.

 Some of the items contained in the first-aid kit have a limited service life. For this reason, check the expiration dates of each of the items regularly, and replace any whose expiration dates have passed. You can acquire replacements in any drugstore or pharmacy. Always observe all legal regulations requiring a first-aid kit to be carried in the vehicle. ◀



### Fuel filler door

 Always switch off the engine before refueling, as it is not possible to add fuel with the engine running, and attempts may also trigger the Service Engine Soon lamp. ◀

To open the filler door, press on the front edge.

In the event of an electrical malfunction, you can also open the fuel filler door manually:

sedan

1. Use the handle to lower the trim panel on the right side of the luggage compartment
2. Pull the button with the fuel pump symbol.

sport wagon

1. Release the right-hand panel in the luggage compartment with the button and fold the panel down
2. Pull the button with the fuel pump symbol.

If a subwoofer\* is installed, loosen the T-screw and swing the subwoofer to the side.

 Always observe all safety precautions posted at the service station when handling fuel. Never carry spare fuel containers in your vehicle. Whether empty or full, these containers can leak, cause an explosion, or lead to fire in the event of a collision. ◀



### Simple and environmentally friendly

 Open the fuel filler cap carefully to prevent fuel from spraying out. Fuel spray may cause injury. Do not top off. Topping off may cause fuel spillage. ◀

Keep the filler cap in the bracket attached to the fuel filler door.

When refueling, insert the filler nozzle completely into the filler pipe. Pulling the nozzle out of the pipe during refueling

- ▷ results in premature pump shutoff
- ▷ and will reduce the effectiveness of the vapor recovery system on the pump.

## Refueling

As long as the filler nozzle is used properly, the fuel tank is full whenever the nozzle shuts off the first time.



Refill early to avoid damaging the catalytic converter; never attempt to drive to the last drop of fuel in the tank. ◀

Tank capacity: approx. 18.5 gal. (70 liters), with a reserve capacity of

▷ BMW 525i, 530i: approx. 2.0 gal. (8 liters)

▷ BMW 540i: approx. 2.5 gal. (10 liters).



Close the filler cap carefully after refueling until a click is heard. While closing, be sure not to squeeze the strap which is fastened to the cap. A loose or missing cap will activate the message "CHECK FILLER CAP" in the Check Control\* or the Check Filler Cap lamp\*. ◀

## Fuel specifications

The engine uses lead-free gasoline only.

Required fuel:

▷ Premium Unleaded Gasoline, min. 91 AKI  
AKI = Anti Knock Index



Never use leaded fuel, as it would cause permanent and irreversible damage to the oxygen sensor and the catalytic converter. ◀

## 26 Tire inflation pressure



The inflation pressures are indicated on a sticker attached to the B-pillar behind the driver's door (visible with door open).

### Check tire pressures

All pressure specifications are indicated in psi (kilopascal) for tires at ambient temperature (refer also to the next pages).

Vehicles with Tire Pressure Monitor (RDC)\*:

After correcting tire inflation pressures, reactivate the system, refer to page [101](#).



Check tire inflation pressures on a regular basis – at least twice a month – and before every extended journey. Incorrect tire pressure can lead to driving instability, tire damage and accidents.

Check the inflation pressure of the spare tire also. Inflate the spare tire to the highest pressure of any tire on your vehicle. ◀

### Comply with tire approval specifications

The inflation pressures in the tables apply to BMW approved tire sizes and tire manufacturers. Your BMW center is familiar with these pressures. Higher pressures may be specified for tires from other manufacturers.

Your vehicle is equipped with tires that not only meet US, but also European standards. We recommend the exclusive use of BMW approved tires.

# Tire inflation pressure

sedan	Tires	 			
	All pressure specifications in the table are indicated in psi (kilopascal) with cold tires (cold = ambient temperature)				
	225/60 R 15 96 H M+S	-	-	33 (230)	41 (280)
	225/55 R 16 95 H M+S			(US/CDN)	
	225/60 R 15 96 W				
	225/55 R 16 95 W				
	235/45 R 17 94 W/Y	29 (200)	33 (230)	33 (230)	41 (280)
525i	205/65 R 15 94 Q M+S	(outside US/CDN)			
	225/60 R 15 96 Q M+S				
	225/55 R 16 95 Q M+S				
	235/45 R 17 94 Q M+S				
	Front: 235/45 R 17 94 W/Y				
	Rear: 255/40 R 17 94 W/Y				
	225/55 R 16 95 H M+S	-	-	33 (230)	41 (280)
	225/55 R 16 95 W			(US/CDN)	
	235/45 R 17 94 W/Y				
530i	225/55 R 16 95 Q M+S	29 (200)	33 (230)	33 (230)	41 (280)
	235/45 R 17 94 Q M+S	(outside US/CDN)			
	Front: 235/45 R 17 94 W/Y				
	Rear: 255/40 R 17 94 W/Y				

## 28 Tire inflation pressure

sedan	Tires All pressure specifications in the table are indicated in psi (kilopascal) with cold tires (cold = ambient temperature)				
	225/55 R 16 95 W 235/45 R 17 94 W/Y	35 (240)	39 (270)	41 (280)	48 (330)
540i	Front: 235/45 R 17 94 W/Y Rear: 255/40 R 17 94 W/Y	35 (240)	-	41 (280)	-
	225/55 R 16 95 Q/T/H M+S 235/45 R 17 94 Q/T/H M+S	30 (210)	35 (240)	36 (250)	44 (300)
540iA	225/55 R 16 95 H M+S 225/55 R 16 95 W 235/45 R 17 94 W/Y	30 (210)	35 (240)	36 (250)	44 (300)
	225/55 R 16 95 Q M+S 235/45 R 17 94 Q M+S	30 (210)	-	36 (250)	-
	Front: 235/45 R 17 94 W/Y Rear: 255/40 R 17 94 W/Y	30 (210)	-	36 (250)	-
		-	35 (240)	-	44 (300)

# Tire inflation pressure

sport wagon	Tires				
	All pressure specifications in the table are indicated in psi (kilopascal) with cold tires (cold = ambient temperature)				
525i	225/55 R 16 95 H M+S				
	225/60 R 15 96 H M+S				
	225/60 R 15 96 W	30 (210)	35 (240)	36 (250)	44 (300)
	225/55 R 16 95 W				
	235/45 R 17 94 W/Y				
540i	225/60 R 15 96 Q M+S				
	225/55 R 16 95 Q M+S	33 (230)	38 (260)	39 (270)	46 (320)
	235/45 R 17 94 Q M+S				
	225/55 R 16 95 H M+S				
	225/55 R 16 95 W	30 (210)	35 (240)	36 (250)	44 (300)
540i	235/45 R 17 94 W/Y				
	225/55 R 16 95 Q M+S	33 (230)	38 (260)	39 (270)	46 (320)
	235/45 R 17 94 Q M+S				



Overview

**Controls and features**

Operation, maintenance

Owner service procedures

Technical data

Index



Overview

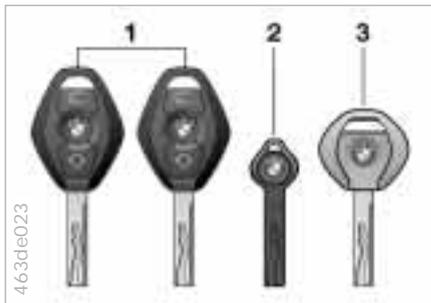
Controls

Maintenance

Repairs

Data

Index



- 1 Master keys with remote control unit determine the functions of the Key Memory, refer to page 67. You can mark individual keys for subsequent identification by applying the colored decals that you received when accepting delivery of your vehicle

▶ There is an extended-life battery in every master key that is charged automatically in the ignition lock as you drive.

For this reason, if you have a master key that is not in regular use, you should use that key approx. once every year while driving for an extended period. This will charge the battery. Refer also to page 34. ◀

- 2 Spare key for storage in a safe place, such as in your wallet. This key is not intended for continuous use

- 3 Door and ignition key  
The locks for the luggage compartment lid/tailgate, rear backrest and glove compartment cannot be operated with this key. This is recommended for valet parking, for instance.

## Central locking system

### The concept

The central locking system is ready for operation as soon as you close the front doors. The system engages and releases the locks on the

- ▷ doors
- ▷ luggage compartment lid/tailgate and rear window\*
- ▷ fuel filler door.

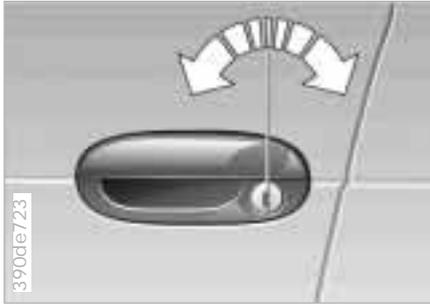
The central locking system can be operated

- ▷ from outside via the driver's door lock as well as via the remote control
- ▷ from inside via the central locking system button.

Activation from inside does not lock the fuel filler door (refer to page 37). Activation from outside simultaneously activates the anti-theft system. The alarm system is also armed or disarmed.

When you use the central locking system to lock the doors from inside the vehicle, it will automatically disengage the locks if an accident occurs, except on doors that have been locked individually using the lock buttons, refer to page 37. The accident response routine also includes automatic activation of the hazard warning flashers and the interior lamps.

## Opening and closing – via the door lock



### Using the key

One turn of the key in the driver's door lock unlocks the driver's door only. Turning the key a second time unlocks all of the remaining doors, the luggage compartment lid/tailgate and the fuel filler door.



You can have a signal set to confirm that the vehicle's locks have engaged securely. ◀

### Convenience operation

You can also operate the windows and sliding/tilt sunroof via the door lock.

- ▷ To open: with the door closed, turn the key to the "Unlock" position and hold it
- ▷ To close: with the door closed, turn the key to the "Lock" position and hold it.



Watch the closing process carefully and be sure that no one is trapped by the closing motion. The closing process stops immediately when you release the key. ◀

### Manual operation

in the event of an electrical malfunction Turn the key to the extreme left or right to unlock/lock the driver's door.

## 34 Opening and closing – via the remote control

### The concept

The remote control makes opening and locking the doors of your vehicle very convenient. Furthermore, it provides three additional functions which you can only execute via the remote control:

▷ To switch on interior lamps, refer to page 35.

With this function, you can also "search for" your vehicle, when parked in an underground garage, for instance

▷ To open the luggage compartment lid/tailgate, refer to page 35.

The luggage compartment lid/tailgate will open slightly, regardless of whether it was previously locked or unlocked

▷ Panic mode

In case of danger, you can trigger the alarm.

Whenever you unlock (lock) the vehicle, you simultaneously deactivate (activate) the anti-theft system, disarm (arm) the alarm system and switch the interior lamps on (off).



You can have a signal set to confirm that the vehicle's locks have engaged securely. ◀



- 1 Unlock, convenience opening and alarm system
- 2 Lock and secure, interior lamp activation, disarming tilt alarm sensor and interior motion sensor
- 3 Open the luggage compartment lid/tailgate, panic mode

### Master keys with remote control



Since passengers or animals remaining in the vehicle might be able to lock the doors from the inside, take the vehicle's keys with you so that the vehicle can be opened again from the outside at any time. ◀



Master keys that are used repeatedly are always ready for operation, since the battery in the key is charged automatically in the ignition lock as you drive.

If it is no longer possible to lock the vehicle via the remote control, the battery is discharged. Use this key while driving for an extended period in order to charge the battery. Refer also to page 32.

To prevent unauthorized use of the remote control, surrender only the door and ignition key 3 or the spare key 2 (refer to page 32) when leaving the vehicle for valet parking, for example. In the event of a system malfunction, please contact your BMW center. You can also obtain replacement keys there. ◀

## Opening and closing – via the remote control

### To unlock



Press button.

Press the button once to unlock the driver's door and the fuel filler door only; press a second time to unlock all remaining doors as well as the luggage compartment lid/tailgate.

### Convenience opening mode



Press and hold button to open the electric power windows and sliding/tilt sunroof.

### To lock and secure



Press button.

 Vehicles without armored glass: do not lock the vehicle if anyone will be remaining inside, as it would then be impossible for the occupant(s) to disengage the locks from the inside. ◀

### To deactivate the tilt alarm sensor and interior motion sensor



Press button a second time immediately after locking.  
For additional information, refer to page [43](#).

### To switch on the interior lamps



With the vehicle locked, press button.

### To open the luggage compartment lid/tailgate



Press button.

The luggage compartment lid/tailgate will open slightly, regardless of whether it was previously locked or unlocked.

 Before and after a trip, be sure that the luggage compartment lid/tailgate has not been opened unintentionally. ◀

### Panic mode



Provided that the alarm system is armed, you can respond to imminent danger by holding down the button for between two and five seconds.

To cancel alarm



Press button.

## 36 Opening and closing – via the remote control

### External systems

The remote control system may be affected by other units or equipment operating in the immediate vicinity of your vehicle.

If this should occur, you can unlock and lock the vehicle via the door lock with a master key.

### For US owners only

The transmitter and receiver units comply with part 15 of the FCC (Federal Communication Commission) regulations. Operation is governed by the following:

FCC ID: LX8EWS  
LX8FZVS  
LX8FZVE

Compliance statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- ▷ This device may not cause harmful interference, and
- ▷ this device must accept any interference received, including interference that may cause undesired operation.

 Any unauthorized modifications to these devices could void the user's authority to operate the equipment. ◀

## Opening and closing – from the inside



You can operate the central locking system with this button when the driver's door is closed. With this button, only the doors, the luggage compartment lid/tailgate and rear window are unlocked or locked. The anti-theft system is not activated. Also, the fuel filler door remains unlocked to allow refueling.

 The central locking system can be locked automatically as soon as you begin to drive if you desire. You may also have this function programmed into individual keys. ◀

-  If only the driver's door was unlocked from the outside and you press the button
- ▷ all other doors, the luggage compartment lid/tailgate, rear window and the fuel filler door will be unlocked if the driver's door is open
  - ▷ the driver's door will be locked again when it is closed. ◀

### To unlock and open the doors

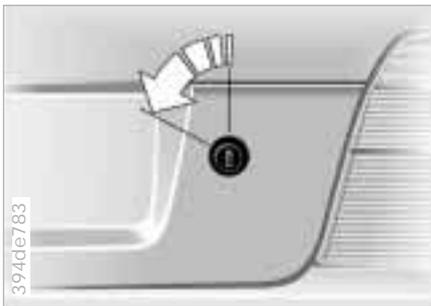
- ▷ Either unlock the doors together with the button for the central locking system and then pull the door handle above the armrest or
- ▷ pull the release handle for each door twice: the first pull unlocks the door, and the second one opens it.

### To engage the locks

- ▷ Use the central locking button to lock all of the doors simultaneously, or
- ▷ press down the individual door lock buttons. As an added design feature to prevent the driver from being inadvertently locked out of the vehicle, the driver's door lock button will not engage as long as the door is open.

 When the vehicle is moving, you should not lock the doors with their lock buttons since doors locked in this manner would not open automatically in the event of an accident. Since passengers or animals remaining in the vehicle might be able to lock the doors from the inside, take the vehicle's keys with you so that the vehicle can be opened again from the outside at any time. ◀

## 38 Luggage compartment lid/Tailgate



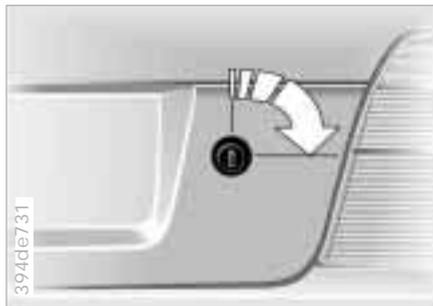
### Lock – sedan only

Only the master keys (refer to page 32) fit in the lock of the luggage compartment lid.

### Opening separately

Turn the master key to the left in the luggage compartment lock, continuing until it stops – the luggage compartment lid will open slightly.

The luggage compartment is locked again as soon as you close the lid.



### Secure separately

Turn the master key to the right past the pressure point and then pull it out in the horizontal position.

This locks the luggage compartment lid and disconnects it from the central locking system. This feature can be used to prevent unauthorized access to the luggage compartment when you hand over the door and ignition key (refer to page 32) for valet parking, etc.

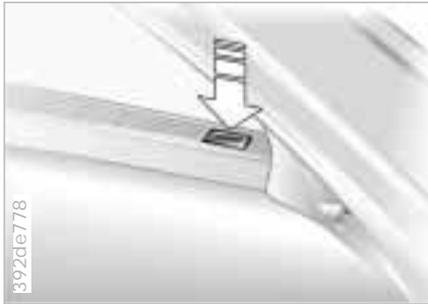
### Manual operation

In the event of an electrical malfunction, you can also open the luggage compartment lid/tailgate manually:

sedan:

Turn the master key to the left in the luggage compartment lock, continuing all the way to the end of its travel – the luggage compartment lid will open slightly.

The luggage compartment is locked again as soon as you close the lid.

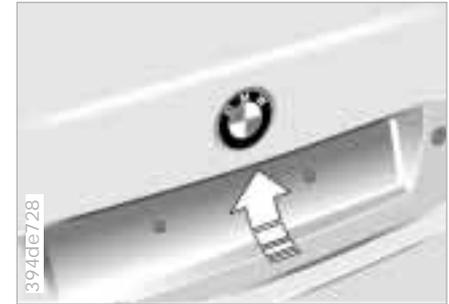


sport wagon:

1. From inside the luggage compartment, open the two side covers (arrow). Remove the covers



2. Release the two quick-release fasteners of the cover for the onboard tool kit in the tailgate. Raise the cover
3. Remove the plastic plug (arrow) and pull toward the interior. The tailgate will be released
4. Open the tailgate. Press the plug back into place and close the cover with the quick-release fasteners
5. Position the two side covers and close them.



## To open from the outside

Press the button (arrow): the luggage compartment lid/tailgate opens slightly.

The luggage compartment (cargo area) is illuminated whenever the luggage compartment lid/tailgate is opened (for additional information refer to page 105).

## 40 Luggage compartment lid/Tailgate



### To open from the inside

You can use this button to open the luggage compartment lid/tailgate when the vehicle is stationary (not possible if the tailgate has been locked separately).



When the tailgate of the sport wagon is opened, the clearance from the ground to the upper edge is more than 6.6 ft (two meters). Please keep this in mind when opening the tailgate (in a garage, for example). ◀

For the roll-up covers and for additional details concerning the luggage compartment, please refer to "Luggage compartment" beginning on page 125.



### Rear window – sport wagon

Small items can be loaded or unloaded quickly if the rear window is opened separately.

Press the button (arrow): the rear window opens slightly. It can now be tilted up.

Push the window down to close it.



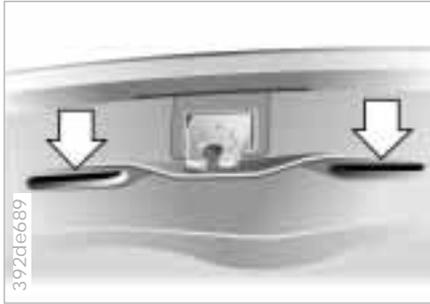
When loading sharp or pointed objects in the area adjacent to the rear window always wrap their edges in soft material if there is any chance that these objects could shift and rub against the window while the vehicle is underway. Failure to observe this precaution can result in damage to the rear window defroster's resistor elements. ◀



### Closing – sedan

The handle recess (arrow) next to the lock mechanism is designed to assist you in closing the luggage compartment lid.

## Luggage compartment lid/Tailgate



### Closing – sport wagon

You can pull the tailgate down by placing both hands in the handle recesses (arrows).

To close the tailgate, merely press it down gently. The closing process will then be carried out automatically.



To avoid injuries, be sure that the travel path of the luggage compartment lid/tailgate is clear when it is closed, observing the same precautions as with all closing procedures.

Operate the vehicle only when the luggage compartment lid/tailgate or rear window is completely closed. Otherwise, exhaust fumes could penetrate the interior of the vehicle. Should it be absolutely necessary to operate the vehicle with the luggage compartment lid/tailgate or rear window open:

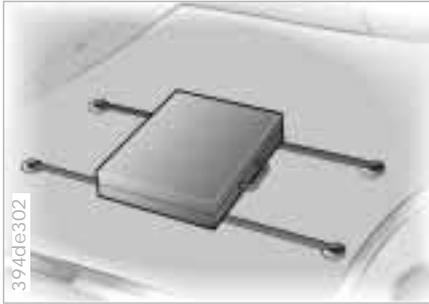
- ▷ Close all windows. Shut the sliding/tilt sunroof
- ▷ Increase the air supply for the air conditioner or automatic climate control to a high level. Refer to page [107](#) or [111](#). ◀



### Emergency release – sedan only

This lever releases the luggage compartment lid from the luggage compartment's interior.

## 42 Luggage compartment



### Luggage straps

Use the straps on the floor of the luggage compartment to secure smaller items of luggage.

Movement is reduced when objects are placed on the straps.

The lashing eyes at the corners of the luggage compartment provide you with a convenient means of attaching luggage nets\* and flexible straps for securing suitcases and luggage.

Refer also to "Cargo loading" on page [128](#).



### Hanger

On the left-hand side of the luggage compartment is a hanger for fastening shopping bags, packages and similar items.

## Alarm system

### The concept

The vehicle alarm system responds

- ▷ when a door, the hood, the luggage compartment lid/tailgate or the rear window is opened
- ▷ to movement inside the vehicle (interior motion sensor)
- ▷ to variations in the vehicle's tilt angle such as those occurring during attempts to steal the wheels or tow the vehicle
- ▷ to interruption of battery voltage.

The system responds to unauthorized vehicle entry and attempted theft by simultaneously activating the following

- ▷ an acoustic alarm for 30 seconds
- ▷ the hazard warning flashers, for approx. five minutes
- ▷ the high beams flash on and off in the same rhythm as the hazard warning flashers.

# Alarm system

## To arm and disarm the alarm system

When the vehicle is locked or unlocked with the key or the remote control, the alarm system is also simultaneously armed or disarmed.



You can have different acknowledgment signals set to confirm arming and disarming. ◀



You can also open the luggage compartment lid/tailgate when the system is armed by pressing the button on the remote control (refer to page 35). When you close the luggage compartment lid/tailgate, the luggage compartment is secured again.



## Indicator lamp displays

- ▷ The indicator lamp below the interior rearview mirror flashes continuously: the system is armed
- ▷ The indicator lamp flashes during arming: door(s), the hood or luggage compartment lid/tailgate are not completely closed. Even if you do not secure the indicated area, the system begins to monitor the remaining areas, and the indicator lamp flashes continuously after 10 seconds. However, the interior motion sensor is not activated
- ▷ If the indicator lamp goes out when the system is disarmed: no manipulation or attempted intrusions have been detected in the period since the system was armed

- ▷ If the indicator lamp flashes for 10 seconds when the system is disarmed: an attempted entry has been detected in the period since the system was armed.

Following triggering of an alarm, the indicator lamp will flash continuously.

## Avoiding unintentional alarms

The tilt alarm sensor and interior motion sensor may be switched off at the same time. To prevent an unintentional alarm from being triggered (in garages with elevator ramps, for instance), or when the vehicle is transported by trailer or train:

Lock the vehicle (arm the alarm system) twice in succession: press button 2 on the remote control twice (refer to page 35), or turn the key in the door lock to the right (lock) twice in succession (refer to page 33).

The indicator lamp lights up briefly and then flashes continuously. The tilt alarm sensor and the interior motion sensor are deactivated as long as the system is armed.

### Interior motion sensor

In order for the interior motion sensor to function properly, the windows and sliding/tilt sunroof must be completely closed.

Nevertheless, you should deactivate the interior motion sensor (refer to "Avoiding unintentional alarms") if you

- ▷ leave children or animals in the vehicle
- ▷ intend to leave the windows or sliding/tilt sunroof open.

## Electric power windows



### To open and close windows

From ignition key position 1:

- ▷ Depress the rocker switch until you feel resistance:  
The window continues moving for as long as you maintain pressure on the switch
- ▷ Press the rocker switch beyond the pressure point:  
The window moves automatically.  
Press the switch a second time to stop the window.

After the ignition has been switched off:

- ▷ You can still operate the windows as long as neither of the front doors has been opened. To open the window, press the switch beyond the pressure point.



When leaving the vehicle, always extract the ignition key from the lock and remember to close the doors to prevent children from operating the power windows and injuring themselves, etc. ◀

For the convenience mode via the door lock or the remote control, refer to pages [33](#) or [35](#).

### Safety feature

A contact strip is integrated into the inner side of each of the upper window frame sections. If pressure is exerted against this contact strip while a window is being raised, the system will respond by stopping the window and then retracting it a small distance.

## Electric power windows

 Despite this safety feature, be extremely careful that the closing path of the window is not obstructed. Otherwise, an object might not touch the contact strip in some situations (very thin objects, for instance). You can override this safety feature by pressing the switch beyond the pressure point and holding it. Because the power windows are sealed at high pressure to prevent wind noise when closed, a powerful motor is required for efficient closing. When closing the windows, always ensure that they are not obstructed in any way. Unsupervised use of these systems can result in serious personal injury. Remove the ignition key to deactivate the electric power windows whenever you leave the vehicle. Never leave the keys in the vehicle with unsupervised children. Never place anything that could obstruct the driver's vision on or next to the windows. ◀



### Safety switch

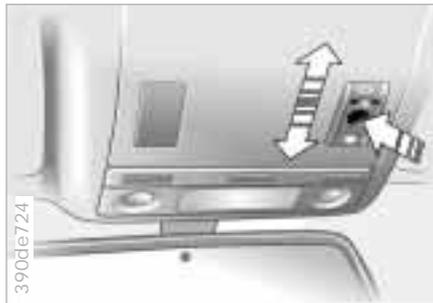
With the safety switch, you can prevent the rear windows from being opened or closed via the switch in the rear passenger area (by children, for example).

 Press the safety switch whenever children are riding in the rear of the vehicle. Careless use of the power windows can lead to injury. ◀

 To prevent injuries, exercise care when closing the sliding/tilt sunroof and keep it in your field of vision until it is shut.

Before leaving the vehicle, switch off the electric sunroof mechanism by removing the ignition key. Do not leave children unattended in the vehicle with access to vehicle keys. The key could be used to start the engine and operate vehicle systems such as the power sunroof, etc. Unsupervised use of these systems can result in serious personal injury. ◀

For the convenience mode via the door lock or the remote control, refer to page 33 or 35.



### **Raising – Opening – Closing**

From ignition key position 1 on, press the switch or slide it in the desired direction until you feel resistance.

When lifting, the headliner retracts several inches.

 The headliner insert can not be closed with the sunroof in its raised position. ◀

After the ignition has been switched off, you can still operate the sliding/tilt sunroof as long as neither of the front doors has been opened.

### **Automatic\* opening and closing**

Press the switch past the pressure point and then release it.

Other automatic operations are:

- ▷ With the sunroof open, press the switch briefly toward "Lift:" the sunroof automatically extends to its fully-raised position
- ▷ With the sunroof lifted, press the switch briefly toward "Open:" the sunroof automatically opens all the way.

Pressing the switch again briefly stops the motion.

### **Safety feature**

If the sliding/tilt sunroof encounters resistance at a point roughly past the middle of its travel when it is closing, the closing cycle is interrupted and the sliding/tilt sunroof will open again slightly.

