Supplementary Owner's Manual for BMW Z4 M Roadster/ Z4 M Coupe

The Ultimate Driving Machine

Contents
A-Z

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Z4 M Roadster
Z4 M Coupe

Supplementary Owner's Manual for Vehicle

Congratulations, and thank you for choosing a BMW Z4 M Roadster/Z4 M Coupe.

Thorough familiarity with your BMW Z4 M Roadster/Z4 M Coupe will provide you with enhanced control and security when you drive it. Therefore, we have one request:

CarManuals2.com

Before starting off in your new BMW Z4 M Roadster/Z4 M Coupe, please take the time to read this Supplementary Owner's Manual and familiarize yourself with the information that we have compiled for you. The manual contains important data and instructions intended to assist you in obtaining maximum satisfaction from your BMW Z4 M Roadster's/Z4 M Coupe's unique array of advanced technical features.

We wish you an enjoyable driving experience.

BMW AG

BMW recommends Castrol

© 2006 Bayerische Motoren Werke
Aktiengesellschaft
Munich, Germany
Reprinting, including excerpts, only with the
written consent of BMW AG, Munich.
Order No. 01 41 0 012 046
US English III/06
Printed in Germany
Printed on environmentally friendly paper,
bleached without chlorine, suitable for recycling.

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Contents

The fastest way to find information on special topics is by using the index starting on page 42.

CarManuals2.com

Using this Owner's Manual

4 Notes

At a glance

8 Cockpit

Controls

16 Everything under control

18 Technology for driving comfort and safety

Driving tips

22 Special operating instructions

Mobility

26 Refueling

27 Wheels and tires

28 Under the hood

31 Replacing components

Reference

38 Technical data

42 Everything from A to Z

Notes

About this Owner's Manual

This Supplementary Owner's Manual contains all the important equipment, instructions and technical data in which the BMW Z4 M Roadster/Z4 M Coupe differs from the BMW Z4. For descriptions of equipment not included in this Supplementary Owner's Manual, please refer to the Owner's Manual for the BMW Z4 or additional brochures in the vehicle's literature.

We have made every effort to ensure that you will find what you need in this Supplementary Owner's Manual as quickly as possible. The fastest way to find specific topics is to refer to the detailed index at the back of the manual. If you wish to gain an initial overview of your vehicle, you will find this in the first chapter.

Should you sell your BMW Z4 M Roadster/Z4 M Coupe some day, please remember to hand over the Supplementary Owner's Manual as well; it is an important component of your vehicle.

CarManuals2.com

Symbols used

Indicates precautions that must be followed precisely in order to avoid the possibility of personal injury and serious damage to the vehicle.

Indicates 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, as well as equipment and functions not yet available at the time of printing.

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.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Your individual vehicle

When you ordered your BMW, you chose various items of equipment. 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. Any differences can easily be identified since all optional accessories and special equipment are marked with an asterisk *.

If equipment in your BMW Z4 M Roadster/Z4 M Coupe is not described in this Supplementary Owner's Manual, please refer to the Owner's Manual for the BMW Z4.

CarManuals2.com

Status at time of printing

BMW pursues a policy of continuous, ongoing development that is conceived 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 features described in this Supplementary Owner's Manual could differ from those on your vehicle.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

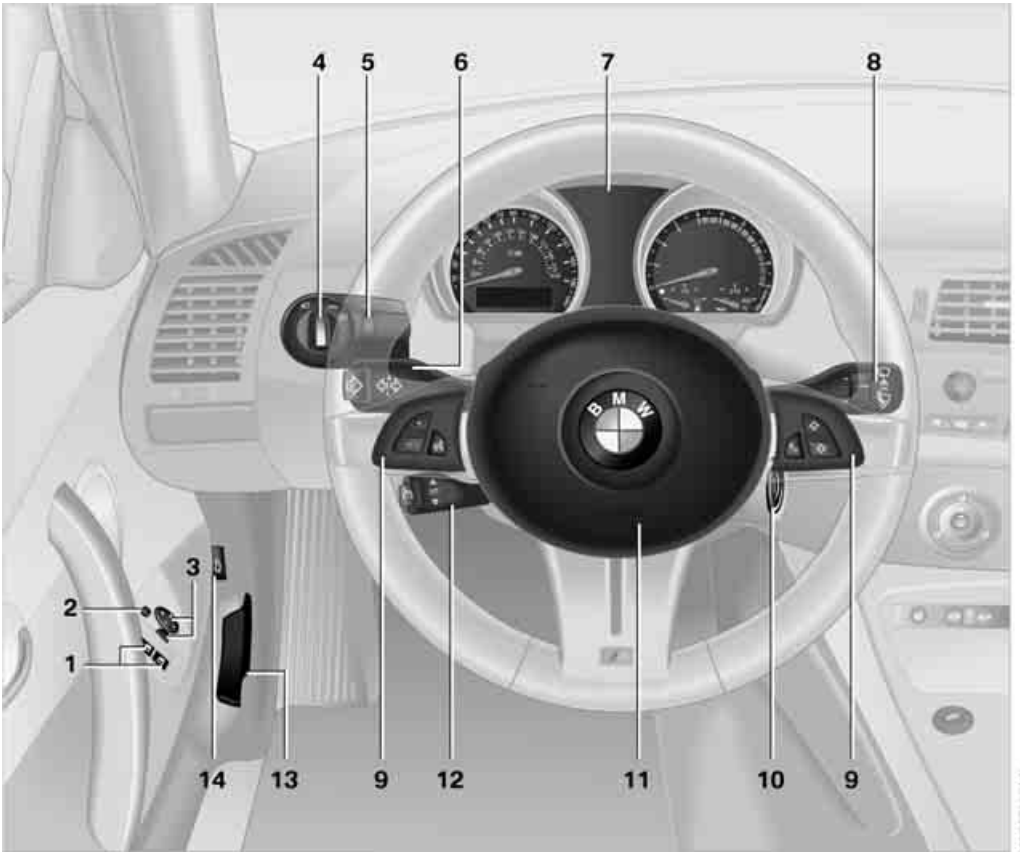
At a glance

This overview of buttons, switches and displays is intended to familiarize you with your vehicle's operating environment. The section will also assist you in becoming acquainted with the control concepts and options available for operating the various systems.

