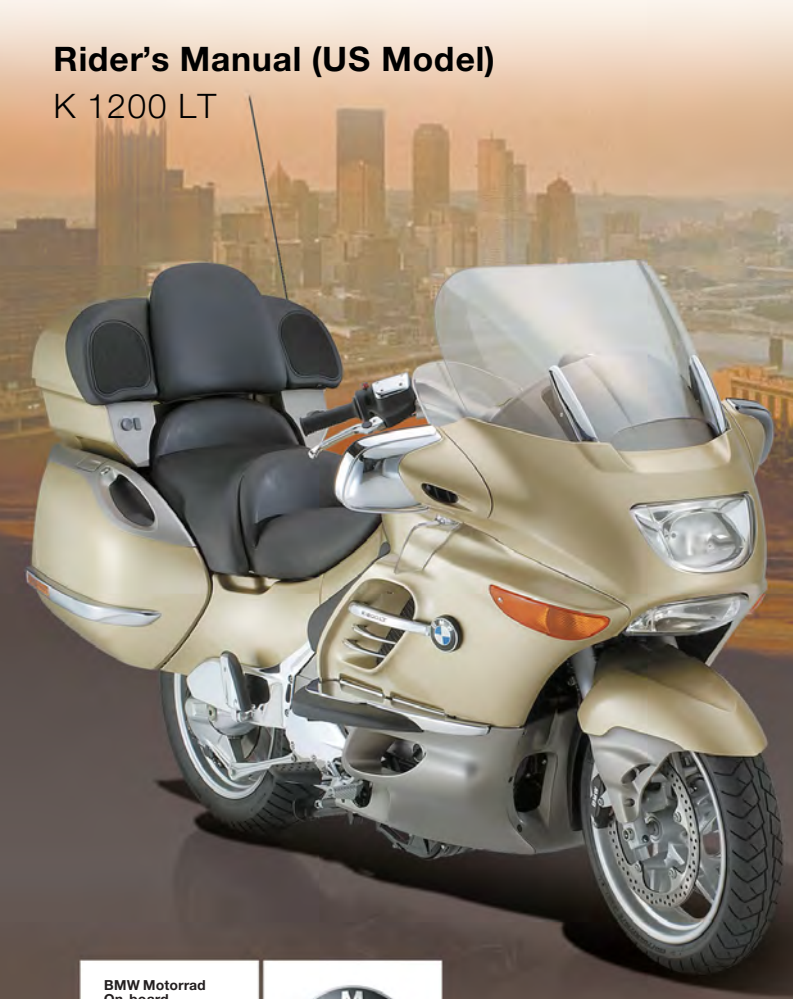
Rider's Manual (US Model)

K 1200 LT



BMW Motorrad On-board documentation

consisting of Rider's Manual and Maintenance Instructions

Please note



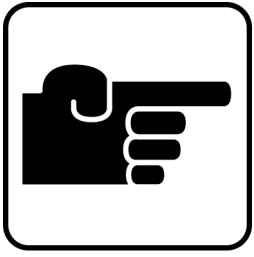
⚠WARNING

This symbol stands for precautions and measures which are essential in order to protect the rider or other persons from possibly severe or fatal injury.



⚠ CAUTION

Instructions and precautions specifically intended to prevent damage to the motorcycle. Disregarding them may render the warranty invalid.



NOTE

Specific instructions on how to operate, control, adjust or look after items of equipment on the motorcycle.

Welcome to BMW

We are delighted that you have chosen a new BMW K 1200 LT and would like to welcome you to the community of BMW riders.

Familiarize yourself with your new motorcycle, so that you can ride it safely and confidently in all traffic situations.

To make sure of this, please read this Rider's Manual carefully before starting to use your new motorcycle. It contains important information on how to operate the controls and how to make the best possible use of all the motorcycle's technical features.

In addition, it contains useful hints and information on the correct equipment for machine and rider, to ensure maximum reliability and safety, and advice on how to maintain the value of your motorcycle.

If you have any questions concerning your motorcycle, your authorized BMW motorcycle retailer will gladly provide advice and assistance.

We hope you enjoy reading this Rider's Manual and wish you many a pleasant, safe journey on your BMW motorcycle.

Best wishes,

BMW Motorrad

Contents

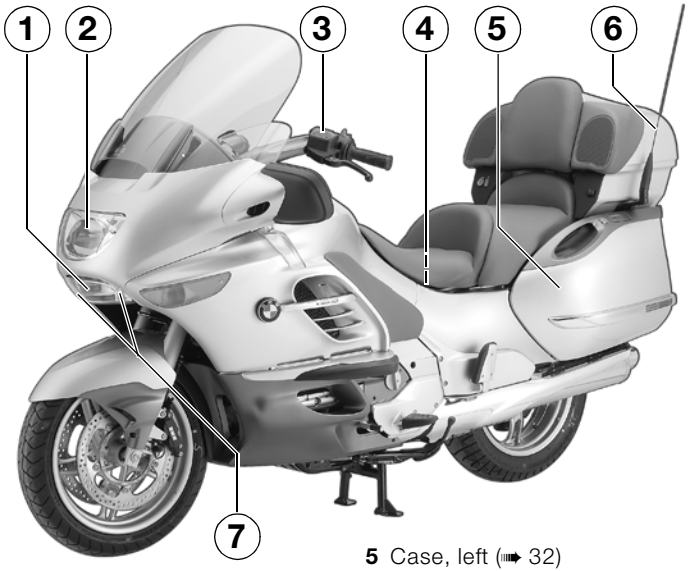
General information and controls
General view, left side 4-5
General view, right side.....6-7
Cockpit 8-9
Indicator and warning lights.....10-11
Ignition key and steering lock 12-13
Handlebar fittings 14-15
Hazard warning flashers..... 16
Adjusting windshield/fins..... 17
Reverser 18-20
Cruise control 21-24
Clock 25
Distance recorder 26
On-board computer 27-31
Case 32
Topcase..... 33
Front seat.....34-35
Rear seat 36-38
Seat heating..... 39
Helmet holder 40

Safety check
Checklist..... 41
Engine oil 42-43
Fuel.....44-45
Handlebar levers.....46-47
Brake system - general 48-49
Brake system - with BMW Integral ABS 50-53
Clutch 54
Coolant 55
Spring preload 56
Wheels.....57-59
Loads.....60-61
Lights.....62-63

Starting – Riding – Parking
First time out 64-65
Important notes 66-67
Side stand 68-69
Center stand EHCS 70-72
Running in 73-74
Before you start 75-76
Starting 77
Indicator and
warning lights 78-79
Riding, gear shifts 80-81
Brake system
- general 82-83
Brake system - with
BMW Integral ABS 84-90
BMW Integral ABS
- troubleshooting chart 91

Arrive safely
Reliability 92-93
Service worldwide 94
Environmental protection 95
BMW motorcycle
accessories 96
Training means
extra safety 97
Concluding thoughts 98

General view, left side



1 High-beam headlight (➠ Maintenance Instructions, Chapter 2)

2 Low-beam headlight (➠ Maintenance Instructions, Chapter 2)

3 Reservoir for clutch hydraulic fluid (➠ 54)

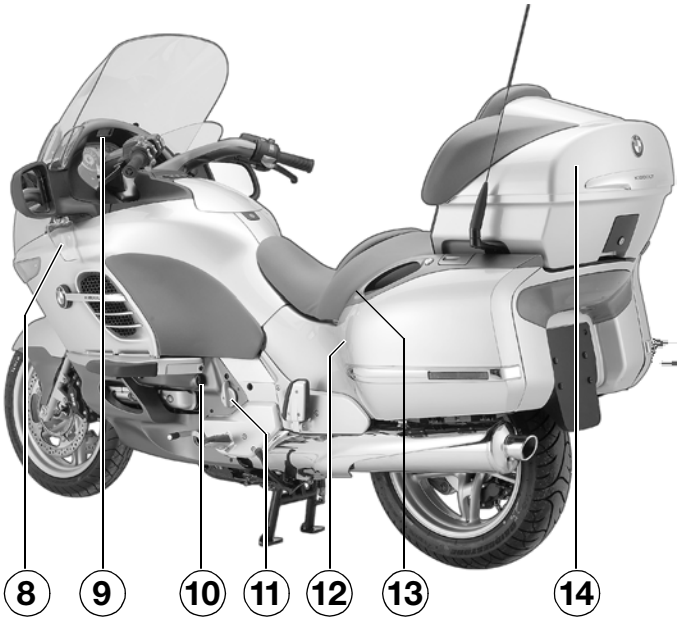
4 Adjusting knob for spring preload, rear suspension (➠ 56)

5 Case, left (➠ 32)
- Seat opener (➠ 34)
- Toolkit
- Repair kit for tubeless tires (➠ Maintenance Instructions, Chapter 2)
- Steel cable for helmet holder (➠ 40)

6 Antenna (➠ Maintenance Instructions, Chapter 2)

7 Parking light (➠ Maintenance Instructions, Chapter 2)

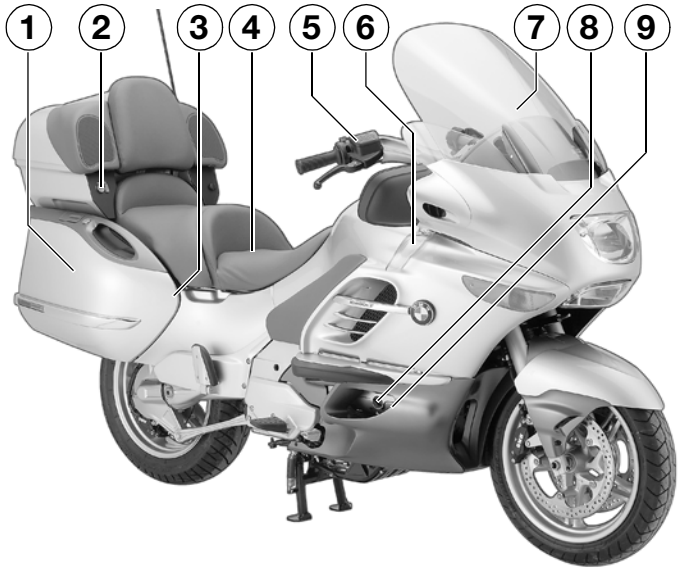
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8 Fin, manually adjustable (➠ 17)
9 Cockpit lighting
10 Socket, 12 V for connecting electrical accessories – max. load 5 A, 60 W
11 Shift lever for reverser (➠ 18-20)
12 Coolant reservoir (➠ 55)
13 Helmet holder(➠ 40)
14 Topcase (➠ 33) with
– Interior lighting
– Mirror and
– Stowage compartment for:
on-board documentation and oil funnel

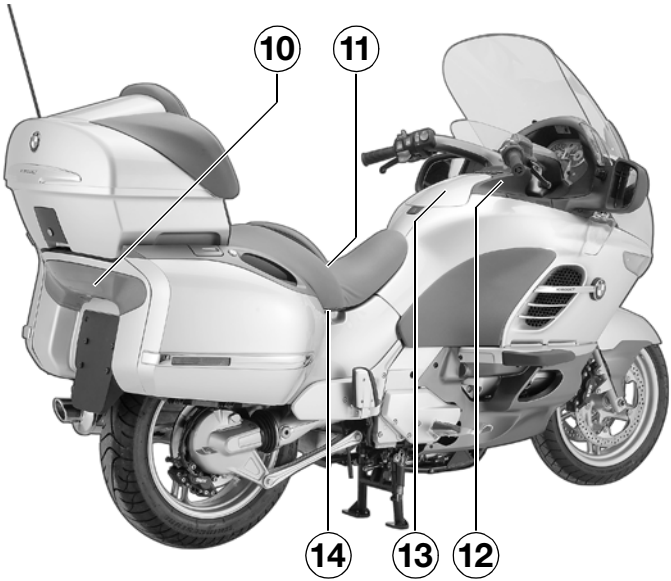
( ) Number in parentheses
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General view, right side



1 Case, right (➠ 32) with
– CD changer[OE] (➠ Supplementary Rider's Manual)
2 Controls for audio system for passenger[OE] (➠ Supplementary Rider's Manual)
3 Brake-fluid reservoir, rear brakes (➠ 52)
4 Fuse box (➠ Maintenance Instructions, Chapter 2)
5 Brake-fluid reservoir, front brakes (➠ 52)
6 Fin, manually adjustable (➠ 17)
7 Windshield, electrically adjustable
8 Engine oil filler neck (➠ 43)
9 Oil level display, engine (➠ 43)

( ) Number in parentheses
➠ page number for description
[OE] Optional equipment



10 Rear-light unit with
- Rear/brake light
- Flashing turn indicators, left/right
- License plate light

11 Type plate with vehicle identification number (VIN)

12 Fuel filler cap (➠ 44)

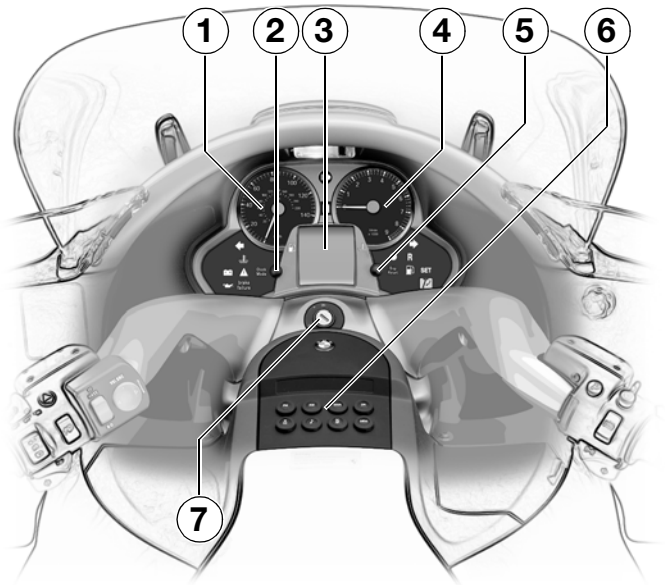
13 Stowage compartment with
- CD player
- Torch

14 Rocker switch for front and rear seat heating OE (➠ 39)

( ) Number in parenthesess
➠ page number for description

OE Optional equipment

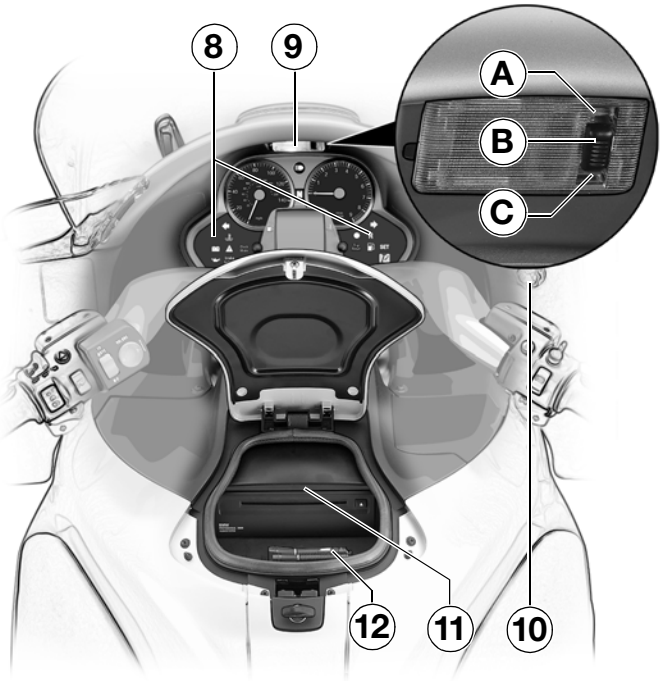
Cockpit



1 Speedometer
2 Pushbutton for setting clock
3 Multifunction display with
- On-board computer (➠ 28)
- Fuel gauge with indicator for reserve (➠ 45)
- Coolant temperature gauge (➠ 55)
- Odometer
- Trip meter
- Clock
- Gear indicator
- Radio display

4 Tachometer (➠ 73)
5 Trip meter reset button
6 Radio controls (➠ Supplementary Rider's Manual)
7 Ignition key and steering lock (➠ 13)

( ) Number in parenthesess
➠ page number for description



8 Indicator and warning lights (➠ 10, 11)

9 Cockpit lighting
- **A** On
- **B** Off
- **C** Automatic (➠ Supplementary Rider's Manual for the anti-theft alarm **DWA**[OE])

10 Knob for headlight beam throw adjustment (➠ 62)

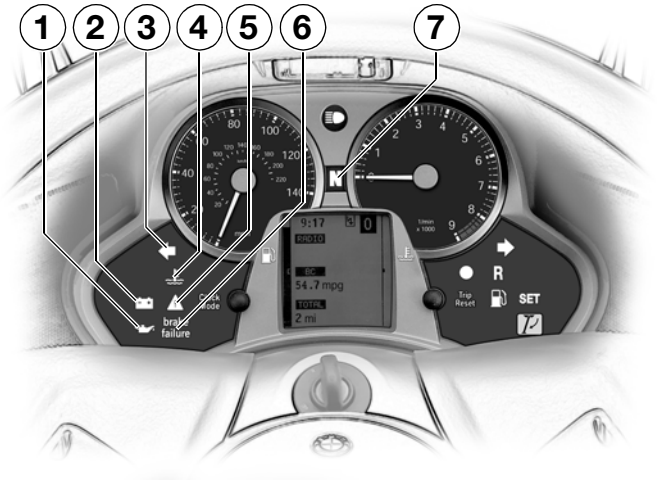
11 Radio/CD player with stowage compartment

12 Torch

( ) Number in parentheses
➠ page number for description

OE Optional equipment

Indicator and warning lights



NOTE

A sensor controls automatic daytime/nighttime switchover. The LCD is illuminated at night.