## Sliding/tilt sunroof\*

 Despite this safety feature, be extremely careful that the travel path of the sunroof is not obstructed whenever it is closed. Remember that the safety mechanism may not be able to detect obstructions under all circumstances (with very thin objects, for instance). You can disable this safety feature by pressing the switch beyond the pressure point and holding it. ◀

### Sliding/tilt sunroof with glass moonroof\*

The options and control procedures are essentially the same as those previously described for the sliding/tilt sunroof. In order to open the raised roof, press the control switch towards "Open" and maintain pressure until the roof has reached the desired position. The headliner insert slides back somewhat when you raise the sunroof, and retracts along with the sunroof panel when you slide it back. The insert then remains open, and you can slide it back and forth to adjust it whenever the sunroof is not fully retracted.



### Interruption in the electrical supply

After interruptions in the electrical supply (when the battery is disconnected, for instance), the sunroof may only lift. To reinitialize the mechanism:

1. Raise the sliding/tilt sunroof fully
2. Press and hold the switch for approx. twenty seconds.



### Manual operation

In the event of an electrical malfunction, you can also operate the sliding/tilt sunroof manually:

1. Remove the interior lamp, then reach into the exposed opening and press out the cover
2. Use the Allen key from the onboard tool kit (refer to page 152) to turn the sliding/tilt sunroof in the desired direction.

For relaxed and fatigue-free driving you should select a seating position that reflects your personal requirements. Correct seating position combines with safety belts and airbags to enhance occupant safety in the event of an accident. To ensure that the vehicle's safety systems provide you with optimal protection, we request that you direct your careful attention to the following section.

For additional information on transporting children, refer to page [62](#).

### **Sitting safely with airbags**

 Always maintain an adequate distance between yourself and the airbags. Always hold the steering wheel by the rim to keep any chance of injury to hands or arms to an absolute minimum should the airbag be deployed. Never allow any objects, individuals or animals to obstruct the areas between passengers and airbags.

Never use the front airbag's cover as a storage tray or support for objects of any kind. Never allow front passengers to rest their feet or legs on the airbag cover. ◀

For airbag locations and additional information on airbags refer to page [59](#).

### **Sitting safely with safety belt**

 Never allow more than one person to wear a single safety belt. Never allow infants or small children to ride in a passenger's lap. Avoid twisting the belt while routing it firmly across the pelvis and shoulder, wear it as snugly against your body as possible. Do not allow the belt to rest against hard or fragile objects in your pockets. Do not route the belt across your neck, or run it across sharp edges. Avoid wearing bulky clothing and pull on the lap belt periodically to retention it over your shoulders. In the event of a frontal impact, a loose lap belt could slide over the hips, leading to abdominal injury. In addition, the safety belt's restraint effectiveness is reduced if it is worn loosely. Expectant mothers should always wear their safety belts, taking care to position the lap belt against the lower hips, where it will not exert pressure against the abdominal area. ◀

For information on using the safety belts refer to page [53](#).

## **Seats**

### **When adjusting your seat, always observe the following precautions**

 Never try to adjust your seat while operating the vehicle. The seat could respond with an unexpected movement, and the ensuing loss of vehicle control could lead to an accident. Never ride with the backrest reclined to an extreme horizontal angle (important for front passengers to remember), otherwise, there is a risk that you will slide under the safety belt in an accident, thus negating the protection the safety belt provides. Do not move the seats to the rear when the vehicle is at an extreme angle (on garage ramps or steep slopes, for example). If you do so, the automatic safety belt height adjustment can be disengaged. ◀

### **Seat adjustment**

- ▷ Manually-adjusted seat, refer to page [49](#)
- ▷ Electric power seats, refer to page [50](#)
- ▷ Head restraints, refer to page [52](#)
- ▷ BMW active seat, refer to page [52](#)

# Manually-adjusted seat



## Seat adjustment

- 1 Backward/forward adjustment  
Pull the lever and slide the seat to the desired position.  
After you release the lever, move the seat forward or backward slightly to engage the detent
- 2 Cushion height  
Pull the lever and apply weight to or remove weight from the seat as required

- 3 Backrest angle  
Pull the lever and apply weight to or remove weight from the backrest as required.



Comply with the adjustment instructions on page 48. Failure to do so could result in diminished personal safety. ◀

## 50 Electric power seats\*



- 1 Tilt angle (driver's seat only)
- 2 Backward/forward adjustment
- 3 Cushion height
- 4 Backrest angle
- 5 Head restraint height

To adjust the angle of the head restraint manually, tilt to the desired angle.

 Read and comply with the adjustment instructions on page 48. Failure to do so could result in diminished personal safety. ◀



### Adjusting BMW sports seat\*

With this seat, you can also adjust the thigh support:

Press the front/rear of the switch to adjust the thigh support for your maximum personal comfort.



### Adjusting BMW comfort seat\*

This seat allows you to make additional adjustments for

- 1 Lumbar support
- 2 Shoulder support

Lumbar support:

You can adjust the backrest's contour for additional support in the curvature of your spine's lumbar region.

The upper hips and spinal column receive supplementary support to help you maintain a relaxed, upright seating position.

## Electric power seats\*

- ▷ Press the front/rear of the switch:  
Increase/decrease curvature
- ▷ Press the upper/lower end of the switch:  
Increase the upper/lower curvature.



### Shoulder support:

Press the front/rear of the switch: the support angle of the upper backrest section is adjusted.

You can use the adjustable upper backrest for supplementary support in the shoulder region. This provides a relaxed seating position and helps relieve stress on the shoulder muscles.

To obtain the optimal shoulder support position, we recommend:

#### Driver and front passenger:

1. Adjust the upper backrest section to its extreme rear position
2. Adjust for the optimal seating position as described on page [48](#)
3. Bring the upper backrest section forward until your shoulders enjoy firm support.

Front passenger's seat adjusted for relaxed traveling:

1. Adjust the upper backrest section to its extreme rear position
2. Lower the backrest slightly to increase the tilt angle
3. Bring the upper backrest section forward until your shoulders enjoy firm support.

 Make corrections in the forward/backward adjustment of the seat to ensure that the safety belt still fits firmly against your body. Failure to observe this precaution can reduce the amount of protection provided by your safety belt. ◀

## 52 Head restraints



Head restraints reduce the risk of spinal injury in the event of an accident.

Adjust the head restraint so that its center is approximately level with your ears.

Leave the center-rear head restraint in the fully-lowered position at all times. Extending it limits its function. ◀

### Adjusting

To adjust the height of the front or rear head restraints, pull up or push down. For electric height adjustment, refer to page [50](#).

To adjust the angle of the front head restraints, tilt to the desired angle.

## BMW active seat\*



Active changes in the seat's cushion help to avoid muscle cramps, pain in the spine's lumbar region and fatigue.

To activate, press the button.

## Safety belts



### Drive with your safety belt on

Always fasten your safety belt before starting off. As supplemental restraint devices, the airbags are designed to enhance the effectiveness of the safety belts, and not to replace them.

### To close

Make sure you hear the catch engage in the belt buckle.

### To open

1. Press the red button in the belt buckle
2. Hold the end of the belt
3. Guide the belt back into the inertia reel.

The shoulder belt anchor automatically adjusts to continue providing an optimum fit when you move the seat forward or back.



The rear belt buckle with the word "CENTER" is intended exclusively for the passenger sitting in the middle. sedan with through-loading system\*: please comply with the instructions for the center safety belt on page [121](#). sport wagon: if it is not possible to extract the center belt, this indicates that the detent for the larger backrest is not securely engaged, refer to page [125](#). ◀



If the safety belt system has been subjected to the stresses involved in an accident or otherwise damaged: to ensure that the safety belts continue to provide effective protection, always have the entire safety belt mechanism replaced and the belt anchorages inspected at your BMW center. If a child-restraint system was in the vehicle during an accident, consult the manufacturer's instructions regarding replacement. ◀

## 54 Seat, mirror and steering wheel memory



You can store and call up three different seat, exterior mirror and steering wheel positions. The illustration shows the buttons on the driver's door for making these position adjustments.

The adjustment of the lumbar support is not stored in the memory.

### To store

- 1 Turn the ignition key to position 1 or 2
- 2 Adjust to the desired positions for the seat, exterior mirror and steering wheel
- 3 Press the **MEMORY** button: the indicator lamp in the button comes on
- 4 Press memory button 1, 2 or 3, as desired: the indicator lamp goes out.

### To select a stored setting

Convenience function:

- 1 Open the driver's door after unlocking the vehicle or turn the ignition key to position 1
- 2 Briefly press memory button 1, 2 or 3, as desired.

Movement stops immediately when one of the seat-adjustment or memory buttons is activated during the adjustment process.

Safety function:

- 1 With the driver's door closed and the ignition key either removed or in position 0 or 2
- 2 Maintain pressure on the desired memory button (1, 2 or 3) until the adjustment process is completed.

If you press the **MEMORY** button accidentally: press the button a second time; the indicator lamp goes out.



Do not select a new stored memory setting while the vehicle is moving. There is a risk of accident from unexpected movement of the seat or steering wheel. ◀

 Your BMW center can adjust your vehicle's systems in such a manner that your personalized settings are automatically called up for the seat, mirror and steering wheel positions when you unlock the vehicle with your personal remote control key. ◀

 Before using the key memory feature to unlock the vehicle always ensure that no objects are stored in the footwell behind the driver's seat. If you fail to do so, persons or objects could be injured or damaged if the seat should move backward. ◀



### Passenger-side exterior mirror tilt function

(automatic curb monitor)

- 1 Move the mirror selector switch (arrow) to the "driver's mirror" position
- 2 When the gearshift lever or the selector lever is placed in "Reverse," the passenger-side mirror tilts downward to help the driver monitor the area directly adjacent to the vehicle during parking (curbs, etc.).

You can deactivate this automatic feature by setting the mirror selector switch to the "passenger-side" position.



The seat cushion and backrest can be heated with the ignition key in position 2.

You can select from different heating modes by repeatedly pressing the button.

You can also switch the higher heating modes off directly: Press the button and hold it slightly longer.

## 56 Adjusting steering wheel



The steering wheel can be moved in any of four directions. Adjust by moving the control lever in the desired direction.



Do not adjust the steering wheel while the vehicle is moving. There is a risk of accident from unexpected movement. ◀

To store the steering wheel setting, refer to "Seat, mirror and steering wheel memory" on page [54](#).

## Steering wheel heating\*



The steering wheel heating feature is available for operation when the ignition key is in position 2.

Press the button to switch on and off.

The lamp within the button lights up when the steering wheel heating is in operation.

If you have a multifunction steering wheel without steering wheel heating, the button for the recirculated-air mode is in this location (refer to page [22](#)).

# Mirrors



## Exterior mirrors

- 1 Mirror switch for 4-way adjustment
- 2 Left/right selection switch

## To adjust manually

The mirrors can also be adjusted manually:

Press the edge of the lens.

To store mirror settings, refer to "Seat, mirror and steering wheel memory" on page 54.

## Convex mirror

 The passenger-side mirror features a convex lens. When estimating the distance between yourself and other traffic, bear in mind that the objects reflected in the mirror are closer than they appear. ◀

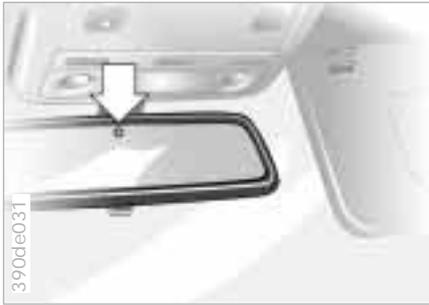
## Self-defrosting mirrors

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



## Interior rearview mirror

To reduce glare from vehicles behind you after dark, tilt the mirror by moving the small lever.



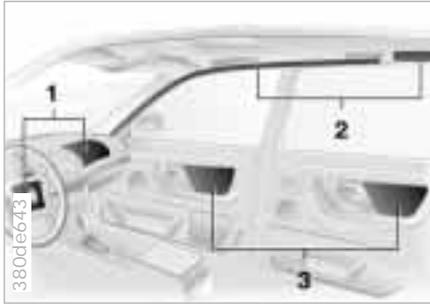
**Interior and exterior mirrors with automatic dimming feature\***

These mirrors automatically respond to glare from following vehicles by dimming through an infinitely-variable range. The mirrors automatically revert to their clear, undimmed setting whenever you select reverse.

The dimming function is regulated by two photocells; one is integrated in the mirror's lens (arrow), while the other is located at an offset position on the rear of the mirror.

To ensure that the mirror continues to operate efficiently, ensure that the photocells remain clear and unobstructed. Refrain from attaching stickers to the windshield in the area immediately in front of the mirror.

# Airbags



- 1 Front airbags on the driver and passenger sides
- 2 Head protection airbags on driver and passenger side (front and rear\*)
- 3 Side airbags on driver and passenger side (front and rear\*)

## Protective effect

The front airbags protect the driver and passenger in the event of a head-on collision where the protection provided by the safety belt alone would not be adequate. The head protection airbags and side airbags help provide protection in the event of a collision from the side. Each of the side airbags is designed to help support the upper body.

 The side airbags in the rear passenger area\* of your vehicle may already have been deactivated, either at the time of manufacture or by a BMW center. You may have them activated if you desire to do so. Please contact your BMW center for additional information. ◀

For information on the correct seating position, refer to page [48](#).

 The airbags will not be triggered in the event of a minor accident, a vehicle rollover or a collision from the rear. ◀



Never apply stickers or adhesive-backed objects of any kind to the airbag covers. Never attempt to reupholster the covers or modify them in any way. If the airbags deploy in response to an accident, if you note any signs of system malfunction, or if you wish to have any parts of the airbag passenger-restraint system deactivated, always contact your BMW center, to whom we strongly urge you to entrust all testing, repair and dismantling operations. Never attempt to modify or tamper with either the system's electrical wiring or any of its individual components. System components include the upholstered surfaces on the steering wheel, instrument panel, the trim panels on the front and rear doors and the roof braces as well as the sides of the headliner above the doors. Never attempt to remove or dismantle the steering wheel.

To ensure compliance with official safety regulations, always entrust disposal of airbag generators to your BMW center. Attempts to carry out service procedures undertaken by anyone other than specially-trained professionals can result in system failure or undesired airbag deployment, both of which can lead to personal injury. If the

airbags deploy in response to an accident, always remember to avoid all contact with system components, as they are hot and can cause burns in the period immediately following deployment. ◀



All vehicle occupants should always sit upright and be properly restrained (infants and small children in appropriate child-restraint systems; larger children and adults using the safety belts). Never let an occupant's head rest near or on a side airbag: the inflating airbag could cause a serious or fatal injury. Please note that the word "Airbag" imprinted on the door trim panel indicates the airbag's location. Accident research shows that the safest place for children in an automobile is in the rear seat. However, a child sitting in the rear seat and not properly restrained may place his or her head on or near the side airbag, if installed. For example, a child – even though belted – may fall asleep with his or her head against the side airbag. It may be difficult for a driver to ensure that children in the rear seat will remain properly positioned at all times and do not place their heads on or near the side airbag. Therefore, we recommend that the

rear-seat side airbags, if provided, be deactivated if you plan to transport children in the rear seat.

The rear-seat side airbags may already have been deactivated, either at the time of manufacture or by a BMW center. Labels in the rear door opening should indicate the status of your rear-seat side airbags. If you are uncertain of their status, or wish to have the airbags activated or deactivated, please contact your BMW center. ◀

Even when all these guidelines are followed, there is still a small residual risk of injuries to the face, hands and arms occurring in isolated instances.

The ignition and inflation noise may provoke a mild temporary hearing loss in extremely sensitive individuals.

Airbag warning information is also provided on the sun visors.



This is the right way for a child to sit in a child restraint when rear side airbags (arrow) are provided.



This is the right way for a larger child to sit wearing the safety belt when rear side airbags (arrow) are provided.

## Indicator lamp



The indicator lamp indicates the operational status of the airbag system from ignition key position 1.

System operational:

- ▷ The indicator lamp comes on briefly then goes out.

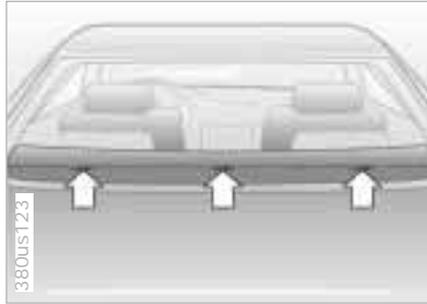
System malfunction:

- ▷ The indicator lamp fails to come on
- ▷ The indicator lamp comes on briefly before going out and then lighting up again.

Please respond to any malfunctions in the system by immediately having it inspected at your BMW center; otherwise the airbag could fail to respond to an accident in which both the angle and the severity of the impact would normally trigger airbag deployment.

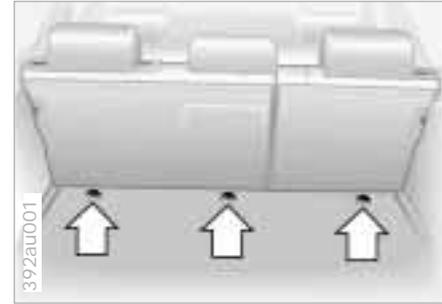
## 62 Transporting children safely

Commercially-available child-restraint systems are designed to be secured with a lap belt or with the lap belt portion of a combination lap/shoulder belt. Improperly or inadequately installed restraint systems can increase the risk of injury to children. Always read and follow the instructions that come with the system.



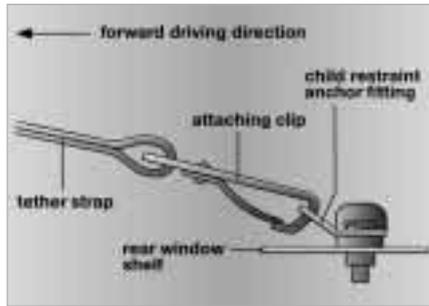
### Child-restraint system with tether strap

If you use a child-restraint system with a tether strap, three additional tether anchorage points have been provided – refer to the arrows in the illustrations. Depending on the location selected for seating in the rear passenger area, attach the tether strap to the corresponding anchorage point to secure the child-restraint system, as shown in the following illustrations.

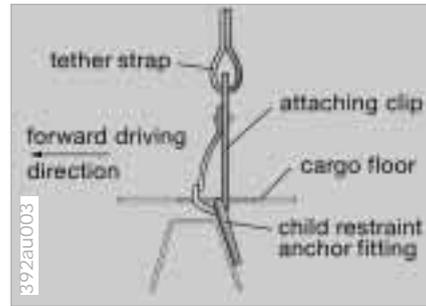


sport wagon:

To gain access to each anchor fitting lift the plastic plug (arrows) with the help of a screwdriver.



The anchor fittings of the sedan are shown in the illustration above. The one in the next column shows the sport wagon.



Each seating position is fitted with a head restraint. Lift the head restraint and pass the tether strap between the head restraint and the seat back. It is recommended to readjust the head restraint into the lowest possible position.

Adjust the tether strap according to the child-restraint manufacturer's instructions.

**⚠** Before installing any child-restraint device or child seat, please read the following: Never install a rear-facing child-restraint system in the front passenger seat of this vehicle. Your vehicle is equipped with an airbag supplemental restraint system for the front passenger. Because the backrest on any rear-facing child-restraint system (of the kind designed for infants under 1 year and 20 lbs./9 kg) would be within the airbag's deployment range, you should never mount such a system in the front passenger seat, since the impact of the airbag against the child-restraint's backrest could lead to serious or fatal injuries. If it is necessary for a child (not an infant) to ride in the front seat, certain precautions should be taken. First, move the passenger seat as far away from the instrument panel as possible. This important precaution is intended to maximize the distance between the airbag and the child.

## 64 Transporting children safely

Older children should be tightly secured with a safety belt, after they have outgrown a booster seat that is appropriate for their age, height and weight. Younger children should be secured in an appropriate forward-facing child-restraint system that has first been properly secured with a safety belt. Never install a rearward-facing child-restraint system in the front passenger seat.

We strongly urge you to carefully read and comply with the instructions for installation and use provided by the child-restraint's manufacturer whenever you use such a system.

Be sure that all occupants (of all ages) remain properly and securely restrained at all times. ◀

All rear seating positions in your vehicle meet the recommendations of SAE J1819, an industry-recommended practice for securing child-restraint systems in motor vehicles.



### Child-restraint installation

All of the rear belt retractors and the front passenger's safety belt can be locked for mounting and securing child-restraint systems.

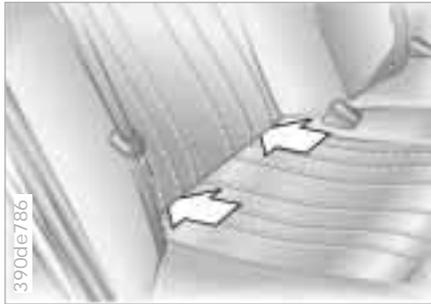
Information regarding this is located near the buckle latch of each safety belt.

### Lock the safety belt

Pull the entire length of the belt from the belt retractor. Allow the reel to retract the belt somewhat and engage the buckle, then tighten the belt against the child-restraint system. The retraction mechanism is now locked.

### Unlock the safety belt

Release the buckle, remove the child-restraint device and allow the belt retractor to reel the belt completely in.



## LATCH child-restraint anchorage points\* – sedan

LATCH: Lower Anchor and Tethers for Children.

Snap the rear center lap belt into the buckle with the word CENTER and then pull the belt away from the area where the child restraint will be mounted.

 Vehicles with through-loading system\*: use the small buckle to connect the two sections of the belt, refer to page [121](#). ◀



The rear outer seating positions are provided with anchors for a LATCH child-restraint system. The illustrations show the right rear seat as an example.

The outer anchorage points for the LATCH child-restraint system are marked with small flags.



Canadian models only:  
The anchorage points for the LATCH child-restraint system are marked with buttons.

 To attach the LATCH child-restraint system, your BMW center will provide an installation guide. The guide, although not necessary for installation of a LATCH child-restraint system, will facilitate the installation and also help protect the vehicle's seating surfaces. Carefully read and comply with the safety precautions of the manufacturer. ◀

## 66 Transporting children safely



### LATCH child-restraint anchorage points\* – sport wagon

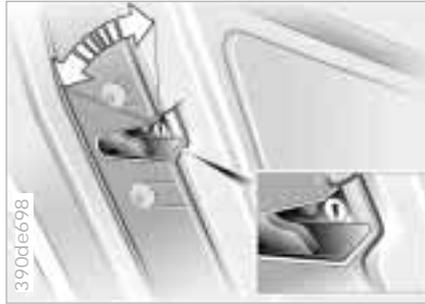
LATCH: Lower Anchor and Tethers for Children.

The rear outer seating positions are provided with anchors for a LATCH child-restraint system. The illustration shows the left rear seat as an example.

Canadian models only:

The anchorage points for the LATCH child-restraint system are marked with buttons, refer to illustration.

 Always follow all manufacturer's instructions and observe all safety precautions when installing the LATCH child-restraint system. ◀



### Child-safety locks

Insert the key to the slot of a rear door lock and turn it outward:

The door can now be opened from the outside only.

# Vehicle Memory, Key Memory



## How the system functions

No doubt you have reflected at one time or another on how great it would be if you could permanently configure your vehicle's various features and adjustments to mirror your own individual preferences. In engineering your vehicle, BMW has incorporated a number of options for personal adjustment that can be programmed into your vehicle at your BMW center.

The available configuration data fall into two categories, according to whether their primary orientation is the vehicle ("Vehicle Memory") or the individual ("Key Memory"). Provided that each person has a separate remote-control key, you can have your BMW center enter two personal adjustments for two different individuals into the system.

The system then relies on a bilateral data exchange to identify the individual user and dial in the selected settings whenever the remote control unit is used to disengage the door locks.

In order for you to distinguish between different keys, colored decals are supplied together with the keys.

## What the system can do

Your BMW center can provide you with details on the capabilities of the Vehicle Memory and Key Memory systems. A few examples follow below:

Examples for Vehicle Memory:

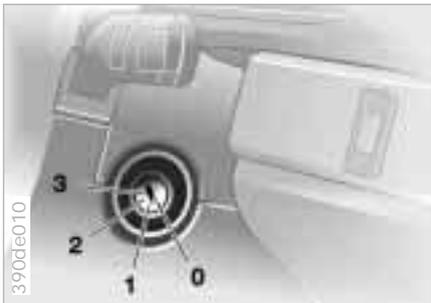
- ▷ Various signals as acknowledgment when locking or unlocking your vehicle
- ▷ Activates/deactivates the "Follow me home" function.

Examples for Key Memory:

- ▷ Locks the vehicle when you start off
- ▷ Automatically adjusts the driver's seat, the exterior mirrors and the steering wheel position to your personal programmed settings when you unlock the vehicle
- ▷ The automatic climate control assumes your preset comfort settings when you unlock the vehicle.



You will see this symbol throughout the Owner's Manual. It is to remind you at appropriate places of the settings that are available to you. ◀



- 0 Steering locked
- 1 Steering unlocked
- 2 Ignition switched on
- 3 Starting engine

### Steering locked

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

After removing the key, turn the steering wheel slightly to the left or right until the lock engages.

An acoustic warning is sounded when you fail to remove the ignition key after opening the driver's door.



Vehicles with automatic transmission:

Do not move the selector lever from the "Park" position until the engine is running (ignition key in position 2).

To turn the key back to position 0 (for instance, prior to removal), start by moving the selector lever to position P (Interlock). ◀

### Steering unlocked

You will find that it is often easier to turn the ignition key from position 0 to position 1 when you move the steering wheel slightly to help disengage the lock.

Individual electrical accessories are ready for operation.

### Starting engine



Vehicles with manual transmission: depress the clutch when starting the engine. A lockout prevents the engine from starting with the clutch engaged. ◀

## Starting the engine

### Before starting

- ▷ Engage the parking brake
- ▷ Be sure that the gearshift lever is in "Neutral" or the selector lever in "Park" if the vehicle is equipped with an automatic transmission
- ▷ Depress the clutch pedal.



Do not allow the engine to run in enclosed spaces. The exhaust gases contain carbon monoxide, an odorless and colorless, but highly toxic gas. Breathing the exhaust gases poses an extreme health risk, and can lead to unconsciousness and death. Never leave the vehicle unattended with the engine running. An unattended vehicle with a running engine represents a potential safety hazard. ◀

# Starting the engine

## Starting the engine

Do not press the accelerator pedal while starting the engine.

 While it is important not to release the key prematurely, you should also avoid allowing the starter to operate continuously for more than 20 seconds at a time. Release the ignition key immediately as soon as the engine starts.

BMW 540i with automatic transmission: Your BMW is equipped with the convenience starting feature. Simply turn the key to position 3 (starter) and then release it immediately.

The starter continues to operate automatically and will be deactivated as soon as the engine starts.

The automatic starting mode will not operate if the battery voltage is low. The engine can be jump-started using an external power source (refer to page 164). ◀

Do not allow the engine to warm up by leaving it running while the vehicle remains stationary. Instead, begin to drive immediately at a moderate engine speed.

Should the engine fail to start on the first attempt (if it is very hot or cold, for instance):

▷ Press the accelerator pedal halfway down while engaging the starter.