CarManuals2.com

Cockpit

Around the steering wheel: controls and displays



For descriptions of equipment listed here without a page reference, please refer to the Owner's Manual for the BMW Z4 under the respective term.◀

1 Opening and closing windows

2 Folding exterior mirrors in or out*

3 Adjusting exterior mirrors

4 Parking lamps

Low beams

Automatic headlamp control*

5 Instrument lighting

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

6

Turn signal indicators

High beams, headlamp flasher

Roadside parking lamps*

BC Computer

7 Instrument cluster 10

8 Windshield wipers
Rain sensor*

9 Buttons on the steering wheel

+
—
Volume

- ▷ Press: to accept and end a telephone call; to start dialing for selected telephone numbers
- ▷ Press longer: activate and deactivate voice entry*

Fast forward/rewind

- ▷ Radio

  Press: next station stored

  Press longer: station search
- ▷ CD

  Press: jump to next track

  Press longer: fast forward/rewind
- ▷ Telephone

  Scan register of names

R/T Display/hide telephone book. Display the entries one after another with the forward/backward buttons

CarManuals2.com

10 Ignition lock

11 Horn: the entire surface

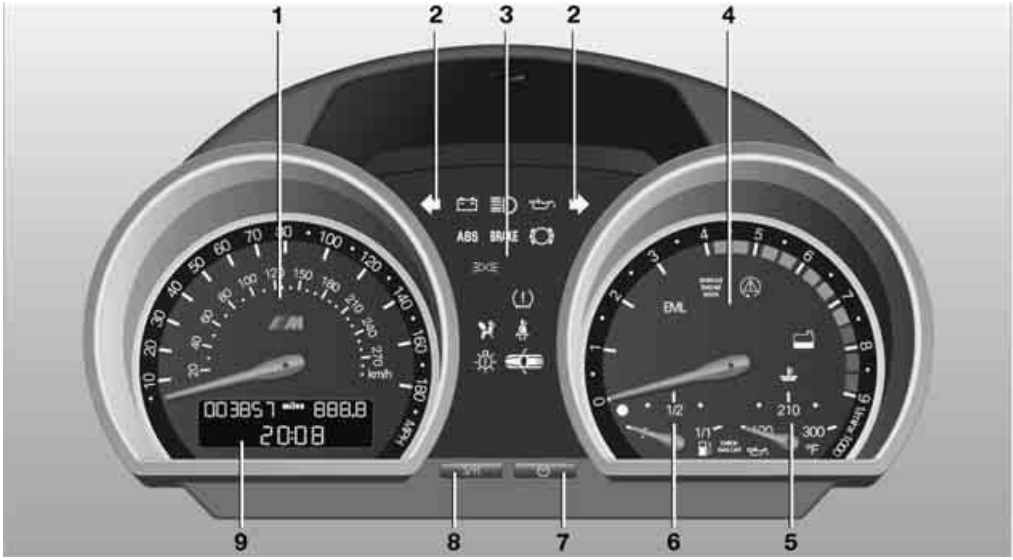
12 Cruise control*

13 Releasing the hood

14 Opening the cargo bay lid/tailgate

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Instrument cluster



For descriptions of equipment listed here without a page reference, please refer to the Owner's Manual for the BMW Z4 under the respective term.◀

1 Speedometer

2 Indicator lamps for turn signals

3 Indicator and warning lamps 11

4 Tachometer 16

with indicator and warning lamps 11

5 Engine oil thermometer 16

6 Fuel gauge 16

7 Button for

- ▷ Displaying the clock
- ▷ Service interval display

8 Button for

- ▷ Resetting trip odometer
- ▷ Setting the clock

9 Display for

- ▷ Trip odometer/Odometer
- ▷ Clock
- ▷ Service interval
- ▷ Computer

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Indicator and warning lamps

Technology that monitors itself

Indicator and warning lamps that are identified by ● are tested for proper functioning whenever the ignition key is turned. They each light up once for different periods of time.

If a malfunction occurs in one of the monitored systems, the corresponding lamp does not go out after the engine has started, or it lights up again while the vehicle is in motion. More information can be found on the specified pages or in the Owner's Manual for the BMW Z4 under the respective terms.

Turn signal indicators

Battery charge current ●

Headlamp flasher/High beams

Engine oil pressure/
Engine oil level ● 28

CarManuals2.com

ABS Antilock Brake System ABS/Driving stability control systems ●

Antilock Brake System ABS/Driving stability control systems for Canadian models

BRAKE Brake system ●

Brake warning lamp for Canadian models

Brake pads ●

Parking lamps/Low beams

Flat Tire Monitor ● 18

Airbags ●

Safety belt reminder

Defective bulb

Doors or cargo bay lid/tailgate open

EML Engine electronics ●
Malfunction in the engine electronics. You can continue to drive with reduced engine output. Please have the system inspected by your BMW Center.

SERVICE ENGINE SOON Service engine soon ●

Service engine soon indicator lamp for Canadian models

Dynamic Stability Control
DSC ● 18

Add coolant

Coolant temperature 16

CHECK GAS CAP Check gas cap ●

Colors

The indicator and warning lamps can light up in various colors and combinations.

- ▷ Red:
  Stop the vehicle immediately
  or
  an important reminder
- ▷ Red and yellow:
  Continue driving cautiously
- ▷ Yellow:
  Have the system checked soon
  or
  for your information
- ▷ Green or blue:
  For your information

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Around the center console: controls and displays

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

For descriptions of equipment listed here without a page reference, please refer to the Owner's Manual for the BMW Z4 under the respective term.◀

1 Reading lamps*

2 Interior lamps

3 Automatic climate control

Air distribution

AUTO Automatic air distribution and flow rate

Cooling function

Automatic recirculated-air control AUC

Recirculated-air mode

MAX Maximum cooling

Air flow rate

Defrosting windows

Rear window defroster

4 Seat heating*

Roadster: opening the convertible top

Roadster: closing the convertible top

DSC DSC Dynamic Stability Control 18

Flat Tire Monitor FTM

5 Indicator/warning lamp for passenger air-bags

6 Central locking system

7 Hazard warning flashers

8 Sport switch

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Controls

This chapter is intended to provide you with information for complete control of your vehicle. All features and accessories that are useful for driving and for your safety, comfort and convenience, are described here.