1 Warning light, engine oil pressure, **red** (➠ 42, 78)

2 Warning light, battery charge current, **red** (➠ 79)

3 Left turn indicator repeater **green**

4 Warning light, coolant temperature, **red** (➠ 55, 79)

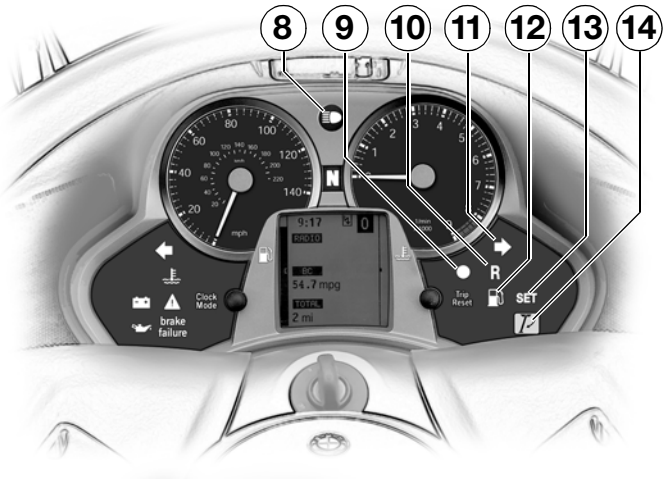
5 Warning light, general **red** ⚠ (➠ 78)

6 Warning light, ABS **red** ABS (➠ 78)

7 Indicator light, neutral, **green** N (➠ 76)

( ) Number in parentheses

➠ page number for description



8 Indicator light, high-beam headlight, **blue**

9 Indicator light, anti-theft alarm **DWA**[OE] (➠ Supplementary Rider's Manual for the anti-theft alarm **DWA**)

10 Indicator light, reverser yellow [R]

11 Right turn indicator repeater **green**

12 Warning light, fuel level/ when approx. 1.1 gals. (4 liters) left in tank **yellow** (➠ 45, 78)

13 Indicator light, cruise control[OE] **yellow** [SET] (➠ 21)

14 Indicator light, electro-hydraulic center stand **EHCS** (➠ 71)

( ) Number in parentheses
➠ page number for description

OE Optional equipment

Ignition key and steering lock



Keys

You will receive two master keys and one spare key.
The key number is on the accompanying tag.

⚠WARNING

Only a RESIDUAL BRAKING FUNCTION is available when the ignition is switched off (➠ 87)

⚠WARNING

Never attach other keys or key rings to the motorcycle key – risk to safety if keys were trapped between the handlebars and the fairing.

NOTE

Ignition key and steering lock, tank filler cap lock, radio-compartment lock and side and top-case locks are all operated with the same key.
Central locking[OE] (➠ Supplementary Rider's Manual for the **anti-theft alarm**)

[OE] Optional equipment



Key positions

ON Operating position, ignition, lights and all circuits switched on, self-test of the instrument group is performed (➠ 10)

R * Ignition and lights off, steering not locked (handlebars can be turned freely to left or right)

⚠WARNING

Never turn the key to OFF or P⇦ while riding the motorcycle

* The key can be removed in these positions

- Turn the handlebars to full left lock.

⚠ CAUTION

Engage the steering lock with the handlebars in this position only.

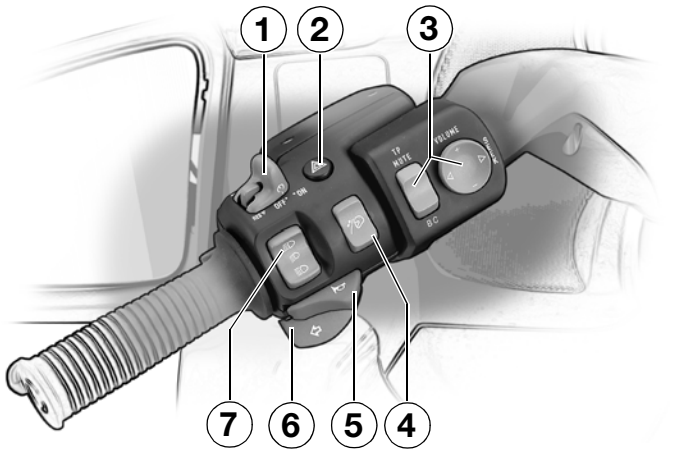
OFF* Ignition and lights off, steering locked

P⇦ * Parking light on, steering locked

NOTE

Switch the parking light on for limited periods only.
Note state of battery charge.

Left handlebar fitting



⚠WARNING

To prevent air from entering the hydraulic circuit:

- **do not turn the fitting on the handlebar.**

1 Switch for cruise control[OE] (➠ 21)

2 Hazard warning flasher switch (➠ 16)

3 Handlebar-mounted remote controls for audio system (➠ Supplementary Rider's Manual) and on-board computer

4 Switch for windshield adjustment (➠ 17)

5 Horn push

6 Left flashing turn indicator switch

- Press

– Turn indicators operate

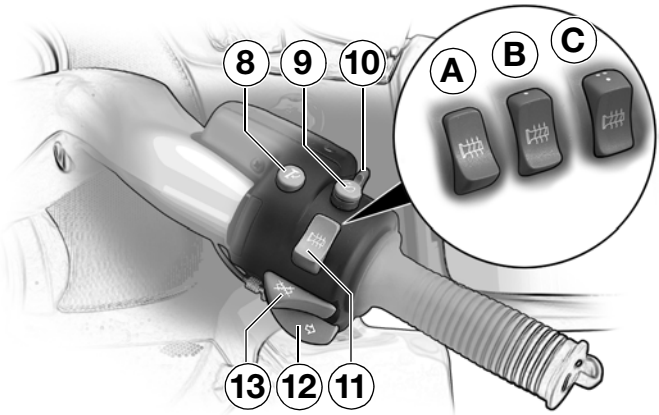
To switch off turn indicators:

- Self-canceling while riding, or press turn-indicator cancel switch **13** (➠ 15)

7 High-beam/low-beam headlight switch

- High-beam headlight
- Low-beam headlight
- Headlight flasher

[OE] Optional equipment



⚠WARNING

To prevent air from entering the brake system:

- **do not turn the fitting on the handlebar.**

8 Pushbutton for electro-hydraulic center stand **EHCS** (➠ 70)

9 Starter button (➠ 18, 77)

10 Emergency off (kill) switch for ignition (➠ 75)

11 Switch for heated handlebar grips OE
- **A** Heating function off
- **B** 50% (center position)
- **C** 100%

12 Right flashing turn indicator switch
- Press

– Turn indicators operate

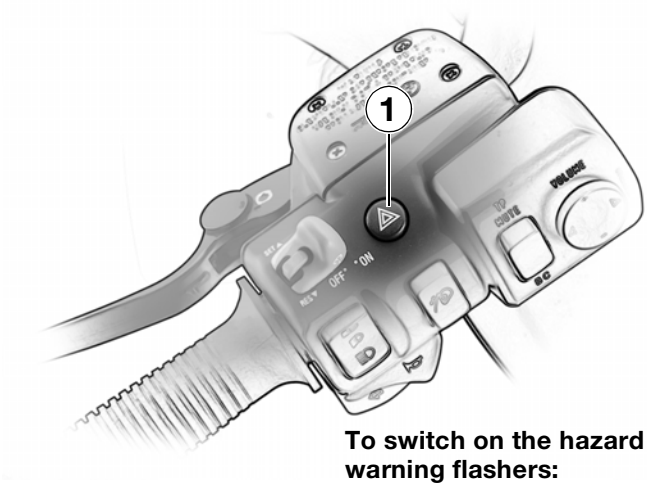
To switch off turn indicators:
- Self-canceling while riding, or press turn-indicator cancel switch **13**

13 Turn indicator cancel switch
- Press

– Left/right turn indicators off

OE Optional equipment

Hazard warning flashers



Hazard warning flashers

NOTE

The ignition must be switched on before the hazard warning flashers can be used.
Do not use the hazard warning flashers for longer than absolutely necessary.
Note state of battery charge.

To switch on the hazard warning flashers:

- Switch on the ignition
- Operate hazard warning flasher switch **1**

– Hazard warning flashers in operation
– Indicator light in switch is on

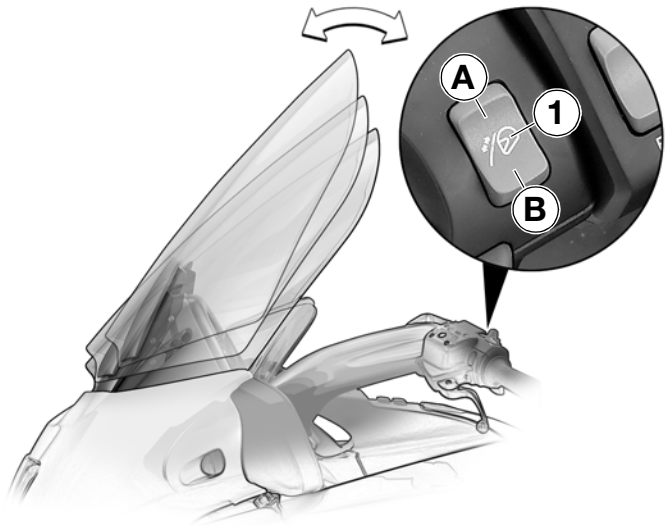
- Switch off the ignition

– The hazard warning flashers continue to operate
– Indicator light in switch goes out

To switch off the hazard warning flashers:

- Operate hazard warning flasher switch **1**

– Hazard warning flashers cease to operate



Adjusting the windshield:

- Switch on the ignition
- Press switch **1**
  - **A** Raise windshield
  - **B** Lower windshield

Steplessly adjust the windshield by moving the switch to the appropriate position, **A** or **B**

⚠ CAUTION

The windshield and fins are not fuel-resistant.

Adjusting left/right fin:

- Move the left and right fins to the desired position

NOTE

The fins regulate the pressure of the slipstream against the rider.

⚠WARNING

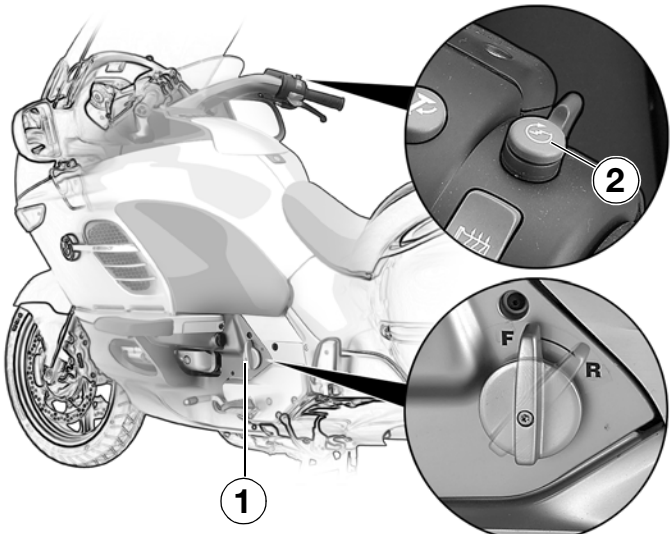
Avoid steep and uneven road surfaces when reversing. Take great care to maintain your balance when reversing on wet, slippery, uneven, unpaved or muddy surfaces. Engage the reverser only when the motorcycle is at a standstill and do not press the starter pushbutton while engaging the reverser.
Do not simultaneously press the pushbutton for the electro-hydraulic center stand.

⚠WARNING

Rules for reversing:
- **No passenger**
- **You must be seated on the motorcycle**
- **Keep both feet on the ground**
- **Keep your feet well clear of the footrests on both sides**
- **Keep both hands on the handlebar grips**
- **Make sure side stand and main stand are both fully retracted (➠ 69, 72)**
- **Check that the area behind the motorcycle is free of obstructions**

⚠ CAUTION

Do not operate the reverser for more than 1 minute – bear the state of battery charge in mind. The reverser switches off if it is overloaded.



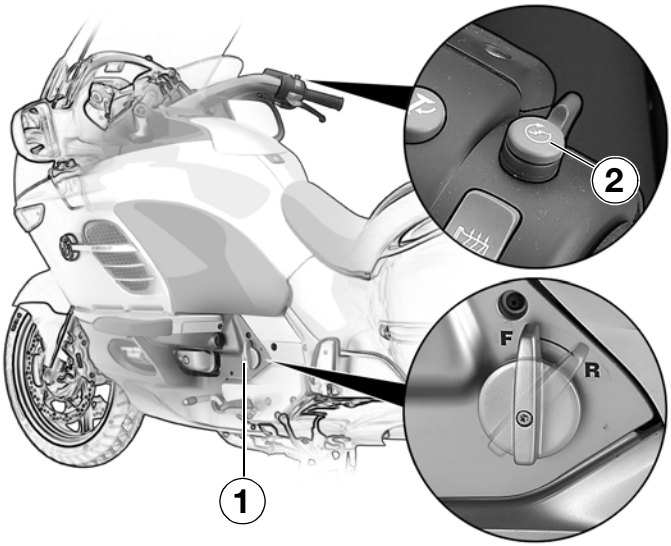
Reversing

- Start the engine (➠ 76, 77)
- Select neutral
  - **Green** neutral indicator light N ON (➠ 10)
- Push lever **1** of reverser all the way toward position **R** until it engages
  - **Yellow** R reverser indicator light ON (➠ 11)
- Press and hold down starter button **2**
  - Carefully reverse the motorcycle

NOTE

If lever **1** does not engage easily in position **R**
– slightly rock the motorcycle backwards and forward until lever **1** engages.

Reverser



Stopping

- Release starter button **2**
  - The motorcycle comes to a stop
- Apply the brake if necessary

Normal operation

- Push lever **1** of reverser all the way toward position **F** until it engages
- **Yellow** R reverser indicator light OFF (➠ 11)

⚠WARNING

Do not engage cruise control when:
- **Riding on twisty roads with poor forward vision**
- **Heavy traffic does not permit you to maintain a constant road speed**
- **Riding on wet, unpaved or dirty roads**

The motorcycle might exceed your chosen cruise control speed if the engine's braking effect is insufficient on a downhill grade. It could also drop below this speed when you ride uphill.