Cold starts at extremely low temperatures of roughly +5 °F (-15 °C) or below and at altitudes of over 3,300 ft (1,000 m):

▷ Allow the starter to turn somewhat longer (approx. 10 seconds) during your initial starting attempt.

Engine idle speed is controlled by the engine-management system. Higher idle speeds at startup are normal and should decrease as the engine warms up. If engine speed does not decrease, service is required.

To prevent the battery from discharging, always deactivate electrical devices that are not in use. Switch the ignition off when the vehicle is not being driven.



Extended starting attempts, characterized by excessively frequent or long periods with the starter engaged, can lead to damage of the catalytic converter. ◀



When driving, standing at idle, and parking the vehicle, take care to avoid contact between the exhaust system and flammable materials (grass, hay, leaves, etc.). Such contact could lead to a fire, resulting in serious personal injury and property damage. ◀

## 70 Switching off the engine Parking brake

Turn the ignition key to position 1 or 0.

 Do not remove the ignition key while the vehicle is rolling. The steering locks, making it impossible to steer the vehicle.

Always remove the ignition key and engage the steering lock before leaving the vehicle.

Vehicles with manual transmission:

Always engage the parking brake when parking on hills and inclined surfaces, as first gear or reverse may not provide adequate resistance to rolling.

Vehicles with automatic transmission: Place the selector lever in "Park." ◀

Vehicles with automatic transmission:

The vehicle must be stationary and the selector lever in "Park" before you can remove the ignition key.



The parking brake is primarily designed to prevent the vehicle from rolling while parked. It operates on the rear wheels.

### To engage

The lever engages automatically and the "PARK BRAKE" or "BRAKE" (in Canada "P") indicator lamp comes on in the instrument cluster in ignition key position 2. Refer to pages [19](#) and [20](#).

### To release

Pull up slightly on the lever, press the button and lower the lever.

 If, in exceptional circumstances, it should be necessary to engage the parking brake while the vehicle is in motion, do not pull it with excessive pressure. Keep your thumb pressed against the release button while carefully pulling up the lever to apply moderate pressure.

Excessive pressure can lead to over-braking and loss of traction (fishtailing) at the rear.

The brake lamps do not come on when the parking brake is applied.

Vehicles with manual transmission:

Always engage the parking brake when parking on hills and inclined surfaces, as first gear or reverse may not provide adequate resistance to rolling.

Vehicles with automatic transmission: Place the selector lever in "Park." ◀

You can help prevent corrosion and avoid uneven braking response by gently engaging the parking brake from time to time when coasting to a stop at traffic lights (ensure that you will not pose a hazard to other road users).



## BMW 525i, 530i

Every time you shift gears, always depress the clutch pedal all the way down, pushing the gearshift lever into the respective end position.

Depress the clutch when starting the engine, as the lockout will prevent the engine from starting if the clutch is not depressed.



## BMW 540i

When shifting gears, always depress the clutch pedal all the way down, pushing the gearshift lever into the respective end position.

Depress the clutch when starting the engine, as the lockout will prevent the engine from starting if the clutch is not depressed.

 When shifting gears in the 5th/6th-gear plane, be sure to press the gearshift lever to the right in order to prevent inadvertent selection of a gear in the 3rd/4th-gear plane. ◀

## Reverse

Select only when the vehicle is completely stopped. Press the gearshift lever to the left to overcome the resistance.

When you engage reverse, the backup lamps will come on automatically when the ignition key is in position 2.

 Do not hold the vehicle in place on slopes by slipping or "riding" the clutch. Use the parking brake instead. Riding the clutch causes increased clutch wear. ◀



The automatic transmission of your BMW is equipped with Adaptive Transmission Control (ATC), a system which reacts with precision to your individual driving style and vehicle operating conditions. ATC operates by automatically selecting from among a range of available control programs.

### **Selector lever positions**

P R N D 4 3 2

The transmission range display varies according to the equipment of your vehicle (refer to the illustrations).

### **Starting the engine**

The selector lever must be in "Park" or "Neutral" before it is possible to start the engine.

### **Range selection**

A detent prevents inadvertent shifts into some selector lever positions. To disengage the detent, press the button on the front of the selector lever knob (arrow).

 While the vehicle is stationary and before shifting out of "Park" or "Neutral," depress the footbrake in order to disengage the selector lever's lock mechanism (Shiftlock). Hold the footbrake down until starting off. Otherwise the vehicle will "creep" when a drive position is engaged. ◀

## Automatic transmission\*



Before leaving the vehicle when the engine is running, move the selector lever to the "Park" or "Neutral" position and apply the parking brake to prevent the vehicle from rolling. Never leave the vehicle unattended with the engine running. An unattended vehicle with a running engine represents a potential safety hazard. If you should accidentally select "Neutral" while traveling at high speed, remove your foot from the accelerator pedal immediately. Allow the engine speed to drop to idle before selecting the desired drive position. Damage could otherwise occur due to excessive engine speed. ◀

### P Park

Select only when the vehicle is completely stopped. The transmission locks to prevent the rear wheels from turning.

### R Reverse

Select only when the vehicle is completely stopped.

### N Neutral (idle)

Select only if your journey is interrupted for a longer period.

### D Drive (automatic shift program)

This position is designed for driving under all normal operating conditions. All forward gears are available.

Under normal operating conditions, fuel consumption is lowest when driving in position D.

### 4 – Sport Program

The Sport Program is designed for performance-oriented driving.

### 3 and 2 – shift limiter

Select this range when you wish to limit gear changes (on steep uphill or downhill slopes, for instance). The transmission shifts up only as far as the selected gear limit.

### "Kickdown"

In the "kickdown" mode, you achieve maximum performance. Depress the accelerator pedal past the resistance point at the full-throttle position.

### **Electronic transmission control module**



If the indicator lamp comes on and/or if the message "TRANS. FAILSAFE PROG" appears in the Check Control\* display panel, this indicates a malfunction in the transmission control system.

Bring the vehicle to a stop, select the "Park" position, apply the parking brake and switch the engine off (ignition key position 0). Restart the engine after a few seconds. If the indicator lamp goes out again after a few seconds, the normal transmission functions have been restored. You may continue to drive as usual.

If the indicator lamp does not go out, you can move the selector lever to all positions. However, the vehicle will now only drive forward with limited gear selection.

You should respond by avoiding extreme engine loads and referring the problem to the nearest BMW center.



Never perform work in the engine compartment without first ensuring that the transmission is in "Park" or "Neutral" as the vehicle could otherwise start to move off on its own. ◀

For jump-starting, towing and tow-starting, refer to pages [164](#) and [165](#).

You can drive as with a normal automatic transmission. In addition, you can also shift manually.

When you move the selector lever from the "D" position to the left into the M/S range, the performance-oriented shift programs of the automatic transmission are engaged. Steptronic enters the manual selection mode and executes the desired shift whenever you tap the selector lever in the direction indicated by "+" or "-." When you wish to use the automatic transmission mode again, move the selector lever to the right into the "D" position.

Under normal operating conditions, fuel consumption is lowest when driving in position D.



## Selector lever positions

P R N D M/S

## Starting the engine

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



## Range selection

A detent prevents inadvertent shifts to the "Reverse" or "Park" selector lever positions. To disengage the detent, press the button on the front side of the selector lever knob (arrow).

 While the vehicle is stationary and before shifting out of "Park" or "Neutral," depress the footbrake in order to disengage the selector lever's lock mechanism (Shiftlock). Hold the footbrake down until starting off. The vehicle will otherwise "creep" when a drive position is engaged. ◀



To prevent the vehicle from starting off on its own, always move the selector lever to position P or N and engage the parking brake before leaving your vehicle with the engine running. Do not leave the vehicle unattended with the engine running. An unattended vehicle with a running engine represents a potential safety hazard. ◀

### **P Park**

Select "Park" only when the vehicle is completely stopped. The transmission locks to prevent the rear wheels from turning.

### **R Reverse**

Select "Reverse" only when the vehicle is completely stopped.

### **N Neutral (idle)**

Select "Neutral" only if your journey is interrupted for a longer period.

### **D Drive (automatic shift program)**

This position is designed for driving under all normal operating conditions. All forward gears are available.

### **"Kickdown"**

In the "kickdown" mode, you achieve maximum acceleration and top speed in position D.

Depress the accelerator pedal past the resistance point at the full-throttle position.



### **M/S Manual mode and Sport Program**

When you change from "D" to "M/S," the Sport Program is activated. This is indicated by "D S" in the transmission range display. The Sport Program is designed for performance-oriented driving.

With the first brief touch, the automatic transmission shifts from the Sport Program to the manual mode. Whenever you move the selector lever in the "+" direction, the transmission upshifts, and when you move it in the "-" direction, the transmission downshifts. M1...M5 will be displayed in the gear indicator.

ATC executes upshifts and downshifts only when the new gear will provide a suitable combination of vehicle and engine speed, i.e., ATC will not execute downshifts that would cause the engine to overrev. The gear selected will appear briefly in the instrument cluster followed by the current gear.

 If you are driving in the manual mode and wish to accelerate rapidly from low road speeds (when passing, for instance), you must shift down manually or with the "kickdown" function. ◀

You can only change from "M/S" to selector lever positions "P," "R," and "N" via the "D" position.

## Electronic transmission control module



If the indicator lamp comes on or the message "TRANS. FAIL-SAFE PROG" appears in the Check Control\*, there is a fault in the transmission system.

Bring the vehicle to a stop. Move the transmission selector lever to "P." Engage the parking brake and turn the engine off (ignition key to position 0).

Wait a few seconds, then start the engine.

If the indicator lamp goes out after a few seconds, normal transmission performance has been restored. You may continue to drive as usual. If the indicator lamp does not go out, you can place the selector lever in all positions. However, the vehicle will now only drive forward with limited gear selection.

If this happens, avoid extreme engine loads and refer the problem to the nearest BMW center.



Never perform work in the engine compartment without first ensuring that the transmission is in "Park" or "Neutral" as the vehicle could otherwise start to move off on its own. ◀

For jump-starting, towing and tow-starting, refer to pages [164](#) and [165](#).



- 1 High beams (blue indicator lamp)
- 2 Headlamp flasher (blue indicator lamp)
- 3 Turn signal indicator (green indicator lamp accompanied by periodic clicking sound from the relay)

### To signal briefly

Press the lever up to but not beyond the pressure point. It then returns to the center position when released.



If the indicator lamp and the clicking from the relay are both faster than normal, one of the turn signal indicators has failed. ◀



- 0 Wipers retracted
- 1 Intermittent mode or rain sensor\*
- 2 Normal wipe
- 3 Fast wipe
- 4 Brief wipe
- 5 Clean the windshield
- 6 Intensive cleaning\*
- 7 Rotary dial for controlling wipe intervals in the intermittent mode and for setting the rain sensor's sensitivity level\*

### Intermittent mode or rain sensor\*

Intermittent mode:

You can set the wipe interval to four stages with rotary dial 7. In addition, the wipe interval is varied automatically depending on road speed.

Rain sensor:

The rain sensor is positioned on the windshield, directly ahead of the interior rearview mirror.

To activate the rain sensor:

Move the lever to position 1 with the ignition key in position 1 or higher. The wipers travel once across the windshield, regardless of the weather conditions.

You can leave the lever permanently in position 1. Whenever the ignition key is in position 1 or higher, all you then need to do to activate the rain sensor is briefly turn the rotary dial 7.

To adjust the sensitivity of the rain sensor:

Turn rotary dial 7.

Deactivating the rain sensor:

Move lever to position 0.

## Washer/Wiper system

 Turn the rain sensor off in automatic car washes. Failure to do so could result in damage caused by undesired wiper activation. ◀

### Normal wipe

The system automatically reverts to operation in the intermittent mode whenever the vehicle is stationary (not on vehicles with rain sensor\*).

### Fast wipe

The wipers revert to operation at normal speed when the vehicle stops (not on vehicles with rain sensor\*).

### Clean the windshield

The system sprays washer fluid against the windshield and activates the wipers for a brief period.

### Intensive cleaning\*

As in setting 5. In addition, an intensive-action washer fluid is first sprayed on the windshield.

For changing the wiper blades, refer to page 152.

### Clean the headlamps\*

When the headlamps are on, they are also cleaned automatically every fifth time you activate the clean the windshield (5) or intensive cleaning (6) mode.

 Do not use the washers if there is any danger that the fluid will freeze on the windshield, as your vision could be obscured. Always use an anti-freeze agent. Refer to page 141. Do not use the washers when the reservoir is empty. This could cause damage to the washer pump. ◀

### Windshield washer jets

The windshield washer jets are warmed automatically when the ignition key is in position 2.



### Rear window wiper – sport wagon

- 0 Retracted (home) position of the rear window wiper
  - 1 Rear window wiper in intermittent mode. Automatically switches to continuous operation when reverse is engaged
  - 2 Clean the rear window
- You can also program the interval:
- ▷ Switch briefly from position 0 to position 1
  - ▷ The time until reactivation (from position 0 to 1) is the programmed interval (max. 30 seconds).

## 80 Washer/Wiper system

The programmed interval is deleted

- ▷ approx. 10 seconds after the lever is placed in position 0 or
- ▷ after the engine is switched off.

When the rear window is opened, the rear window wiper is switched off. It must be switched on again after the window has been closed.

For changing the wiper blade, refer to page 152.

## Cruise control

You can store and automatically maintain any desired vehicle speed above approx. 20 mph (30 km/h).

The cruise control is available whenever the engine is running and the system has been activated.

### To activate the system



In ignition key position 1 or 2: Press the button and the indicator lamp in the instrument cluster (refer to page 21) will come on. You can now use the cruise control.



Do not use cruise control on twisting roads, when high traffic density prevents driving at a constant speed, or when the road surface is slick (snow, rain, ice) or loose (rocks or gravel, sand). ◀

### To deactivate the system



Press button as often as needed until the indicator lamp in the instrument cluster goes out.

Cruise control is also deactivated when the ignition key is in position 0.

The speed stored in memory is deleted.

## Cruise control

### To maintain and store speed or to accelerate



Press button (+) briefly:

The system maintains and stores the current vehicle speed. Every time you tap the button, the speed increases by approx. 0.6 mph (1 km/h).

Press and hold button (+):

The vehicle accelerates without pressure on the accelerator pedal. When you release the button, the system maintains and stores the current speed.



If, on a downhill gradient, the engine braking effect is not sufficient, the controlled speed can be exceeded. Speed can drop on uphill grades if the engine output is insufficient. ◀

### To decelerate



Press button (-) briefly:

If you are already driving with active cruise control, the speed is decreased by approx. 0.6 mph (1 km/h) every time you tap the button.

Press and hold button (-):

With the cruise control active, the system automatically reduces the throttle opening to slow the vehicle. When you release the button, the system maintains and stores the current speed.

### To interrupt the cruise control



When the system is activated, press the button. The indicator lamp stays on. You can use the cruise control again whenever you want by calling up the speed that was stored last.

In addition, cruise control is interrupted automatically:

- ▷ When the brakes are applied
- ▷ When you depress the clutch pedal
- ▷ If you exceed or fall below the programmed speed for an extended period (by depressing the accelerator, for example).

### To recall the stored setting



Press button:

The vehicle accelerates to and maintains the last speed stored.

## 82 Odometer, outside temperature display



- 1 Odometer
- 2 Trip odometer
- 3 Outside temperature display

### Odometer

You can activate the displays shown in the illustration with the ignition key in position 0 by pressing the button in the instrument cluster (arrow).

The range of available displays varies according to your individual vehicle's equipment.

### Trip odometer

To reset the trip odometer to zero, press the button (arrow) with the ignition key in position 1 or 2.

### Ice warning

If the outside temperature drops to approx +37.5 °F (+3 °C), a warning signal sounds and the display flashes briefly.

 The ice warning does not alter the fact that surface ice can form at temperatures above +37.5 °F (+3 °C), on bridges and shaded road surfaces, etc. ◀

### Outside temperature display

The outside temperature appears in the display from ignition key position 1 on. You can change the units of measurement (°F/°C) by

1. pressing and holding down the button (arrow) with the ignition key in position 1
2. and then turning the ignition key to 0.

Refer also to page 88.

## Tachometer



Do not operate the engine with the needle in the red overspeed zone of the gauge.

To protect the engine, the engine-management system interrupts the fuel supply when you approach this sector.

## Energy control



Indicates the current fuel consumption in mpg (in liters/100 km on Canadian vehicles). This allows you to see whether your current driving style is conducive to fuel economy with minimum exhaust emissions.

When the vehicle is stationary, the display goes to "Maximum" (zero on Canadian models).

## Fuel gauge



When you switch on the ignition, the indicator lamp comes on briefly to confirm that the system is operational. If the indicator lamp stays on, there are approx.

- ▷ 2.0 gal (8 liters) – BMW 525i, BMW 530i
  - ▷ 2.5 gal (10 liters) – BMW 540i
- of fuel still in the tank.

Tank capacity: refer to page [175](#)

Certain operating conditions (such as those encountered in mountainous areas) may cause the needle to fluctuate slightly.

 Please refuel early, since driving to the last drop of fuel can result in damage to the engine and/or catalytic converter. ◀

## 84 Coolant temperature gauge



### Between the blue and red zones

Normal operating range. The needle may rise as far as the edge of the red sector in normal operation.

Checking coolant level: refer to page [144](#).

### Blue

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

### Red

When you switch on the ignition, the warning lamp\* comes on briefly to confirm that the system is operational.

If the warning lamp lights up during normal vehicle operation, or the message "COOLANT TEMPERATURE" appears in the Check Control\*, the engine is overheated. Switch off the engine immediately and allow it to cool down.

## Service Interval Display



The range of available displays varies according to your individual vehicle's equipment.

### Green lamps

The number of illuminated lamps decreases as the time for your next maintenance visit approaches.

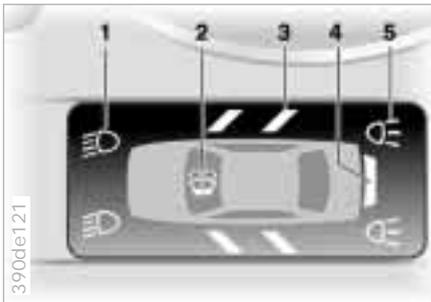
### Yellow lamp

This field appears together with OILSERVICE or INSPECTION.

Maintenance is due. Please contact your BMW center for an appointment.

### Red lamp

The maintenance deadline has been passed.



## Graphic display\*

The following alerts and status messages are displayed with icons from ignition key position 2 and remain in the display until the defects are corrected:

- 1 Check low beams
- 2 Add washer fluid (goes out after approx. 1 minute)
- 3 Door open
- 4 Luggage compartment lid/tailgate open
- 5 Check brake and tail lamps.  
A defective center brake lamp is indicated by the upper symbol

When you open the door after stopping, a warning signal sounds without a visual indicator for:

- ▷ "LIGHTS ON" and
- ▷ "KEY IN IGNITION LOCK."

## Alphanumeric display\*

Text messages are used to alert the driver to system malfunctions when the ignition key is turned to position 2. The alert is accompanied by a gong.

- 1 Status messages symbol
- 2 Display
- 3 CHECK button

Messages warning of system malfunctions are assigned one of two priority levels:

## Priority 1

These defects are immediately indicated by a gong and a flashing warning symbol 1. Simultaneous defects will be displayed consecutively. These status messages remain in the display until the defects are corrected. They cannot be deleted by pressing the CHECK button 3:

## ▷ "RELEASE PARKINGBRAKE"

## ▷ "COOLANT TEMPERATURE"

The coolant is overheated. Stop the vehicle immediately and switch off the engine. Refer to pages [84](#) and [144](#)

## ▷ "STOP!ENGINE OILPRESS"

The oil pressure is too low. Stop the vehicle immediately and switch off the engine. Refer to pages [19](#), [142](#)

## ▷ "CHECK BRAKE FLUID"

Indicates that brake fluid is down to roughly minimum level. Have the reservoir topped up at the earliest opportunity, refer to page [145](#). Have the source of the brake fluid loss repaired at your BMW center

## ▷ "TIRE DEFECT"\*

Reduce vehicle speed immediately and stop the vehicle. Avoid hard brake applications. Do not oversteer. Refer to page [102](#)

## ▷ "SELFLEVEL SUSP.INACT"

Please consult the nearest BMW center. Refer to page [101](#)

## ▷ "LIMIT"\*

Display if the programmed speed limit has been exceeded, refer to page [93](#)

## Priority 2

These displays appear for 20 seconds when the ignition key is turned to position 2. The warning symbols remain after the message disappears. You can display the messages again by pressing the CHECK button 3:

## ▷ "TRUNKLID OPEN"

Message appears only when the vehicle is initially set in motion

## ▷ "DOOR OPEN"

This message appears after a defined road speed has been exceeded

## ▷ "FASTEN SEAT BELTS"\*

In addition to this message, a warning lamp with the safety belt icon appears and an acoustic signal sounds

## ▷ "WASHER FLUID LOW"

Too low; top up fluid at the next opportunity. Refer to page [141](#)

## ▷ "CHECK ENGINE OIL LEV"

The engine oil level is at the absolute minimum. You should respond by topping up the oil as soon as possible, refer to page [142](#). Do not continue for more than approx. 30 miles (50 km) before adding oil

## ▷ "CHECK FILLER CAP"

Inspect the cap to make sure that it is closed properly, refer to page [25](#)

## ▷ "OUTSIDE TEMP. +20 °F (-5 °C)"

This display is only an example. The current temperature is displayed at outside temperatures of +37.5 °F (+3 °C) and below. Refer also to page [82](#)

## ▷ "TIRE PRESSURE SET"\*

The RDC has imported the current inflation pressure in the tires as the target values which the system will monitor.

Refer to page [101](#)

## ▷ "CHECK TIRE PRESSURE"\*

Check and correct the tire inflation pressure to specifications at the earliest opportunity (next stop to refuel).

Refer to page [101](#)

## ▷ "TIRECONTROL INACTIVE"\*

A temporary interference of the RDC or a system fault. Refer to page [102](#)

## ▷ "CHECK BRAKE LIGHTS"

A lamp has failed or the electrical circuit has a fault. Refer to pages [156](#) and [162](#) or consult a BMW center

# Check Control

- ▷ "CHECK LOWBEAM LIGHTS"  
"CHECK SIDE LIGHTS"  
"CHECK REAR LIGHTS"  
"CHECK FRONT FOGLAMPS"  
"CHECK LICPLATE LIGHT"  
"CHECK HIGHBEAM LIGHT"  
"CHECK BACK UP LIGHTS"  
Defective bulb or circuit. Refer to pages 153 and following, page 162 or consult your BMW center
- ▷ "TRANS. FAILSAFE PROG"  
Please consult the nearest BMW center. Refer to pages 74 and 77
- ▷ "CHECK BRAKE LININGS"  
Have the brake pads inspected by your BMW center. Refer to page 134
- ▷ "CHECK COOLANT LEVEL"  
Coolant too low, top up at the next opportunity. Refer to page 144
- ▷ "ENGINE FAILSAFE PROG"\*  
Indicates a malfunction in the electronic engine-management system, which then reverts to an emergency default program allowing continued operation at reduced power and lower engine speeds.  
Please have the system inspected at your BMW center.

## Displays after completion of trip

All of the malfunctions registered during the trip appear consecutively when the ignition key is turned to position 0.

The following displays will appear when appropriate:

- ▷ "LIGHTS ON"
- ▷ "KEY IN IGNITION LOCK"
- ▷ "CHECK ENGINE OIL LEV"  
Add engine oil at the next opportunity (next stop to refuel). Refer to page 142.

This display appears when you open the driver's door after parking the vehicle. A supplementary gong is also heard.

Status messages remain available for a period of approx. three minutes after the display goes out and the key is removed from the ignition. Press the CHECK button 3. If there were multiple reports, press the CHECK button repeatedly to view them all in sequence.

## To check the Check Control

Press the CHECK button 3 with the ignition key in position 2:

CHECK CONTROL OK appears in the display.

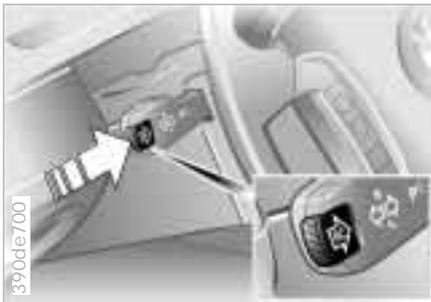
No malfunctions are present in the monitored systems.

## Computer

You can find a description of the computer on pages 88 and 93 as well as in the "Owner's Manual for Onboard Computer."



You can have the Check Control and computer messages displayed in a different language. ◀



### Mode selection

From ignition key position 1 and up, you can press the button in the turn signal lever to retrieve information from the computer for display. Tap the button toward the steering column to scroll to the next status display in the sequence.

The displays appear in the following order: outside temperature, average fuel consumption, cruising range, average speed.

Starting with ignition key position 1, the last active setting is displayed.

The range of available displays varies according to your individual vehicle's equipment.



### Outside temperature and average fuel consumption

You can change the units of measure (°F/°C) for the outside temperature display by

1. pressing and holding the trip odometer reset button (in ignition key position 1)
2. and then turning the ignition key to 0.

Refer also to page [82](#).

### Cruising range and average speed

The computer bases its calculations of the cruising range on the previous driving style and conditions.

The computer ignores any time spent when the vehicle is stationary and the engine is not running in its average speed calculations.

### To delete the display

Press the button in the turn signal lever while the average speed is being shown to cancel the display of computer information.

### To restart calculations

You can maintain pressure on the button within the turn signal lever to reset the computer and initiate new calculations of average speed and fuel consumption. This feature is only available when the engine is running.

### Computer with alphanumeric display\*

If your vehicle is equipped with Check Control featuring an alphanumeric display, a description of the corresponding computer can be found starting on page [93](#) as well as in the "Owner's Manual for Onboard Computer."

## Multi-Information Display (MID)\*

### Central display

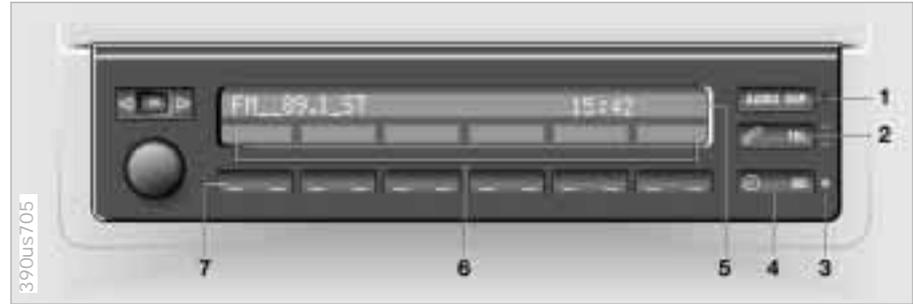
The MID serves as the central display and operation for the following onboard systems:

- ▷ Digital clock (e.g. time display, date)
- ▷ Audio systems (radio, cassette, CD)
- ▷ Computer (e.g. fuel consumption, cruising range)
- ▷ Cellular phone (e.g. dialing).

You will find explanations and information on operating the digital clock and the computer on the following pages. Please refer to the separate Owner's Manual instructions for operating the audio systems, the cellular phone and the onboard computer.