Everything under control

Tachometer

The orange warning zone between arrows **1** and **2** shows the currently permissible engine speed, which depends on engine temperature. As engine temperature increases, some of the LEDs in this warning zone go out one after another.

As much as possible, avoid driving at engine speeds within the illuminated warning zone.

Never force the engine speed up into the red warning zone beginning at arrow **2**. To protect the engine, the fuel supply is interrupted when speed reaches this sector.

Fuel gauge

Reserve

In contrast to the descriptions in the Owner's Manual for the BMW Z4, the reserve level for the BMW Z4 M Roadster/Z4 M Coupe is approx. 2.6 US gallons/10 liters.

Coolant temperature

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe is not equipped with a coolant thermometer.

CarManuals2.com

Should the coolant and thus the engine become too hot, a warning lamp will come on in the instrument cluster.

Red warning lamp

The engine is overheated. Reduce your speed immediately and pull over at a suitable location. Switch off the engine and allow it to cool down. Contact your nearest BMW Center or a workshop that works according to BMW repair procedures with correspondingly trained personnel.

Do not open the hood, otherwise there is a risk of injury from scalding.◀

Yellow warning lamp

The engine is too warm. Continue driving, but in a moderate manner, so that the engine can cool down.

If the warning lamp comes on again, have the engine checked without delay.

Engine oil thermometer

The general operating temperature lies between 175 °F /80 °C and 250 °F /120 °C. Do not exceed the maximum temperature of 300 °F /150 °C.

If the engine oil temperature is too high, the permissible engine speed, and thus the available engine output, is reduced.

Service interval display

Regardless of your service requirements, have the breaking-in inspection per-

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

formed by your BMW Center after driving 1,200 miles/2,000 km.◀

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Technology for driving comfort and safety

Driving stability control systems

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe does not feature Dynamic Traction Control DTC.

Dynamic Stability Control DSC

DSC prevents slip at the drive wheels while starting off and accelerating the vehicle. DSC also recognizes unstable vehicle conditions, such as fishtailing or nose-diving. In these cases, and subject to physical limits, DSC helps to keep the vehicle on a steady course by reducing engine speed and by applying brakes at individual wheels.

The laws of physics cannot be repealed even with DSC. It will always be the driver's responsibility to drive in a manner that matches road conditions. Therefore, do not limit the additional safety margin by practicing risky driving.◀

Deactivating DSC

Press the button; the DSC indicator lamp in the instrument cluster lights up. No more interventions to increase stability and forward momentum are carried out.

To enhance vehicle stability, reactivate DSC as soon as possible.

Activating DSC

Press the button briefly; the indicator lamp goes out in the instrument cluster.

Checking

The indicator lamp flashes:
DSC controls the drive forces and brake forces.

The indicator lamp is lit:
DSC is deactivated.

Flat Tire Monitor FTM

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe is not equipped with Run Flat tires. You should therefore observe the following when you receive a flat tire warning.

Flat tire warning

The warning lamp in the instrument cluster lights up in red. A signal also sounds. There is a flat tire or substantial loss of tire pressure.

CarManuals2.com

1. Reduce speed and pull the vehicle over carefully. Avoid strong braking and steering maneuvers.
2. Determine which tire is damaged. To do this, check the tire inflation pressure using the M Mobility System, refer to Restoring tire inflation pressure on page 33.
3. Use the M Mobility System to repair the flat tire, refer to page 31.

Power steering

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe is equipped with hydraulic power steering.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Driving tips

This section provides you with information useful in dealing with specific driving and operating conditions.

CarManuals2.com

Special operating instructions

Break-in procedures

In contrast to the descriptions in the Owner's Manual for the BMW Z4, please take note of the following differences for your BMW Z4 M Roadster/Z4 M Coupe.

Always obey all official speed limits.

Engine and differential

Up to 1,200 miles/2,000 km

Drive at varying engine and road speeds, but do not exceed 5,500 rpm or 100 mph/170 km/h.

Strictly avoid depressing the accelerator pedal to full-throttle position.

After the breaking-in inspection at 1,200 miles/2,000 km, engine or road speeds can be gradually increased.

Transmission

The function of the transmission reaches its optimal level only after driving a distance of approx. 300 miles/500 km. Do not exceed engine speeds of 5,500 rpm during this time.

After replacing components

The same break-in procedures should be observed if any of the components mentioned above have to be renewed in the course of the vehicle's operating life.

Driving notes

Ground clearance

The front spoiler greatly restricts the vehicle's ground clearance. Make sure that your BMW always has sufficient ground clearance, e.g. when entering underground garage complexes or driving over the edge of a curb; otherwise the front spoiler could be damaged.◀

Braking safely

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe is equipped with perforated brake discs.

In certain braking situations, operation of the perforated brake discs can cause noise; however, this does not affect the performance and operating safety of the brakes.

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Mobility

This section helps you maintain your car's mobility by supplying important information on vital topics including fuels and lubricants, wheels and tires, service, maintenance and breakdown assistance.

CarManuals2.com

Refueling

Note when refueling

In contrast to the descriptions in the Owner's Manual for the BMW Z4, please take note of the following differences for your BMW Z4 M Roadster/Z4 M Coupe.

CarManuals2.com

Fuel tank capacity

Approx. 14.5 US gallons/55 liters, including the reserve capacity of approx. 2.6 US gallons/ 10 liters.

Do not drive until the tank is empty. Otherwise, the engine may not operate properly and damage could result.◀

Fuel specifications

Do not fill the tank with leaded fuel, as this would cause permanent damage to the catalytic converter.◀

Required fuel

Super Premium Gasoline/AKI 91

This gasoline is highly recommended. However, you may also use gasoline with less AKI. The minimum AKI Rating is 89.

Do not fill the tank with any gasoline below the specified minimum fuel grade; otherwise engine damage could result.◀

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Wheels and tires

Correct wheels and tires

In contrast to the descriptions in the Owner's Manual for the BMW Z4, your BMW Z4 M Roadster/Z4 M Coupe is not equipped with Run Flat tires.

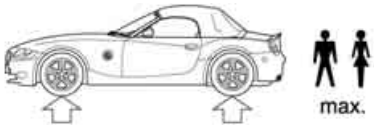
CarManuals2.com

Information for your safety

The factory-approved radial-ply tires are specifically matched to your vehicle and offer optimal road safety as well as enhanced driving comfort if used properly.