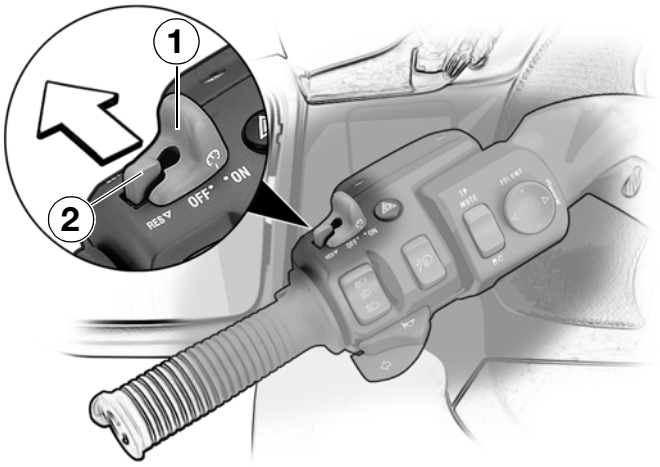
For safety reasons, always keep both hands on the handlebars.

NOTE

With automatic cruise control, speed can be controlled in the range between 25 and 100 mph (40 and 160 km/h).
When the motorcycle is at a standstill and – ignition **OFF** – the system is switched off and the stored road speed is cancelled.
The indicator light for cruise control is off.
On a motorcycle fitted with BMW Integral ABS, the cruise-control system is not operational if the brake light is defective (**red** general warning light ⚠ ON ➠ 78).

[OE] Optional equipment

Cruise control[OE]



Activating the system

- Move switch **1** to **ON**

– **Red** indicator light in the switch is ON

Setting road speed

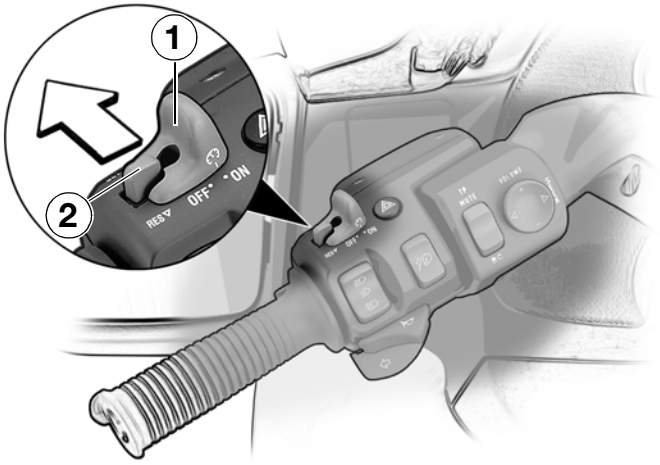
- Briefly press button **2** in **SET** direction (arrow)

– **Yellow** SET indicator light for cruise control is ON (➠ 11)

NOTE

The motorcycle maintains and memorizes your current cruising speed.

[OE] Optional equipment



Step-by-step acceleration

- Press button **2** in **SET** direction
  - Memorized road speed increases by approx. 1 mph (2 km/h)

NOTE

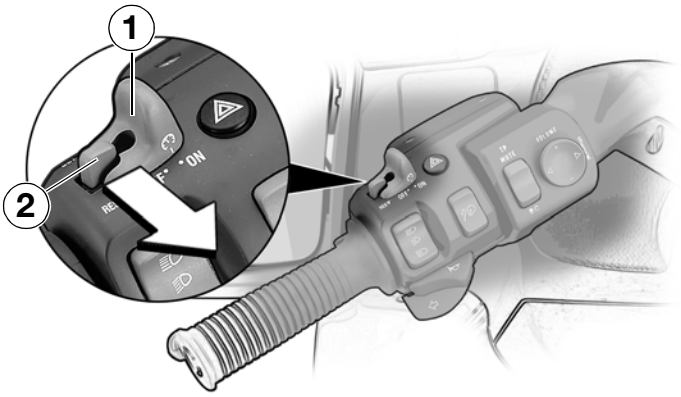
Each time you press button **2** in the **SET** direction, road speed increases by a further 1 mph (2 km/h).

Stepless acceleration

- Press and hold down button **2** in **SET** direction (arrow)
- The motorcycle accelerates steadily, even though you do not manually open the throttle
- Release button **2**
- The motorcycle maintains and memorizes your current cruising speed

[OE] Optional equipment

Cruise control[OE]



Decelerating

- Press and hold down button **2** in **RES** direction (arrow)

– The motorcycle decelerates steadily, even though you do not manually close the throttle

NOTE

Each time you push the button in the **RES** direction, road speed decreases by a further approx. 1 mph (2 km/h).

Deactivating the system

- Move switch **1** to **OFF**

– The cruise control system switches off immediately

– **Red** indicator light and **yellow** SET indicator light for cruise control (➠ 11) OFF

Temporary override

When you actuate the:

– brakes
– clutch
– throttle twistgrip (close the throttle)

the cruise control system is briefly switched off

– **Yellow** SET indicator light for cruise control (➠ 11) OFF

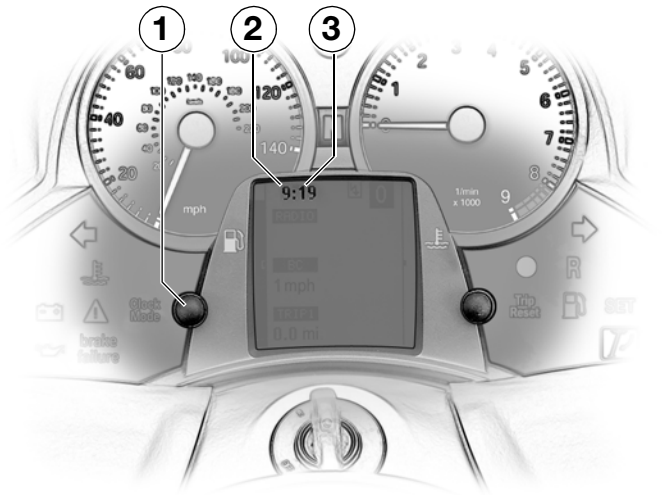
– **Red** indicator light ON

- Push button **2** in the **RES** direction

– The motorcycle returns to and maintains the cruising speed stored in memory

– Indicator light, cruise control **yellow** SET (➠ 11) ON.

OE Optional equipment



Setting the clock

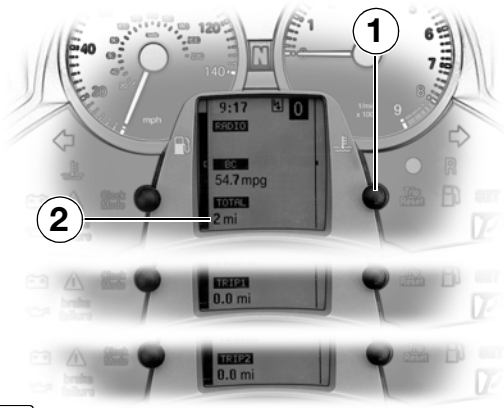
⚠WARNING

Do not attempt to set the clock unless the motorcycle is at a standstill
– Risk of accident.

- Ignition key **ON** (➠ 12)
- Press button **1** for longer than 2 seconds, until the clock enters set mode
  – Hours reading **2** starts flashing: briefly press button **1** to set
- Press button **1** again for longer than 2 seconds
  – Minutes reading **3** starts flashing: briefly press button **1** to set
- Press button **1** again for longer than 2 seconds to exit set mode

Set mode is automatically exited if 20 seconds elapse without the button being pressed.

Distance recorder



NOTE

Distance recorder **2** appears only when the ignition key is in the **ON** position.
Each time you switch on the ignition the odometer reading showing the total distance the motorcycle has covered appears for 10 seconds, before the display switches to the mode selected before the ignition was switched off.

WARNING

Do not attempt to check/set the distance recorder unless the motorcycle is at a standstill
– Risk of accident.

- Ignition key **ON**
- Press button **1** for less than 2 seconds; each time you press the button the display steps to the next reading in the following sequence:
  - Odometer reading (total distance covered)
  - Tripmeter 1 reading
    - Press button **1** for longer than 2 seconds if you want to reset this reading.
  - Tripmeter 2 reading
    - Press button **1** for longer than 2 seconds if you want to reset this reading.



Handlebar-mounted remote controls

NOTE

Use rocker switch **1** on the left handlebar fitting to access the menu of the on-board computer. When you switch on the ignition (ignition key in the **ON** position), the display initially shows the ambient temperature, before switching to the reading that was displayed before the ignition was switched off.

- Each time you push rocker switch **1** on the left handlebar fitting in the **BC** direction for less than 2 seconds, you step from one function to the next in the following sequence:

– Average road speed (➠ 28)
  – Press button **1** in the **BC** direction for more than 2 seconds to reset
– Residual range (➠ 28)
– Average consumption 1 (➠ 29)
– Average consumption 2 (➠ 29)
  – Resetting of average consumption 1/2 by pressing button 1 longer than 2 sec. in direction **BC**
– Ambient temperature (➠ 30)

Average road speed

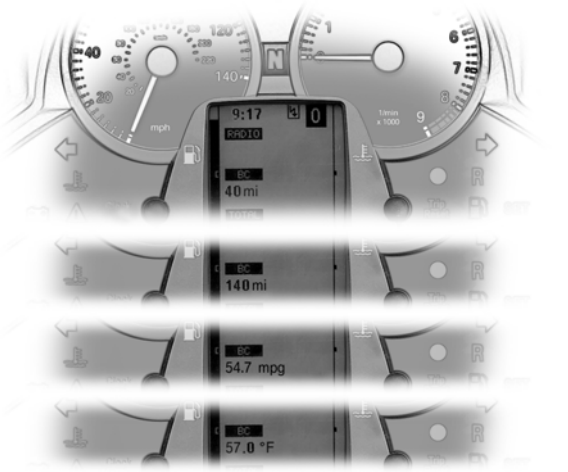
NOTE

The reading is in km/h or mph, depending on national-market version.
Stops with the engine switched off are ignored.
Average speed is always calculated over the time since the last “RESET” triggered by means of the handlebar-mounted switch.

Residual range

NOTE

Reading in km or miles, depending on national-market version.
The range is estimated on the basis of style of riding and taking the remaining supply of fuel into account.
Note that the range cannot be shown accurately if the motorcycle was placed on its side stand. The reading is corrected during the journey.
The display shows residual range in km or miles.
Also observe the reading of the fuel-level gauge and the warning light for reserve fuel level (➠ 10, 11).
The on-board computer registers that you have refueled when approximately 3.2 quarts (3 liters) have been added.

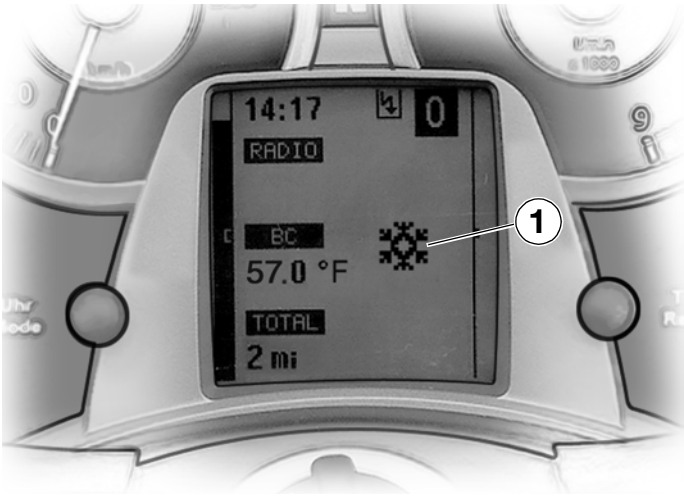


Average consumption

NOTE

Reading in liters/km, liters/mile, or miles/gallon, depending on national-market version.
The average consumption can be calculated for two different distances, e.g. for an entire trip and simultaneously for a partial distance.

The average is calculated over the time the engine is running. Stops with the engine switched off are ignored.
Average fuel consumption is always calculated over the time since the last “RESET” triggered by means of the handlebar-mounted switch.



Ambient temperature

NOTE

Reading in °C or °F, depending on national-market version.

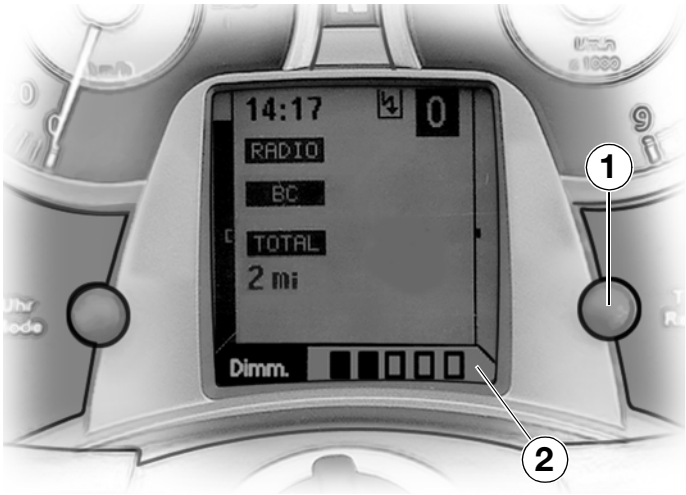
Ice warning

If the ambient temperature drops below +3 °C, the onboard computer automatically switches over to the temperature display and the ice warning symbol **1** flashes in the display.

⚠WARNING

The ice warning does not exclude the fact that black ice is also already possible at measured temperatures above 3 °C.

Always think well ahead when temperatures are low, especially on bridges and where the road is in the shade.



Display dimming

⚠WARNING

Only adjust the display dimming when the motorcycle is stationary.
– Accident danger

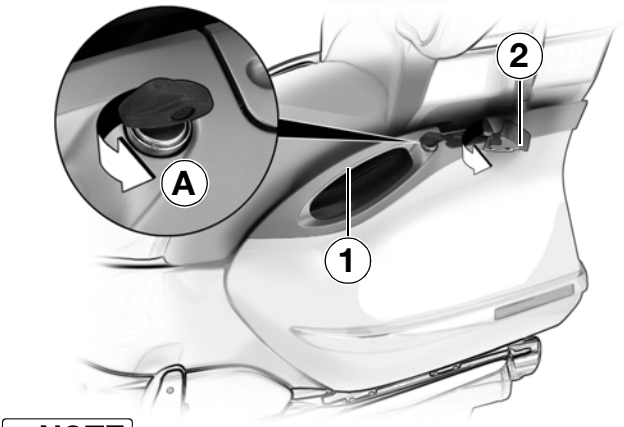
The brightness of the backlit multifunction display is variable.

- Press button **1**
- The level of dimming appears in display field **2**
- Press button **1** again
- The display lighting becomes one level brighter each time the button is pressed. Each time the button is pressed again after maximum brightness is reached, brightness is reduced by one level.

NOTE

If the button **1** is not pressed for longer than 2 seconds, the set brightness is applied.

Opening/closing cases



NOTE

If your motorcycle is equipped with central locking[OE], see the Supplementary Rider's Manual for the **anti-theft alarm**

- Place the motorcycle on the main (center) or side stand
  – Make sure the ground is level and firm.

Opening the case

- If necessary, unlock the case
  - Turn key in case lock to position **A**
- Press the locking cylinder
  – Latch **2** snaps open
- Grip handle **1**
- Open latch **2** (arrow)
- Open the case

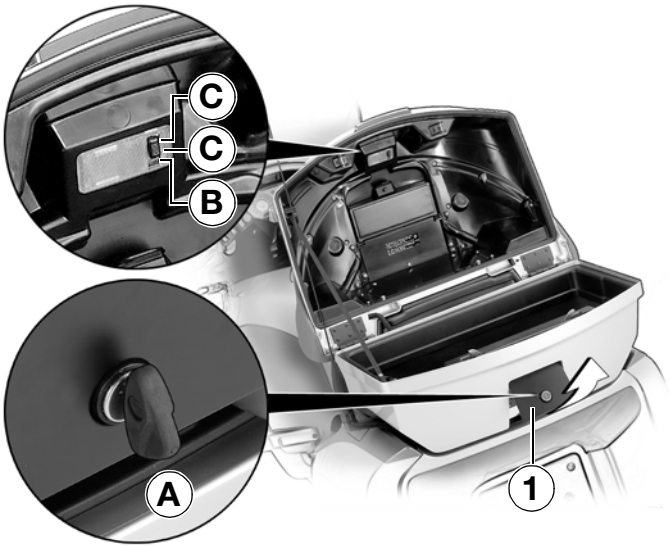
Closing the case

CAUTION

To ensure the case is leak-tight, keep the sealing edges clear when locking.