 The system rejects implausible numerical entries.

Any interruption in the supply of electrical power from the battery will result in the loss of all stored data. Once the power has been restored, you will need to reset the clock and re-enter any times for activating the auxiliary heater/parked-car ventilation. Distance and vehicle speed data must also be entered again. ◀



- 1 Function button for audio systems
- 2 Function button for the cellular phone\*
- 3 Indicator lamp for independent ventilation\*
  - ▷ remains on if switch-on time is active
  - ▷ flashes while operating
- 4 Function button for the digital clock and computer
- 5 Indicator display for the various computer systems
- 6 Display for the entry and display buttons. Depending on the operating mode, the functions and alternatives which can be selected at the buttons are displayed here
- 7 Entry and display buttons for operating the various computer systems

## 90 Digital clock in the MID\*

 Only make entries when the vehicle is standing still – to avoid endangering yourself or other road users. ◀

### To call up time or date



Press the left side of the button.

Display shows:



You can have the time displayed in 12 or 24 hours.

To change the display:



Press the left side of the button.

If the 12-hour time display is in use, AM or PM appear after the time.

### To change the time



Press the left side of the button.



Press the right side of the button:  
The dots flash in the display.

To alter the setting:



Press on the left or right, or hold the button down.

To store the entry:



Press the right side of the button.

### To change the date



Press the left side of the button.



Press.



Press the right side of the button:  
The dots and the DATE display flash.

To alter the setting:



Press on the left or right, or hold the button down.

To store the entry:



Press the right side of the button.

The clock takes leap years into account and therefore does not have to be reset manually.

## Digital clock in the MID\*

### Reminder signal

You can program a reminder signal (Memo) to be heard every hour, so that you are sure not to miss a news broadcast, for example.



Press the left side of the button.



Press:

MEMO OFF appears in the display for entry and query buttons, and the tone symbol will appear in the upper right of the display.

A signal is then heard 15 seconds before each hour.

### Stopwatch



Press the left side of the button.



Press.

Display shows:



To start the stopwatch function:



Press the right side of the button.

To take an intermediate time reading:



Press.



Press:

The stopwatch display can be seen counting up; the stopwatch continues to run.

To halt the stopwatch:



Press the right side of the button.

 The stopwatch is halted when the ignition key is turned back to 0, but starts to run again when the ignition key is turned to 1. ◀

## 92 Digital clock in the MID\*

### Enter the switch-on times for the parked-car ventilation\*

You can enter two different activation times.

The ventilation will shut off automatically after 30 minutes.



To use the parked-car ventilation system, please refer to the information provided starting on page [114](#).



Press the left side of the button.



Press on the left or right.

Display shows:



Press the right side of the button:  
Display flashes, e.g. TIMER 1.

To enter the time:



Press on the left or right, or hold the button down.

To confirm the entry:



Press the right side of the button.

The activated time is marked with an asterisk.



The activation times remain stored until new entries are made.

You can change switch-on times that have already been memorized by making a new time entry as described above.

When the switch-on time is active, the LED comes on in the MID. During actual operation of the ventilation, the LED flashes. The LED goes out when the system is switched off.

To activate/deactivate the time:



Press twice.

### Directly switching the parked-car ventilation\* on and off



The parked-car ventilation function is only available in ignition key position 1.



Press the left side of the button.



Press.

Or



Press.

## Computer in the MID\*

 Only make entries when the vehicle is standing still to avoid endangering yourself or other road users. ◀

Computer calculations begin at the start of the journey.  
Information can also be accessed for display by remote control, refer to page 97.

### Speed limit

Speed limit entry:

You can enter the road speed at which you wish to hear and see a reminder signal: a signal will sound, the word LIMIT will flash, and for a moment, the speed limit warning stored in the memory will appear on the instrument cluster as an alphanumeric display\*, along with the Check Control.

The speed limit reminder is only repeated if the vehicle has in the meantime been driven at least 3 mph (approx. 5 km/h) slower.



Press the right side of the button.



Press.



Press the right side of the button.

Display shows:



Enter the limit by pressing the function buttons.

To correct an entry:



Press the left side of the button and repeat the entry.

To store the entry:



Press the right side of the button.

## 94 Computer in the MID\*

To adopt the current speed as the speed limit:



Press the right side of the button.



Press.



Press twice at right.

Deactivating the speed limit:



Press the right side of the button.



Press.

The LIMIT display goes out, but the stored value is not lost and can be reactivated by pressing the LIMIT button.

### Distance to destination

The remaining distance to the destination will be displayed on the screen. This is of course only possible if you entered the entire distance before starting the journey.

Enter:



Press the right side of the button.



Press the left side of the button.



Press the right side of the button.

Display shows:



You can enter the distance by pressing the function buttons.

To correct an entry:



Press the left side of the button and repeat the entry.

To store the entry:



Press the right side of the button.

To recall stored value:



Press the right side of the button.



Press the left side of the button.

## Computer in the MID\*

### Estimated time of arrival

When you have entered the distance from your destination, you can obtain an estimated time of arrival display which is continuously updated by the computer as your average driving period varies.



Press the right side of the button.



Press the right side of the button:  
The estimated time of arrival is displayed.

### Cruising range

The distance which the vehicle should cover on the remaining fuel in the tank is displayed.



Press the right side of the button.



Press:  
The display shows the estimated cruising range.

 Always refuel when the range falls below 30 miles (50 km), as otherwise the engine or the catalytic converter could be damaged. ◀

The computer will only register fuel amounts over 1.8 gal (6 liters).

### Fuel consumption

You can have the average fuel consumption displayed for two different distances, for example a complete journey and part of the journey.

To start the calculation, select the function with the engine running:



Press the right side of the button.



Press on the left or right:  
The display will show the average fuel consumption.

To restart the fuel consumption calculation:



Press on the left or right.



Press the right side of the button.

### Speed

You can call up a display of the vehicle's average speed.

To start the calculation, select the function with the engine running:



Press the right side of the button.



Press:

The display shows the average speed.

To recalculate the speed:



Press the right side of the button.

### Extended immobilizer function

You can enter a code that will prevent the engine from being started unless the code is entered.

If you do not have access to the code, the emergency deactivation procedure will have to be carried out, refer to the next page.

Entering and activating the code:



Press the right side of the button.



Press the left side of the button.

Display shows:



Enter the code with the function buttons.

To correct an entry:



Press the left side of the button and repeat the entry.

To store the entry:



Press the right side of the button. Turn the ignition key to position 0.

To deactivate the code:

When you are asked to enter the code (ignition key in position 1 or 2):

▷ Enter the code with the function buttons.



Press the right side of the button.

After the code has been entered correctly and confirmed with the SET button, the time display appears.

## Computer in the MID\*

After three incorrect code entries, or three attempts to start the engine without a code entry, the alarm will sound for 30 seconds on vehicles equipped with an alarm system.

Deactivating the alarm in an emergency:

If you have forgotten the code, proceed as follows:

1. Disconnect the battery, wait approx. 2 minutes, then reconnect it. Note that on vehicles with an alarm system, the alarm will sound
2. Turn the ignition key to position 1: The time display will count down for the next ten minutes
3. After ten minutes, start the engine.

 If the code becomes available again in the meantime, it can be entered during the waiting period after pressing the CODE button. ◀



### Remote control

The button on the turn signal indicator lever can be used to select the computer data which are to be displayed.

To do this, press

- ▷ the button on the lever until PROG 1 shows on the display
- ▷ the MID buttons in the order in which you wish the information to be displayed.

Each time an entry is stored, the program number appears on the display.

To terminate the selection procedure:



Press the right side of the button.

To have all the available information displayed, press

- ▷ the button on the lever until the display shows PROG 1
- ▷ the SET button.

To obtain individual items of information, press the button briefly as often as necessary.

### **The concept**

PDC provides extra safety and convenience during parking maneuvers by providing an acoustic signal to indicate the distance between your front and rear bumpers and the nearest object. To do this, four ultrasonic sensors in the front and rear bumpers each measure the distance to the nearest object. The monitoring range of the front sensors and two rear sensors at the ends of the rear bumper extends outward roughly 2 ft (60 cm), while the rear bumper's two centrally located sensors detect objects at distances of up to approx. 5 ft (1.50 meters).

### **Automatic function**

The system starts to operate automatically approx. one second after you select reverse or move the selector lever into the "R" position with the ignition key in position 2.



### **Manual activation**

Press the button, the indicator lamp lights up.

When you subsequently drive a distance of more than approx. 160 ft (50 meters) or exceed a speed of approx. 20 mph (30 km/h), the system switches off and the indicator lamp goes out. Reactivate the system as required.

### **Acoustic signals**

The distance from an obstacle is indicated in front with a higher intermittent tone, at the rear with a lower intermittent tone. As the distance between vehicle and object decreases, the intervals between the tones become shorter. A continuous tone indicates the presence of an object less than 1 ft (30 cm) away.

The warning signal is canceled after approx. three seconds if you are moving parallel to a wall.

If there is a malfunction of the system: The indicator lamp flashes and a brief continuous signal tone is heard

- ▷ if you activate PDC with the button
- ▷ when you first select reverse or move the selector lever into the "R" position after switching on the ignition
- ▷ if a malfunction occurs while the PDC system is active.

Switch the system off and have the cause of the malfunction corrected at your BMW center.

 PDC does not remove the driver's personal responsibility for evaluating the distance between the vehicle and any obstacles. Even with the sensors, there is a blind spot in which objects cannot be detected. This applies especially in those cases where the system approaches the physical limits of ultrasonic measurement, as occurs with tow bars and trailer couplings, and in the vicinity of thin or wedge-shaped objects. Certain sources of sound, such as a loud radio, could drown out the PDC signal tone. ◀

 Keep the sensors clean and free of ice or snow in order to ensure that they continue to operate effectively. Do not apply high pressure spray to the sensors for a prolonged period of time. Maintain an adequate distance of more than 4 in (10 cm). ◀

### Automatic Stability Control plus Traction (ASC+T)/Dynamic Stability Control (DSC)\*

These systems contribute to additional vehicle stability, especially during acceleration and when cornering.

The DSC system enhances the benefits of the ASC+T. In addition to optimizing vehicle stability and traction during acceleration or when starting from a standstill, a further benefit is realized in cornering. This, of course, is true only within physically feasible limits.

The system activates automatically each time you start the engine.

**Indicator lamp**

The indicator lamp in the instrument cluster goes out shortly after you switch on the ignition.

Refer to page 21.

Indicator lamp flashes:

The system is active and governs drive torque and braking force.

If the indicator lamp fails to go out after the engine is started, or if it comes on during normal driving:

There is a system malfunction or the system was deactivated with the button. You can still drive the vehicle normally without ASC+T/DSC.

Please consult your BMW center for repairs.

**To deactivate the system**

Press the button, the indicator lamp lights up and remains on continuously.

Depending on equipment options, the button is marked with ASC or DSC.

With deactivated ASC+T/DSC you are driving with conventional, unregulated torque transfer.

In the following exceptional situations, it may be effective to deactivate the ASC+T/DSC for a brief period:

- ▷ When rocking the vehicle or starting off in deep snow or on loose surfaces
- ▷ When driving with snow chains.

**To reactivate the system**

Press the button again; the indicator lamp goes out.



The laws of physics cannot be repealed, even with ASC+T/DSC. An appropriate driving style always remains the responsibility of the driver. Do not use the extra safety margins furnished by these systems as an excuse for taking unnecessary risks. ◀

**Dynamic Brake Control (DBC)\***

DBC is an integral component of the DSC system.

The system responds to sudden, high-intensity applications of force to the brake pedal by automatically braking the vehicle with maximum boost to achieve the shortest possible braking distances during "panic stops." This system exploits all the benefits of ABS.

Do not reduce the pressure exerted against the brake pedal until the braking maneuver has been completed. DBC is deactivated when you release the brake pedal.



The warning lamp for the self-leveling suspension comes on, or the message "SELFLEVEL SUSP.INACT" appears in the Check Control: there is a malfunction in the self-leveling suspension.

Stop and inspect the vehicle. If it is riding significantly lower in the rear than in the front, or if it is sitting at an incline (left rear compared to right rear), consult the nearest BMW center. Drive with appropriate caution in the meantime. The vehicle has reduced ground clearance or driving comfort is noticeably reduced.

Even if the attitude of the vehicle is normal, you should consult the nearest BMW center if the warning lamp indicates a system fault.

## The concept

RDC monitors the tire pressures at all four wheels, even when the vehicle is moving. The system provides an alert whenever the inflation pressure drops significantly below the specified pressure in one or more tires.

In order for the system to "learn" the correct tire inflation pressure, check the inflation pressure in all tires. Refer to the table of "Tire inflation pressures" beginning on page 27 and make any necessary corrections. Then activate the system.



This indicator lamp in the instrument cluster or the Check Control will inform you if the tire pressure is not correct.



## Activate the system

1. Turn the ignition key to position 2 (do not start the engine)
2. Maintain pressure on the button until the yellow indicator lamp in the instrument cluster comes on for several seconds or the message "SET TIRE PRESSURE" appears in the Check Control panel
3. After you have driven for a few minutes, the RDC will import the current inflation pressure in the tires as the reference values which the system will monitor.

You will only have to repeat this procedure if the tire inflation pressure must be corrected. Otherwise, the RDC functions automatically when the ignition key is in position 2, and thus operates whenever the vehicle is driven.

### Loss of tire pressure

If, after a certain period of time, the inflation pressure has gone down significantly (which is normal for any tire), the yellow indicator lamp comes on or the message "CHECK TIRE PRESSURE" appears in the Check Control.

This alerts you that you should have the tires inflated to the specified pressures as soon as possible.

 If you are prompted to check the tire pressure shortly after a correction has been made, this indicates that the corrected values were not accurate. Please check the inflation pressure again and make corrections according to the inflation pressure table. ◀

### Flat tire

If there is a tire failure with a loss of inflation pressure, the red indicator lamp comes on or the message "TIRE DEFECT" appears in the Check Control. In addition, a gong sounds.

If this occurs, reduce vehicle speed immediately and stop the vehicle in a safe location. Avoid hard brake applications. Do not oversteer. Replace the flat tire.

 The spare tire which is available in your vehicle as standard equipment is equipped with the electronics required for RDC and, following activation of the system, is also monitored after it is mounted. ◀

 The RDC cannot alert you to severe and sudden tire damage caused by external factors. ◀

 Have the tires changed at your BMW center.

Your BMW center has the information needed for working with RDC and is equipped with the necessary special tools. ◀

### System interference

During the period of the malfunction, the yellow indicator lamp comes on or the message "TIRECONTROL INACTIVE" appears in the Check Control.

You will also see the same message

- ▷ in the event of a system fault
- ▷ if a wheel is mounted without the RDC electronics
- ▷ if, in addition to the spare tire, additional wheels with RDC electronics are on board.

Please contact your BMW center for additional information.

# Parking lamps/Low beams



## Parking lamps (side marker lamps)



With the switch in this position, the front, rear and side vehicle lighting is switched on.

For lighting on one side for parking as an additional feature, refer to page 104.

## Low beams



When the ignition is switched off while the low beams are on, the headlamps go out and only the parking lamps (side marker lamps) remain on.



**"Follow me home":**  
When you activate the headlamp flasher after parking the vehicle and switching off the lamps, the low beams will come on for a brief period. You may also have this function deactivated if you wish. ◀

## "LIGHTS ON" warning

When the driver's door is opened with the ignition key in position 0 an acoustic signal will sound for several seconds to remind you that you have forgotten to switch off the lamps.

Vehicles with alphanumeric Check Control\*:

The reminder is provided by the Check Control, refer to page 87.

## Daytime driving lamps\*

The headlamps are automatically switched on for daytime driving in ignition key position 2.

## Automatic headlamp control\*



When the switch is set to this position the system automatically activates and cancels the low beams in response to changes in ambient light (in tunnels, at dusk, etc.) as well as rain and snow.



The vehicle's external lamps remain on constantly when you switch on the front fog lamps after the headlamps have come on automatically. ◀



Automatic headlamp control cannot serve as a substitute for the driver's judgement in determining when the vehicle lamps should be switched on. For example, the sensors are not able to detect fog. To avoid safety risks, you should respond to these kinds of low-visibility situations by switching the headlamps on manually. ◀



You can have the sensitivity of your vehicle's automatic headlamp control adjusted. ◀



Turn the rotary dial to adjust the illumination intensity.



- 1 High beams  
(blue indicator lamp)
- 2 Headlamp flasher  
(blue indicator lamp)
- 3 Standing lamps

### Standing lamps, left or right

As an additional feature, you can illuminate your vehicle on either side for parking, if you wish to do so:

With the ignition key in position 0, push the lever in the appropriate direction. The lever engages in the turn signal indicator position.



### Front fog lamps



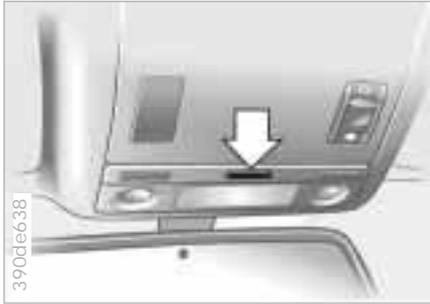
The green indicator lamp in the instrument cluster lights up to indicate that the front fog lamps are on.

If the high beams are switched on, the fog lamps go out.



If the automatic headlamp control is on, the low beams will come on automatically whenever you activate the fog lamps. ◀

## Interior lamps



The interior lamps operate automatically.

### Switching the interior lamps on and off manually

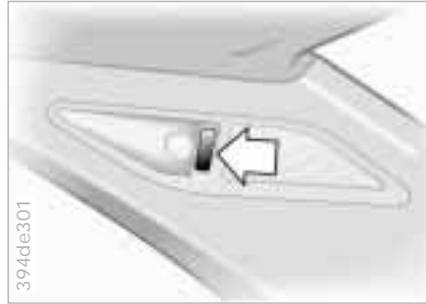
Press the button (arrow) briefly.

If you want the interior lamps to remain off all the times, press and hold the button for approx. 3 seconds.

Press the button briefly to revert to normal operation.

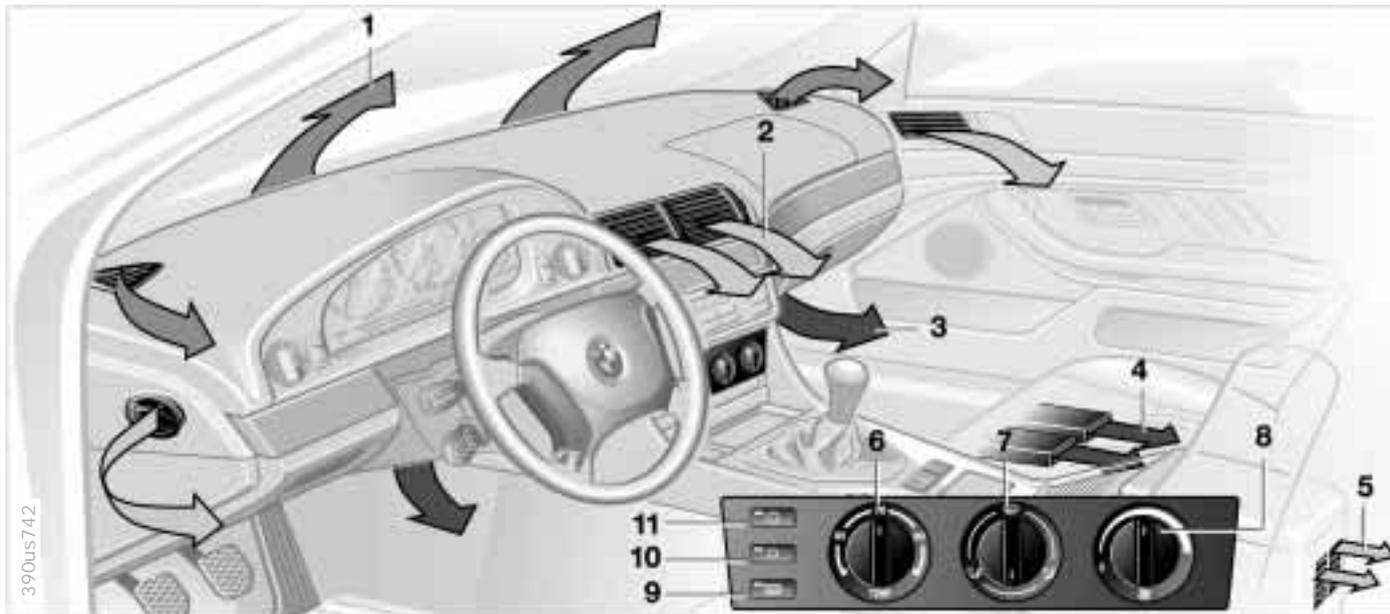
The lamp in the sport wagon's cargo area operates the same way.

## Reading lamps



The reading lamps are located in the front near the interior lamp. There are also reading lamps in the rear. They can be switched on and off with the button (arrow) adjacent to each lamp.

 To avoid subjecting the battery to excessive loads, all of the lamps within the vehicle are automatically switched off approx. 15 minutes after you turn the ignition key to position 0. ◀



1 Airflow directed toward the windshield and side windows

2 Airflow for the upper body area [108](#)

3 Footwell ventilation

4 Rear footwell ventilation

5 Airflow for the upper body area in the rear seat [108](#)

6 Temperature [107](#)

7 Air distribution [107](#)

8 Air supply [107](#)

9 Rear window defroster [107](#)

10 Cooling [107](#)

11 Recirculated-air mode [107](#)

# Air conditioning

## Temperature



The graduations on the dial provide general reference values for the interior temperature. We recommend 70 °F (22 °C) as a comfortable setting. When you start the vehicle, this system adjusts the air to the selected temperature as quickly as possible, and then maintains that temperature constantly.

## Air distribution



You can direct the emerging air toward the windows , toward your upper body , or into the footwell . All intermediate settings are also available. In the  setting, there is a low flow of air onto the windows to keep them free of condensation.

## Air supply



You can control the emerging air's flow rate through an infinitely-variable range. The heating and ventilation become more and more effective as the air supply settings are increased. In the "0" setting, the blower and climate control are switched off and the outside air supply is blocked.

## Rear window defroster



The indicator lamp comes on to indicate that the rear window defroster is in operation. The rear window defroster switches off automatically.

## Cooling



The air conditioning cools and dehumidifies the incoming air before reheating it to the selected temperature. Depending on the weather, the windshield may fog over briefly when the engine is started. You can reduce condensation forming on the windows by switching on the air conditioning.



Condensation forms in the air conditioning system during operation, which then exits under the vehicle. Traces of condensed water of this kind are thus normal. ◀

## Recirculated-air mode

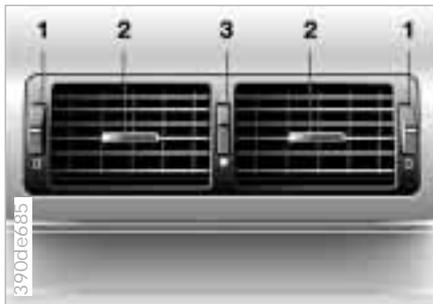


You can respond to unpleasant odors in the surrounding environment by using this mode to temporarily suspend the flow of outside air into the vehicle's interior. The system then recirculates the air currently within the vehicle.

If your vehicle is equipped with a multi-function steering wheel featuring a recirculated-air button then you can also select the recirculated-air mode from this location (refer to page 22).



If the windows should fog over in the recirculated-air mode, switch the recirculated-air mode off and increase the air supply as required. ◀



### Draft-free ventilation

You can adjust the vent outlets for the upper body area for optimal personal comfort:

- 1 Rotary dials for opening and closing the vent outlets through an infinitely-variable range
- 2 Levers for adjusting airflow direction
- 3 Rotary dial allows you to control the temperature of the airflow as desired:
  - ▷ Turn toward blue – colder
  - ▷ Turn toward red – warmer.



### Rear passenger area ventilation

- 1 Rotary dial for opening and closing the vent outlets through an infinitely variable range
- 2 Levers for selecting airflow direction. The air that flows out here is somewhat cooler than the air delivered to the foot-well.

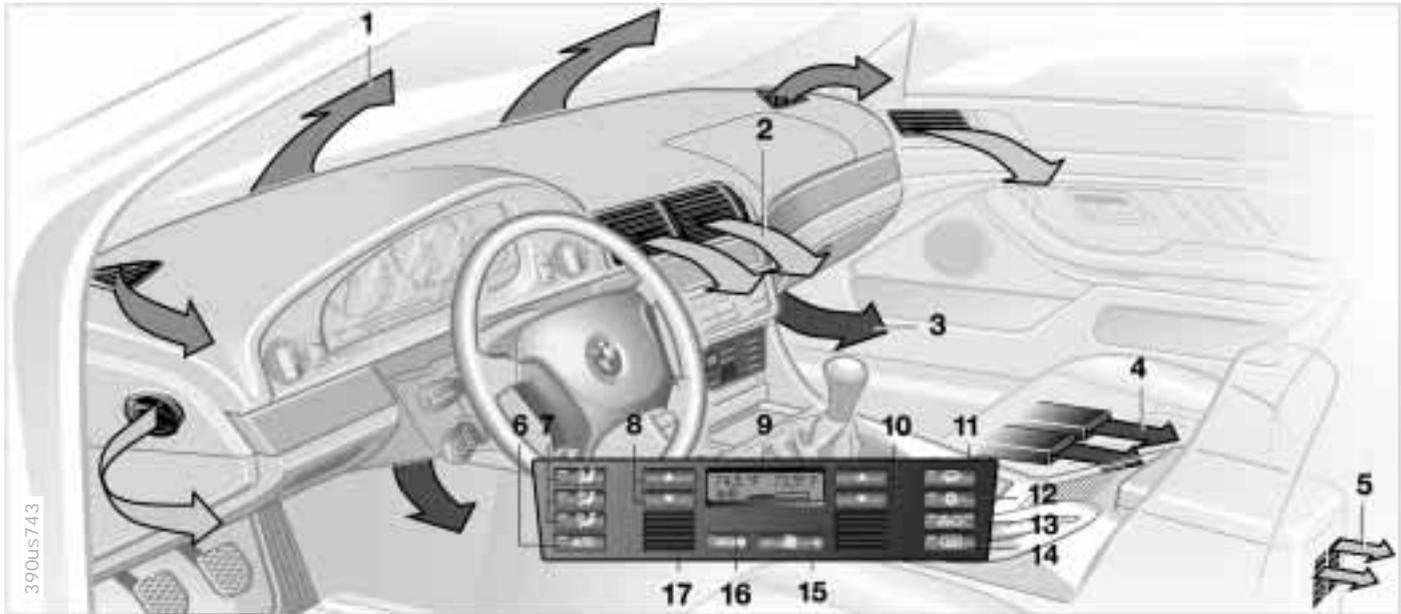
### Microfilter

The microfilter removes dust and pollen from the incoming air. Your BMW center will replace it during routine maintenance. A substantial reduction in airflow indicates that the filter needs to be replaced early.