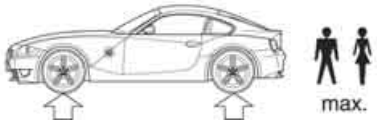
In the event of a flat tire, proceed as described under M Mobility System, refer to page 31.

Z4 M Roadster: tire inflation pressures

Tire size	Pressure specifications in psi/kPa	
All pressure specifications in the table are indicated in psi/kilopascal with cold tires, cold = ambient temperature		
Front: 225/45 ZR 18	30/210	–
Rear: 255/40 ZR 18	–	32/220
225/40 R 18 92 V M+S	33/230	36/250

You will find more information about permissible loads and weights on page 41.

Z4 M Coupe: tire inflation pressures

Tire size	Pressure specifications in psi/kPa	
All pressure specifications in the table are indicated in psi/kilopascal with cold tires, cold = ambient temperature		
Front: 225/45 ZR 18	30/210	–
Rear: 255/40 ZR 18	–	32/220
225/40 R 18 92 V M+S	33/230	38/260

You will find more information about permissible loads and weights on page 41.

Snow chains*

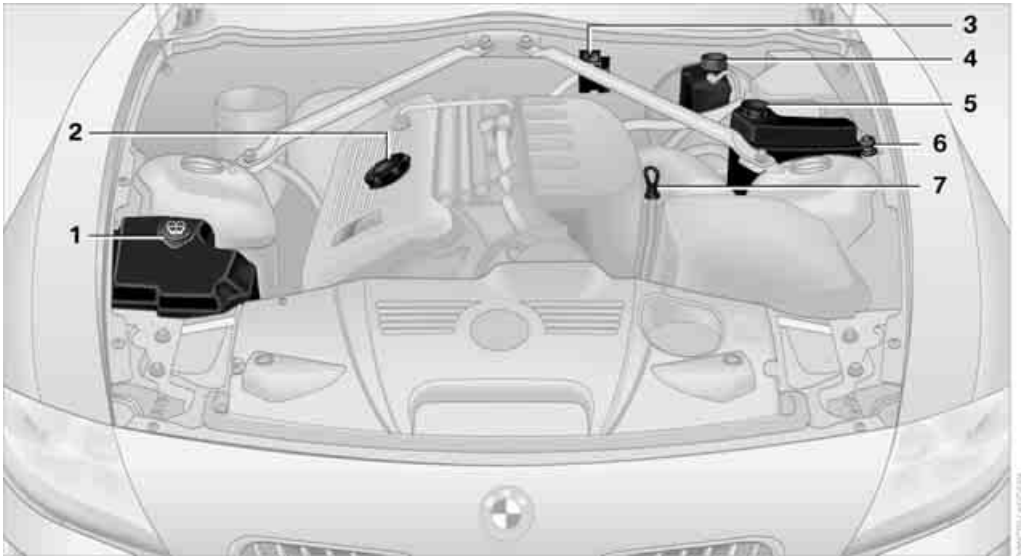
Snow chains may be attached only to winter tires of the size 225/40R 18 on both rear wheels.

▷ Do not initialize the Flat Tire Monitor if snow chains are mounted, otherwise the instrument might issue an incorrect reading. When driving with snow chains, you may find it helpful to deactivate DSC temporarily, refer to page 18.◀

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Under the hood

Important parts in the engine compartment



1 Washer fluid reservoir for headlamp and windshield washer system

2 Filler neck for engine oil, refer to Adding engine oil

3 Jump-starting connection

4 Reservoir for brake fluid

5 Coolant expansion tank

6 Chassis ground, negative terminal

7 Dipstick for engine oil, refer to Checking the oil level

CarManuals2.com

Engine oil

Like fuel consumption, engine oil consumption depends on your driving style and the vehicle's operating conditions.

Warning lamp

Engine oil pressure

The warning lamp lights up in red: The engine oil pressure is too low. Stop the vehicle immediately and switch off the engine. Check the engine oil level and top up if necessary. If the oil level is correct, please contact your nearest BMW Center or a workshop that works according to BMW repair procedures with correspondingly trained personnel.

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

Engine oil level

The warning lamp lights up in yellow while you are driving. A signal also sounds.

The oil level is at the absolute minimum; check engine oil level using dipstick **7** and refill as soon as possible. Do not drive more than 30 miles/50 km before refilling.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

The warning lamp lights up in yellow after the engine is switched off. A signal also sounds.

Check the engine oil level using dipstick **7** at the earliest opportunity, e.g. when you stop to refuel, and refill engine oil.

The warning lamp lights up in yellow within 30 seconds after the engine is started:

The oil level sensor is defective. Have the system checked as soon as possible.

Checking the oil level

1. Position the vehicle on a level surface.
2. Switch off the engine when it is at operating temperature.
3. After approx. 1 minute, pull dipstick **7** out and wipe it off with a clean, lint-free cloth, paper towel or something similar.
4. Carefully push the dipstick fully into its tube, then pull it out again.
   The oil level must be between the two marks on the dipstick.

The oil volume between the two marks on the dipstick corresponds to approx. 1.4 US quarts/ 1.3 liters.

Adding engine oil

Do not add oil until the oil level has dropped almost to the lower mark on the dipstick, refer to Checking the oil level.

Do not add oil beyond the upper mark on the dipstick, otherwise excessive oil can lead to engine damage.◀

Before you check the engine oil level after adding oil, restart the engine and let it run to obtain a correct reading. Then proceed as described under Checking the oil level.

BMW engines are designed to operate without oil additives; the use of additives could even lead to damage in some cases. The same applies to the transmission and differential as well as to the power steering.◀

CarManuals2.com

Continuous exposure to used oil has caused cancer in laboratory tests. For this reason, thoroughly wash any areas of skin that have come into contact with oil using soap and water.

Keep oils, greases, etc. out of the reach of children and comply with the warnings on the containers. Otherwise, health hazards may result.◀

Comply with the applicable environmental regulations concerning the disposal of used oil.◀

Recommendation: have the oil changed at your BMW Center.

Approved engine oils

The quality of the engine oil is extremely important for the function and life of an engine. BMW only approves specific oils after confirming their suitability for use in its vehicles with extensive testing.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Only use oils specifically approved for your vehicle model.