- Close the lid of the case
- Close latch **2**
- If necessary, lock the case and remove the key

[OE] Optional equipment



Opening the topcase

- If necessary, unlock the topcase
  - Turn key in topcase lock to position **A**
- Press down locking cylinder – Latch **1** snaps open
- Pull up latch **1** as far as it will go (arrow)
- You can now open the lid of the topcase

– Topcase lighting
B ON
C OFF

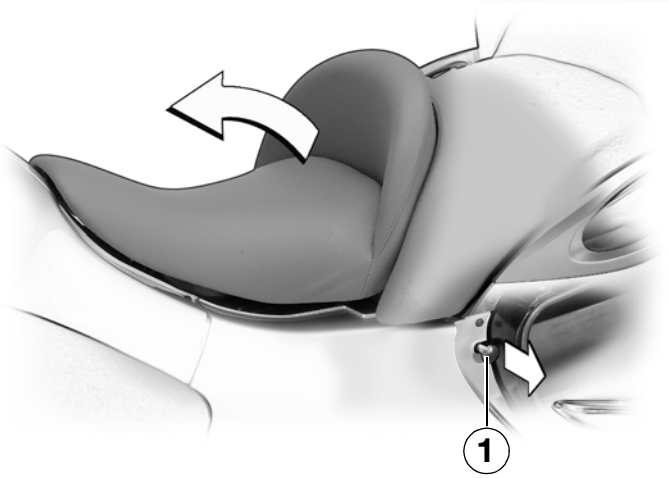
Closing the topcase

NOTE

The interior light goes out automatically when you close the topcase.

- Close topcase lid
- Close latch **1** until it engages
- If necessary, lock the topcase and remove the key

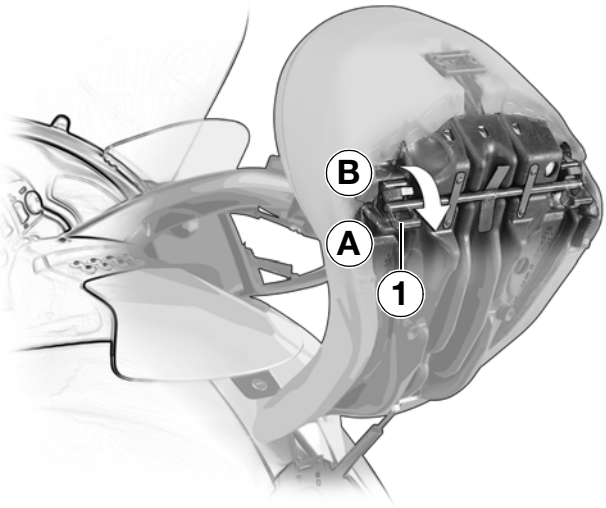
Front seat



Opening front seat

- Place the motorcycle on the main (center) or side stand
  - Make sure the ground is level and firm.
- Open the left case (➠ 32)
- Pull out lever **1** (arrow)
- Lift the seat up and forward (arrow)
  - Mount for helmet holder (➠ 40),
  - Knob for spring preload (➠ 56),
  - Battery and fuses (➠ Maintenance Instructions, Chapter 2)

are accessible



Adjusting front seat:

- Open the seat (➠ 34)

– Mover adjuster **1** to the desired position (arrow)

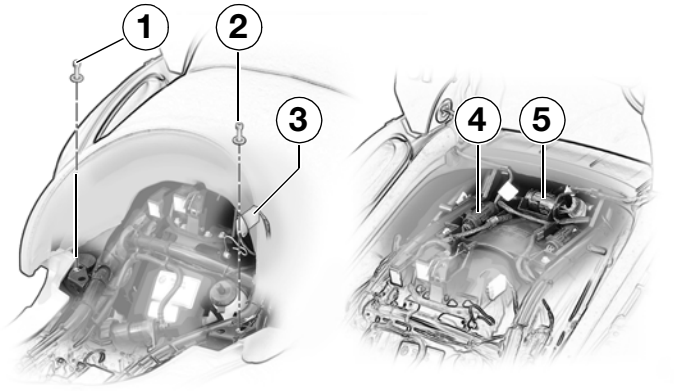
– The front seat can be set to either of 2 positions:
  – **A** = high
  – **B** = low

Locking front seat

⚠ CAUTION

When closing the front seat:
– Fold in knob for adjusting spring strut
– Check that the front seat is securely latched

- Swing down the rear of the seat until it engages with an audible click
- Close the left case (➠ 32)



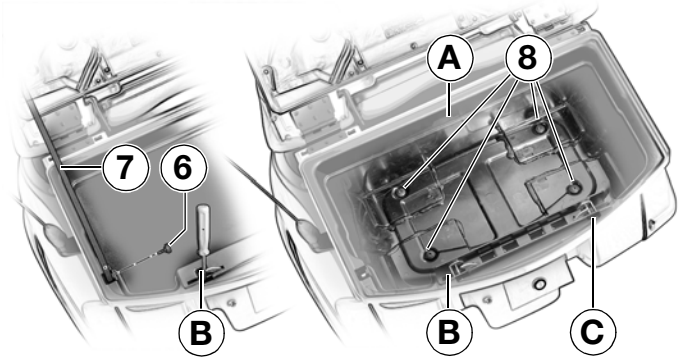
Adjusting the backrest:

NOTE

The backrest can be adjusted by one position by moving the topcase.
It is advisable to have this adjustment performed by your authorized BMW motorcycle retailer.

- Place the motorcycle on its main (center) stand
  – Make sure the ground is level and firm.
- Open the seat (➠ 34)
- Remove securing screws **1** and **2**
- Raise the rear seat slightly and disconnect plug **3** of the seat heating[OE]
- Carefully pull the rear seat forward
- Remove plugs **4** and **5** for the loudspeakers from their holders and turn them counterclockwise to disconnect
- Remove cables of plugs **4** and **5** from their holders

[OE] Optional equipment



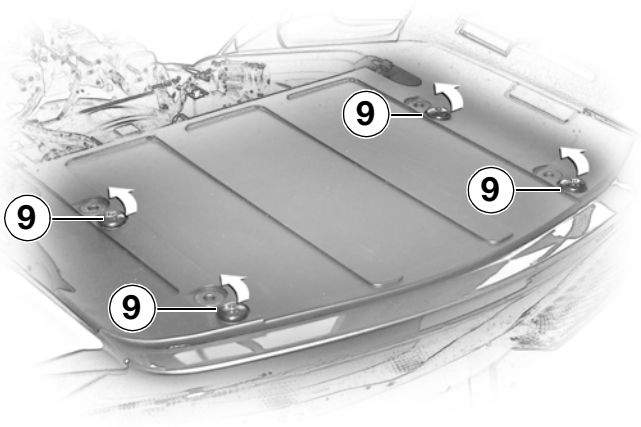
- Open the topcase (➠ 33)
- Slacken knurled screw **6**
- Hold topcase cover
- Carefully disengage retaining strap **7**

⚠ CAUTION

To avoid damaging the topcase lid hinges and the loudspeakers, hold the lid or install suitable supports.

- Disengage inner shell from Velcro fastener at point **A**
- Use small screwdriver to push back retaining clips at points **B** and **C**
- Carefully lift the inner shell out of the topcase
- Remove four securing screws **8** from the topcase
- Carefully remove topcase

Rear seat



- Move securing screws **9** (short) to the appropriate positions on the retaining plate (arrow)

⚠ CAUTION

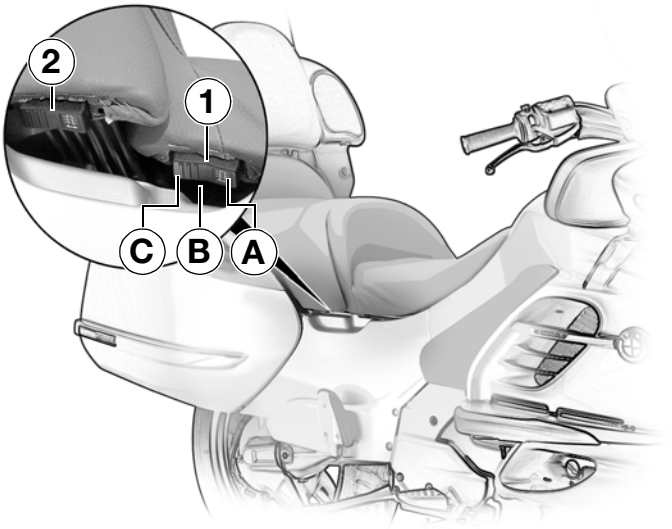
The securing screws of topcase and retaining plate are of different lengths: do not mix them up.

– The backrest can be adjusted by one position.

- Carefully fit the topcase
- Tighten four securing screws **8** (long) in the topcase to the specified tightening torque
- From this point on, installation is the reverse of the removal procedure

Tightening torque:

Securing screws
for topcase..... 9 Nm
Retaining plate ..... 9 Nm
Rear seat ..... 9 Nm



NOTE

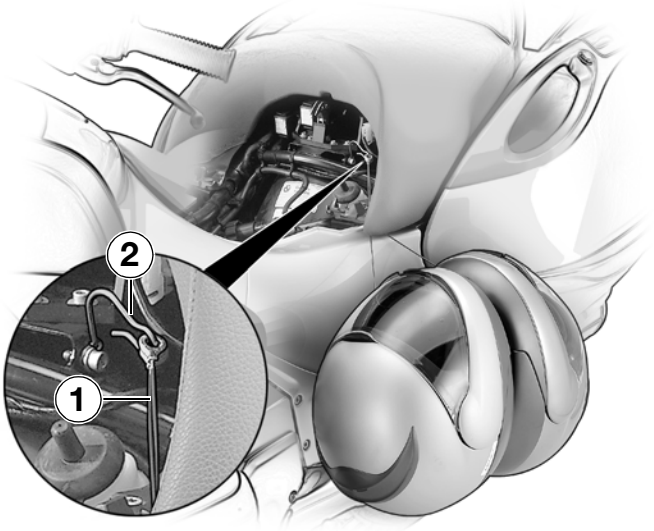
Only use seat heater when necessary. Increased current consumption can lead to battery discharging when driving in the low rpm range.

- Press switch for front seat heating **1** or rear seat heating **2**
  - **A** Continuous heating
  - **B** Heating function OFF
  - **C** Rapid heating, then move the switch to position **A** or **B**

NOTE

The seat heating in the backrest shuts down automatically at 122 °F (50 °C).

Helmet holder



- Open the seat (➠ 34)
- Pass steel cable **1** through the chinguards of the helmets
- Hook the steel cable **1** over the holder **2**
- Carefully close and lock the front seat (➠ 34)

NOTE

Helmets can also be stored in the topcase (➠ 61).

Use the safety checklist – before every journey

Please perform the safety check accurately. If your motorcycle needs any routine maintenance, you can then attend to it before the journey starts (➠ Maintenance Instructions), or have it performed by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer. This is to ensure that your motorcycle complies with road-vehicle use and safety laws.

Your vehicle must be in perfect technical order: this is a basic prerequisite for your safety and the safety of other road users.

For this reason, check the details in the following sections before you start the journey:

- Fuel level
- Positions of the handlebar levers
- Brake fluid level
- Clutch fluid level
- Brakes
- Warning lights and indicator lights
- Spring preload
- Wheel rim and tire condition, tread depth and tire pressures
- Load, gross weight
- Lights
- Coolant level

- Check regularly (every time you stop for fuel), on the basis of the following section:
- Engine oil level (every second/third stop for fuel)
- Brake pads

If you encounter any problems or difficulties, it is always best to contact your authorized BMW motorcycle retailer.

He will provide the necessary advice and assistance.

Checking oil level

Check the oil level at regular intervals.

Always check the oil level when the engine is at operating temperature, because the difference between the oil level indicated when the engine is at operating temperature and the oil level indicated when the engine is very cold due to extremely low outdoor temperatures 14 °F (-10 °C) can be as much as 0.4 in (10 mm).

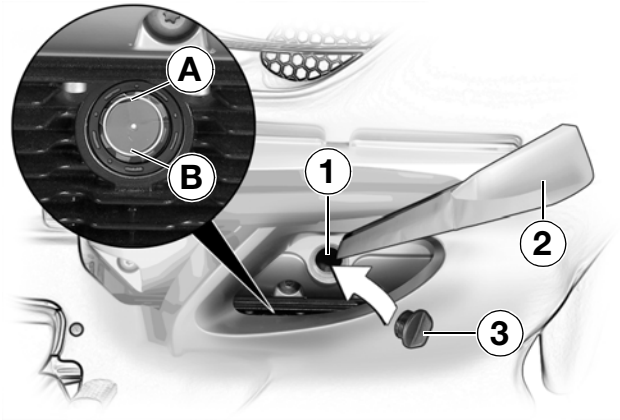
After switching off the engine at operating temperature, wait at least 5 minutes for the oil to drain back into the sump.

Checking the oil level after the engine has been run only briefly or when it is not properly warm will falsify the reading and could lead to the engine being operated with the wrong quantity of oil, because cold oil is viscous and takes longer to drain back into the sump.

⚠ CAUTION

To avoid damage to the engine:
- Never exceed the maximum oil level.
- Always keep the oil level above the minimum mark.

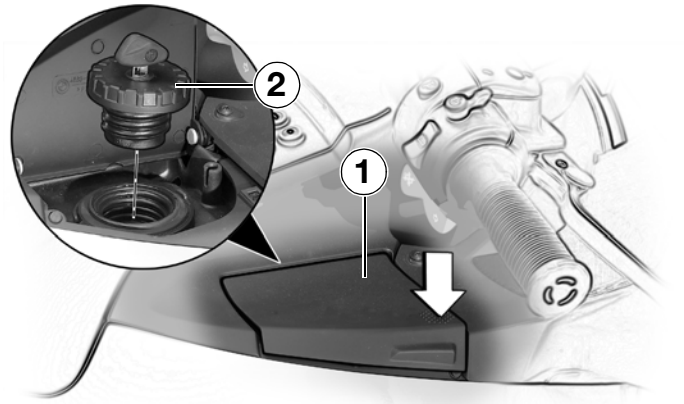
- Check the oil level with the engine at its regular operating temperature
- Check the oil level after the engine has been stopped for at least 5 minutes
- Place the motorcycle on its main (center) stand
  - Make sure the ground is level and firm.



- Check the oil level at the display:
  A (MAX) Top edge of display
  B (MIN) Bottom edge of display
  – The difference between the two marks is approx. 0.5 quart (0.5 liter)
- If necessary, remove oil filler plug **3** and add the engine oil, using funnel **2**, through oil filler neck **1**
- Reinstall oil filler plug **3**

⚠ CAUTION

The **red** warning light (➠ 11) for engine oil pressure indicates no (or very little) oil pressure in the lube-oil system; this light must not be regarded as an oil level check. Oil pressure builds up after 1-2 seconds and the warning light goes out – the **red** engine oil pressure warning light should remain off while the engine is running.



⚠ CAUTION

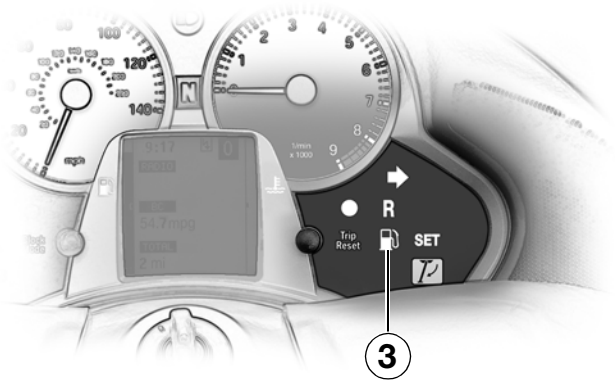
Note that fuel containing lead will destroy the catalytic converter.
Do not run the fuel tank dry or you may damage the engine or catalytic converter.

Refueling

⚠WARNING

Fuel is flammable and explosive. Do not smoke. Never bring a naked flame near the fuel tank.
The fuel expands when hot (for instance if the fuel tank is in the sun). For this reason, only fill as far as the lower edge of the filler neck.