### To defrost windows and remove condensation

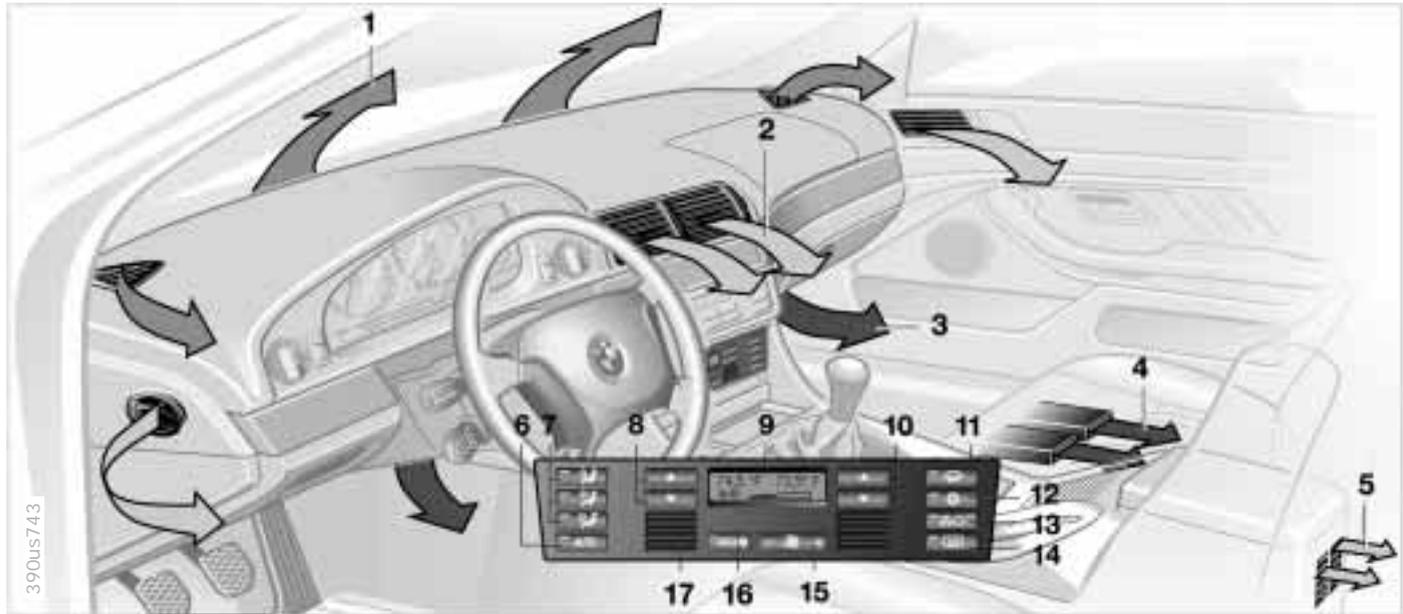
1. Use the rotary temperature dial to set the system for an interior temperature that you find comfortable, such as 70 °F (22 °C)
2. Set the air distribution rotary dial to 
3. Set the blower/air supply rotary dial completely to the right
4. Close the vent outlets in the rear seating area
5. Switch on the rear window defroster to defrost the rear window.



390us743

- |   |   |   |   |   |  |
|---|---|---|---|---|--|
| 1 | Airflow directed toward the windshield and side windows | 4 | Rear footwell ventilation                                       | 7 | Individual air distribution <a href="#">111</a>            |
| 2 | Airflow for the upper body area <a href="#">113</a>     | 5 | Airflow for the upper body area in the rear <a href="#">113</a> | 8 | Temperature control – left-hand side <a href="#">111</a>   |
| 3 | Footwell ventilation                                    | 6 | Automatic air distribution <a href="#">111</a>                  | 9 | Display for temperature and air supply <a href="#">111</a> |

## 110 Automatic climate control\*



10 Temperature control –  
right-hand side [111](#)

11 To defrost windshield and  
windows [111](#)

12 Air conditioning [112](#)

13 Automatic recirculated-air control  
(AUC) [112](#)

14 Rear window defroster [112](#)

15 Air supply [111](#)

16 Maximum cooling [112](#)  
Residual heating mode [113](#)

17 Air grill for interior temperature  
sensor – please keep clear and  
unobstructed

## Tips for pleasant driving

Use the automatic system, that is, press AUTO button 6. Select an interior temperature that you find comfortable.

Detailed setting options are described for you in the following section.



Your BMW center can program the settings of your vehicle in such a manner that, when you unlock the vehicle with your individualized key, your own personalized setting for the automatic climate control is initiated. ◀

## Automatic air distribution



The AUTO program assumes the adjustment of the air distribution and the air supply for you and also adapts the temperature to external influences (summer, winter) to meet preferences you can specify.

## Individual air distribution



You can cancel the AUTO program by selecting specific distribution patterns to suit your own individual requirements. While the AUTO program is then deactivated, the automatic airflow control remains in operation. The system directs air to the windows , the upper body  and into the footwells . You can reactivate the automatic air distribution mode by selecting the AUTO button.

## Temperature



You can make individual temperature settings on the driver's side or the front passenger side. Your selection appears in display 7. The numbers that appear in the display are reference figures for interior temperature. We recommend a setting of 72 °F (22 °C) for a congenial interior climate, even when the air conditioner is in operation. When you start the vehicle, the system ensures that the selected temperature is achieved as quickly as possible. It then maintains this temperature, regardless of the season.

## Air supply



AUTO appears in display 9, while the AUTO program automatically controls the flow of incoming air, refer to overview on page 109. You can use "+" and "-" to vary the airflow. When your setting is displayed by bars, the automatic airflow is switched off. Automatic air distribution maintains its setting. You can reactivate the automatic airflow by pressing the AUTO button.

When you press "-" during operation at minimum blower speed all displays are canceled: the blower, heating and air conditioner are switched off. The outside air supply is deactivated. By pressing any button of the automatic climate control (except the MAX button 16), you can switch the system back on.

## To defrost windows and remove condensation



This program quickly removes ice and condensation from the windshield and the side windows.

**Air conditioning**

The air is cooled and dehumidified and – depending on the temperature setting – warmed again when the air conditioning is switched on. Depending on the weather, the windshield may fog over briefly when the engine is started. You can reduce condensation forming on the windows by switching on the air conditioning.



Condensation forms in the air conditioning system during operation, which then exits under the vehicle. Traces of condensed water of this kind are thus normal. ◀

**Maximum cooling**

With the engine running this program provides maximum cooling at outside temperatures above approx. 41 °F (5 °C).

60 °F (16 °C) appears in the temperature display 9, and the system reverts to the recirculated-air mode while simultaneously providing maximum airflow through the vent outlets only. That is why you need to keep these open if you select this program.

**Automatic recirculated-air control (AUC)**

You can respond to unpleasant external odors by temporarily stopping the flow of outside air. The system then recirculates the air currently within the vehicle. Press the button repeatedly to run through the following control sequence:

- ▷ Indicator lamps off: outside airflow operational
- ▷ Left-hand indicator lamp on – AUC mode: the system recognizes pollutants in the outside air and blocks the flow of air when necessary. The system then recirculates the air currently within the vehicle.

Depending on the air quality, the automatic system then switches back and forth between outside air supply and recirculation of the air within the vehicle

- ▷ Right-hand indicator lamp on: the flow of external air into the vehicle is permanently blocked. The system then recirculates the air currently within the vehicle.

If you have a multifunction steering wheel with the recirculated-air button (refer to page 22), you can also use it to switch between "Off" and the recirculated-air mode or AUC and the recirculated-air mode.



If the windows should fog over in the recirculated-air mode, switch the recirculated-air mode off and increase the air supply as required. ◀

**Rear window defroster**

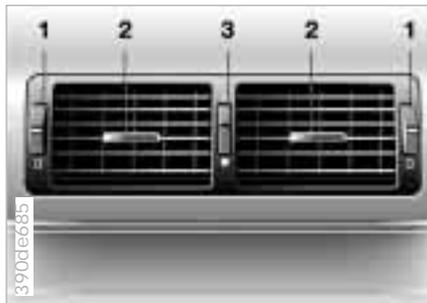
When the rear window defroster is activated, the indicator lamp comes on. The rear window defroster switches off automatically.

## Residual heating mode

 The heat which is stored in the engine is utilized for heating the interior when the engine has been switched off (while waiting at a railroad crossing, for instance).

In ignition key position 1, you can alter the settings of the automatic climate control. In ignition key position 0, the system automatically directs heated air to the windshield, side windows and footwells.

 This function is available for operation when the outside temperature is below approx. 59 °F (15 °C), with the engine warm from recent operation and an adequate charge in the battery. The LED on the button will light up when all conditions have been met. ◀



## Draft-free ventilation

You can adjust the vent outlets for the upper body area completely for your personal comfort:

- 1 Rotary dials for infinitely-variable opening and closing of the vent outlets
- 2 Selector levers for airflow direction
- 3 Rotary dial allows you to control the temperature of the airflow as desired:
  - ▷ Turn toward blue – colder
  - ▷ Turn toward red – warmer.

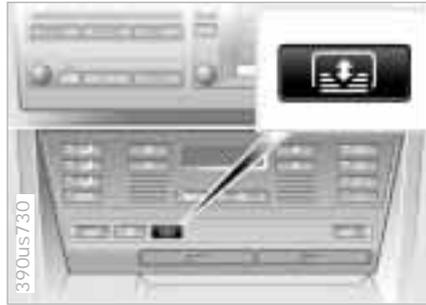


## Rear passenger area ventilation

- 1 Rotary dial for infinitely-variable opening and closing of the vent outlets
- 2 Selector levers for airflow direction
- 3 The rotary dial operates in the same way as the front dial to adjust the temperature of the emerging air.

**Microfilter, activated-charcoal filter**

The microfilter removes dust and pollen from the incoming air. The activated-charcoal filter provides additional protection by filtering gaseous pollutants from the outside air. Your BMW center replaces this combined filter as a standard part of your scheduled maintenance. A substantial reduction in airflow indicates that the filter must be replaced before scheduled maintenance.



To operate, press the button briefly with the ignition key in position 1 or 2.

**Sun blinds for rear side windows\***

Use the strap to extract the blinds, then hook them in the attachment provided.

**Parked-car ventilation\***

This system allows you to ventilate the interior and lower its temperature using the blower of the automatic climate control.

The parked-car ventilation system is operated via the Multi-Information Display (MID) – refer to page 92 – or the onboard computer. Refer to the separate Owner's Manual.

You can set two different times for the system to start; it will remain active for 30 minutes. You can also turn it on and off directly. Since the system uses a substantial amount of electrical current, you should not activate it twice in succession without allowing the battery to be recharged in normal operation between use.

The parked-car ventilation system is available for timer-controlled operation at outside temperatures above 60 °F (16 °C) as well as for manual operation at any temperature, provided that the vehicle is stationary.

The air emerges via the vent outlets for the upper body. Therefore, the vent outlets must be open for the system to operate.

## The concept

The BMW Universal Transmitter replaces up to three hand-held transmitters to control different devices such as a garage door opener, alarm systems or a door locking system. The BMW Universal Transmitter recognizes and "learns" the transmitted signal from each of the original hand-held transmitters.

The signal of an original hand-held transmitter can be programmed on one of the three channel keys. Following that, each of the devices can be actuated with the appropriately-programmed channel key. The indicator lamp flashes to confirm transmission of the signal.

Before you sell your vehicle, the programmed channel keys should be cleared. Refer to page 117 for the description of this process.

 To prevent potential injuries or damage during the programming operation and before every remote triggering of a programmed device using the BMW Universal Transmitter, be sure that there are no persons, animals or objects within the range of movement of the respective device. Also, comply with the safety precautions of the original hand-held transmitter. ◀



To Canadian residents:

During programming, your hand-held transmitter may automatically stop transmitting after two seconds. This may not be long enough to program the BMW Universal Transmitter. If you are programming from one of these hand-held transmitters, the Universal Transmitter's lamp may begin to flash in a series of double flashes. If this occurs, continue to hold the key on the Universal Transmitter while you reactivate your hand-held transmitter. You may have to repeat this function several times while programming. ◀



Before programming, read the "User's information" section on page 117. ◀

## The original hand-held transmitter



If this symbol is depicted on the packaging or in the user's instructions for the original hand-held transmitter, it may be assumed that this original hand-held transmitter is compatible with the BMW Universal Transmitter.

## Checking for the conversion code

In order to determine whether the original hand-held transmitter is equipped with a conversion-code system, you may either refer to the instructions for the original hand-held transmitter or program a channel key as described in the left column on page 116 under "Programming."

Following that, press and hold the programmed channel key of the BMW Universal Transmitter. If the indicator lamp of the BMW Universal Transmitter flashes rapidly for two seconds and then stays on continuously, the original hand-held transmitter is equipped with a conversion-code system. If the conversion-code system is available, program the channel keys as described in the right-hand column on page 116 under "Programming a hand-held transmitter with change code."



If you have additional questions, please consult your BMW center or call 1-800-355-3515. ◀



### Programming

- 1 Channel keys
- 2 Indicator lamp
- 3 Receiver for programming

 Read and comply with the safety precautions on page 115. ◀

1. Ignition key in position 2
2. For initial operation: press and hold the two outer keys 1 until the indicator lamp 2 flashes. Release the keys. The three channel keys are cleared

3. Hold the original hand-held transmitter at the receiver 3 a maximum of 2 in (5 cm) away
4. Simultaneously press the transmitting key of the original hand-held transmitter (arrow 2) and the desired channel key of the BMW Universal Transmitter (arrow 1). Release both keys as soon as the indicator lamp flashes rapidly
5. To program other original hand-held transmitters, repeat steps 3 and 4.

The corresponding channel key is now programmed with the signal of the original hand-held transmitter.

### Programming a hand-held transmitter with conversion code

 Read and comply with the safety precautions on page 115. ◀

Consult the operating instructions for the individual device when programming the BMW Universal Transmitter. Read and comply with the following programming instructions for the use of the BMW Universal Transmitter with a conversion-code system:

 A second person simplifies programming of the BMW Universal Transmitter. ◀

1. Program the BMW Universal Transmitter as described above under "Programming" on the previous page
2. Press and hold the programming key on the receiver of the device for about two seconds or until the programming lamp on the device comes on
3. Press the desired channel key of the BMW Universal Transmitter three times.

 If you have additional questions, please consult your BMW center. ◀

## Clearing the channel keys



Read and comply with the safety precautions on page 115. ◀

The memory of individual channel keys cannot be deleted. However, the three channel keys can be cleared together in the following manner:

- ▷ Press and hold the two outer channel keys of the BMW Universal Transmitter until the indicator lamp flashes, and then release the keys.
- All of the channel keys are cleared.

## User's information

Do not use this BMW Universal Transmitter with any garage door opener that lacks safety "stop" and "reverse" features as required by federal safety standards (this includes any garage door opener model manufactured before April 1st, 1982).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**To open**

Pull the handle and the lamp comes on.

**To close**

Fold the cover up.



To prevent injury in the event of an accident, close the glove compartment immediately after use. ◀

**To lock**

Use one of the master keys. A master key is also required for unlocking.



For example, if you turn over only your door and ignition keys for valet parking (refer to page 32), access to the glove compartment is not possible. ◀

**Rechargeable flashlight\***

Located on the left-hand side of the glove compartment.

Features integral overload-protection, so it can be left in its holder continuously.



To avoid completely discharging and possibly damaging the lamp, always ensure that the flashlight is switched off before inserting it in the socket. ◀



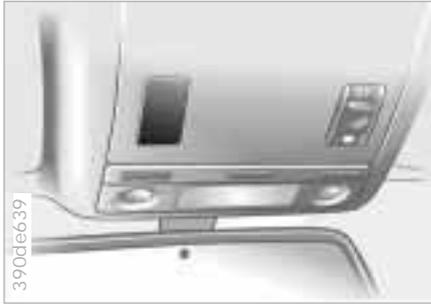
The cover of the storage compartment on the vertical surface of the center console can be pushed open or closed (illustration). If your vehicle is equipped with a cassette holder\*, open each cassette compartment by pressing on the small button.

Storage compartment on the center console between the front seats: to open, reach into the recess at the front and pull upward.

You will find a coin holder in the door pocket on the driver's side.

You will find additional storage compartments in all of the doors as well as on the backrests of the front seats.

## Cellular phone\*



### Hands-free system

On vehicles with telephone preparation\*, the hands-free speaker is positioned in the headliner.

For further information on the cellular phone, refer to the separate Owner's Manual.

## Beverage holder\*



Two holders for canned drinks have been provided in the front center console (illustration).

Press to open; fold back inward to close.

## Ashtray, front



### To empty

Press the edge of the lid (arrow): The ashtray moves up and can be removed.

On vehicles equipped with a non-smoker's package, the insert is removed in the same way.



Press the cover panel for access (arrow), then push the lighter down.

You can remove the lighter from its socket for use as soon as it snaps back out.



Hold or touch the hot cigarette lighter by the knob only. Holding or touching it in other areas could result in burns.

The cigarette lighter remains operational when the ignition key has been removed.

For this reason, do not leave unsupervised children in the vehicle. ◀

### **Cigarette lighter socket**

This socket is suitable for attaching power supplies for flashlights, car vacuum cleaners and other appliances up to a rating of approx. 200 watts at 12 volts. Avoid damage to the socket caused by inserting plugs of different shapes or sizes.

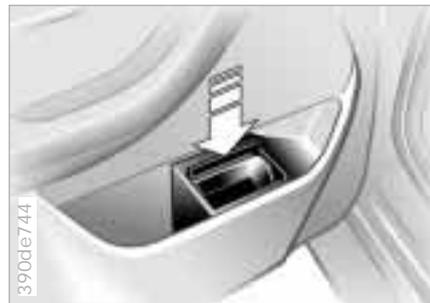
Another socket is located in the cargo area of the sport wagon in the middle of the right-hand side panel.

### **Non-smoker's equipment package**

On vehicles with the non-smoker's equipment package, the socket is concealed by a cover.

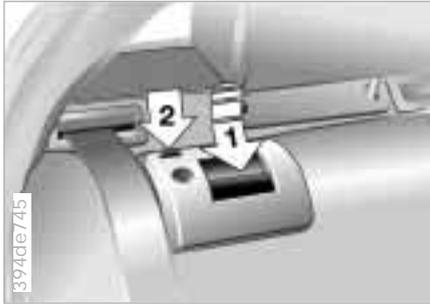
For access to the socket: lift off the cover.

### **Ashtray, rear**



### **To empty**

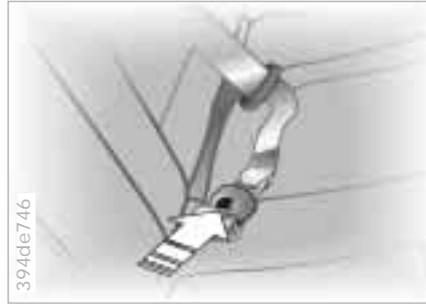
Press the edge of the cover (arrow). The ashtray moves up and can be removed.



## Fold the rear backrests down

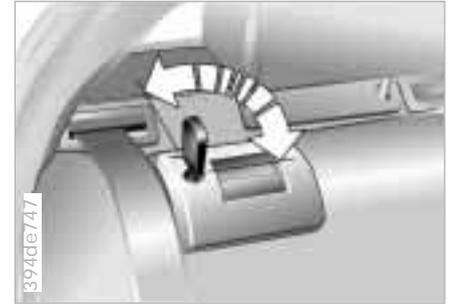
Reach into the recess and pull forward (arrow 1).

When you close the backrest, be sure that the catch engages securely. The red slide (arrow 2) must go underneath.



The central safety belt has an additional small buckle.

- ▷ If you connect the two belt sections, you can use the central belt as any normal 3-point belt
- ▷ It is easier to fold the rear-seat backrest up and down if you disconnect the belt (arrow).



With a master key, you can lock each backrest in the rear seat.

This also prevents access to the luggage compartment from the interior of the vehicle if you turn over only your door and ignition key 3 (refer to page 32), for valet parking.

## 122 Ski bag\*

The ski bag allows the safe and clean transport of up to 4 pairs of standard skis or up to two snowboards.

The length of the ski bag and the additional space provided in the luggage compartment make it possible to carry skis with a length of up to 6.8 ft (2.10 meters). Because of the tapered shape of the bag, the ski bag can only accommodate two pairs of skis with a length of 6.8 ft (2.10 meters).



### Installing the center armrest

Guide the armrest into position from above, then apply pressure until you hear it snap into position.

 When removing and installing the center armrest, be sure that the seat covers are not damaged by the side pins. ◀

### Removing the center armrest

(Not for vehicles with the through-loading system and for the sport wagon, refer to page 124.)

1. Fold the center armrest completely outward
2. Loosen the trim from the upper Velcro® fastener and place it on the armrest
3. Grasp the front of the armrest with one hand, then use your other hand to reach down behind the armrest and pull up sharply (arrow).



### Loading

1. Press the release button (arrow 1) to unlock the cover panel in the luggage compartment
2. Press the detent levers (arrows 2) inward and fold the cover to the front seats.
3. Extend the ski bag between the front seats. The zipper provides convenient access to the inside of the bag, and can also be left open to promote drying



4. Use the magnetic retainers to attach the cover panel to the upper surface (metal surface below rear tray) of the luggage compartment.

To store the ski bag, perform the above steps in reverse sequence.



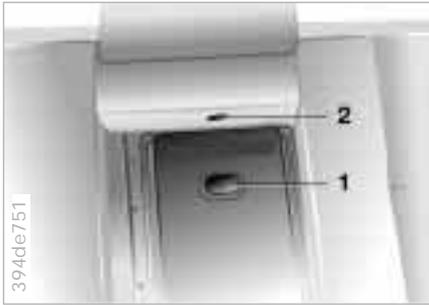
An unsecured ski bag could lead to loss of vehicle control and in case of an accident to personal injury. ◀



### Securing the load

-  Secure the bag's contents by tightening down the retaining strap at the buckle. ◀

Please ensure that the skis are clean before loading them into the bag. Take care to avoid damage from sharp edges.



### **With through-loading system**

1. Fold the center armrest outward.  
Loosen the trim from the upper Velcro® fastener and place it on the armrest
2. Press button 1 downward and swing the cover forward
3. Press knob 2: the cover in the luggage compartment is unlocked.



### **In the sport wagon**

1. Fold the center armrest outward.  
Loosen the trim from the upper Velcro® fastener and place it on the armrest
2. Press button 1 downward and swing the cover forward
3. Press button 2: the cover in the cargo area is unlocked.



## Fold the rear backrests down

Reach into the recess and pull upward (arrow).

The rear backrest is divided into two sections (one-third and two-thirds of the width of the seat). You can fold either section of the backrest down separately in order to increase the capacity of the cargo area.

 When you close the backrest, be sure that the catch engages securely. The red warning indicator disappears in the recess when the retainer is locked.

The center safety belt can be retracted only when the larger backrest is engaged. ◀



## Roll-up cover

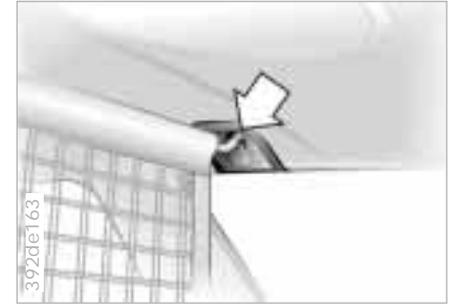
Pull the roll-up cover out and hook it into the rear bracket.

The cover will support light objects such as items of clothing.

 Do not place heavy or bulky objects on the roll-up cover, otherwise, they could endanger occupants while braking hard, during evasive maneuvers, or in an accident, for example.

Do not allow the cover to snap back, since this could damage it. ◀

For storing the case, refer to the next page.

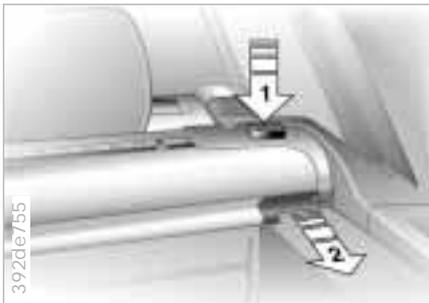


## Partition net

Pull out the partition net by the strap and hold the bar firmly in the other hand. Then grasp the bar on both sides, pull it up and engage it in the holders. It is easiest to do this from the back seat.

 Do not allow the partition net to snap back. Doing so could pose a risk of injury and the partition net could be damaged. ◀

When the rear backrests are folded down, you can store the case in front of the rear seats, pull the partition net out from there and insert it in the front holders (refer to the next page).



### Removing the roll-up cover and partition net

1. Press on the buttons (arrow 1) to release the case on both sides
2. Holding the case straight, pull out to the rear (arrow 2).

### Installation

Simply slide the case forward in the two side holders until it engages.

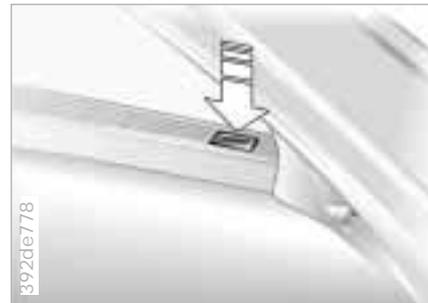


### Storage

There are holders for the case in front of the rear seats.

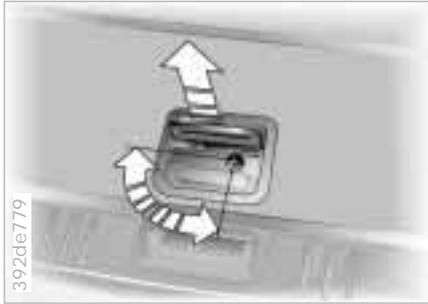
Guide the case in from the side as shown in the illustration. The strap of the partition net must be directed upward, while the end of the roll-up cover must be laid around and under the case to the rear.

You can pull the partition net out and insert it in the holders above it in the upper roof area.



### Side covers

Open the side covers by pressing the button.



## Floor compartment

To release: press the handle in the recess and fold the cover upward on the handle (large arrow).

You can lock the cover with a master key.

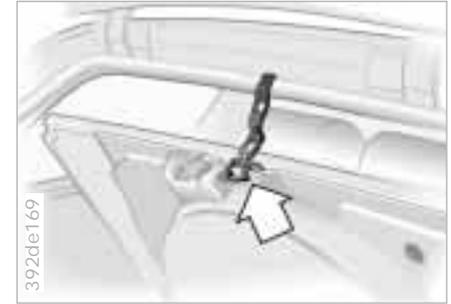
The dividers in the compartment can be rearranged. If you remove the divider and turn the divider retainer to the left and remove it, you have a level storage compartment.



## Fold the floor panel up

Lift up the black retainer on the lower side of the panel and hook it into the upper frame of the tailgate cutout.

Before you fold the floor panel down, return the retainer to its original position.



## Fold up the spare tire cover

Lift up the cover and hook it into the red retainer on the floor panel (arrow).

Before you fold the cover down, return the retainer to its original position.

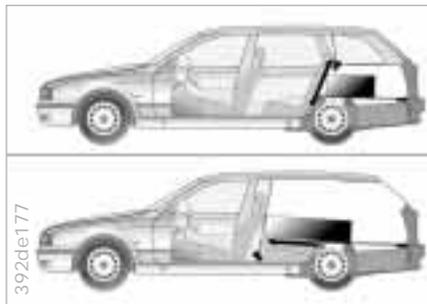


### Raise the cargo floor

For access to the compartment under the floor or to the spare tire, etc.:

- ▷ Raise the cargo floor and secure it with the support rod (arrow)
- ▷ Open the quick-release fasteners on the spare tire cover.