Your BMW Center will be glad to advise you about oils currently approved for your vehicle.◀

You can also call BMW of North America toll-free at 1-800-831-1117 or visit this website: www.bmwusa.com to obtain this information.

Do not use any oil additives, as they could cause engine damage under some circumstances.◀

Alternative oil grades

If a high-performance synthetic oil approved by BMW should be unavailable, you may use small volumes of other oils for topping up between oil changes. The following data must appear on the packaging:

- Viscosity
  preferred: SAE 10W-60
  alternative: SAE 5W-40 or SAE 10W-40
- Specification
  preferred: API SJ/CF
  alternative: API SJ, also SK, SL, S...

Low ambient temperatures

The oils used by BMW at the factory for your vehicle model can be used at virtually all ambient temperatures. However, if the vehicle is operated for a longer period at temperatures below –4 °F /–20 °C, your BMW Center will be glad to recommend a suitable oil.

CarManuals2.com

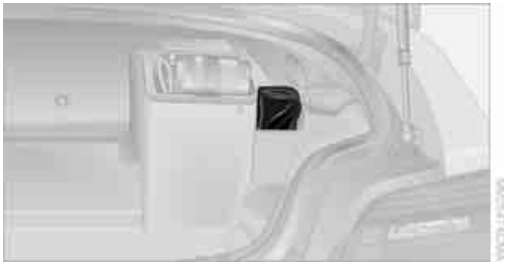
Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Replacing components

Onboard tool kit

The onboard tool kit is stored in a tool pouch.

Roadster



The onboard tool kit can be found on the right-hand side of the cargo bay in a compartment next to the battery cover.

Coupe: access to onboard tool kit

1. Turn the quick-release fastener counter-clockwise.

CarManuals2.com

2. Pull out the cover.

When reinstalling the cover, make sure that its tabs are inserted into the corresponding cut-outs in the cargo bay trim panel.◀

The onboard tool kit can be found on the right-hand side of the cargo bay on top of the battery.

M Mobility System

Repairing a flat tire

To repair a flat tire, an M Mobility System is provided in your BMW Z4 M Roadster/Z4 M Coupe. Using this system you can apply a sealant to the inside of the tire, seal off the damaged area, restore the tire inflation pressure and then continue driving.

Safety measures in the event of a flat: Park the vehicle as far as possible from passing traffic and on solid ground. Switch on the hazard warning flashers.
Lock the steering wheel so that the wheels are facing straight ahead. Apply the handbrake and engage first or reverse gear. Have all vehicle occupants get out of the vehicle and ensure that they remain outside the immediate area in a safe place, such as behind a guardrail.
If a warning triangle or portable hazard warning lamp is required, set it up on the roadside at an appropriate distance from the rear of the vehicle. Comply with all national safety guidelines and regulations.◀

Preparation

If possible, do not remove foreign bodies which have penetrated the tire.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Corresponding information on using the M Mobility System is also provided on the device.◀

Before using the M Mobility System, note the information on the sealant bottle.◀

Pull the sticker for the speed limit off the sealant bottle and affix it to the steering wheel.

Please observe the expiry date on the sealant bottle.◀

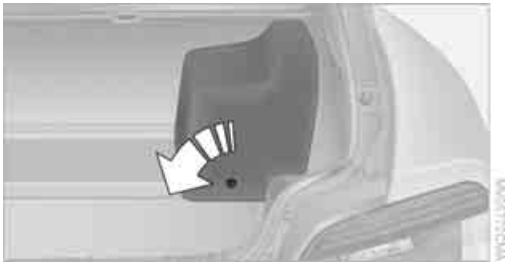
Roadster

The M Mobility System is located on the right-hand side of the cargo bay on the battery cover.

Coupe: access to the Mobility Set

CarManuals2.com

1. Turn the quick-release fastener counter-clockwise.



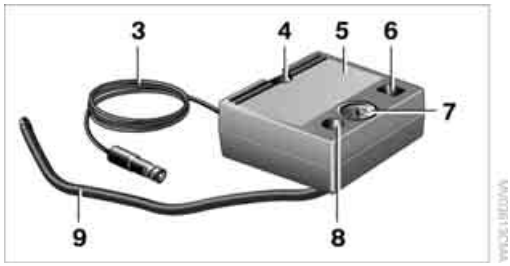
2. Pull out the cover.

When reinstalling the cover, make sure that its tabs are inserted into the corresponding cut-outs in the cargo bay trim panel.◀

The M Mobility System is located on the right-hand side of the cargo bay in a compartment on top of the battery.

The M Mobility System consists of

1 Sealant bottle and sticker with speed limit
2 Filler hose from sealant bottle to wheel



3 Cable and connector to cigarette lighter socket
4 Mounting for sealant bottle
5 Compressor
6 On/off switch
7 Gauge for indicating tire inflation pressure
8 Button for reducing tire inflation pressure
9 Connecting hose for connecting compressor and sealant bottle or compressor and wheel

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Connector, cable and connecting hose are attached to the bottom of the compressor.

Using the M Mobility System

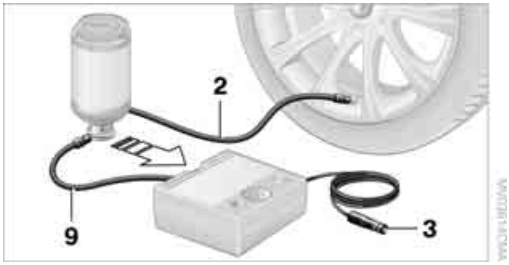
To repair a flat tire with the M Mobility System, proceed as follows:

- ▷ Fill sealant into wheel
- ▷ Distribute sealant
- ▷ Restore tire inflation pressure

Filling sealant into wheel

⚠ Strictly adhere to the specified order, otherwise highly pressurized sealant could escape.◀

1. Shake sealant bottle.
2. Screw hose **9** onto connection of sealant bottle.
3. Unscrew and remove dust cap from valve of defective wheel and screw filler hose **2** of sealant bottle onto valve.
4. Insert sealant bottle on compressor housing so that the bottle is in an upright position.