- Place motorcycle on side stand
  – Make sure the ground is level and firm.
- Open fuel-tank flip **1** by briefly pressing down on the ribbed section (arrow)
- To open fuel cap **2**:
  – Unlock the cap, turn it counter-clockwise and remove



- Refuel

– Always use super (premium) unleaded fuel to DIN 51607 or equivalent standard, min. octane number 95 (RON) or 85 (MON)

- To close fuel cap **2**:
  – Place the cap in position, turn it clockwise as far as it will go and lock it

NOTE

Hold the tank cap while locking it.

- Push fuel-tank flip **1** down until it engages with an audible click

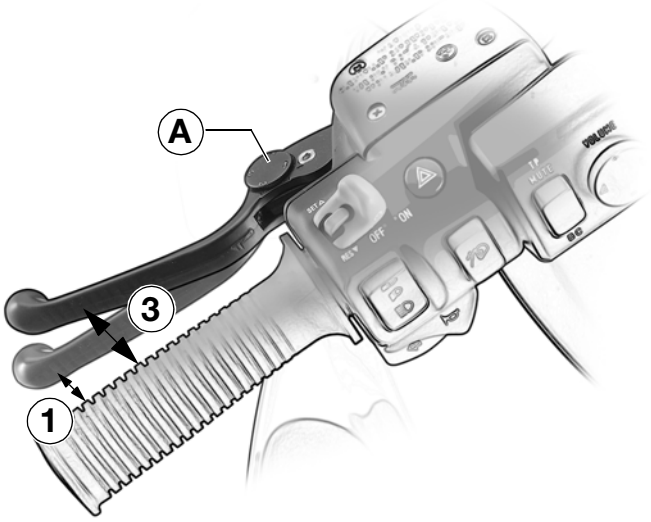
Capacity

– Total capacity: 6.3 gals. (24 liters)

– A **yellow** warning light **3** comes on when there are approximately 1.1 gals. (4 liters) of fuel left in the tank

NOTE

The warning light and fuel gauge function only when the ignition is on.



Clutch lever, adjusting

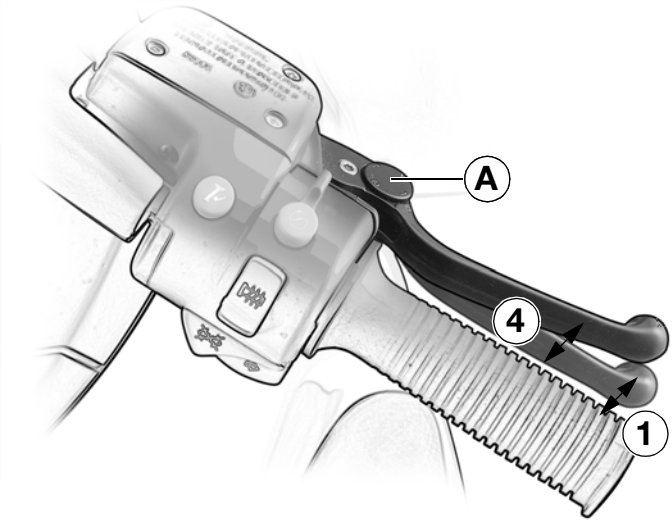
⚠ CAUTION

Sudden changes in play or spongy action indicate a fault in the hydraulic system.
If you are doubtful about the reliability of the hydraulic clutch operating system consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

⚠WARNING

To prevent air from entering the hydraulic circuit of the clutch: do not turn the fitting on the handlebar.

- Turn knob **A** to set the most comfortable span:
– Setting **1**: minimum span
– Setting **3**: maximum span



⚠WARNING

To prevent air from entering the brake circuit: do not turn the fitting on the handlebar.

Adjusting the handbrake lever

- Turn knob **A** to set the most comfortable span:

– Setting **1**: minimum span
– Setting **4**: maximum span

Work on the brake system

⚠WARNING

To ensure reliability have all work on the brake systems performed by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Brake system, checking

⚠WARNING

Sudden changes in play or spongy action of the brake lever indicate a fault in the brake system.
Before riding off, therefore, always check the resistance of the front and rear brake levers and test operation of the brakes.
Do not ride the motorcycle if you have any doubts about the safety of the brake system.
Immediately seek the advice of a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

⚠WARNING

Have the brake pads replaced before they wear to the minimum permissible thickness: have the work performed by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Checking brake pads

Brake pad wear depends on your personal style of riding. In order to ensure the dependability of the brake system: do not permit the brake pads to wear past the minimum permissible thickness (➠ Maintenance Instructions, Chapter 2).

Checking brake fluid level

⚠WARNING

On a motorcycle equipped with BMW Integral ABS, the brake fluid level in the reservoir (➠ 52) does NOT drop as the brake pads wear.

⚠WARNING

Have the brake system checked immediately by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer, if the brake fluid level in the reservoir of the brake system (➠ 52) drops below the MIN mark.

Changing the brake fluid

⚠WARNING

Brake fluid is exposed to severe thermal loads, and absorbs moisture from the atmosphere.
Consequently, the brake fluid must be changed regularly (➠ Maintenance Instructions, Chapter 1) by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

RESIDUAL BRAKING FUNCTION

⚠WARNING

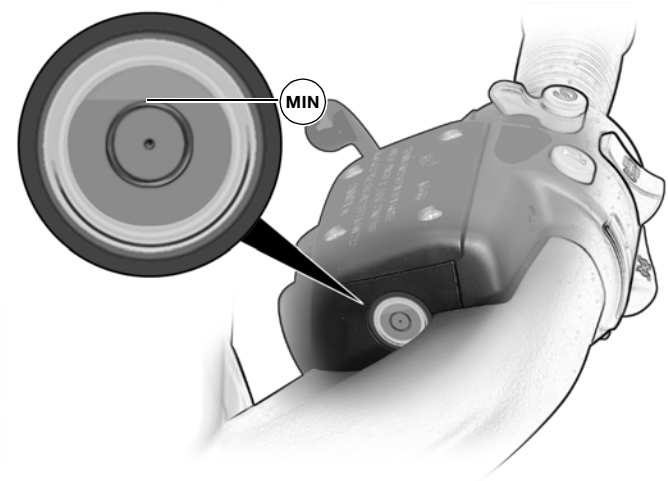
When the ignition is switched off, before and during self-diagnosis (➠ 88), or if the BMW Integral ABS fails, only a RESIDUAL BRAKING FUNCTION (➠ 87) remains available for slowing the motorcycle.
When the RESIDUAL BRAKING FUNCTION is active, you must apply CONSIDERABLY higher pressure to the brake levers in question in order to apply the brakes, and lever travel is longer.
When the RESIDUAL BRAKING FUNCTION is active, the ABS function is unavailable in the brake systems in question.

⚠WARNING

When the RESIDUAL BRAKING FUNCTION is active, maintain a defensive riding style and proceed immediately to the nearest BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

NOTE

When the RESIDUAL BRAKING FUNCTION for the front brake is active, it is advisable to set adjuster **A** (➠ 47) of the handbrake lever to position **4**.



Checking front brake fluid level

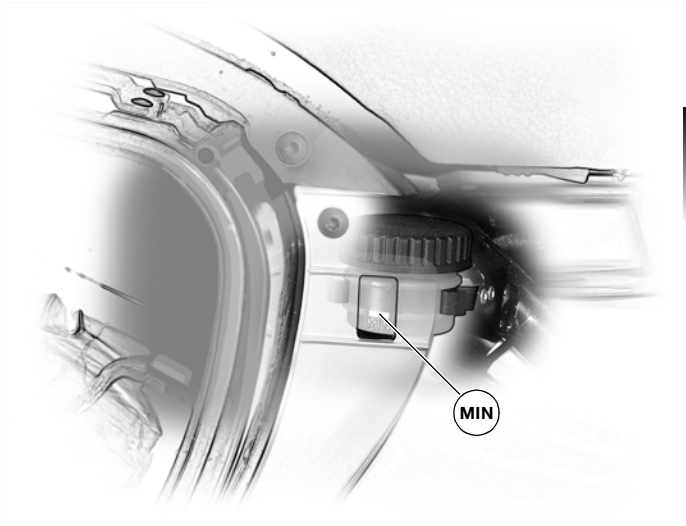
⚠WARNING

Never permit the brake fluid level to drop below the minimum level (MIN mark).

- Place the motorcycle on its main (center) stand
  – Make sure the ground is level and firm.
- Turn the steering fully to the left; the fluid reservoir must be horizontal
- Check brake fluid level in display
  MIN Minimum level (top of marking ring)

NOTE

The brake fluid level in the brake fluid reservoir remains constant despite wear of the brake pads.



Checking rear brake fluid level

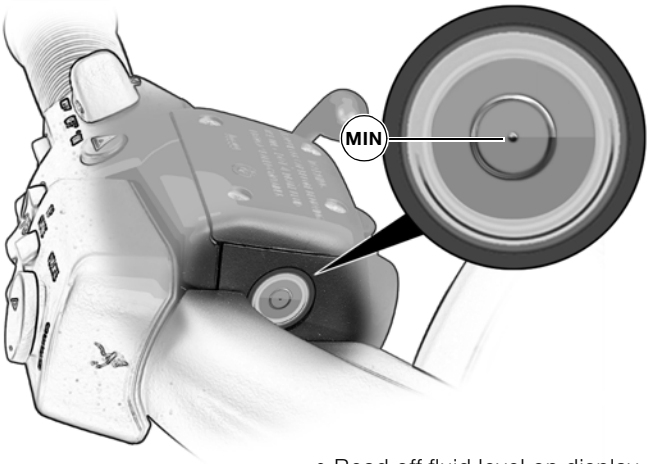
⚠WARNING

Never permit the brake fluid level to drop below the MIN mark on the brake fluid reservoir

- Place the motorcycle on its main (center) stand
  - Make sure the ground is level and firm
- Open the right case
- Check the brake fluid level through the window
  MIN minimum level

NOTE

The brake fluid level in the brake fluid reservoir remains constant despite wear of the brake pads.



Checking the fluid level in the clutch fitting

⚠WARNING

Never permit the fluid level to drop below the middle of the display (MIN)

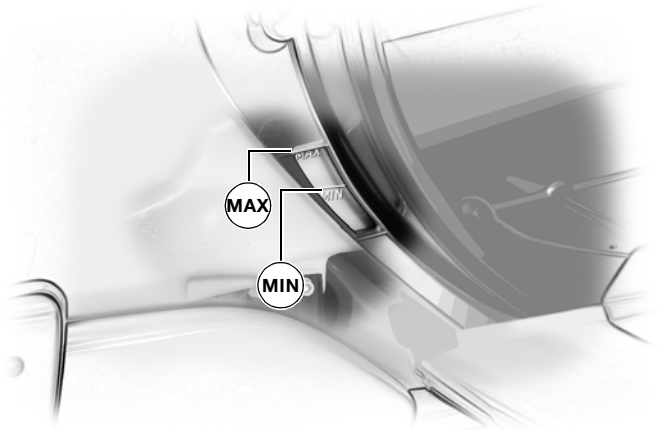
- Place the motorcycle on its main (center) stand
  – Make sure the ground is level and firm.
- Turn the steering fully to the right;
  the fluid reservoir must be horizontal
- Read off fluid level on display
  MIN Minimum level (center of display)

NOTE

The fluid level in the reservoir rises as the clutch plate wears.

⚠ CAUTION

If the fluid level drops, assume there is a defect in the clutch system.
Have the clutch system checked immediately by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.



Checking coolant level

⚠ CAUTION

Always keep the coolant level above the minimum mark. Check coolant level only when the engine is cold.

- Place the motorcycle on its main (center) stand
  – Make sure the ground is level and firm.
- Open the left case (➠ 32)
- Check coolant level at the expansion tank, using torch if necessary:
  MAX Maximum level
  MIN Minimum level

⚠ CAUTION

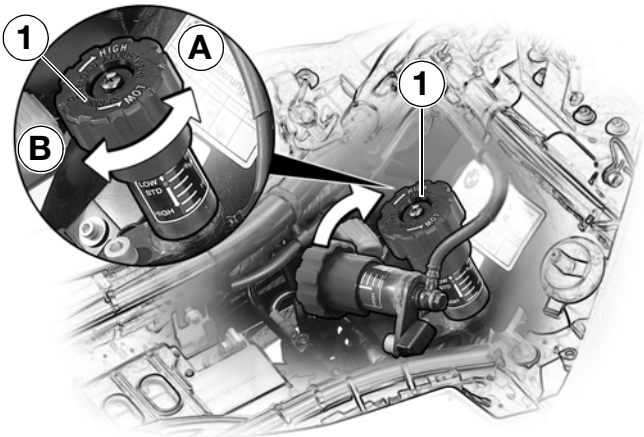
Never overfill the expansion tank underneath the front seat.

- Add coolant if necessary
- Close the left case (➠ 32)

NOTE

If the expansion tank is full and coolant temperature is high (as indicated by red warning light ➠ 10) or coolant consumption is excessive, consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Spring preload



⚠WARNING

Before the journey starts, adjust spring preload to suit the gross weight/load on the motorcycle.

Adjusting spring preload

- Opening the seat (➠ 34)
- Unfold knob **1**
- Steplessly adjust spring preload by turning knob **1** to suit the load on the motorcycle

One-up without luggage
(approx. 187 lbs (85 kg) rider, fully suited)

- Turn knob **1** as far as it will go in the “LOW” direction as indicated by arrow **A**

With luggage
(approx. 264 lbs (120 kg))

- Center knob **1** by turning it in the direction indicated by arrow **B**

Two-up with luggage
(330 lbs (150 kg) or more)

- Turn knob **1** as far as it will go in the “HIGH” direction as indicated by arrow **A**

⚠ CAUTION

Fold in knob **1** before closing front seat.

- Lock the front seat (➠ 35)

⚠WARNING

Use only wheels and tires that BMW Motorrad has approved for your motorcycle. For each size of tire BMW tests certain makes, and approves those that it certifies as roadworthy. If BMW Motorrad has not approved the wheels and tires it cannot assess their suitability or provide any guarantee of road safety. You can obtain detailed information on approved tire sizes and makes from your authorized BMW motorcycle retailer or by visiting www.bmw-motorrad.com on the Internet

Checking wheel rims

⚠WARNING

Have damaged wheel rims checked and, if necessary, replaced by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Checking tire tread

⚠WARNING

Comply with local legal requirements concerning minimum tread depth.
Worn tires can impair handling.

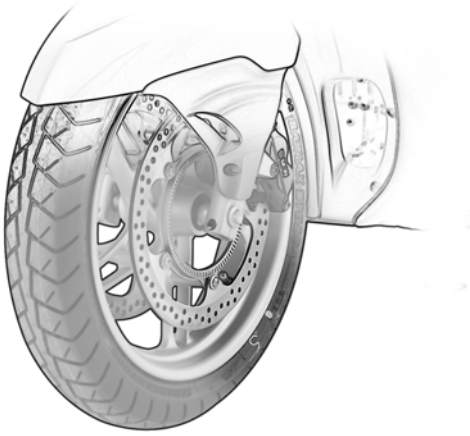
- Measure tread depth at the center of the tire tread

BMW's minimum tread depth recommendation:
Front ..... 0.08 in (2 mm)
Rear ..... 0.12 in (3 mm)

Checking tire pressures

⚠WARNING

Incorrect tire pressures have a considerable influence on handling and on tire life.
Tire pressures must be chosen to suit the total weight on the motorcycle. Do not exceed the gross weight limit or the tires' specified load capacity (➠ 61).