## Cargo loading



### Stowing cargo

When transporting loads in your BMW:

- ▷ Position heavy loads as far forward as possible – directly behind the backrests or the luggage compartment partition panel – and at the bottom (the illustration shows the sport wagon)
- ▷ Cover sharp edges and corners
- ▷ Do not pile objects higher than the top edge of the backrest
- ▷ Pull out the partition net\* (refer to page 125) and ensure that carried items cannot pass through the partition net
- ▷ For very heavy loads when the rear seat is not occupied, secure each safety belt in the opposite buckle.



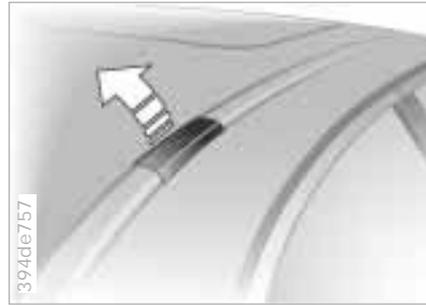
### Securing the load

- ▷ Secure smaller, light pieces with the retaining straps or a luggage net\*, or use elastic straps (refer to page 42)
- ▷ For large, heavy pieces, visit your BMW center for load-securing devices\*. Lashing eyes are provided at the corners of the luggage compartment/cargo area for attaching these load-securing devices (the illustration shows the sport wagon)
- ▷ Read and comply with the information enclosed with the load-securing devices.

## Cargo loading

 Always position and secure the load correctly. If you do not, it can endanger the passengers during braking or evasive maneuvers. Do not exceed the approved gross vehicle weight or the permissible axle loads (refer to page 173). If you do, the operating safety of the vehicle is no longer ensured and you are in violation of the law. Do not carry hard or heavy objects unsecured in the passenger compartment. If you do so, they may be projected through the air during braking and evasive maneuvers, thus endangering vehicle occupants. ◀

## Roof-mounted luggage rack



A special roof-rack system is available as an optional extra for your BMW. Please observe the precautions included with the installation instructions.

### Anchorage

Access to the anchorages:  
To fold up the cover (arrow), please use the tool provided with the roof-rack system.

### Loading and driving notes

Roof-mounted luggage racks raise the center of gravity of the vehicle when they are loaded. For this reason, they exercise a major effect on the vehicle's handling and steering response.

You should therefore always remember not to exceed the approved roof weight, the approved gross vehicle weight or the axle loads when loading the rack. You will find the specifications under "Technical data" on page 173.

Make sure that the load is not too bulky, and attempt to distribute it evenly. Always load the heaviest pieces first (on the bottom). Ensure that adequate room remains for the tilt sunroof to extend upward and that no objects protrude into the tailgate's travel range on the sport wagon.

 Always ensure that roof-mounted loads are tightly secured, as loose loads can shift or even fly off the roof, posing a serious hazard for following traffic. ◀

Drive smoothly and avoid sudden acceleration and braking. Do not corner at high speeds.



Overview

Controls and features

**Operation, maintenance**

Owner service procedures

Technical data

Index



Overview

Controls

**Maintenance**

Repairs

Data

Index

To ensure that your vehicle provides maximum economy throughout a long service life, we request that you observe the following suggestions.

### **Engine and differential**

Up to 1,200 miles (2,000 km):

Drive at varying engine speeds and road speeds, but do not exceed 4,500 rpm and the following road speeds during this initial period:

BMW 525i, 530i: 100 mph (160 km/h)

BMW 540i: 106 mph (170 km/h).

Comply with all official speed limits.

Refrain from using full throttle and avoid pressing the accelerator beyond the kickdown point.

Once you have driven 1,200 miles (2,000 km), engine and vehicle speeds can gradually be increased.

You should also comply with these break-in procedures if the engine or differential is replaced later in the course of the vehicle service life.

### **Tires**

Owing to technical factors associated with their manufacture, tires do not achieve their full traction potential until an initial break-in period has elapsed. For this reason, you should drive with extra care during the initial 200 miles (300 km).

Comply with all official speed limits.



When the vehicle is operated on wet or slushy roads, a wedge of water may form between the tire and the road surface. This phenomenon is referred to as aquaplaning or hydroplaning, and can lead to partial or complete loss of traction, vehicle control and braking effectiveness. Reduce your speed on wet roads. ◀

### **Brake system**

Approx. 300 miles (500 km) must elapse before the brake pads and rotors achieve the optimal pad-surface and wear patterns required for trouble-free operation and long service life later on.

To break-in the separate parking brake drums, apply the parking brake lightly when coasting to a standstill (at a traffic signal, for instance), provided that traffic conditions allow you to do so. To avoid corrosion, repeat this procedure from time to time.



The brake lamps do not come on when the parking brake is applied. Vacuum for the brake system servo unit on your BMW is available only when the engine is running. When you move the vehicle with the engine switched off – when towing, for instance – substantially higher levels of pedal force will be required to brake the vehicle. ◀

### **Clutch**

The clutch will also begin to function optimally after about 300 miles (500 km). Engage the gears carefully during the break-in period.



### Brakes:

Do not drive with your foot resting on the brake pedal. Even light but consistent pedal pressure can lead to high temperatures, brake wear and possibly even brake failure.

### Hydroplaning:

When driving on wet or slushy roads, reduce vehicle speed. If you do not, a wedge of water may form between the tires and the road surface. This phenomenon is referred to as aquaplaning or hydroplaning. It is characterized by a partial or complete loss of contact between the tires and the road surface. The ultimate results are loss of steering and braking control.

### Driving through water:

When there is water on the roads, do not drive in it if it is deeper than 1 ft (30 cm), and even then, only at walking speed, otherwise the vehicle can sustain damage to the engine, the electrical systems and the transmission.

### Rear parcel tray:

Do not place heavy or hard objects on the rear parcel tray. These objects could endanger vehicle occupants during heavy brake applications or evasive maneuvers.

### Clothes hooks:

Hang items of clothing from the hooks so that they will not obstruct the driver's vision. Do not hang heavy objects on the hooks. If you do so, they could cause personal injury during braking or evasive maneuvers. ◀

### The concept

The Antilock Brake System (ABS) keeps the wheels from locking during braking, thereby enhancing active driving safety.

With ABS, the shortest possible braking distances are achieved under most conditions (on straight-aways and in curves, on asphalt, ice, wet road surfaces, etc.).

### Braking with ABS

If you are in a situation that requires full braking, you will exploit the full benefits of the ABS system if you apply maximum pedal pressure ("panic stop").

Pulsation at the brake pedal combined with sounds from the hydraulic circuits indicates to the driver that ABS is in its active mode.

### Brake fluid level

If the brake fluid level is too low and brake pedal travel has become noticeably longer, there may be a defect in one of the two brake system's hydraulic circuits.

 Proceed to the nearest BMW center. Higher brake application pressure may be necessary under these conditions, and the vehicle may exhibit a slight tendency to pull to one side when the brakes are applied. Braking distances may also be longer. Please remember to adapt your driving style accordingly. ◀

### Disc brakes

Limited vehicle use, extended periods with the vehicle parked or in storage, and operating conditions in which braking is restricted to gentle, low-pressure applications will all increase the tendency for corrosion to form on the rotors; this is often accompanied by a simultaneous accumulation of contamination on the brake pads. The pads must exert a certain minimal level of pressure against the rotors for the disc brakes' inherent self-cleaning effect to remain effective; the pressure available under the above conditions may not provide adequate cleansing.

If the brake rotors are corroded, they will tend to respond to braking with a pulsating effect that even extended brake applications will fail to cure.

When driving in heavy rain and on wet roads it is a good idea to apply light pressure to the brake pedal every few miles. Monitor traffic conditions to ensure that this maneuver does not pose a hazard to you or to other road users. The heat generated in this process helps dry the pads and rotors to ensure that your brake system will respond with undiminished efficiency when you need it.

When descending steep hills and extended grades, downshift to a gear that will allow you to continue safely with only a minimal amount of braking. By minimizing the loads placed on the brake system, this strategy helps ensure that optimal brake system response will remain available at all times.

 Do not coast with the clutch depressed or with the transmission or selector lever in Neutral. Do not coast with the engine switched off. The engine provides no braking effect when the clutch is depressed and there is no power-assist for braking or steering when the engine is not running. Never allow floor mats, carpets or any other objects to protrude into the area around the accelerator, clutch and brake pedals and obstruct their movement. ◀

### Brake pads

 For your own safety: use only brake pads that BMW has approved for your particular vehicle model. BMW cannot evaluate non-approved brake pads to determine if they are suited for use, and therefore cannot ensure the operating safety of the vehicle if they are installed. ◀

## Tire inflation pressure

### Information for your safety

The factory-approved radial tires are matched to the vehicle and have been selected to provide optimum safety and driving comfort.

It is not merely the tire's service life, but also driving comfort and – above all else – driving safety which depend on the condition of the tires and the maintenance of the specified tire inflation pressure.

 Incorrect inflation pressures are a frequent cause of tire problems and flat tires. Tire pressure also has a major effect on your BMW's handling response. We recommend that you check the tire pressure – remember to check the spare tire as well – before every extended trip, as well as at least every two weeks in normal use (refer to page 26). Failure to observe these precautions can result in incorrect tire pressures, which cause instable handling response as well as tire damage, and can ultimately lead to an accident. ◀

## Tire condition



### Tire tread – Tire damage

Inspect your tires frequently for tread wear, signs of damage and for foreign objects lodged in the tread. Check the tread depth.

The tread depth should not drop below 0.12 in (3 mm), even though, for example the legally specified minimum tread depth in Europe is only 0.063 in (1.6 mm). Below a tread depth of 0.12 in (3 mm) there is an increased risk of hydroplaning, even at relatively moderate speeds and with only small amounts of water on the road.

Tread wear indicators, refer to arrow, are embedded around the tire circumference in the base of the tire tread. Their locations are indicated on the tire sidewall with TWI – Tread Wear Indicator. At a tread depth of 0.063 in

(1.6 mm) these indicators, signal that the tires have reached the legally permissible wear limit.

 Do not drive on a deflated (flat) tire. A flat tire greatly impairs steering and braking response, and can lead to complete loss of control over the vehicle.

Avoid overloading the vehicle so that the permitted load on the tires is not exceeded. Overloading leads to overheating and causes damage inside the tires. The ultimate result can assume the form of a sudden air loss. Unusual vibrations encountered during normal vehicle operation can indicate a flat tire or some other vehicle malfunction. The type of problem can be caused by contact with curbs, etc. This is also true for irregularities in the vehicle's handling characteristics, such as a pronounced tendency to pull to the left or right. Should this occur, respond by immediately reducing your speed. Proceed carefully to the nearest BMW center or professional tire center, or have the vehicle towed in to have it, its wheels and tires inspected. Tire damage (up to and including blow-outs) can endanger the lives of both the vehicle occupants and other road users. ◀

To maintain good handling and vehicle response, use only tires of a single tread configuration from a single manufacturer. BMW tests wheel and tire combinations and approves them.

### **DOT Quality Grades**

Treadwear

Traction AA A B C

Temperature A B C



All passenger car tires must conform to Federal Safety Requirements in addition to these grades. ◀

### **Treadwear**

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 would wear one and one-half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

### **Traction**

The traction grades, from highest to lowest, are AA, A, B and C.

Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.



The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics. ◀

### **Temperature**

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Car Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.



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

## Tire replacement

### Uniform Tire Quality Grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

Treadwear 200 Traction AA  
Temperature A

 Do not use retreaded tires, since driving safety may be impaired. This is due to the possible variations in casing structures and, in some cases, to their extreme age, which can lead to a decrease in their durability. ◀

### Tire age

The date on which the tire was manufactured is indicated by the code on the sidewall:

DOT ... 2601 indicates that the tire was manufactured in Week 26 of the year 2001.

Although tires may have a theoretical service life of up to 10 years, BMW strongly recommends that you replace all tires after an absolute maximum of 6 years.

## Wheel and tire combinations

### The right choice

 Never mount wheels and tires that have not been specifically approved by BMW for use on your particular model. Although other wheels and tires may theoretically have the same dimensions, variations in factors such as manufacturing tolerances can result in contact between tire and bodywork, ultimately leading to serious accidents. If non-approved wheels and tires are used, BMW cannot evaluate their suitability, and therefore cannot be held liable for driving safety. ◀

BMW has tested certain tires for each tire size, rated them according to road safety and approved them. Your BMW center can inform you which tires have been tested in this way. Observe possible national guidelines, e.g. regarding entry into vehicle documents.

 The correct wheel and tire combination affects different systems such as ABS, ATC, ASC+T/DSC. The function of these systems is impaired if improper wheel and tire combinations are used.

Always ensure that all of the tires mounted on the vehicle are the same series, from the same manufacturer and with the same tread pattern. If you have to mount the spare tire in response to a flat tire, etc., you should remount a tire of the correct specifications as soon as possible. ◀

 The use of rims and wheel bolts that do not meet the specifications of the original factory-installed equipment will affect the safe operation of your vehicle and may cause an accident and personal injury. Never mix tires of different design, such as steel-belted radials with radial bias-belted or bias-ply tires, etc. Mixing tire types will adversely affect roadholding and can lead to loss of vehicle control. ◀

### Storage

Store tires in a cool, dry place, protecting them against light whenever possible. Protect the tires against contact with oil, grease and fuel.

**Choosing the right tire**

BMW recommends winter tires (M+S radial tires) for operation under inclement winter driving conditions. While all-season tires (M+S designation) provide better winter traction than summer tires with the load ratings H, V, W, Y and ZR, they generally do not achieve the performance of winter tires.

In the interests of safe tracking and steering response, install radial tires made by the same manufacturer and with the same tread configuration on all four wheels if you elect to mount winter tires.

**Do not exceed specified maximum speeds**

Never exceed the maximum speed for which the winter tires are rated.

Unprofessional attempts by laymen to service tires can lead to damage and accidents.

Have this work performed by skilled professionals only. Any BMW center has the required technical knowledge and the proper equipment and will be happy to assist you. ◀

**Tire condition, tire inflation pressure**

Winter tires display a perceptible loss in their ability to cope with winter driving conditions once the tread wears to below 0.16 in (4 mm), and should thus be replaced.

Comply with the specified tire inflation pressures and be sure to have the wheel and tire assemblies balanced every time you change the wheels/tires.

**Snow chains\***

BMW narrow-link snow chains are approved exclusively for use in combination with winter tires on the rear wheels only. Comply with all manufacturer's safety precautions when mounting the chains. Do not exceed a speed of 30 mph (50 km/h) while driving with mounted snow chains.



It is not possible to mount snow chains on tires with 17-inch wheels. ◀



## To unlock

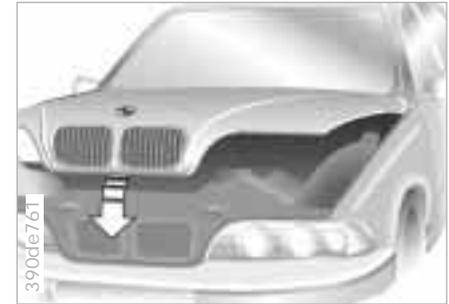
Pull the lever located under the left-hand side of the instrument panel.

 Do not work on your vehicle without appropriate skills. Failure to work in an informed, professional manner when servicing components and materials constitutes a safety hazard for vehicle occupants and other road users. If you are not familiar with the guidelines, please have the operations performed by your BMW center. ◀



## To open

Pull the release handle and open the hood.

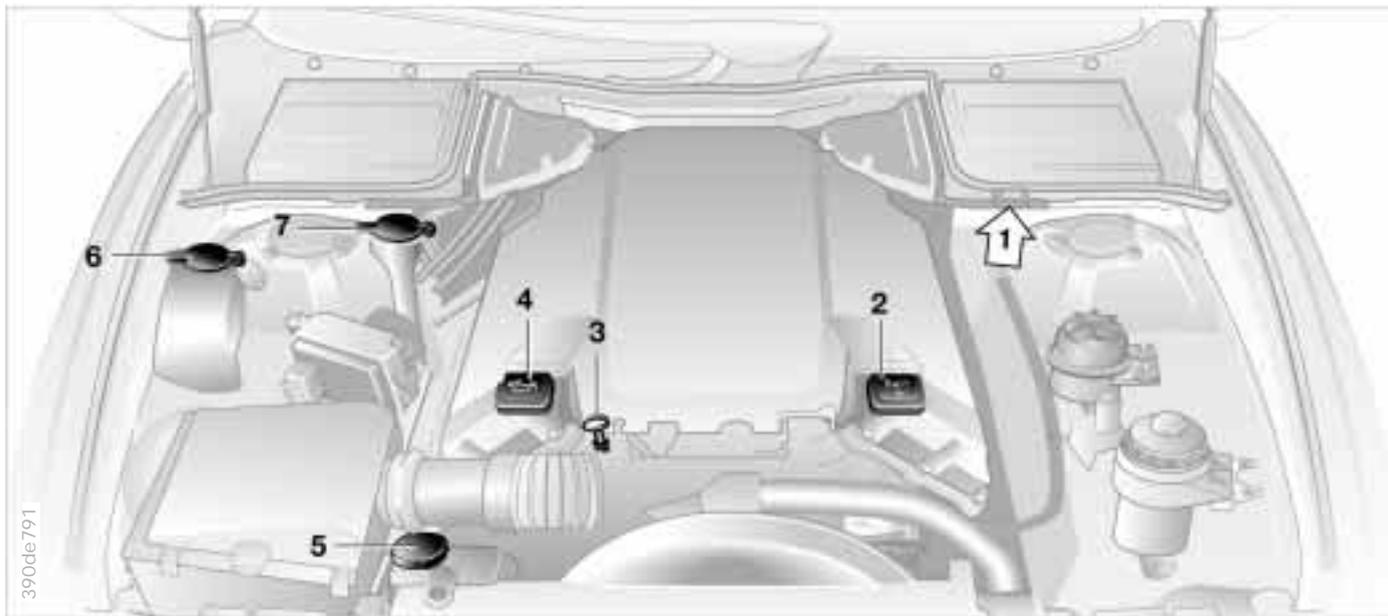


## To close

Allow the hood to fall from a height of about 12 in (30 cm) so that it audibly engages.

 To avoid injuries, be sure that the travel path of the hood is clear when it is closed, as with all closing procedures. If you notice that the hood is not completely closed while driving, stop immediately and close it securely. ◀

## 140 Engine compartment essentials



1 Reservoir for brake fluid (under the housing of the microfilter) [145](#)

2 Auxiliary terminal for jump-starting [164](#)

3 Engine oil dipstick [142](#)

4 Engine oil filler neck [142](#)

5 Coolant expansion tank [144](#)

6 Reservoir for intensive-cleaning system\* [141](#)

7 Reservoir for windshield and headlamp washer system\* [141](#)

## Washer fluids



### Headlamp\* and windshield washer system

Capacity in US quarts (liters).

Windshield washer:

approx. 3.7 (3.5) – sedan

approx. 6.3 (6.0) – sport wagon

Incl. headlamp washing system:

approx. 6.3 (6.0)

Fill with water and – if required – with a washer antifreeze (according to manufacturer's recommendations).



We recommend that you mix the washer fluid before adding it to the reservoir. ◀



### Intensive-cleaning washer reservoir\*

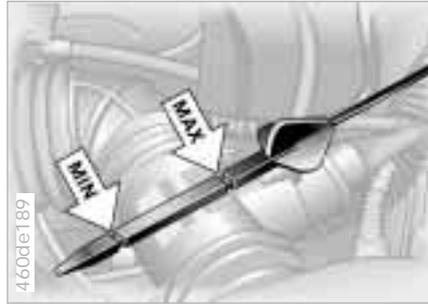
Capacity approx. 1.1 US quarts (1.0 liter).

Fill with intensive-cleaning washer fluid.

It resists freezing to approx. -17 °F (-27 °C) and is available from your BMW center.



Antifreeze agents or intensive-cleaning washer fluids for the washer systems are highly inflammable. For this reason, keep them away from sources of flame and store only in original containers. Store them so that they are inaccessible to children. Comply with the instructions on the containers. ◀



### Checking oil level

1. Park the vehicle on a level surface
2. Switch the engine off after it has reached normal operating temperature
3. After approx. 5 minutes, pull the dipstick out and wipe it off with a clean lint-free cloth, paper towel, or similar material
4. Carefully push the dipstick all the way into the guide tube and pull it out again
5. The oil level should be in between the two marks on the dipstick.

As with fuel economy, oil consumption is directly influenced by your driving style and vehicle operating conditions.

The oil volume between the two marks on the dipstick corresponds to approx. 1.1 US quarts (1 liter). Do not fill beyond the upper mark on the dipstick. Excess oil will damage the engine.

### Adding engine oil

While you should wait until the level has dropped to just above the lower mark before adding oil, you should never allow the oil level to fall below this mark.



BMW engines are designed to operate without oil additives; the use of additives could lead to damage in some cases. This is also true for the manual transmission, the automatic transmission, the differential, and the power steering system. ◀

Recommendation: have the oil changed by your BMW center only.

## Engine oil



Continuous exposure to used oil has caused cancer in laboratory testing. For this reason, any skin areas that come into contact with oil should be thoroughly washed with soap and water.

Always store oil, grease, etc., out of reach of children. Comply with all warning labels and information on lubricant containers. ◀



Comply with the applicable environmental laws regulating the disposal of used oil. ◀

### Specified engine oils

The quality of the engine oil selected has critical significance for the operation and service life of an engine. Based on extensive testing, BMW has approved only certain engine oils.

Use only approved "BMW High Performance Synthetic Oil."

If you are unable to obtain "BMW High Performance Synthetic Oil," you can add small amounts of synthetic oil in between oil changes. Only use oils with the API SH specification or higher.



Ask your BMW center for details concerning the specific "BMW High Performance Synthetic Oil" or "synthetic oils" which have been approved. ◀

You can also call BMW of North America at 1-800-831-1117 or visit the website: [www.bmwusa.com](http://www.bmwusa.com) to obtain this information.

### Viscosity ratings

Viscosity is the oilflow rating as established in SAE classes.

The selection of the correct SAE class depends on the climatic conditions in the area where you typically drive your BMW.



Approved oils are in SAE classes 5W-40 and 5W-30. ◀

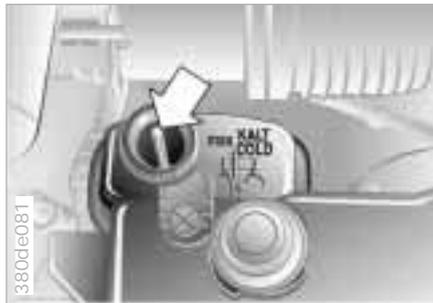
These oils may be used for driving in all ambient temperatures.

 Do not add coolant to the cooling system when the engine is hot. If you attempt to do so, escaping coolant can cause scalds.

To avoid the possibility of damage later on, never use anything other than factory-approved, nitrite and amino-free extended-duty antifreeze with corrosion inhibitor. Your BMW center is familiar with the factory specifications.

Antifreeze and anti-corrosion agents are hazardous to health. You should always store them in their original containers and in a location which is out of reach of children.

Extended-duty antifreeze with corrosion inhibitor contains the inflammable substance ethylene-glycol. For this reason, do not spill antifreeze with corrosion inhibitor on hot engine parts. It could catch fire and cause burns. ◀



### **Checking coolant level and adding coolant**

Correct coolant level when the engine is cold (approx. 68 °F / 20 °C):

Unscrew the cap from the expansion tank.

The coolant level is correct when the upper end of the red float is at least even with the upper edge of the filler neck (refer to the arrow in the illustration), but no more than 0.8 in (2 cm) above it – that is, up to the second mark on the float (refer also to the schematic diagram next to the filler neck).

1. Start by turning the cap counter-clockwise. Pause to allow any accumulated pressure to escape, then open
2. If the coolant is low, slowly add coolant until the correct level is reached – do not overfill.



Comply with the applicable environmental laws regulating the disposal of extended-duty antifreeze with corrosion inhibitor. ◀

## Brake fluid



The warning lamp for the brake system's hydraulic circuits comes on/the message



"CHECK BRAKE FLUID" appears in the Check Control: brake fluid level too low.

### To add brake fluid

The brake fluid reservoir is located under the microfilter housing on the driver's side of the vehicle. For adding brake fluid or for determining and correcting the cause of brake fluid loss, consult your BMW center. Your BMW center is familiar with the specifications for factory-approved brake fluids (DOT 4).

Brake fluid loss may result in extended brake pedal travel. Should this occur, refer to the notes on page [134](#).



Brake fluid is hygroscopic, that is, it absorbs moisture from the air over time.

In order to ensure the safety and reliability of the brake system, have the brake fluid changed every two years by a BMW center. Refer also to the Service and Warranty Information Booklet (US models) or to the Warranty and Service Guide Booklet (Canadian models).

Brake fluid is hazardous to health and damages the vehicle's paint. You should always store it in its original container and in a location which is out of reach of children.

Do not spill the fluid and do not fill the brake fluid reservoir beyond the MAX mark. The brake fluid could ignite upon contact with hot engine parts and cause serious burns. ◀



Comply with the applicable environmental laws regulating the disposal of brake fluid. ◀



The BMW Maintenance System has been designed as a reliable means of providing maximum driving and operating safety – and as cost-effectively as possible for you.

Please keep in mind that regular maintenance is not only necessary for the safety of your vehicle, but also plays a significant role in maintaining its resale value.

### **Service Interval Display**

While conventional systems rely on distance traveled alone to determine when service is due, the BMW Maintenance System has for years considered the actual conditions under which the vehicle operates, because mileage can be accumulated in very different ways.

From a maintenance standpoint, 62,000 miles (100,000 km) accumulated in short-distance urban driving are not the equivalent of the same distance covered at moderate speeds in long-distance highway travel.

The BMW Maintenance System includes the Engine Oil Service and Inspections I and II.

Determining the maintenance intervals according to the actual loads on the vehicle covers every kind of operating situation. However, even those who drive only short distances – significantly less than 6,000 miles (10,000 km) annually – should have the engine oil changed at least every 2 years since oil deteriorates over time, regardless of use.

### **Service and Warranty Information Booklet (US models) or Warranty and Service Guide Booklet (Canadian models)**

For additional information on maintenance intervals and procedures, please refer to the Service and Warranty Information Booklet (US models) or the Warranty and Service Guide Booklet (Canadian models).

As a precaution against corrosion, it is advisable to have the body checked for damage from rocks or gravel at the same time, depending upon operating conditions.



Have your BMW center do the maintenance and repair.

Be sure that all maintenance work is confirmed in the Service and Warranty Information Booklet (US models) or in the Warranty and Service Guide Booklet (Canadian models).

These entries will constitute your proof that the vehicle has received regular maintenance. They are also required in the event of a warranty claim. ◀

### Light-emitting diodes (LEDs)

Light-emitting diodes installed behind translucent lenses serve as the light source for many of the controls and displays in your vehicle. The concept behind their operation is related to that employed for lasers, and they are officially designated as Class 1 light-emitting diodes.