5. Make sure that the device is switched off, position 0.
6. Insert connector **3** into cigarette lighter socket inside the vehicle.
7. With the ignition switched on:
   Switch on the device and allow it to run for approx. 3 minutes to fill the wheel with sealant. It is not important what inflation pressure the tire has after this.
8. Switch off device.
9. Remove connecting hoses from connection of sealant bottle and tire valve.

Stow the M Mobility System in the vehicle again.

Distributing sealant

Immediately drive approx. 2 miles/3 km so that the sealant is evenly distributed in the tire.

CarManuals2.com

▷ Do not exceed a speed of 35 mph or 60 km/h. Do not drive slower than 12 mph or 20 km/h if possible.◀

Restoring tire inflation pressure

1. After approx. 2 miles/3 km, pull over at a suitable location.
2. Screw compressor hose **9** directly onto tire valve.
3. Insert connector **3** into cigarette lighter socket inside the vehicle.
4. Correct tire inflation pressure to 29 psi/ 200 kPa. With the ignition switched on:
   - ▷ To increase inflation pressure: switch on the compressor, position I. Switch off the device briefly to check the tire's current inflation pressure.

     ⚠ Do not allow the compressor to run for more than 10 minutes, otherwise the device will overheat and may be damaged.◀
   - ▷ To reduce inflation pressure: press button **8**.

▷ if the inflation pressure is not maintained, drive the vehicle again, refer to Distributing sealant. Then repeat steps 1 to 4 once. Using the M Mobility System can be ineffective with tire punctures larger than approx. 1/6 in/ 4 mm. Please contact the nearest BMW Center or a workshop that works according to BMW repair procedures with correspondingly trained personnel if the tire cannot be made ready for driving with the M Mobility System.◀

⚠ The tire inflation pressure must be at least 29 psi/200 kPa. Otherwise do not continue driving.◀

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Continued driving

Do not exceed the permissible maximum speed of 50 mph or 80 km/h, otherwise accidents could result.◀

Reinitialize the Flat Tire Monitor. For instructions, refer to the Owner's Manual for the BMW Z4.
Have the defective tire and the sealant bottle of the M Mobility System replaced as soon as possible.◀

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

CarManuals2.com

Reference

This chapter will help you find the desired information as quickly as possible. It contains the Technical data section as well as the manual's index.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Technical data

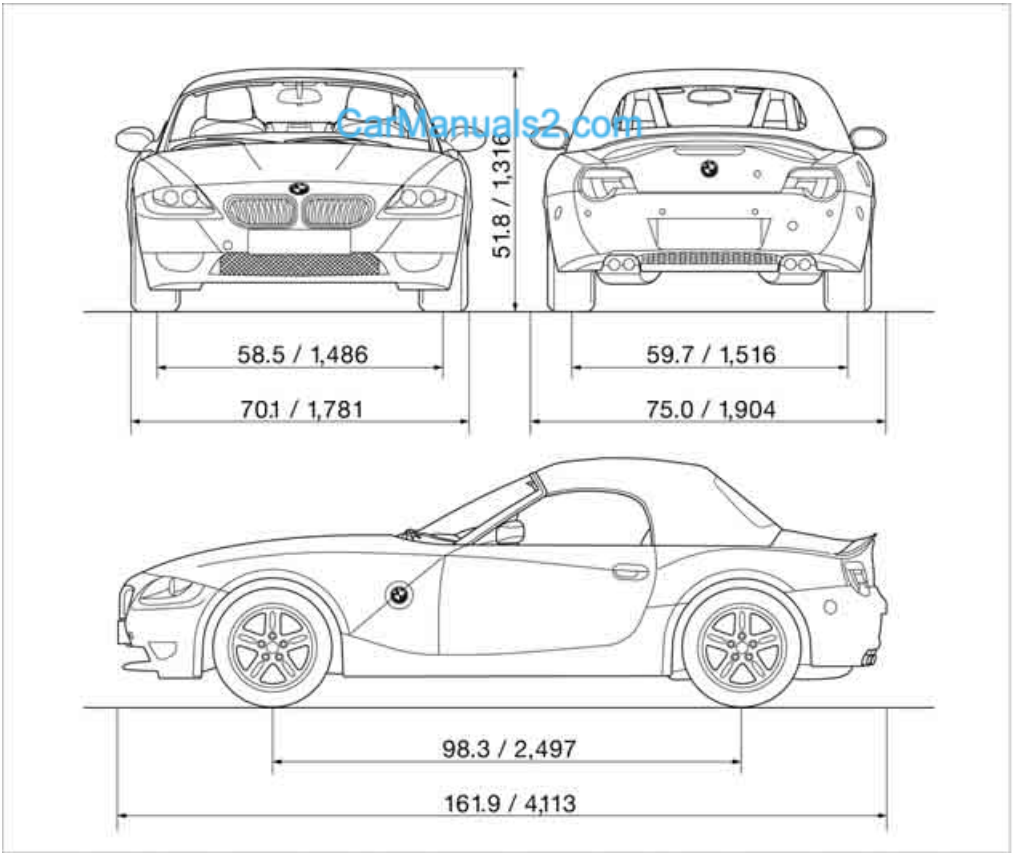
Engine data

		Z4 M Roadster/Z4 M Coupe
Displacement	cu in/cm³	198.1/3,246
Number of cylinders		6
Maximum power output	hp	330
at engine speed	rpm	7,900
Maximum torque	ft lbs/Nm	262/355
at engine speed	rpm	4,900