– If tires are cold:
- Remove valve caps
- Check/correct tire pressures

Tire pressures:

	Front	Rear
One-up	2.5 bar (36.3 psi)	2.9 bar (42.1 psi)
Two-up	2.5 bar (36.3 psi)	2.9 bar (42.1 psi)
Two-up with luggage	(2.5 bar (36.3 psi)	3.2 bar (46.4 psi)

- Screw the valve caps back on tightly

Screwing on valve caps

⚠WARNING

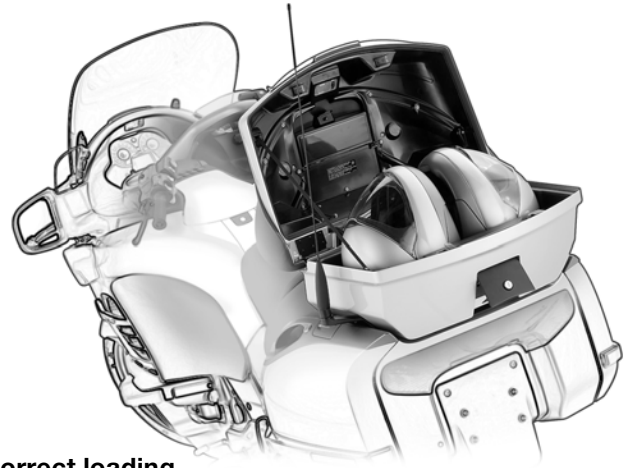
At high road speeds, tire valves have a tendency to open as a result of centrifugal force.
Use only metal valve caps with rubber seals.
Valve caps that are screwed on well prevent air from escaping suddenly.

⚠WARNING

BMW cannot examine or test each product of outside origin on the accessories and tires market to ensure that it can be used on or in connection with BMW motorcycles without constituting a safety risk. Even approval by an official inspection authority or an official permit (General Operating Permit) cannot always provide this guarantee. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW motorcycles and consequently, they are not sufficient in some circumstances.

NOTE

BMW accessories and other products approved by BMW can be obtained from your authorized BMW motorcycle retailer.



Correct loading

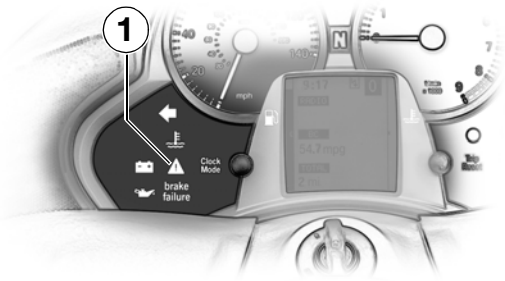
⚠WARNING

Overloading can impair the stability of your motorcycle, as can an incorrectly distributed load.

- Make sure that the weight is uniformly distributed between right and left
- Pack heavy items at the bottom and toward the inboard side
- Max. load in topcase: 22 lbs (10 kg)
- Max. load in each case (left and right): 22 lbs (10 kg)

⚠ CAUTION

Do not exceed the gross weight limit of 1,300 lbs (600 kg). Do not exceed the wheel load limits of 449 lbs (204 kg) at the front and 886 lbs (402 kg) at the rear. Adjust the rear-suspension spring and shock absorber settings and the tire pressures to suit gross weight (➠ 56-59). Gross weight consists of:
– motorcycle with full tank
– rider
– passenger
– luggage



Checking lights

⚠ CAUTION

Check that all lights are operational at the start of each journey.

NOTE

If turn indicator repeater flashes at twice the usual speed:
A turn indicator bulb is defective.
For instructions on changing bulbs in parking light, headlight (low beam and high beam), rear light, brake light and turn indicators:
(➠ Maintenance Instructions, Chapter 2).

Rear light

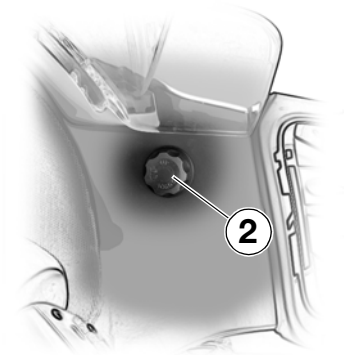
General warning light **1** (➠ 78)
ON:
Brake light or rear light defective. If the rear light is defective the brake light is dimmed and acts as a rear light. When you apply the brakes the brake light shines at full brightness.

Adjusting beam throw

⚠ CAUTION

Do not attempt to adjust headlight beam throw to suit load unless the motorcycle is at a standstill

Have the headlight basic setting adjusted by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.



Basic setting:

- Turn knob **2** counter-clockwise as far as it will go

Adjusting to suit load:

- Change the spring strut setting to suit load (➠ 56)

NOTE

When spring preload is adjusted (➠ 56), beam throw is automatically adjusted to suit the load on the motorcycle.

- Precision-adjust by turning knob **2**

Adjusting headlight for RHD/LHD traffic

If the motorcycle is ridden in a country where the opposite rule of the road applies, its asymmetric low headlight beam will tend to dazzle oncoming traffic. Consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer, to have the headlight adjusted to suit whichever rule of the road applies.

⚠ CAUTION

Adhesive films with unsuitable adhesives can damage the headlight lens.

Handling your motorcycle safely

Each motorcycle has a character all its own. It is time now for you to familiarize yourself with the way your own motorcycle behaves:
– acceleration
– roadholding
– cornering
– braking ...
These are all things you need to become familiar with.
Please remember too that if the motorcycle has not yet covered 600 miles (1,000 kilometers), the engine is not yet fully run in.

⚠ CAUTION

BMW Integral ABS incorporates a brake booster, so braking efficiency is significantly higher than with conventional brake systems.

⚠WARNING

The tires need to cover a certain distance before they acquire their full road grip (➠ 74).

If you ride at high speed, always bear in mind that various boundary conditions such as the spring preload setting and the shock-absorber setting, an unbalanced luggage load, loose clothing, low tire pressure, poor tire tread, and so on, can affect the handling of your motorcycle.

Safe motorcycling does not depend on the motorcycle and equipment alone.
Your own skill and common-sense are needed too.
The key to genuine safety on the road is a sensible balance between the motorcycle's technical features and the rider's skill, so that together they form a single efficient unit.
Riding safely in traffic calls for a sense of responsibility to your passenger and to other road users.

⚠WARNING

Do not ride the motorcycle after drinking alcoholic beverages. Even small amounts of alcohol or drugs, particularly if taken in conjunction with medicines, will adversely affect your perception and your ability to assess situations and make decisions, and also slow down your reflexes.

Take to the road now by all means, but think carefully about everything you do.

Risk of fatal accident

Your motorcycle is equipped with a digital electronic engine management system and a high-power ignition system.

⚠WARNING

When the engine is running or the ignition switched on, never touch electrically live parts of the ignition system or the digital engine electronics.

BMW Integral ABS

⚠WARNING

When the ignition is switched off or if the BMW Integral ABS fails, only a RESIDUAL BRAKING FUNCTION remains available for slowing the motorcycle (➠ 87).
Under these circumstances you must apply CONSIDERABLY higher pressure to the brake levers in order to apply the brakes, and lever travel is longer

Risk of poisoning

Exhaust fumes contain carbon monoxide, which is colorless and odorless but highly toxic.

⚠WARNING

Inhaling the exhaust fumes therefore represents a health risk and can even cause loss of consciousness with fatal consequences.
Do not run the engine in an enclosed space.

Catalytic converter

⚠ CAUTION

To avoid damage to the catalytic converter:

- Do not run the fuel tank dry
- Do not push start your motorcycle. Use jump leads instead
- Do not run the engine with a spark plug lead disconnected
- Do not exceed the engine-speed limits marked on the tachometer
- Comply with all specified maintenance intervals
- Stop the engine at once if it is misfiring
- In the event of misfiring or a severe drop in engine power, consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer

If misfiring or malfunction of the fuel-air mixture preparation system causes unburned fuel to reach the catalytic converter, there is a risk of it overheating and being damaged.

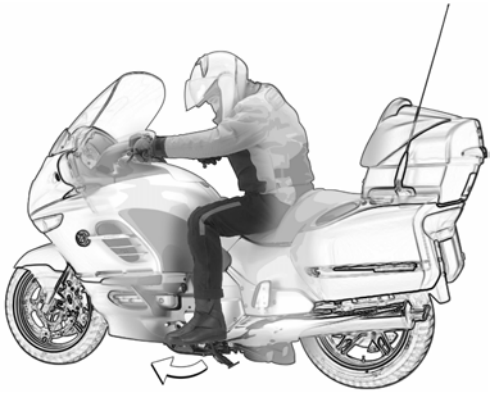
Risk of fire

High temperatures occur at the exhaust system, particularly if a catalytic converter is installed.

⚠WARNING

Make sure that whether riding or standing still or when the motorcycle is parked, no easily flammable material (for example hay, grass, leaves, clothing or luggage etc.) can come into contact with the hot exhaust system.
Do not allow the engine to idle unnecessarily or for prolonged periods of time – risk of overheating or fire.
Ride away immediately after starting the engine.

Side stand



Placing motorcycle on side stand

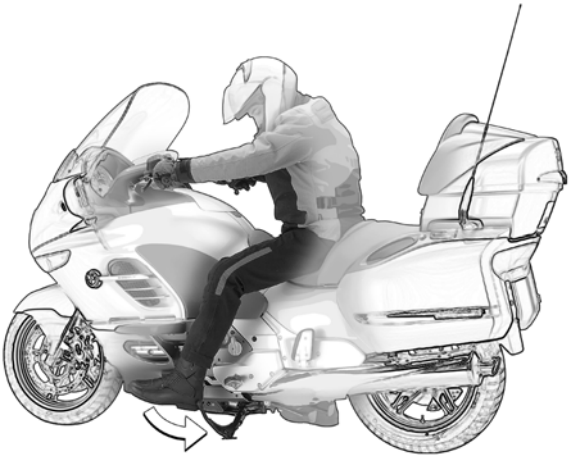
⚠WARNING

For safety reasons, never sit on the motorcycle with the side stand extended.

⚠ CAUTION

Stop the engine before using the side stand.
Make sure the surface under the stand is firm.
On a grade, the motorcycle should always face uphill; select 1st gear.

- Switch off the ignition
- Keep both feet on the ground
- Hold the left handlebar grip with your left hand
- Keep your right hand on the right handlebar grip and the handbrake lever
- Hold the motorcycle upright and balanced
- Use your left foot at the extension pin to extend the side stand fully (arrow)
- Slowly lean the motorcycle to the side until its weight is taken by the stand and dismount from the motorcycle
- Turn the handlebars to full left lock (➠ 13)
- **Check that the motorcycle is firmly supported**



Removing motorcycle from side stand

⚠WARNING

If the motorcycle is fitted with BMW Integral ABS, only the RESIDUAL BRAKING FUNCTION is available when the ignition is switched off (➠ 87). Make sure the side stand is fully retracted before you ride off.

– Allowing the motorcycle to roll with the side stand extended represents a safety risk.

- Turn the ignition key to the "**R**" or "**ON**" position (➠ 13) – handlebars unlocked
- Both feet on the ground, no weight on the motorcycle
- Hold the left handlebar grip with your left hand
- Keep your right hand on the right handlebar grip and the handbrake lever
- Slowly raise the motorcycle to the upright position and keep it balanced
- Sit on the motorcycle and use your left foot to retract the side stand

Electro-hydraulic center-stand system EHCS

NOTE

Your motorcycle has an electro-hydraulic center stand, **EHCS** for short, that makes it easy to park the motorcycle on its main stand.

Indicators and indicator lights of the EHCS

Indicator light	Indicator in the multi-function display	Meaning
Flashes at 2 Hz		**EHCS active** (➠ 88)
ON		**EHCS at limit position** (➠ 88)
Flashes at 4 Hz	Lightning flash	**EHCS system failure** – On-board system voltage is below 10 V – Control unit or its periphery defective
Flashes at 4 Hz	Hourglass	**EHCS system overload** – After it has been in operation for 10 seconds, the EHCS is disabled for 10 seconds. – If the EHCS is used more than three times in succession for 10 seconds, it is disabled for 3 minutes (you can cancel this disabled period by switching the ignition on and then off again).
Flashes at 4 Hz	Call symbol	**Operator error** – Side stand extended – Gear engaged – Handbrake/footbrake applied – Motorcycle not at a standstill



Placing motorcycle on main (center) stand

⚠ CAUTION

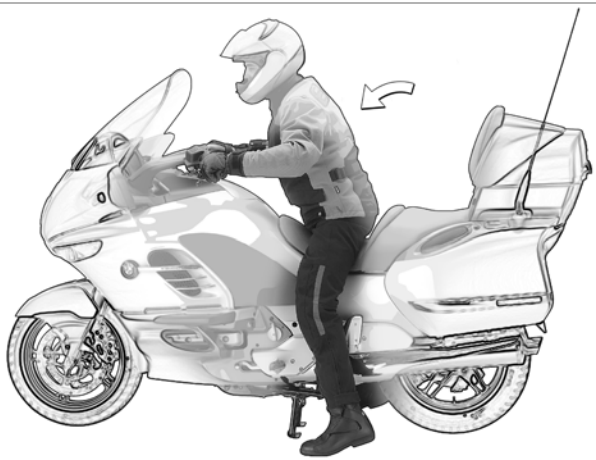
Always make sure the surface under the stand is level and firm.

- Switch on the ignition and allow the engine to idle if necessary
- Bring the motorcycle to a complete standstill
- Select neutral N
- Do not apply the handbrake or footbrake
- Hold the left handlebar grip with your left hand
- Hold the right handlebar grip with your right hand
- Sit upright on the motorcycle, with both feet on the ground to support your weight
- Press and hold down the button to extend the center stand
  – The **EHCS** indicator light flashes at 2 Hz
- When the stand reaches its limit position
  – The **EHCS** indicator light remains permanently ON

Release the button

- **Check that the motorcycle is firmly supported**
- Switch off the ignition and dismount

Main (center) stand



Removing motorcycle from main (center) stand

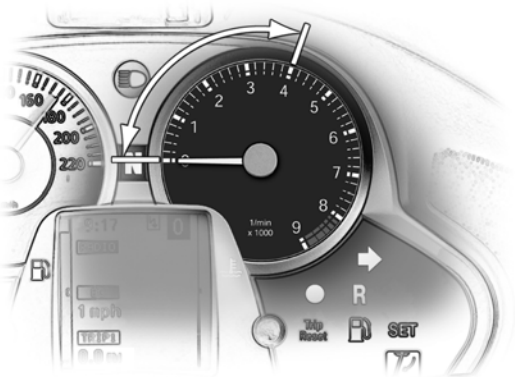
⚠WARNING

For safety reasons, never sit on the motorcycle with the main stand extended.
If the motorcycle is fitted with BMW Integral ABS, only the RESIDUAL BRAKING FUNCTION is available when the ignition is switched off (➠ 87).

⚠ CAUTION

Make sure the main stand is fully retracted before you ride off.

- Select neutral N
- Turn the ignition key to the "**R**" or "**ON**" position (➠ 13)
  – handlebars unlocked
- Both feet on the ground, no weight on the motorcycle
- Hold the left handlebar grip with your left hand
- Hold the right handlebar grip with your right hand
- With both feet on the ground, push the motorcycle forward off the center stand
- Keep the motorcycle balanced and sit on the seat
- **Check that the main stand has fully retracted**



Running-in engine speeds

From 0 to 600 miles (1,000 km)

- Engine speed max. 4,000 rpm and no full-load acceleration
- Do not omit the first inspection after 600 miles (1,000 km).

Make an appointment with your authorized BMW motorcycle retailer in good time, so that the work can be performed punctually.

From 600 to 1,200 miles (1,000 to 2,000 km)

- Engine speeds can be gradually increased after 600 miles (1,000 km)
- Avoid lengthy periods at full load until 1,200 miles (2,000 km) have been covered

⚠ CAUTION

Exceeding the specified engine speeds while running in will contribute to premature engine wear.

NOTE

While running in the motorcycle, vary the throttle opening and engine-speed range frequently.
Try to do most of your riding during this initial period on twisting, fairly hilly roads rather than high-speed main roads and highways.

Running in new tires

⚠WARNING

New tires have a smooth surface. This must be roughened by riding in a restrained manner at various heel angles until the tires are run in.
This running in procedure is essential if the tires are to reach their maximum level of grip.