 Do not remove the protective lens and avoid staring directly at the unfiltered beam for extended periods (several hours), as inflammation of the iris could result. ◀

California laws require us to state the following warning:

 Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Battery posts, terminals and related accessories contain lead and lead compounds. Wash your hands after handling. Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing thoroughly with soap and water. ◀



The Onboard Diagnostic (OBD) interface socket is located on the left of the driver's side at the bottom of the instrument panel and under a cover. The cover has the letters "OBD" on it.

The purpose of the OBD system is to ensure proper operation of the emission control system for the vehicle's lifetime. The system monitors emissions-related components and systems to detect deterioration and malfunction.



An illuminated lamp informs you of the need for service, not of the need to stop the vehicle. However, the systems should be checked by your BMW center at the earliest possible opportunity.

Under certain conditions, the indicator will blink or flash. This indicates a rather severe level of engine misfire. When this occurs, you should reduce speed and consult the nearest BMW center as soon as possible. Severe engine misfire over only a short period of time can seriously damage emission control components, especially the catalytic converter.



Service Engine Soon warning lamp for Canadian models.



When the filler cap is not properly tightened, the OBD system can detect the vapor leak and the indicator will light up. If the filler cap is subsequently tightened, the indicator should go out within a few days. ◀





Overview

Controls and features

Operation, maintenance

**Owner service procedures**

Technical data

Index

Overview

Controls

Maintenance

**Repairs**

Data

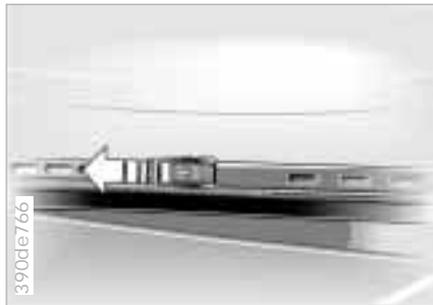
Index





Attached to the underside of the luggage compartment lid/tailgate. Unscrew the wingnut for access.

## Windshield wiper blades



### Front

1. Pull the wiper arm up slightly and hold it firmly
2. Press back the release (arrow) and pull the wiper blade back toward the base of the wiper arm
3. Install the new blade and slide the release back into position.



### Rear\*

1. Hold the wiper blade on the window and remove/unclip the wiper arm at the articulated joint (arrow)
2. Insert a new wiper blade and press it on/clip it into the wiper arm.



Use only wiper blades approved by BMW. ◀

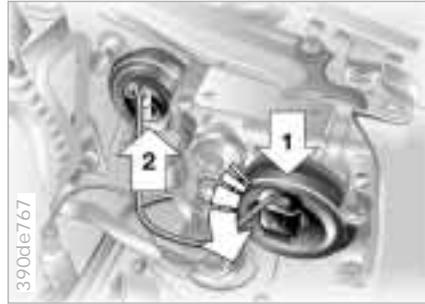
## Lamps and bulbs

The lamps and bulbs are essential factors contributing to the safety of your vehicle. For this reason, you should follow the instructions below carefully when replacing a bulb. If you are not familiar with any of the procedures, consult your BMW center.

 Do not touch the glass portion of a new bulb with your bare hands since even small amounts of impurities burn into the surface and reduce the service life of the bulb. Use a clean cloth, paper napkin, or a similar material, or hold the bulb by its metallic base. ◀

A replacement bulb set is available from your BMW center.

 Whenever working on the electrical system, switch off the electrical accessory you are working on or disconnect the cable from the negative terminal of the battery. Failure to do this could result in short circuits. To prevent injuries and damage, comply with any instructions provided by the bulb manufacturer. ◀



The right side of the engine compartment.

- 1 Low beams
- 2 High beams

 For checking and adjusting headlamp aim, please contact your BMW center. ◀

### Low and high beams

H7 bulb, 55 watt

 The bulb is pressurized. Therefore, you should always wear safety glasses and protective gloves. Failure to observe these precautions can result in physical injury if the bulb breaks. ◀

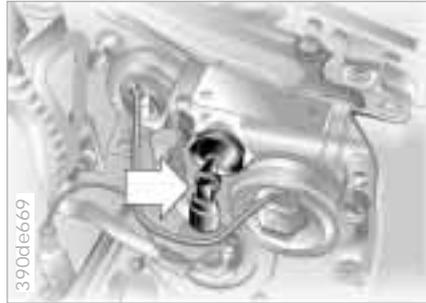
1. Turn the bulb holder to the left (arrow) and remove
2. Remove and replace the bulb.

-  When cleaning the headlamps, please observe the following:
- ▷ Do not wipe dry (scratches). Never use abrasives or strong solvents to clean the covers
  - ▷ Remove dirt and contamination (such as insects) by soaking with BMW Car Shampoo and then rinsing with plenty of water
  - ▷ Always use a deicer spray to remove accumulated ice and snow – never use a scraper. ◀

### **Xenon lamps\***

The operating life of these lamp units is extremely long and the likelihood of failure very low, provided that they are not switched on and off an excessive number of times. If one of these bulbs should nevertheless fail, it is possible to continue driving with great caution using the fog lamps, provided traffic laws in your area do not prohibit this.

 Because of the extremely high voltages involved, any work on the xenon lighting system should be carried out by technically-qualified personnel only. Otherwise, there is a risk of fatal injury. ◀

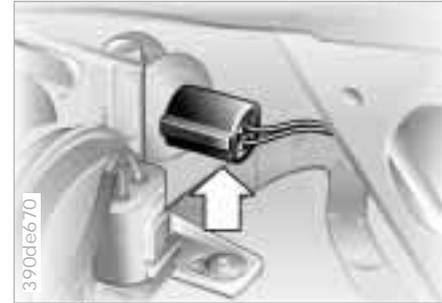


### **Standing lamps**

10 watt bulb

 The bulb holder and reflector are a single unit and are both changed at the same time. ◀

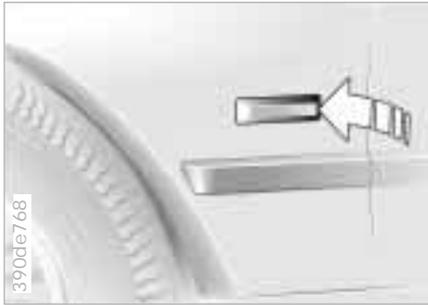
1. Turn the bulb holder with reflector to the left and remove
2. Disconnect the plug
3. Plug the new bulb holder into the plug connector. Be sure that it is securely engaged
4. Insert the reflector with bulb holder and turn to the right as far as possible.



### **Turn signal indicator/Parking lamps (side marker lamps)**

Dual-filament bulb, 21 watt

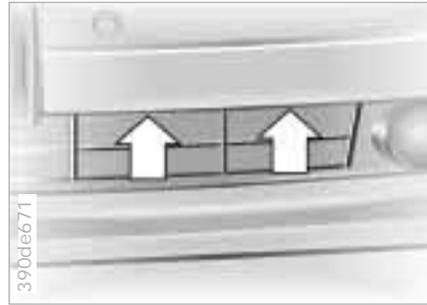
1. Turn the bulb to the left and remove
2. Remove and replace the bulb.



## Side turn signal indicators

5 watt bulb

1. Use finger pressure against the rear end of the lens (arrow) to press it forward for removal
2. Press gently on the bulb and turn it to the left to remove it.

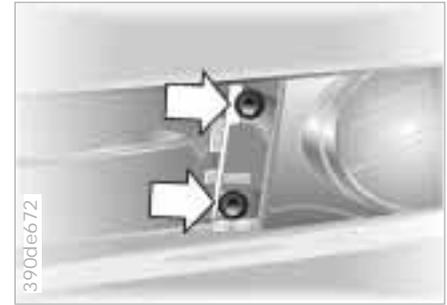


## Front fog lamps

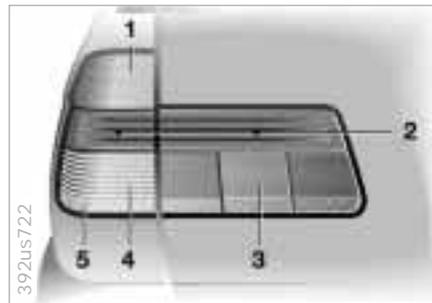
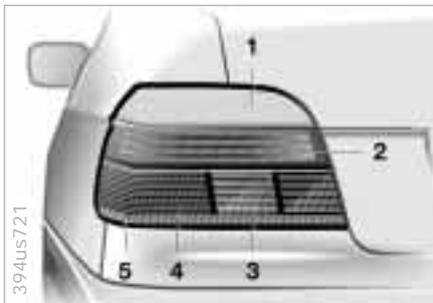
H8 bulb, 35 watt

 The bulb is pressurized. Therefore, wear safety glasses and protective gloves. Failure to observe these precautions can result in physical injury if the bulb breaks. ◀

1. Using a screwdriver, remove the mounting clips for the air grill (arrow) and remove the grill by bringing it toward the front



2. Loosen both screws (arrows)
3. Take off the cover panel next to the headlamp
4. Turn the headlamp 90° to the left and remove it by bringing it toward the front
5. Disconnect the plug
6. Turn the lamp to the left and remove it.



### Tail lamps – sedan

Rear lamp/Side marker lamps: LEDs  
 Remaining bulbs: 21 watt

- |                                   |                 |
|-----------------------------------|-----------------|
| 1 Turn signal indicator           | yellow or white |
| 2 Rear lamp/<br>Side marker lamps | red             |
| 3 Backup lamps                    | white           |
| 4 Brake lamps                     | red             |
| 5 Reflector                       | red             |

 Please contact your BMW center if there is a defect in the rear lamp/side marker lamp assembly. ◀

1. Use the upper handle to fold down the side panel in the luggage compartment
2. Turn the corresponding bulb holder to the left (arrow) and remove it
3. Press the defective bulb gently and turn it to the left. Remove the bulb and replace it
4. Insert the bulb holder and turn to the right as far as possible.

### Tail lamps – sport wagon

Rear lamp/Side marker lamps: LEDs  
 Remaining bulbs: 21 watt

- |                                   |       |
|-----------------------------------|-------|
| 1 Turn signal indicator           | red   |
| 2 Rear lamp/<br>Side marker lamps | red   |
| 3 Backup lamps                    | white |
| 4 Brake lamps, reflector          | red   |
| 5 Reflector                       | red   |

 Please contact your BMW center if there is a defect in the rear lamp/side marker lamp assembly. ◀



Lamps in the rear apron panel:

1. Open the cover in the side panel
2. Turn the quick-release fastener and remove the trim panel in front of the bulb holder
3. Open the quick-release fastener (arrow) and remove the bulb holder
4. Apply gentle pressure to the bulb while turning it to the left to remove.

If a subwoofer\* is installed behind the right-hand panel, unscrew the T-screw and swing the subwoofer to the side.



Lamps in the luggage compartment lid/tailgate:

1. Open the trim panel in the luggage compartment lid/tailgate
2. Open the quick-release fastener (arrow) and remove the bulb holder
3. Apply gentle pressure to the bulb while turning it to the left to remove.



**Center (high-mount) brake lamp**

21 watt bulb

1. Open the luggage compartment lid
2. Unclip the cover panel (on the underside of the rear tray) with a screwdriver (arrow)
3. Turn the bulb to the left and remove
4. Apply gentle pressure to the bulb while turning it to the left to remove.

sport wagon: LED strip in the tailgate.  
Please contact a BMW center in case of a malfunction.



### License plate lamps

5 watt bulb

1. Insert a screwdriver into the slot and press to the left (arrow); this disengages the lamp
2. Remove the lamp and replace the bulb.

## Changing a wheel

 Safety measures in the event of a flat tire or wheel change:

Stop the vehicle as far as possible from passing traffic. Park on a firm, flat, surface. Switch on the hazard warning flashers.

Turn the steering wheel to the straight-ahead position, remove the key and engage the steering lock. Shift into 1st or reverse (selector lever in Park with automatic transmission) and engage the parking brake.

All passengers should be outside the vehicle and well away from your immediate working area (behind a guardrail, for instance).

If necessary, set up your warning triangle or portable hazard warning lamp on the roadside at an appropriate distance from the rear of the vehicle.

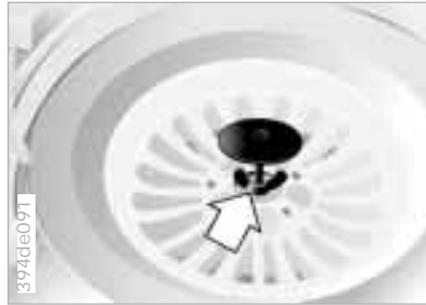
Comply with all safety guidelines and regulations.

Change the wheel only on a level, firm surface which is not slippery. Avoid jacking the vehicle up on a soft or slippery surface (snow, ice, very smooth surfaces, etc.), since it could slide sideways.

Position the jack on a firm support surface.

Do not place wooden blocks or similar objects under the jack. If this is done, the jack might not be able to reach its full support capacity because of the limited height.

Do not lie under the vehicle or start the engine when the vehicle is supported by the jack – risk of fatal injury. ◀



## What you will need

In order to avoid rattling noises later, note the position of the tools when you remove them and return them to their original positions when you are through using them.

### ▷ Car jack

sedan: fold back the luggage compartment floor mat for access, then unscrew the wingnut to release the jack (arrow).

sport wagon: raise the floor panel and spare tire cover (refer to page 127).

When you have completed work, screw the jack all the way back down. Fold the handle back and insert it in its holder

### ▷ Wedge (wheel chock)

Located next to the jack. Loosen the wingnut to remove it

### ▷ Spare tire and adapter\* for removing the lug bolt cover\* (refer to the next page)

Both are next to the jack. Remove the adapter or the plastic cover. Unscrew the wingnut (arrow) by hand and remove the wheel

### ▷ Lug wrench and screwdriver

In the onboard tool kit under the luggage compartment lid (refer to page 152).

sport wagon: the lug wrench is next to the spare tire.

## Procedure

1. Carefully read and comply with the safety precautions on the previous page
2. Secure the vehicle to prevent it from rolling:  
Place the wedge against the rear surface of the front tire on the side opposite the side being raised. If the vehicle is parked on a downward slope, place the wedge securely in front of the tire. If the wheel must be changed on a surface with a more severe slope, take additional precautions to secure the vehicle from rolling
3. Wheels with full wheel covers\*:  
Reach into the ventilation openings and pull the cover off



4. Wheels with adapter\*: position the lug bolt adapter on the lug bolt cover. Then apply the lug wrench and turn it to the left (refer to the illustration)
5. Wheels with hub cover\*: pry the hub cover off with the screwdriver in the slot
6. Loosen the lug bolts 1/2-turn



7. Position the jack at the jacking point closest to the flat tire so that the jack base is vertically below the jacking point and the entire surface of the head of the jack will move into the square recess of the jacking point (refer to the illustration detail) when the jack is cranked
8. Jack the vehicle up until the wheel you are changing is raised from the ground
9. Unscrew the lug bolts and remove the wheel
10. Remove accumulations of mud or dirt from the mounting surfaces of the wheel and hub. Clean the lug bolts



11. Position the spare tire. Secure the wheel by turning at least two lug bolts into opposite bolt holes
12. Screw in the remaining lug bolts. Tighten all the bolts securely in a diagonal pattern
13. Lower the jack and remove it from beneath the vehicle
14. Tighten the lug bolts in a diagonal pattern
15. Wheels with full wheel covers: Place the wheel cover with the valve opening over the valve (arrow). Use both hands to press the cover securely onto the rim

 For this light-weight wheel, use only the full wheel cover installed by the factory. Other wheel covers may not fit securely. ◀

## Changing a wheel

16. Wheels with hub covers:  
Position the hub cover and press it on tightly
17. If equipped with lug bolt covers:  
Align the arrow on the cover with the line in the wheel and press the cover into place
18. Check and correct the tire inflation pressure at the earliest opportunity. For vehicles with Tire Pressure Monitor (RDC)\*:  
After mounting the spare tire or correcting the inflation pressure, reactivate the system. Refer to page [101](#).

 The vehicle jack is designed for changing wheels only. Do not attempt to raise another vehicle model with it or to raise any load of any kind. To do so could cause accidents and personal injury. To ensure continued safety, have the lug bolts checked with a calibrated torque wrench [torque specification 72 lb-ft (100 Nm)] at the earliest opportunity. ◀

When storing the wheel, take care to ensure that you do not damage the retaining pin in the spare tire recess.

If light-alloy wheels other than original BMW light-alloy wheels have been mounted, it may be necessary to use different lug bolts for those wheels.

Replace the defective tire as soon as possible and have the new wheel/tire balanced.

Protect valve inserts against dirt using screw-on valve stem caps. Dirty valve stems frequently lead to slow pressure loss.

 Size 255/40 R17 94 W\* tires on the rear axle:

In the event of a flat tire, it may be necessary to mount the spare tire of different size at the rear. This tire is suitable for use in all load and speed ranges. Nevertheless, you should remount a tire of the correct size as soon as possible. ◀

 Battery posts, terminals and other components contain lead and lead compounds. Wash hands after handling. ◀

### Battery care

The battery is maintenance-free, that is, the original electrolyte will normally last for the service life of the battery under moderate climatic conditions.

 For all questions that regard the battery, please consult your BMW center. The battery is completely maintenance-free; the following section is provided for your information only. ◀

 Do not disconnect the battery when the engine is running, as the ensuing voltage surge would damage the vehicle's onboard electronics. ◀

### Charging the battery

When charging the battery in the vehicle, leave the engine off at all times. Connect the charge cables to the terminals in the engine compartment (for terminal locations, refer to "Jump-starting" on page 164).

 Return used batteries to a recycling point or your BMW center. Maintain the battery in an upright position for transport and storage. Secure the battery against tilting during transport. ◀

## Fuses



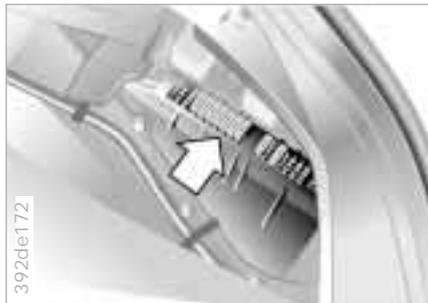
### In the glove compartment

Open the glove compartment and turn the two white quick-release fasteners to the left.



## In the luggage compartment

Use the handle to pull down the trim on the right wall.



## In the cargo area – sport wagon

Open the right access door by pressing the button and pull the trim panel to the side.

If a subwoofer\* is installed, loosen the T-screw and swing the subwoofer to the side.



Do not attempt to repair a burned fuse or replace it with a fuse having a different color or ampere rating. To do this could cause a fire in the vehicle resulting from a circuit overload. ◀

Do not use spray starter fluids to start the engine.

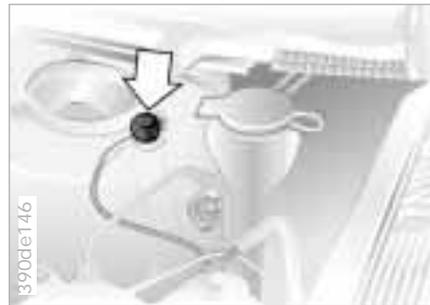
When your battery is discharged you can use two jumper cables to start your vehicle with power from the battery in a second vehicle. You can also use the same method to help start another vehicle. Always use jumper cables with fully insulated handles on the terminal clamps.

 Do not touch high-voltage wiring and cables on a running engine. Contact with components carrying high voltage can be harmful or fatal. Carefully observe the following instructions to avoid personal injury and/or damage to one or both vehicles. ◀

1. Ensure that the battery in the support vehicle is also rated at 12 volts. This information is provided on the top of the battery casing
2. Do not disconnect your battery from your vehicle's electrical system. Switch off all electrical accessories in both vehicles
3. Make absolutely certain that there is no contact between the bodywork of the two vehicles – short circuit hazard



4. Start the engine on the support vehicle and allow it to run
5. Use one jumper cable (+) to connect the positive terminal of the battery in the support vehicle with the auxiliary positive terminal provided in the engine compartment of your BMW specifically for jump-starting. The cover on this auxiliary terminal is identified by a "+" symbol, refer to the illustration. Pull up to open the cover



6. Next, connect one end of the other jumper cable (-) to either the support vehicle's negative battery terminal or a suitable ground on its engine or bodywork. Connect the other end to the negative battery terminal or a suitable ground on the vehicle being started. There is a special nut on the strut dome of your BMW; refer to the arrow in the illustration

 Always adhere to this sequence when connecting jumper cables; failure to observe this procedure can lead to sparks at the battery terminals and pose an injury hazard. ◀

## Jump-starting

7. Start the support vehicle's engine and let it run at an increased idling speed for a few minutes. Start the engine on the vehicle needing the jump-start, and allow it to run as usual. If the first start attempt is not successful, wait a few minutes before another attempt in order to allow the discharged battery to recharge
8. Before disconnecting the jumper cables let the engines run for a few minutes
9. Then disconnect the jumper cables in reverse sequence.

Depending on the cause of the fault, have the battery recharged by your BMW center.

## Towing the vehicle



### Tow fitting

The screw-in tow fitting is stored in the onboard tool kit; be sure that it remains in the vehicle at all times. This fitting is designed for installation in the tow sockets located at the front and rear of the vehicle, and is intended for towing on paved road surfaces only. It should not be used to pull a vehicle out of deep snow, mud, sand, etc. Always observe all applicable towing laws and regulations.

### Access to tow sockets

Front:

Apply pressure to the arrow symbol on the cover panel to remove.



Rear:

Apply pressure to the arrow symbol on the cover panel to remove.

 Screw the tow fitting in until it bottoms firmly. Failure to screw the fitting all the way in can cause thread damage.

Never attach tie-down hooks, chains, straps, or tow hooks to tie rods, control arms, or any other part of the vehicle suspension, as severe damage to these components will occur, leading to possible accidents. ◀

Use only a nylon towing strap to tow the vehicle, since the inherent resilience of this material helps protect both vehicles from sudden jerking movements.

 The towed vehicle should always be the lighter of the two vehicles. If this is not the case, it is no longer possible to control vehicle response. ◀

### Tow-starting

It is not possible to start the engine of vehicles equipped with an automatic transmission by towing or pushing.

For instructions on jump-starting: refer to page 164.

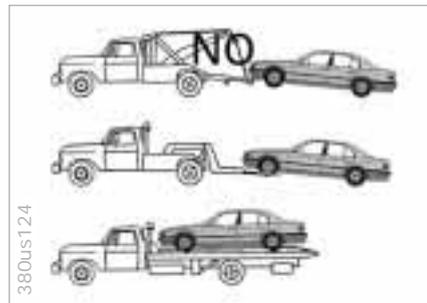
Never attempt to use your vehicle to push another vehicle, since damage to the energy-absorbing bumpers could result.

### Towing a vehicle with automatic transmission

1. Place the selector lever in position N
2. Towing speed:  
Max. 45 mph (70 km/h)
3. Towing distance:  
Max. 95 miles (150 km)
4. Leave the ignition key in position 1 to ensure that the brake lamps, turn signal indicators, horn and windshield wipers remain operative, and to prevent the steering lock from engaging
5. Switch on the hazard warning flashers (observe official regulations).

Find some means of identifying the vehicle in tow, for instance, place a sign or warning triangle in the rear window.

 Make sure that the ignition key remains in position 1 even when the electrical system has failed to prevent the steering lock from engaging. The steering and brakes are without power-assist when the engine is off. This means that increased effort is required for steering and braking. ◀

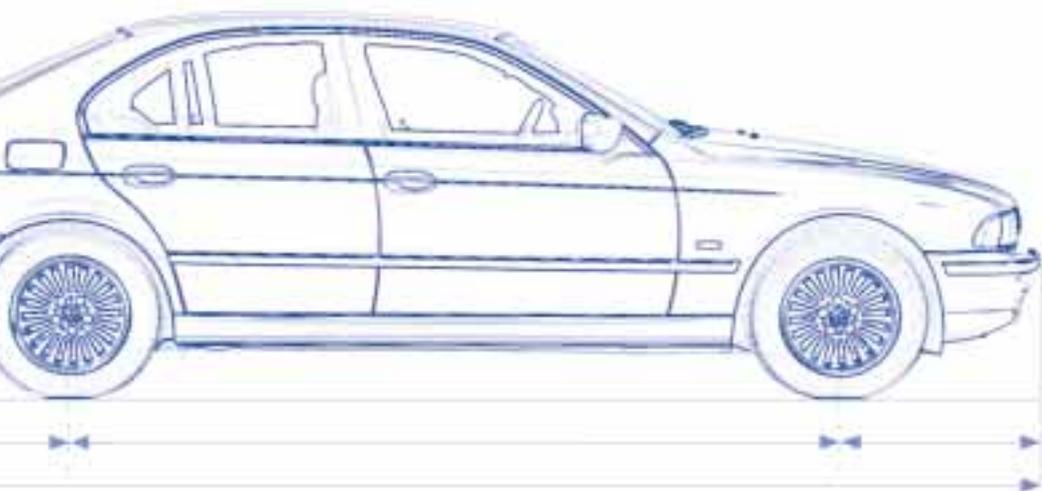


### Towing with a commercial tow truck

- ▷ Do not tow with sling-type equipment
- ▷ Use a wheel-lift or flatbed carrier
- ▷ Please comply with applicable towing laws.