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Roadster: dimensions

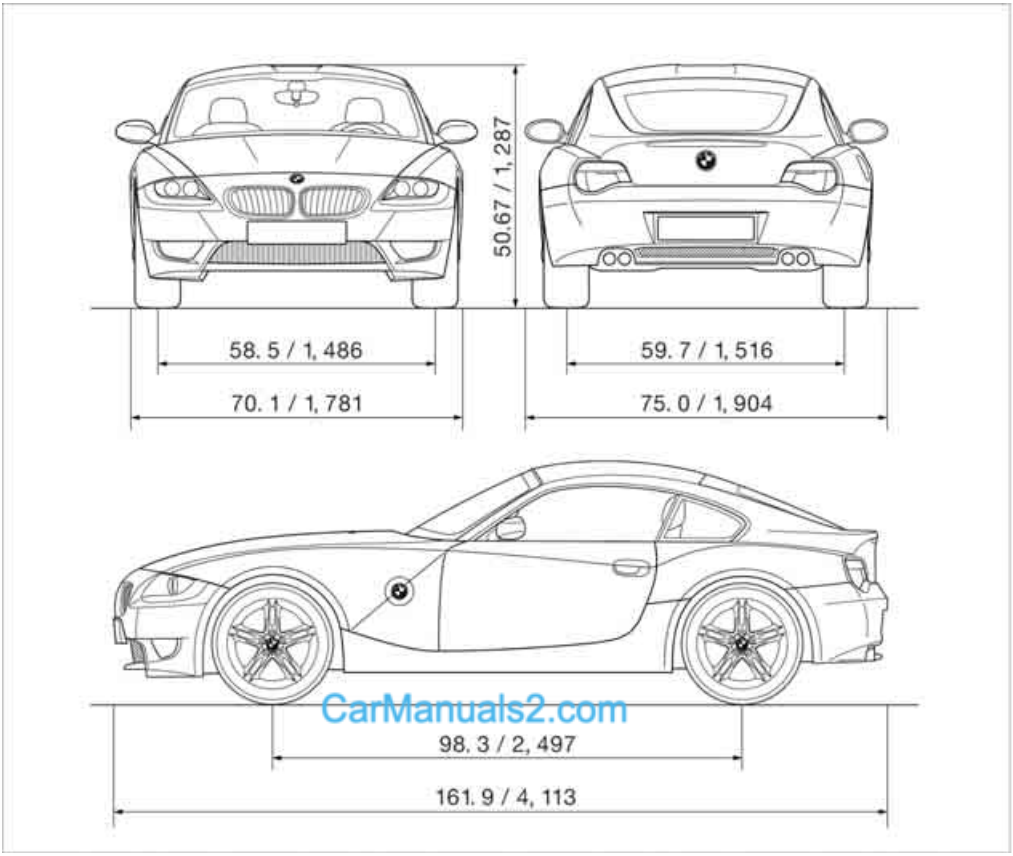


CarManuals2.com

All measurements in inches/millimeters. Smallest turning circle dia. 34 ft 5 in/10.5 m.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Coupe: dimensions



CarManuals2.com

All measurements in inches/millimeters. Smallest turning circle dia. 34 ft 5 in/10.5 m.

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Weights

		Z4 M Roadster
Curb weight	lbs/kg	3,203/1,453
Approved gross vehicle weight	lbs/kg	3,821/1,733
Load	lbs/kg	617/280
Approved front axle load	lbs/kg	1,852/840
Approved rear axle load	lbs/kg	2,006/910
Cargo bay capacity	cu ft/liters	7.1/200
With convertible top compartment panel folded up	cu ft/liters	7.8/220
Never exceed either the approved axle loads or the approved gross vehicle weight.		

		Z4 M Coupe
Curb weight	lbs/kg	3,230/1,465
Approved gross vehicle weight	lbs/kg	3,814/1,730
Load	lbs/kg	584/265
Approved front axle load	lbs/kg	1,885/855
Approved rear axle load	lbs/kg	2,061/935
Cargo bay capacity	cu ft/liters	8.7-10.6/245-300
Never exceed either the approved axle loads or the approved gross vehicle weight.		

CarManuals2.com

Capacities

			Notes
Fuel tank	US gal/liters	approx. 14.5/55	
including reserve of	US gal/liters	approx. 2.6/10	
Window washer system			
including headlamp washers	US quarts/liters	approx. 5.3/5	
Engine with oil filter renewal	US quarts/liters	5.8/5.5	For details: page 29
Manual transmission	US quarts/liters	1.9/1.8	Oil change at breaking-in inspection and during every Inspection II
Differential	US quarts/liters	1.2/1.1	Oil change at breaking-in inspection and during every Inspection II

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Everything from A to Z

Index

A

ABS Antilock Brake System
– indicator lamp 11
Accessories, refer to
– Your individual vehicle 5
Airbags
– indicator lamp 11
– warning lamp 11
AKI, refer to Fuel specifications 26
Antilock Brake System ABS
– indicator lamp 11
Approved engine oils 29
Assistance systems, refer to Dynamic Stability Control DSC 18
Axle loads, refer to Weights 41

B

Battery
– indicator lamp 11
Brake fluid
– indicator/warning lamp 11
Brake hydraulic system
– indicator/warning lamp 11
Brake lamps
– indicator lamp, defective bulb 11
Brake pad wear indicator
– warning lamp 11
Brakes
– indicator/warning lamps 11
– operating noise 22
Brake system
– indicator/warning lamps 11
– indicator lamp 11
Breakdown
– Flat Tire Monitor 18
Breaking-in inspection 16
Breaking in the differential, refer to Engine and differential 22
Breaking in the transmission, refer to Transmission 22
Break-in procedures 22
Burned fuel, refer to Fuel specifications 26
Buttons on the steering wheel 9

C

Capacity
– cargo bay, refer to Weights 41
Cargo bay
– battery cover 31
– capacity 41
Center console, refer to Around the center console 12
Charge indicator lamp 11
Check gas cap, indicator lamp 11
Cockpit 8
Comfort area, refer to Around the center console 12
Compound brake discs, refer to Braking safely 22
Consumption display, refer to Fuel gauge 16
Controls and displays 8
Coolant
– indicator lamp 11
Coolant temperature 16
Coolant thermometer, refer to Coolant temperature 16
Cooling system, refer to Capacities 41
Curb weight, refer to Weights 41
Customized equipment, refer to Your individual vehicle 5
Cylinders, refer to Engine data 38

D

Dashboard, refer to Cockpit 8
Data 38
– dimensions 39, 40
– engine data 38
– technical 38
Data, technical
– capacities 41
– engine data 38
– weights 41
DBC Dynamic Brake Control
– warning lamp 11
Dimensions 39, 40
Dipstick, engine oil 29
Displacement, refer to Engine data 38
Display elements, refer to Instrument cluster 10
Displays, refer to Instrument cluster 10
Displays and controls 8
Driving notes 22
Driving stability control systems 18
DSC Dynamic Stability Control 18
– indicator lamp 11, 18
Dynamic Brake Control DBC
– indicator lamp 11
Dynamic Stability Control DSC 18
– indicator lamp 11, 18