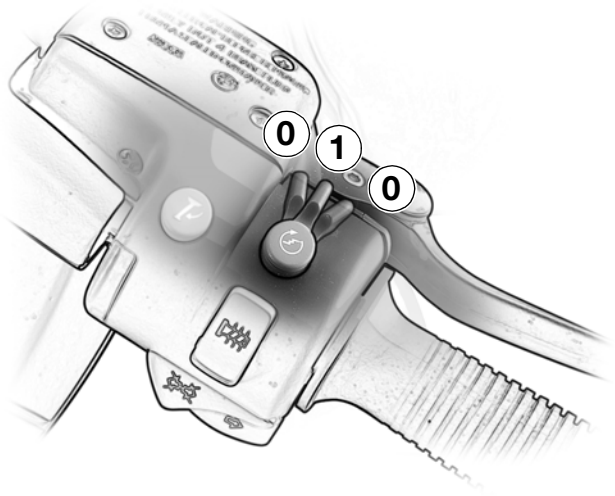
Running in new brake pads

⚠WARNING

New brake pads must "bed down" and therefore do not achieve their optimum friction levels during the first 300 miles (500 km).
This slight initial reduction in braking efficiency can be compensated for by exerting greater pressure on the lever.
Try to avoid all unnecessary hard braking during this initial period.

⚠ CAUTION

Comply with the notes on BMW Integral ABS (➠ 84-91).



Switching on the ignition

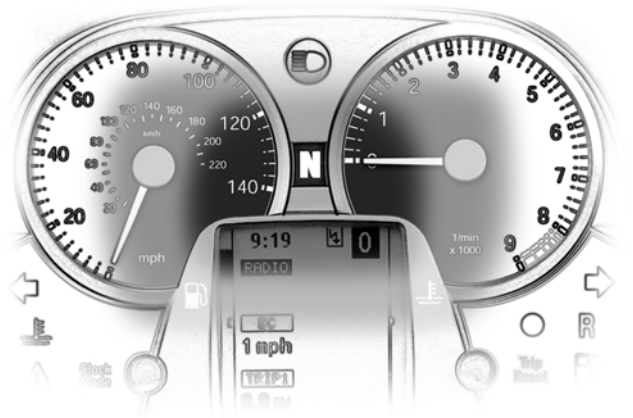
– Move the kill switch to the run position **1**
• Ignition key **ON**

In an emergency only:

• Move the kill switch to the **0** position.
– The electronic engine management, fuel pump and starter motor electrical circuits are de-energized

NOTE

If you move the kill switch to the **0** position while the ignition is on (switch in **ON** position), the BMW Integral ABS remains operational (➠ 84-91).



Fully retract the side stand

NOTE

If the side stand is extended and a gear engaged, you cannot start the motorcycle.

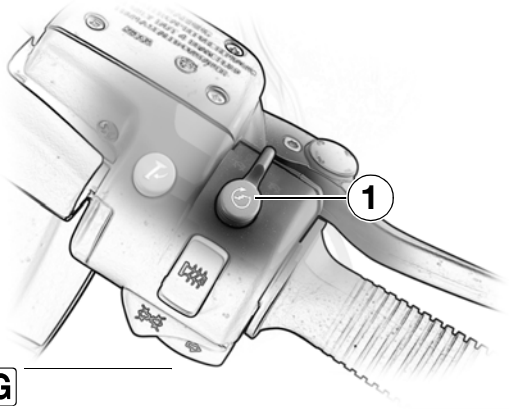
Select neutral

– Neutral indicator light **green** N is on (➠ 10)
– Gear indicator shows “0”

NOTE

Engine does not start:
– Move the gear lever to the N position or disengage the clutch

Engine stops when first gear is engaged:
– Fully retract the side stand; if necessary, consult the troubleshooting chart (➠ Maintenance Instructions, Chapter 2)



Starting

⚠WARNING

Do not allow the engine to idle unnecessarily or for prolonged periods of time – risk of overheating or fire. Ride away immediately after starting the engine. Avoid high engine speeds after a cold start.

⚠ CAUTION

If you attempt to start the engine when the battery is flat, you will hear the relay chattering. Further attempts will damage the starter relay and starter motor. Before repeating the attempt to start the engine: recharge the battery (➠ Maintenance Instructions, Chapter 2).

NOTE

Do not turn the throttle twistgrip when starting the engine.

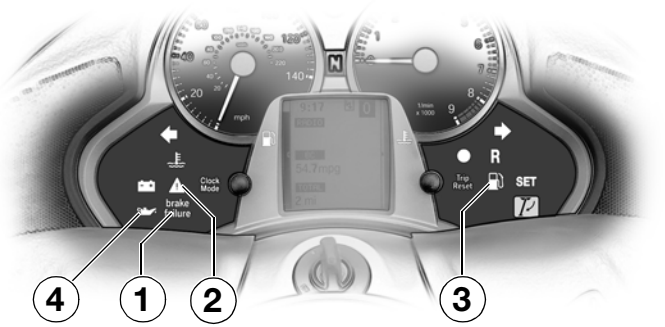
- Press starter pushbutton **1**

– The engine starts

- Gently turn the throttle twistgrip

NOTE

At ambient temperatures below 32 °F (0 °C), pull the lever to disengage the clutch when starting the engine.



ABS warning light

The ABS warning light **1** lights up if the BMW Integral ABS develops a fault (➠ 91).

Warning light, general

General warning light **2** lights up if the BMW Integral ABS develops a fault (➠ 91), or if the tail light or brake light is defective.

Low fuel level

When warning light **3** comes on, there are still approximately 1.1 gals. (4 liters) of fuel in the tank.

Engine oil pressure

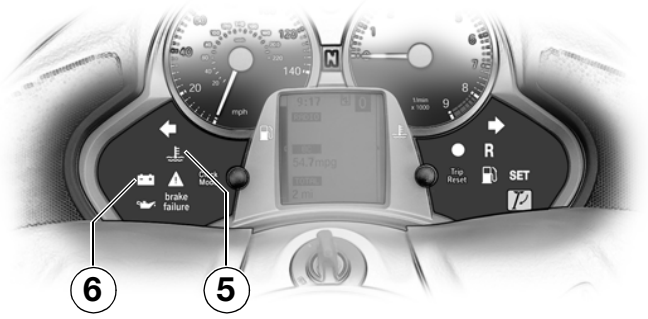
Warning light **4** goes out above idle speed.

⚠ CAUTION

If warning light **4** comes on during the journey, take the following action as soon as traffic conditions permit:

- Disengage the clutch
- Operate the kill switch
- Bring the motorcycle safely to a halt
- Check engine oil level (➠ 43)

Add with fresh oil if the oil level is low. If the warning light for engine oil pressure lights up even though the oil level is correct, it is absolutely essential to consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.



Coolant temperature
Warning light **5 (red)** goes out when the engine is started, above idle speed.

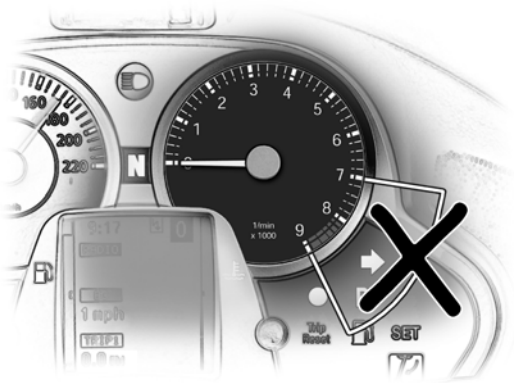
⚠ CAUTION

If the coolant temperature warning light **5** comes on, stop the engine and allow it to cool down.
Check coolant level in the expansion tank (➠ 55).
If the expansion tank is full, but the warning light remains on, or if coolant consumption is excessive, consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Battery charge current
Warning light **6** goes out above idle speed.

⚠ CAUTION

If warning light **6** comes on while the motorcycle is being ridden:
consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.



Engine speed

Choose engine speeds in accordance with the coolant temperature reading, and do not use maximum engine speeds until the engine has reached its regular operating temperature.

When the tachometer needle enters the red zone on the dial, the fuel supply is interrupted in order to protect the engine against over-revving, as you will notice because the engine "stutters".

⚠WARNING

Never run the engine with the needle of the tachometer in the red zone.

Load changes

⚠WARNING

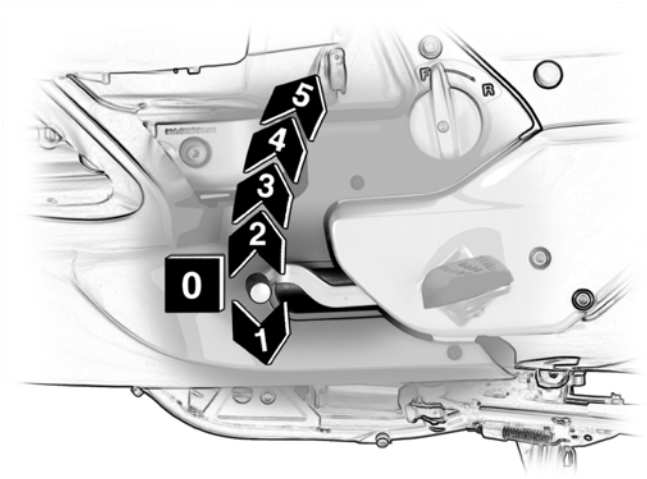
Try not to open or close the throttle abruptly, particularly on wet or slippery roads.

Gear shifts

NOTE

Never slip the clutch excessively when changing gear. Vary your speed only by using the throttle in a suitable gear, not by slipping the clutch.

The digital cockpit display shows which gear has been selected (➠ 10).



Moving away/upshifts:

- Pull the clutch lever in
- Press down on the gearshift lever (to select first gear) and take your foot off the lever
- Smoothly reengage the clutch
- Increase engine speed slightly as necessary
- Accelerate when the clutch is fully engaged
- For upshifts into 2nd, 3rd, 4th and 5th gears, proceed in the same way, but lift the gear lever with your foot

Downshifts:

- Close the throttle twistgrip
- Pull the clutch lever
- Select the next-lowest gear: Press the gearshift lever in the direction opposite to that indicated by the arrow
- Smoothly reengage the clutch

Wet brakes

After the motorcycle has been washed, ridden through water or ridden in the rain, the brake disks and pads may be wet (or iced-over in winter), and may not take effect immediately.

⚠WARNING

The brakes have to dry before they start to bite.

Salt on brakes

The brakes may fail to take effect immediately if the motorcycle was ridden on salt-covered roads and the brakes were not applied for some time.

⚠WARNING

The layer of salt on the brake disks and pads has to be worn off before the brakes start to bite.

Oil and grease on brakes

⚠WARNING

Brake disks and pads must be free from oil or grease.

Dirt or mud on brakes

When you ride on loose surfaces or muddy roads, the brakes may fail to take effect immediately because of dirt or moisture on the disks or brake pads.

⚠WARNING

The brakes must first be applied until the disks and pads are clean.
Dirt on the brakes increases the rate of pad wear.

⚠WARNING

If the brake lever can be moved right to the limit of its travel, this indicates a mechanical or hydraulic fault.
The brake system is defective.
Immediately consult a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

Sensitive electronic control

It takes skill and sensitive control of the brakes to pull up safely on a motorcycle. If the front wheel brake locks and the wheel skids, the necessary longitudinal and lateral stabilizing forces are lost, and a fall can result.

For this reason, the rider seldom makes full use of available braking performance in an emergency.

BMW Integral ABS is the latest-generation BMW ABS development: by preventing both wheels from locking and optimizing braking-force distribution by means of the integral function, it offers much improved braking performance (➠ 86). Full use is made of technical braking capacity to minimize braking distances, even when road conditions are poor. When the motorcycle is ridden in a straight line, the BMW Integral ABS is able to handle emergency braking safely.

Extra safety reserves

But remember: the potentially shorter braking distances which BMW Integral ABS permits must not be used as an excuse for careless riding. ABS is primarily a means of ensuring a safety margin in genuine emergencies.

- You have to familiarize yourself with the new, electronically assisted braking. Try the brakes several times when you take your motorcycle out for the first time. Find out for yourself how the brakes feel
- Never ride without due care and caution, or assume that good fortune will protect you from your own foolhardiness
- Keep within the allowable speed limits
- Take care when cornering. When you apply the brakes on a corner, the motorcycle's weight and momentum take over and even BMW Integral ABS is unable to counteract their effects.

Fully integral brakes

The integral brake function interlinks the front and rear brakes, so both wheels are braked when you operate a brake lever.

The electronic controller in the BMW Integral ABS computes the braking-force distribution between front and rear wheels, and applies the brakes accordingly.

Braking-force distribution depends on load and is recalculated every time the ABS controller comes into action.

In a fully integral brake configuration, the integral braking function is activated by either the handbrake lever or the brake pedal.

Brake booster

The hydraulic pump in the BMW Integral ABS actively boosts the braking force acting on the wheel when the brakes are applied.

By boosting the braking force in this way, the BMW Integral ABS achieves higher braking efficiency than standard brake systems.

ABS - anti-lock brake system

ABS prevents the wheels locking under heavy braking when the motorcycle is traveling in a straight line, thus contributing significantly to road safety.

RESIDUAL BRAKING FUNCTION

If the BMW Integral ABS develops a fault, a RESIDUAL BRAKING FUNCTION only is available in the brake circuits in question.
The RESIDUAL BRAKING FUNCTION is the braking efficiency without the hydraulic servo assistance of the BMW Integral ABS.
Under these circumstances, therefore, you must apply CONSIDERABLY higher pressure to the brake levers in question in order to apply the brakes, and lever travel is longer.
When the RESIDUAL BRAKING FUNCTION is active, the ABS function is unavailable in the brake system in question.
When the RESIDUAL BRAKING FUNCTION is active, the integral braking function is partially or entirely unavailable.

⚠WARNING

When the RESIDUAL BRAKING FUNCTION is active, maintain a defensive riding style and proceed immediately to the nearest BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

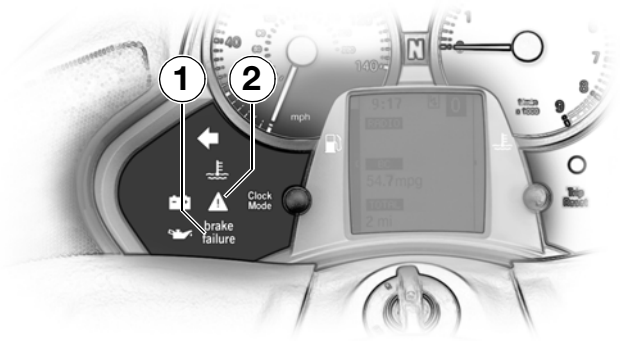
NOTE

When the RESIDUAL BRAKING FUNCTION for the front brake is active, it is advisable to set adjuster **A** (➠ 47) of the handbrake lever to position **4**.

The RESIDUAL BRAKING FUNCTION is active under the following circumstances:
– Ignition off
– Before and during self-diagnosis (➠ 88)
– Fault in the BMW Integral ABS (➠ 91)

NOTE

When the RESIDUAL BRAKING FUNCTION is active for both brake circuits, the noise of the pump is no longer audible when you operate the brake levers.



Self-diagnosis with pull-away test

The BMW Integral ABS performs self-diagnosis and a pull-away test to ensure its operability. Self-diagnosis is performed automatically when you switch on the ignition.

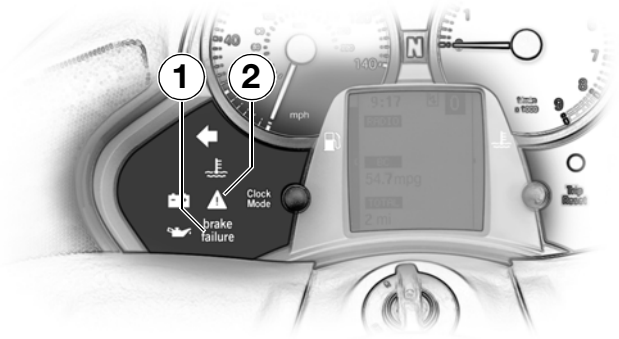
⚠WARNING

Self-diagnosis is not performed unless both brake levers are in their fully released positions.
Only the RESIDUAL BRAKING FUNCTION is available until self-diagnosis is completed (➠ 87).