 Never allow passengers to ride in a towed vehicle for any reason. ◀





Overview

Controls and features

Operation, maintenance

Owner service procedures

**Technical data**

Index



Overview

Controls

Maintenance

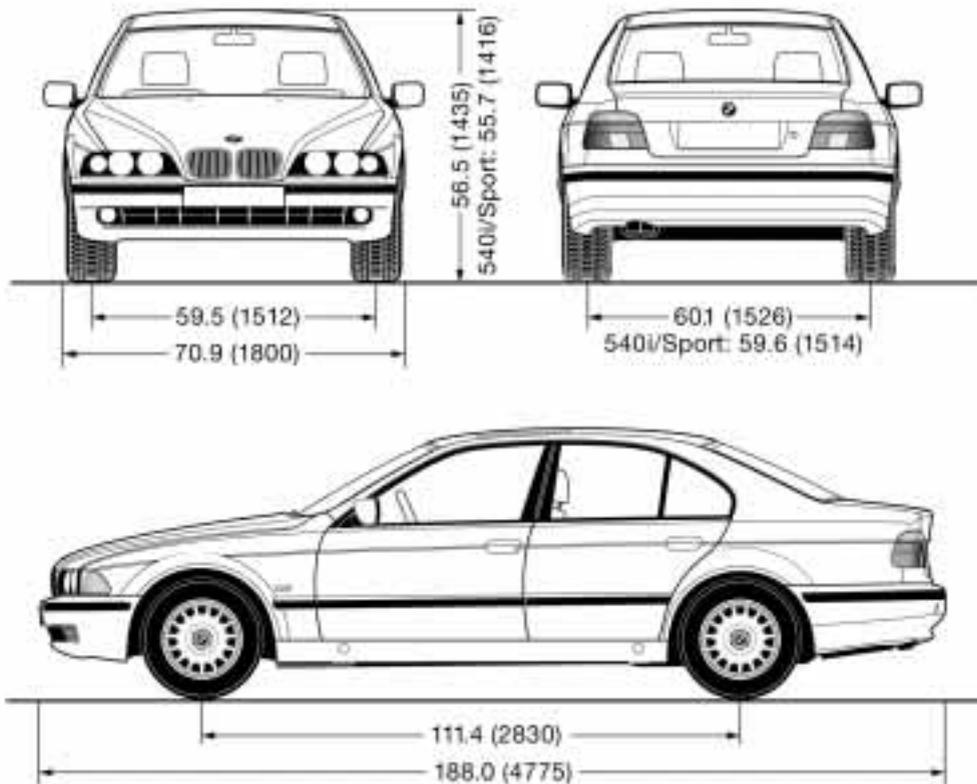
Repairs

Data

Index

## 170 Engine specifications

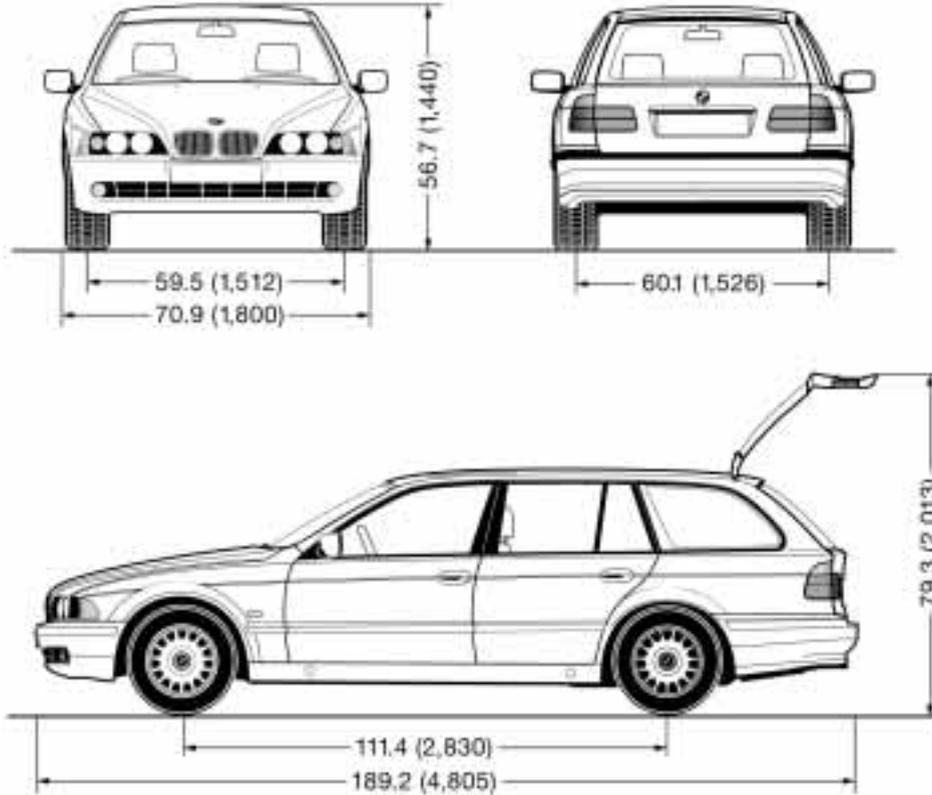
		BMW 525i/sport wagon	BMW 530i	BMW 540i/sport wagon
Displacement	cu in (cm <sup>3</sup> )	152.2 (2,494)	181.8 (2,979)	268.4 (4,398)
Number of cylinders		6	6	8
Maximum output at engine speed	hp rpm	184 6,000	225 5,900	290 5,400
Maximum torque at engine speed	lb ft (Nm) rpm	175 (236) 3,500	214 (289) 3,500	324 (440) 3,600
Compression ratio	$\epsilon$	10.5	10.2	10.0
Stroke	in (mm)	2.95 (75.0)	3.53 (89.6)	3.26 (82.7)
Bore	in (mm)	3.31 (84.0)	3.31 (84.0)	3.62 (92.0)
Fuel-injection system		Digital electronic engine-management system		



All dimensions are given in inches (mm).

Min. turning circle dia.: BMW 525i, 530i: 37.1 ft (11.3 m); BMW 540i: 37.4 ft (11.4 m)

## 172 Dimensions – sport wagon



All dimensions are given in inches (mm). Height with roof-mounted luggage rack\*: 57.4 (1,459)  
Min. turning circle dia.: BMW 525i: 37.1 ft (11.3 m); BMW 540i: 37.4 ft (11.4 m)

		BMW 525i	BMW 530i	BMW 540i
Curb weight (with one person, ready for operation, full tank of fuel, options not included)				
with manual transmission	lbs. (kg)	3,450 (1,565)	3,494 (1,585)	3,748 (1,700)
with automatic transmission	lbs. (kg)	3,505 (1,590)	3,549 (1,610)	3,803 (1,725)
Approved gross vehicle weight				
with manual transmission	lbs. (kg)	4,464 (2,025)	4,509 (2,045)	4,762 (2,160)
with automatic transmission	lbs. (kg)	4,520 (2,050)	4,563 (2,070)	4,817 (2,185)
Approved front axle load	lbs. (kg)	2,138 (970)	2,138 (970)	2,381 (1,080)
Approved rear axle load	lbs. (kg)	2,579 (1,170)	2,579 (1,170)	2,635 (1,195)
Approved roof load capacity	lbs. (kg)	220 (100)	220 (100)	220 (100)
Never exceed either the approved axle loads or the gross vehicle weight.				
Luggage compartment capacity	cu ft (l)	16.2 (460)	16.2 (460)	16.2 (460)

174 **Weights – sport wagon**

		BMW 525i	BMW 540i
Curb weight (with one person, ready for operation, full tank of fuel, options not included)			
with manual transmission	lbs. (kg)	3,682 (1,670)	-
with automatic transmission	lbs. (kg)	3,715 (1,695)	4,056 (1,840)
Approved gross vehicle weight			
with manual transmission	lbs. (kg)	4,773 (2,165)	-
with automatic transmission	lbs. (kg)	4,828 (2,190)	5,093 (2,310)
Approved front axle load	lbs. (kg)	2,116 (960)	2,381 (1,080)
Approved rear axle load	lbs. (kg)	2,844 (1,290)	2,910 (1,320)
Approved roof load capacity	lbs. (kg)	220 (100)	220 (100)
Never exceed either the approved axle loads or the gross vehicle weight.			
Cargo area capacity	cu ft (l)	14.5 – 53.9 (410 – 1,525)	14.5 – 53.9 (410 – 1,525)

			Notes
Fuel tank	gal. (liters)	approx. 18.5 (approx. 70)	Fuel specification: page <a href="#">25</a>
Reserve	gal. (liters)	approx. 2.0 (approx. 8) – BMW 525i, 530i approx. 2.5 (approx. 10) – BMW 540i	
Windshield washer system	quarts (liters)	approx. 3.7 (approx. 3.5)	For details: page <a href="#">141</a>
with headlamp washer system	quarts (liters)	approx. 6.3 (approx 6.0)	
Intensive cleaning system	quarts (liters)	approx. 1.1 (approx 1.0)	
Cooling system including heater circuit	quarts (liters)	11.1 (10.5) – BMW 525i, 530i 12.7 (12.0) – BMW 540i	For details: page <a href="#">144</a>
Engine oil and filter change	quarts (liters)	6.9 (6.5) – BMW 525i, 530i 7.9 (7.5) – BMW 540i	"BMW High Performance Synthetic Oil." For details: page <a href="#">143</a>
Manual transmission, automatic transmission and differential	-	-	Lifetime fluid, no fluid change required

A B C

P Q R



Overview

Controls and features

Operation, maintenance

Owner service procedures

Technical data

**Index**

Overview

Controls

Maintenance

Repairs

Data

**Index**

# Everything from A to Z

## A

ABS (Antilock Brake System) [20](#), [133](#)

Accessories [9](#)

Activated-charcoal filter [114](#)

Active seat [52](#)

Adaptive Transmission Control (ATC) [72](#), [75](#)

Add

antifreeze [144](#)

brake fluid [145](#)

engine coolant [144](#)

engine oil [142](#)

washer fluid [141](#)

Adjusting

backrest [50](#)

head restraints [52](#)

mirrors [57](#)

seats [48](#)

steering wheel [56](#)

temperature [107](#), [111](#)

thigh support [50](#)

Air conditioning [106](#)

Air distribution [107](#), [111](#)

Air outlets [106](#), [109](#)

Air pressure,  
tires [26](#), [135](#)

Air supply [107](#), [111](#)

Air vent [106](#), [109](#)

Airbags [20](#), [59](#)

Alarm system [42](#)

Anchorage points  
child-restraint system with  
tether strap [62](#)

Antifreeze, disposal [144](#)

Antifreeze, radiator [144](#)

Antilock Brake System  
(ABS) [20](#), [133](#)

Anti-theft alarm system [42](#)

Anti-theft protection [34](#)

Approved axle load [173](#)

Approved gross vehicle  
weight [173](#)

Aquaplaning [133](#), [135](#)

ASC+T (Automatic Stability  
Control plus Traction) [21](#)

ASC+T/DSC (Automatic  
Stability Control plus  
Traction/Dynamic Stability  
Control) [99](#)

Ashtray, front [119](#)

Ashtray, rear [120](#)

ATC (Adaptive Transmission  
Control) [72](#), [75](#)

Attach vacuum cleaner [120](#)

AUC (Automatic  
recirculated-air  
control) [112](#)

Automatic climate

control [109](#)  
removing condensation  
from windows [111](#)

Automatic cruise control [80](#)

Automatic curb monitor [55](#)

Automatic rear window  
cleaning [79](#)

Automatic recirculated-air  
control (AUC) [112](#)

Automatic Stability Control  
plus Traction (ASC+T) [21](#)

Automatic Stability Control  
plus Traction/Dynamic  
Stability Control (ASC+T/  
DSC) [99](#)

Automatic  
transmission [20](#), [72](#)

Automatic transmission with  
Steptronic [20](#), [75](#)

Average fuel  
consumption [88](#)

Average speed [88](#), [96](#)

Avoiding unintentional  
alarms [43](#), [44](#)

## B

Backrest, adjusting [50](#)

Backup lamps  
bulb replacement [156](#)

Battery [162](#)

care [162](#)

charging [162](#)

discharged [164](#)

disposal [162](#)

Belts [53](#)

Beverage holder [119](#)

Blower [107](#), [111](#)

BMW active seat [52](#)

BMW comfort seat [51](#)

BMW Maintenance  
System [146](#)

BMW Universal  
Transmitter [115](#)

Bottle holder, refer to  
beverage holder [119](#)

Brake fluid [145](#)  
adding [145](#)

Brake hydraulic system [19](#)

Brake lamps, bulb  
replacement [156](#)

Brake malfunctions [134](#)

Brake system [134](#)  
brake fluid level [134](#)

brake pads [20](#), [134](#)

disc brakes [134](#)  
malfunctions [134](#)

Break-in procedures [132](#)

Bulbs and lamps [153](#)

- C**
- California Proposition
    - 65 Warning 147
  - Capacities 175
  - Cargo area
    - floor compartment 127
    - lamps 105
    - opening from the inside 40
    - partition net 125
    - roll-up cover 125
  - Cargo loading 128
  - Cellular phone 119
  - Center (high-mount) brake lamp 157
  - Central locking
    - system 32, 37
  - Changing a wheel/tire 158 
  - Charge indicator lamp 19
  - CHECK button 85
  - Check Control 85 
  - Check engine oil
    - level 142 
  - Child seats 62
  - Child-restraint
    - installation 64
  - Child-restraint system with tether strap 62
  - Child-restraint systems 62
  - Child-safety locks 66
  - Cigarette lighter 120
  - Clean rear window 79
  - Cleaning windshield 79
  - Climate control, refer to
    - Automatic climate control 109
  - Clock 90
    - for additional information refer to the "Owner's Manual for Onboard Computer"
  - Cockpit 14
  - Code, refer to immobilizer function 96
  - Cold start 69
  - Comfort seat 51
  - Compartments 118
  - Computer 88
    - for additional information refer to the "Owner's Manual for Onboard Computer"
    - remote control 97
  - Computer in the MID 93
  - Configuring personal adjustments, Vehicle and Key Memory 67
  - Consumption display 83
  - Consumption, fuel 88, 95
  - Convenience operation of windows and sliding/tilt sunroof 33
  - Convenience starting
    - feature 69
  - Coolant 144
  - Coolant temperature
    - gauge 84
  - Copyright 4
  - Cover, sun blinds 114
  - Cruising range 88, 95
  - Cup holder 119
  - Cup holder, refer to
    - beverage holder 119
  - Curb monitor 55
- D**
- Date
    - calling up 90
    - changing 90
  - Daytime driving lamps 103
  - DBC (Dynamic Brake Control) 20
  - Deactivating 97
    - interior motion sensor 43
    - tilt alarm sensor 43
  - Deep water 133
  - Defrost windows 108, 111
  - Defroster mode 108, 111
  - Digital clock in the MID 90
  - Dimensions 171
  - Dipstick, engine oil 142 
  - Displacement 170
  - Display lighting 104
  - Displays 16, 17
  - Disposal
    - antifreeze with corrosion inhibitor 144 
    - used batteries 162 
    - used oils 143 
  - Distance from
    - destination 94
  - Distance warning 98
  - Divided rear-seat
    - backrest 121
  - Doors
    - manual operation 33
    - opening and closing 34
    - opening/closing from the inside 34
    - operation via remote control 34
  - DOT Quality Grades 136
  - Driving notes 133
  - DSC (Dynamic Stability Control) 21, 99
  - Dynamic Brake Control (DBC) 20
  - Dynamic Stability Control (DSC) 21, 99
- E**
- Electric power seat 50
  - Electric power windows 44

# Everything from A to Z

Electrical malfunction  
doors 33  
fuel filler door 24  
luggage compartment  
lid 38  
sliding/tilt sunroof 47  
tailgate 39

Elements of operation,  
cockpit 14

Emergency release of  
luggage compartment lid  
from luggage  
compartment's interior 41

Energy control 83

Engine compartment  
essentials 140

Engine coolant 84, 144

Engine oil 142  
consumption 142  
disposal 143🔧  
level 20  
pressure 19  
specifications 143🔧  
viscosity ratings 143

Engine specifications 170

Estimated time of arrival 95

Exterior mirrors 57, 58

## F

Failure messages 85🔧

Filling the washer  
reservoir 141🔧

First-aid kit 23

Fittings, tow-starting and  
towing 165🔧

Flashlight 118

Flat tire 135, 158🔧

Fog lamps 104  
bulb replacement 155🔧

Fold rear-seat backrest 121

Follow me home lamps 103

Front ashtray 119

Front fog lamps 104

Front seat adjustment 48

Fuel 25  
gauge 83  
quality 25  
specifications 25  
tank capacity 175

Fuel consumption 88, 95  
average 88, 95  
indicator 83

Fuel filler door 24  
electrical malfunction 24  
manual release 24

Fuses 162

## G

Gasoline 25  
gauge 83  
quality 25

Glass moonroof 47

Glove compartment 118

Grilles 109

Gross vehicle weight 173

## H

Handbrake 70

Hands-free system 119

Hazard warning triangle 23

Head restraints 50

Headlamp covers,  
care 153🔧

Headlamp flasher 78

Headlamp washer  
system 141

Heated seats 55

Heated steering wheel 56

Heating and  
ventilation 106, 109

Heating while stopped 113

Heavy cargo 128

Height adjustment  
seats 50

steering wheel 56

Height of vehicle 171

High beams 21, 104  
bulb replacement 153🔧

High Performance Synthetic  
Oils 143

High-mount brake lamp 157

Holder for canned  
beverages 119

Hood 139  
release 139🔧

Horn 14

Hydraulic Braking Assistant,  
refer to DBC 20

Hydroplaning 133, 135

## I

Ice warning 82

Identification, tires 137

Ignition lock 68

Immobilizer function 96

activating code 96

deactivating code 96

selecting code 96

Imprint 4

Indicator and warning  
lamps 19

Inflation pressure 26🔧

monitoring 101

Inflation pressure,  
tires 26, 135

INSPECTION 84

Instrument  
cluster 15, 16, 17

# Everything from A to Z

Instrument displays [15](#)  
 Instrument lighting [104](#)  
 Instruments [15](#)  
 Intensive cleaning [141](#)  
 Interior lamps [105](#)  
 Interior mirrors [58](#)

Interior motion sensor [42](#)  
   avoiding unintentional  
   alarms [44](#)  
   deactivate [35](#)  
 Interior rearview mirror [57](#)  
   automatic dimmer [58](#)  
 Interlock [68](#)

## J

Jack [159](#)  
 Jump-starting [164](#) 

## K

Key Memory [67](#)  
 Key with remote control [32](#)  
 Keys [32](#)  
 Kickdown [73, 76](#)

## L

Lamp switch [103](#)  
 Lamps and bulbs [153](#)   
 Lashing eyes to secure the  
 load [128](#)  
 Length of vehicle [171](#)

Level control  
   system [21, 101](#)  
 License plate lamps  
   bulb replacement [158](#)   
 Lighter [120](#)  
 LIGHTS ON warning [103](#)  
 LIMIT [93](#)  
 Load-securing devices [128](#)  
 Louvers [106, 109](#)  
 Low beams [103](#)  
   bulb replacement [153](#)   
 Low-fuel warning lamp [83](#)  
 Lug bolts [160](#)  
 Lug wrench [159](#)   
 Luggage

  compartment [38, 42, 125](#)  
   capacity [173](#)  
   manual operation [38](#)   
 Luggage compartment  
   lid [38](#)  
   electrical malfunction [38](#)  
   emergency release from  
   luggage compartment's  
   interior [41](#)  
   opening from the  
   outside [39](#)  
   opening separately [38](#)  
   remote control [35](#)  
   secure separately [38](#)  
 Luggage compartment's  
   interior, emergency  
   release [41](#)

Luggage net [42](#)  
 Luggage straps [42](#)  
 Lumbar support [50](#)

## M

M+S tires [138](#)  
 Maintenance [84, 146](#)   
 Malfunction displays [85](#)   
 Manual operation  
   doors [33](#)  
   fuel filler door [24](#)  
   luggage compartment  
   lid [38](#)  
   sliding/tilt sunroof [47](#)  
   tailgate [39](#)  
 Manual transmission [71](#)  
 Manually controlled  
   recirculated-air [112](#)  
 Manually-adjusted seat [49](#)  
 Master key [32](#)  
 Maximum cooling [112](#)  
 Memory settings  
   for seat, mirror and  
   steering wheel [54](#)  
   related to individuals ("Key  
   Memory") [67](#)  
   related to the vehicle  
   ("Vehicle Memory") [67](#)  
 Microfilter [108, 114](#)  
 MID (Multi-Information  
 Display) [89](#)

Mirrors [57](#)  
   adjusting [57](#)  
   automatic dimming  
   feature [58](#)  
   defrosting [57](#)  
   memory setting [54](#)

Modifications,  
   technical [9, 147](#)  
 Monitoring inflation  
   pressure, tires [101](#)  
 Moonroof [47](#)  
 Multifunction buttons,  
   steering wheel [22](#)  
 Multi-Information Display  
 (MID) [89](#)

## N

Non-smoker's  
 equipment [120](#)

## O

OBD interface socket [148](#)  
 Odometer [16, 82](#)  
 Oil additives [142](#)  
 Oil change interval, refer to  
   the Service and Warranty  
   Information Booklet (US  
   models) or to the Warranty  
   and Service Guide Booklet  
   (Canadian models)  
 Oil consumption [142](#)

# Everything from A to Z

Oil dipstick 142   
Oil level, indicator lamp 20  
Oil pressure, indicator lamp 19  
Oil specifications 143   
Oil viscosity 143  
Oils, disposal 143   
OILSERVICE 84  
Old batteries 162  
Onboard computer, refer to the "Owner's Manual for Onboard Computer"  
Onboard Diagnostic (OBD) system 148  
Onboard Diagnostics (OBD) 148  
Onboard tool kit 152   
Opening and closing  
  from the inside 37  
  from the outside 33  
  using the key 33  
  using the remote control 33  
Opening the rear window 40  
Operating range 88  
Outlets,  
  ventilation 106, 109  
Outside temperature display 82, 88

**P**  
Park Distance Control (PDC) 98  
Parked-car ventilation system 114  
  for additional information refer to the "Owner's Manual for Onboard Computer"  
Parking aid 98  
Parking brake 20, 70  
Parking lamps 103  
  bulb replacement 154   
Partition net 125  
Passenger-side mirror tilt function 55  
PDC (Park Distance Control) 98  
Pocket light 118  
Pollen filter 108, 114  
Power windows 45  
  safety switch 45  
Power-slip control, refer to ASC+T/DSC 99

**Q**  
Quality Grades, tires 136

**R**  
Rain sensor 78  
RDC (Tire Pressure Monitor) 101  
Reading lamps 105  
Rear ashtray 120  
Rear window 40  
  defroster 107, 112  
  sun blinds 114  
  wiper 79  
Rear window cleaning 79  
Rear-seat backrest  
  fold 121  
  folding 121  
Rearview mirror 57  
Recirculated-air mode 107  
Reclining seat 48  
Refueling 24  
Releasing hood 139  
Reminder signal (Memo) 91  
Remote control 34  
  computer 97  
Remove condensation from windows 108, 111  
Replacing  
  fuses 162   
  lamps and bulbs 153   
  wiper blades 152   
Reporting safety defects 10

Reservoir, washer system 141   
Residual heat 113  
Rims 137  
Roller sun blind 114  
Roll-up cover 125  
Roof load capacity 173  
Roof-mounted luggage rack 129

**S**  
Safety belts 53  
Safety defects, reporting 10  
Safety lock buttons 37  
Seat belts 53  
Seat heating 55  
Seats  
  electric power 50  
  heating 55  
  manually-adjusted 49  
  memory setting 54  
Secure the load 128  
Securing cargo 42, 128  
Selector lever, automatic transmission 72, 75  
Self-leveling suspension 101  
  inactive 21  
Service and Warranty 10  
Service and Warranty Information Booklet (US models) 146

- Service Interval
  - Display 84, 146
- Shiftlock 72, 75
- Shoulder support 51
- Side airbags 59
- Side Impact Head Protection System 59
- Side lamps
  - bulb replacement 154 
- Side turn signal indicators
  - bulb replacement 155 
- Sitting safely 48
  - with airbags 48
  - with safety belt 48
- Ski bag 122
- Ski bag in the sport wagon 124
- Sliding/tilt sunroof 46
  - manual operation 47
  - with glass moonroof 47
- Snow chains 138
- Socket for attaching electrical appliances 120
- Spare tire 159 
- Speaker 119
- Special characteristics of winter tires 138
- Special oil 143 
- Speed 96
- Speed limit 93
- Speed, average 88, 96
- Speedometer 15, 16, 17
- sport wagon
  - cargo area 125
  - compartments in the cargo area 126
  - cover in the cargo area 126
  - folding down the rear backrest 125
  - lashing eyes 128
  - load-securing devices 128
  - opening the rear window 40
  - partition net 125
  - rear window wiper, blade replacement 152 
  - releasing the tailgate after an electrical malfunction 39
  - roll-up cover 125
  - securing a load 128
  - ski bag 124
  - tail lamp assembly, bulb replacement 156 
- Standing lamps 104
- Starting assistance 164 
- Starting problems 69 
- Starting the engine 69
- Steering wheel
  - heating 56
  - lock 68
  - memory setting 54
- Steering wheel with multifunction buttons 22
- Steptronic 75
- Stopwatch 91
  - for additional information refer to the "Owner's Manual for Onboard Computer"
- Storage compartments 118
  - in the cargo area 126
- Summer tires 137
- Sun blinds 114
- Sunroof 46
- Switching off the engine 70
- Switch-on times for parked-car ventilation 92
- Symbols 8
- T**
- Tachometer 83
- Tail lamps 156
  - bulb replacement 156 
- Tailgate
  - manual operation 39
  - manual release 39
  - opening from the inside 40
  - opening from the outside 39
- Technical modifications 9, 147
- Telephone preparation 119
- Temperature display 82, 88
- Temperature gauge 84
- Temperature layering 108, 113
- Tether strap 62
- Third brake lamp 157
- Through-loading system 121
- Tilt alarm sensor 42, 43
  - avoiding unintentional alarms 44
  - deactivate 35
- Tilt function, passenger-side mirror 55
- Time
  - calling up 90
  - changing 90
  - of arrival, estimated 95
- Timer 90
  - for additional information refer to the "Owner's Manual for Onboard Computer"
- Tire
  - change 158 
  - damage 135 
  - inflation pressure 26, 135
  - pressure monitoring 101, 135
  - replacement 136
  - tread 135
- Tire inflation pressure 26

# Everything from A to Z

Tire Pressure Monitor  
(RDC) [101](#)

Tire Quality Grading [137](#)

Tools [152](#)

Torque [170](#)

Tow fittings [165](#)

Towing the vehicle [165](#)

Track [171](#)

Traction control system,  
refer to ASC+T/DSC

Transmission [71](#), [72](#), [75](#)

Transmitter key [32](#)

Transporting children  
safely [62](#)

Tread depth, tires [135](#)

Trip odometer [82](#)

Trunk lid

refer to luggage  
compartment lid [38](#)

Trunk, refer to luggage  
compartment [42](#)

Turn signal indicator [78](#)  
bulb replacement [154](#)

Turning circle [171](#)

## U

Uniform Tire Quality Grading  
(UTQR) [137](#)

Universal Transmitter [115](#)

Use antifreeze,  
radiator [144](#)

Used batteries,  
disposal [162](#)

Used oils, disposal [143](#)

## V

Vacuum cleaner, attach [120](#)

Valve caps [161](#)

Vehicle Memory [67](#)

Vent outlets [108](#), [113](#)

Ventilation [106](#), [108](#), [113](#)

draft-free [108](#), [113](#)

in the rear [108](#)

Viscosity ratings, oils [143](#)

## W

Warm feet – cool  
head [108](#), [113](#)

Warning and indicator  
lamps [19](#)

Warning lamps [19](#)

Warning messages [85](#)

Warning triangle [23](#)

Warranty and Service Guide  
Booklet (Canadian  
models) [146](#)

Washer system [78](#)

Water on the roads [133](#)

Weights [173](#)

Wheel and tire  
combinations [137](#)

Wheel change [158](#)

Wheelbase [171](#)

Width of vehicle [171](#)

Windshield wipers [78](#)  
blade replacement [152](#)

Winter tires [138](#)

Wiper blade  
replacement [152](#)

Wiper system [78](#)

Work in the engine  
compartment [139](#)

## X

Xenon lamps [154](#)

# Refueling

BMW recommends 

To ensure that you always have convenient access to all essential information when you stop for fuel, we recommend that you take the time to fill out the adjoining chart by entering the data that apply to your vehicle. Consult the index for individual specifications.

## Fuel

Designation	
-------------	--

Please enter your preferred fuel here.

## Engine oil

Quality	
---------	--

The space between the two marks on the dipstick corresponds to approx. 1.1 US quarts (1 liter).

## Tire inflation pressures

	Summer tires		Winter tires	
	Front	Rear	Front	Rear
Up to 4 persons				
5 persons or 4 plus luggage				

More about BMW

[bmwusa.com](http://bmwusa.com)



The Ultimate  
Driving Machine