E

Eingine oil level
– checking 29

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Engine
– breaking in 22
– data 38
– electronics 11
– indicator lamp 11
– speed 16
Engine compartment 28
Engine data 38
Engine oil 28
– adding 29
– additives 29
– alternative oil grades 29, 30
– approved engine oils 29
– capacity 41
– dipstick 29
– indicator/warning lamp 11
Engine oil level 28
– indicator/warning lamp 11
Engine oil pressure 28
– indicator/warning lamp 11
Engine oil sensor
– indicator/warning lamp 11
Engine oil temperature, refer to Engine oil thermometer 16
Engine oil thermometer 16
Engine output, refer to Engine data 38
Engine speed, refer to Engine data 38
ESP Electronic Stability Program, refer to Dynamic Stability Control DSC 18

F

Fasten safety belts
– warning lamp 11
Filling sealant into wheel 33
Flat tire 18
– Flat Tire Monitor 18
– indicator/warning lamp 11
– M Mobility System 31
Flat tire, refer to Repairing a flat tire 31
Flat Tire Monitor 18
– indicator/warning lamp 11, 18
– snow chains 27
FTM, refer to Flat Tire Monitor 18
Fuel
– capacity, refer to Capacities 41
– display 16
– quality 26
Fuel display, refer to Fuel gauge 16
Fuel reserve indicator, refer to Fuel gauge 16
Fuel tank capacity, refer to Capacities 41

G

Gasoline, refer to Fuel specifications 26
Gross weight, refer to Weights 41

H

Hazard warning flashers 12
Headlamp flasher
– indicator lamp 11
Headlamp washer reservoir
– volume, refer to Capacities 41
Height, refer to Dimensions 39, 40
High beams
– indicator lamp 11
Horn 8

I

Indicator/warning lamp
– brakes 11
– Flat Tire Monitor 18
Indicator and warning lamps, overview 11
Inflation pressure monitoring, refer to
– Flat Tire Monitor 18
Inspection, refer to Service interval display 16
Instrument cluster 10
Instrument panel, refer to Cockpit 8
Instrument panel, refer to Instrument cluster 10
Interval
– display, service 16

K

Knock control 26

L

Length, refer to Dimensions 39, 40
Longlife oils 30
– alternative oils 30
– approved engine oils 29
Low-beam headlamps
– indicator lamp 11
Low beams
– indicator lamp, defective lamp 11
Luggage compartment
– capacity 41
Luggage compartment lid
– indicator lamp 11
Luggage compartment volume, refer to Cargo bay capacity 41

M

M Mobility System 31
Maintenance
– refer to Service interval display 16
Manufacturer 5
Measurements, refer to Dimensions 39, 40
Mobility System 31

O

Octane numbers, refer to Fuel specifications 26
Oil, refer to Engine oil 28
Oil consumption 28
Oil filter change 41

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Oil level 28
– checking 29
– indicator lamp 11
Oil pressure 28
– indicator/warning lamp 11
Oil sensor
– indicator lamp 11
Oil service 16
Oil types 29
Onboard tool kit 31

P

Parking brake
– indicator lamp 11
Parking lamps
– indicator lamp 11
Parts and accessories, refer to Your individual vehicle 5
Permissible axle load, refer to Weights 41
Permissible gross weight, refer to Weights 41
Power output, refer to Engine data 38
Power steering, hydraulic 18
Pressure, tires
– restoring with M Mobility System 31
Pressure monitoring, tires, refer to Flat Tire Monitor 18

R

Rear lamps
– indicator lamp, defective lamp 11
Refueling 26

S

Safety belts
– warning lamp 11
Safety systems, refer to
– Dynamic Stability Control DSC 18
Screwdriver, refer to Onboard tool kit 31
Sealant bottle, refer to M Mobility System 31
Service interval display 16
Signal horn, refer to Horn 8
Special oils, refer to Approved engine oils 29
Specified engine oils 29
Speedometer 10
Sport switch 13
Stability control, refer to
– Driving stability control systems 18
– Dynamic Stability Control DSC 18
Starting assistance, refer to Dynamic Stability Control DSC 18
Status at time of printing 5
Steering wheel 8
– buttons on steering wheel 9
Switches, refer to Cockpit 8
Symbols 4

T

Tachometer 16
Tailgate
– indicator lamp 11
Tank capacity, refer to Fuel tank capacity 41
Tank indicator, refer to Fuel gauge 16
Technical data 38
Temperature
– engine 16
Tire inflation pressure 27
Tire pressure monitoring, refer to Flat Tire Monitor 18
Tire puncture
– M Mobility System 31
Tires
– flat 18
– Flat Tire Monitor 18
– M Mobility System 31
Tool kit, refer to Onboard tool kit 31
Torque, refer to Engine data 38
Track width, refer to Dimensions 39, 40
Traction control, refer to Dynamic Stability Control DSC 18
Trunk capacity, refer to Cargo bay capacity 41
Turning circle, refer to Dimensions 39, 40
Turn signal indicators
– indicator lamp 11

V

Vehicle
– break-in period 22
– dimensions, refer to Dimensions 39, 40
– weight 41
Volume
– fuel tank, refer to Capacities 41

W

Warning and indicator lamps 11
Washer fluid reservoir, refer to
– Capacities 41
Weights 41
Wheelbase, refer to Dimensions 39, 40
Wheels and tires 27
Width, refer to Dimensions 39, 40
Windshield washer reservoir
– volume, refer to Capacities 41
Wrench, refer to Onboard tool kit 31

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

Refueling

So that you have important specifications available to you when you stop to refuel, we recommend that you fill out this table with the data that apply to your vehicle. The index of this Supplementary Owner's Manual, or the index of the BMW Z4 Owner's Manual, directs you to the respective information.

Fuel

Designation

Please enter your preferred fuel here.

Engine oil

Quality

The oil volume between the two marks on the oil dipstick corresponds to approx.
1.4 US quarts/1.3 liters.

Tire inflation pressures

	Summer tires		Winter tires	
	Front	Rear	Front	Rear
Up to 2 persons				
2 persons plus luggage				

CarManuals2.com

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG

More about BMW

bmwusa.com

The Ultimate
Driving Machine

CarManuals2.com

01 41 0 012 046 ue

Online Edition for Part-No. 01 41 0 012 046 - © 04/06 BMW AG