- Release the brake levers, if necessary
- Switch on the ignition

Initially:
– ABS warning light **1**: Flashes at 4 Hz
– General warning light **2**: ON
➠ Self-diagnosis is in progress

Then:
– ABS warning light **1**: Flashes at 1 Hz
– General warning light **2**: OFF
➠ Self-diagnosis successfully completed



- Start the engine.
- Move off

– ABS warning light **1**:
OFF (as of approx. 3 mph (5 km/h) road speed)

➠ Pull-away test successfully completed

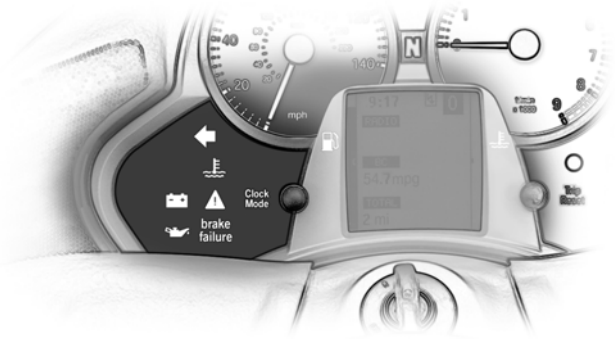
➠ BMW Integral ABS is available

NOTE

Flashing at 1 Hz = 1 flash per second (slow flashing)
Flashing at 4 Hz = 4 flashes per second (fast flashing)

NOTE

Starting on grades:
Always switch on the ignition with gear engaged, clutch lever released and both brake levers released.
Self-diagnosis cannot be performed if you do not follow this procedure.
When self-diagnosis completes, apply the brakes, disengage the clutch, and start the engine.



⚠WARNING

If the BMW Integral ABS fails in both brake circuits, a RESIDUAL BRAKING FUNCTION only is available (➠ 87).

⚠WARNING

If the RESIDUAL BRAKING FUNCTION (➠ 87) is active, maintain a defensive riding style and proceed immediately to a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

⚠WARNING

If there is a fault in the ABS system, the reserves of safety normally afforded by ABS are not available until the defect has been put right.
There is a risk of dropping the motorcycle if the brakes are applied too hard and the wheels lock or the rear wheel lifts clear of the ground as a result of a high level of tire adhesion. Have the defect rectified immediately by a BMW-certified workshop, preferably an authorized BMW motorcycle retailer.

BMW Integral ABS - troubleshooting chart

Warning light, general ⚠	ABS warning light ABS	Malfunctions
OFF	ON	Only RESIDUAL BRAKING FUNCTION available in both circuits (➠ 87)
OFF	Flashes at 1 Hz	ABS not available Pull-away test not completed (➠ 88)
OFF	Flashes at 4 Hz	Only RESIDUAL BRAKING FUNCTION available in both circuits (➠ 87) Self-diagnosis not completed (➠ 88)
ON	OFF	Rear/brake light defective (➠ Maintenance Instructions, Chapter 2) cruise-control system not available
ON	Flashes at 1 Hz	At least one brake circuit without ABS (➠ 90)
ON	Flashes at 4 Hz	At least one brake circuit in RESIDUAL BRAKING FUNCTION mode (➠ 87)
Alternate flashing at 1 Hz	Alternate flashing at 1 Hz	Fluid level in BMW Integral ABS too low. Check the motorcycle as follows: – Ignition OFF: is brake pressure OK at the brake levers? – Are the brakes acting on both wheels? – Is the brake system leaktight, no signs of brake fluid escaping? The brake system is defective if the test outcome is negative.
Alternate flashing at 4 Hz	Alternate flashing at 4 Hz	Fluid level in the BMW Integral ABS is too low, perform the checks listed above. Only RESIDUAL BRAKING FUNCTION available in at least one circuit (➠ 87) **⚠WARNING** **Do not ride the motorcycle if you have any doubts about the dependability of the brake system.**



Know-how…
In recent years, motorcycles' technical design features have become more and more sophisticated.
Electronic engine management system, electronic ignition, integral brakes, the catalytic converter or the use of four valves per cylinder are clear signs that far more than basic technical knowledge may be needed to solve certain problems. In addition, high-tech materials are increasingly taking the place of conventional ones, which again calls for thorough and expert knowledge if they are to be handled correctly during repair work. To be sure of achieving the necessary standard, it is always advisable to consult your authorized BMW motorcycle retailer.

The authorized BMW motorcycle retailer employs staff who attend regular and comprehensive training courses.
Your authorized BMW motorcycle retailer also receives all the current technical information and is therefore fully aware of the latest developments.

…technical features…
The authorized BMW motorcycle retailer's staff has the experience and all the necessary facts at its disposal when it comes to solving problems quickly and effectively. Workshops are equipped with the latest technical facilities, for example the special tools developed by BMW, such as the **BMW** diagnosis system and exhaust emissions tester.

Regular visits to the workshop for routine servicing are strongly recommended even after the warranty period has elapsed. They are the only way to be genuinely certain that your BMW motorcycle is being kept in perfect working order.
For generous treatment of claims submitted after the warranty period has expired, evidence of regular maintenance by an authorized BMW motorcycle retailer is essential.
Certain signs of wear may otherwise not be noticed until it is too late to put them right at moderate cost.
The staff in the authorized BMW motorcycle retailer's workshop know every detail of your motorcycle and can take remedial action if necessary before minor faults develop into serious problems. By having the necessary repairs done properly and in good time, you save time and money in the long run.

...Service

You can obtain accurate advice in all cases, and make appointments with a firm completion deadline which we will comply with punctually. But the most gratifying feeling of all is that your BMW is in genuinely good shape when it leaves the authorized BMW motorcycle retailer's workshop – and above all, safe.

BMW Service Card

A Service Card is available for all new BMW motorcycles.
A wide range of emergency-assistance services are in place to help you in the unlikely event of a problem occurring somewhere far from home.
If you have a breakdown anywhere in Europe, just call our Central Emergency Service number from any telephone. Our experts are on duty there day and night to arrange assistance for you. They can provide practical advice on what to do next and can make arrangements on your behalf, for example notifying local emergency services anywhere in Europe, recovery and transportation of the motorcycle to the nearest authorized BMW motorcycle retailer, call a taxi for you, and even a replacement vehicle and hotel accommodation, if necessary.

BMW Service worldwide

And if your travels take you even further away from home, you have no need to worry: we are represented in more than 100 countries of the world.

NOTE

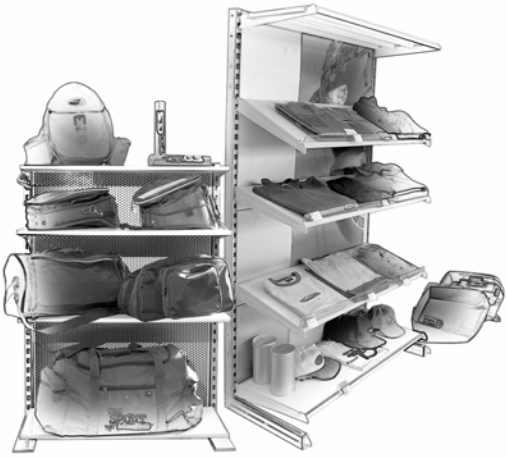
Call us if you have any questions about the BMW dealership network. You can contact us from any European country on a telephone hotline. The phone numbers are listed in the “Service Kontakt / Service Contact” booklet (see on-board documentation). Or if you prefer you can use the homepage address to contact us on the Internet.

Development…
Motorcyclists have an intensive relationship with nature. BMW has made sure that they continue to enjoy the best possible prospects for successful riding in the future.
This not only because your new BMW is available with exhaust emission control by closed-loop, three-way catalytic converter.

…waste disposal…
Behind the scenes, in the repair workshop, we do not neglect the pro-environmental aspects of our work either.
Wherever possible, we use environmentally acceptable, biodegradable materials. We ensure strict compliance with all environmental legislation, for example the correct disposal of old oil, which is now classified as hazardous waste in many countries.

…recycling
Alongside the correct disposal of materials that are potentially hazardous to the environment, recycling is being given increasing priority by BMW.
For example, plastics that are marked according to type can more easily be returned to the materials cycle. Remember: when it comes to making repairs to your motorcycle, the authorized BMW motorcycle workshop is far better equipped to protect the environment than you are at home.

BMW Motorrad accessories



Always an idea ahead
This is our motto – and it is one we live up to. For many years now, BMW has offered the enthusiast everything capable of enhancing the fascination of motorcycling. A unique program that is regularly updated and offers plenty of scope for choosing items according to individual preferences.
Ask your authorized BMW motorcycle retailer for the latest details of what can be upgraded on or retrofitted to your motorcycle.

Every accessory product is made to the same exemplary standards of design, function and quality as the motorcycle itself. At the end of the day, there is a great deal of experience involved here since all our engineers are themselves keen motorcycle riders who know what is really needed. Whenever development work starts on a new motorcycle, equipment items are also taken into consideration and their practical value confirmed by extensive testing.
This is your guarantee of the high quality you expect from BMW.

Cornering and braking need to be practiced

Develop a “sixth sense” for potentially dangerous situations. That means: look ahead, plan how to avoid possibly dangerous situations and study other road users' behavior with a degree of healthy skepticism.

– Take bends smoothly and rhythmically, avoiding braking and acceleration
– Approach bends slower than you feel they can be taken; a neat riding style will get you to your destination more safely than sheer speed
– Ride at the inner edge of the ideal line, look ahead and plan to leave the bend as smoothly as you entered it

Allow for reaction time when judging braking distances.

– At 30 mph (50 km/h), for instance, every second lost represents a further distance of about 45.9 ft (14 m) before the brakes are applied
– At 55 mph (90 km/h), this distance grows to 82 ft (25 m)

Practice applying the brakes with and without an extra load on the motorcycle, and study its reactions on various kinds of road surface.

Work up to the wheel lock limit gradually.

BMW has a worthwhile safety contribution to make in this area too – BMW Safety Training. These programs are a wonderful opportunity: systematic basic and follow-up training enables you to master situations close to the limit and keep your motorcycle under supreme control whatever happens.

Now it's your turn

- Regular care is important, with all functions checked before the journey starts.
- Use only genuine BMW accessories. These satisfy all safety requirements and are precisely matched to your BMW motorcycle.
- Have your motorcycle serviced only by the trained, expert personnel at your local authorized BMW motorcycle retailer.
- Do not under any circumstances install unapproved accessories. This can represent a safety risk, invalidate the motorcycle's general operating permit or cause you to lose your insurance cover.
- Technical modifications should always be entrusted to your authorized BMW motorcycle retailer.

NOTE

Your local authorized BMW motorcycle retailer can supply you with useful items to add to your motorcycle's toolkit and accompany the maintenance instructions.

– BMW Repair Manual
– BMW set of circuit diagrams

It's good to know you've thought of everything, isn't it?

Our aim is to make your journey safer

We want you to reach all your destinations safely – and we want you to enjoy riding your BMW as a constant source of relaxed pleasure and satisfaction.

A
ABS, 86
Accessories and loads, 60, 61
Adjusting beam throw, 62
Adjusting fins, 17
Adjusting the handbrake lever, 47
Adjusting windshield, 17
Allowable gross weight, 61
Antenna, 4
Anti-lock brake system
  Notes, 84-91
Audio system controls
  Passenger, 6

B
BMW Integral ABS, 84-90
  Brake fluid level, 52
  Brake-fluid reservoir, front brakes, 6
  Brake-fluid reservoir, rear brakes, 6
  Troubleshooting chart, 91
  Warning lights, 10
BMW Service Card, 94
Brake booster, 86
Brake fluid level
  Check
    Rear brake, 53
Brake pads, running in, 74
Brake system
  General, 48, 49
  With BMW Integral ABS, 50-53
Brake system, checking, 48

C
Cassette recorder/radio, 9
Catalytic converter, 67
Catalytic convertor
  Safety instructions, 67
Checking brake pads, 49
Checking oil level, 42
Checklist, 41
Clutch
  Fluid level, 54
Clutch lever, adjusting, 46
Cockpit
  Overview, 8, 9
Coolant level
  Check, 55
Coolant temperature, 78
Coolant temperature gauge, 8
Cruise-control system
  Notes, 21
  Operation, 22, 23, 24
  Switch, 14

E
Emergency off (kill) switch for ignition, 15, 75
Engine oil, 42, 43
  Oil filler neck, 43
Engine oil pressure
  Indicator light, 78
Engine speed, 80

F
Front brake
Brake fluid level, 52
Handbrake lever, 47
Front seat
Adjusting, 35
Locking, 35
Opening, 34
Front seat heating, 39
Fuel filler cap, 7, 44
Fuel gauge, 8
Fuel grade, 45
Fuel level, 78
Fully integral brakes, 86
Fuse box, 6

G
Gear shifts, 80, 81
General view
Left side, 4, 5
Right side, 6, 7

H
Handlebar fitting
Left, 14
Right, 15
Handlebar-mounted remote controls for audio system, 14
Hazard warning flasher switch, 14
Hazard warning flashers, 16
Heated handlebar grips, 15
Helmet holder, 5, 40
High-beam/low-beam headlight switch, 14
Horn, 14
Horn push, 14

I
Ignition key and steering lock, 8, 12, 13
Indicator and warning lights
ABS, 10, 78
Battery charge light, 10, 79
Coolant temperature, 10, 79
Cruise control, 11
Engine oil pressure, 10, 78
High-beam headlight, 11
Low fuel level, 11, 78
Neutral, 10
Reverser, 11
Turn indicator, right, 11
Instruments, cockpit, 8, 9
Integral brake function, 86
Integral brakes, 86

K
Keys, 12, 13

L
Left flashing turn indicator switch, 14
Lights
Beam throw, 62, 63
Notes, 62

M
Main (center) stand, 70, 71, 72
Motorcycle accessories, 96

N
Neutral (transmission), 76
Notes on safety
  General, 66

O
Octane number, fuel, 45
Odometer, 8
Oil filler neck, 6, 42, 43
Oil funnel
  Compartment for, 5
Oil level
  Check, 42, 43
  Display, 6
  Engine oil pressure, 11, 78
On-board computer, 8
  Ambient temperature, 30
  Average consumption, 29
  Average speed, 28
  Display dimming, 31
  Estimated residual range, 28
  Handlebar-mounted remote controls, 27
On-board documentation
  Compartment for, 5
Opening/closing cases, 32
Opening/closing topcase, 33
Overheating, 67, 77

P
Protecting the environment, 95

R
Radio/cassette recorder, 9
Rear seat
  Adjusting backrest, 36, 37, 38
Rear seat heating, 39
Refueling, 44
Remote control
  Audio system
    Handlebar-mounted, 14
    Passenger, 6
Remote controls
  On-board computer, 27
Repair kit for tubeless tires, 4
Repeaters
  Turn indicator, left, 10
Residual braking function, 51, 87
Reverser, 18
  Lever, 5
Riding, 80
Right flashing turn indicator switch, 15
Rims, 57
Running-in engine speeds, 73

S
Safety check, 41
Safety instructions
  Braking, 82
  Catalytic converter, 67

Seat
Adjusting, 35
Removing, 35
Seat heating, 7, 39
Seat opener, 4
Service worldwide, 94
Side stand, 68, 69, 75, 76
Socket
Rider and passenger, 5
Speedometer, 8
Spring preload, 4, 56
Starter button, 15
Starter switch, 15
Starting, 77
Stowage compartment
Torch, 7
Switch on the ignition, 75, 76

T
Tachometer, 8
Tank cap, 7
Tightening torques
Topcase, rear seat, 38
Tires
Inflation pressure, 59
Running in, 74
Tread depth, 57
Tools, 4
Torch
Compartment for, 7
Tread depth, tires, 58, 59
Trip meter, 8
Troubleshooting chart, 91
Turn indicator cancel switch, 15
Type plate, 7

V
Valve caps, 59

W
Warning light
Low fuel level, 78
Warning lights
ABS, 78
Battery charge light, 79
Coolant temperature, 79
Engine oil pressure, 78
General, 78
Warnings
braking, 82
Windshield adjustment
Switch, 14

Details described or illustrated in this booklet may differ from the motorcycle's actual specification as purchased, the accessories fitted or the national-market specification. Please note that no claims will be entertained on the basis of such discrepancies. Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.

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BMW Motorrad,
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Printed in Germany

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BMW Motorrad
Printed information

Order No.:
01 47 7 699 247
08.2005
2nd edition US / RF

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