BMW Motorrad

The Ultimate Riding Machine

Rider's Manual
K 1600 GT

Vehicle data/dealership details

Vehicle data

Model

Vehicle Identification Number

Colour code

Date of first registration

Registration number

Dealership details

Person to contact in Service department

Ms/Mr

Phone number

Dealership address/phone number (company stamp)

Welcome to BMW

We congratulate you on your choice of a vehicle from BMW Motorrad and welcome you to the community of BMW riders. Familiarise yourself with your new vehicle so that you can ride it safely and confidently in all traffic situations.

About this Rider's Manual

Please read this Rider's Manual carefully before starting to use your new BMW. It contains important information on how to operate the controls and how to make the best possible use of all your BMW's technical features. In addition, it contains information on maintenance and care to help you maintain your vehicle's reliability and safety, as well as its value.

Suggestions and criticism

If you have questions concerning your motorcycle, your authorised BMW Motorrad dealer will gladly provide advice and assistance.

We hope you will enjoy riding your BMW and that all your journeys will be pleasant and safe

BMW Motorrad.

01 41 8 522 671

Table of Contents

General instructions

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your motorcycle. All maintenance and repair work on the motorcycle is documented in Chapter 11. This record of the maintenance work you have had performed on your motorcycle is a precondition for generous treatment of goodwill claims.
When the time comes to sell your BMW, please remember to hand over this Rider's Manual; it is an important part of the motorcycle.

Abbreviations and symbols

CAUTION Low-risk hazard. Non-avoidance can lead to slight or moderate injury.

WARNING Medium-risk hazard. Non-avoidance can lead to fatal or severe injury.

DANGER High-risk hazard. Non-avoidance leads to fatal or severe injury.

ATTENTION Special notes and precautionary measures. Non-compliance can lead to damage to the vehicle or accessory and, consequently, to voiding of the warranty.

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

◀ Indicates the end of an item of information.

• Instruction.

» Result of an activity.

Reference to a page with more detailed information.

◁ Indicates the end of a passage relating to specific accessories or items of equipment.


Tightening torque.


Technical data.

OE Optional extras.
The vehicles are assembled complete with all the BMW Motorrad optional extras originally ordered.

OA Optional accessories. You can obtain BMW Motorrad optional accessories through your authorised BMW Motorrad dealer; optional accessories have to be retrofitted to the vehicle.

EWS Electronic immobiliser.

DWA Anti-theft alarm (Diebstahlwarnanlage).

ABS Anti-lock brake system.

DTC Dynamic Traction Control.

ESA Electronic Suspension Adjustment.

RDC Tyre pressure monitoring.

Equipment

When you ordered your BMW motorcycle, you chose various items of custom equipment. This Rider's Manual describes optional extras (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment which you have not ordered. Please note, too, that your motorcycle might not be exactly as illustrated in this manual on account of country-specific differences. If your BMW was supplied with equipment not described in this Rider's Manual, you will find these features described in separate manuals.

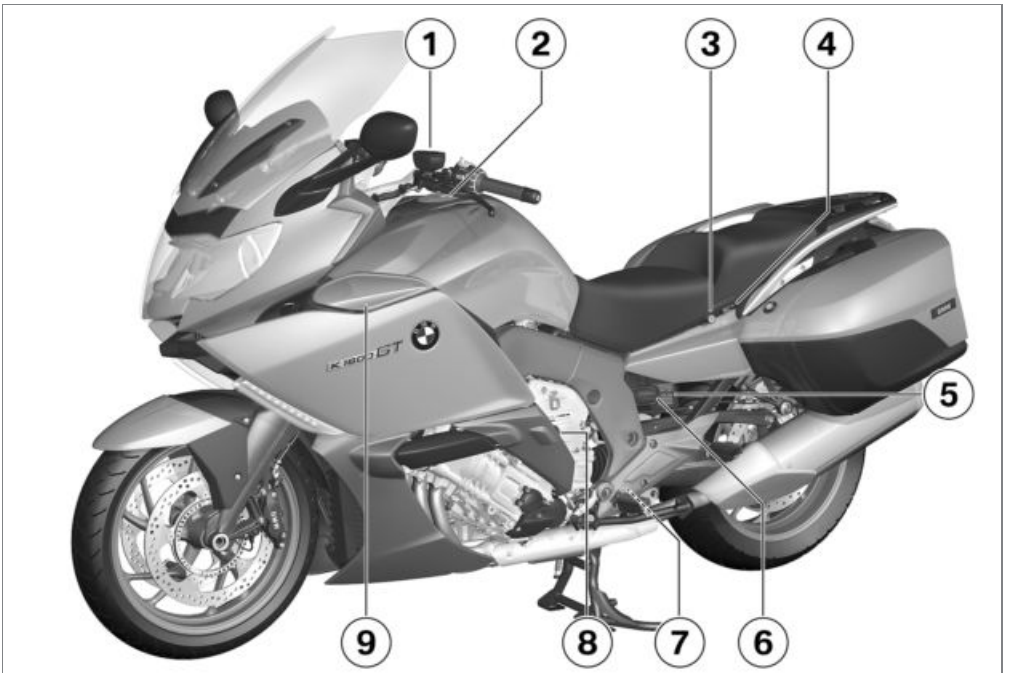
Technical data

All dimensions, weights and power ratings stated in the Rider's Manual are quoted to the standards and comply with the tolerance requirements of the Deutsches Institut für Normung e.V. (DIN). Versions for individual countries may differ.

Actuality

The high safety and quality standards of BMW motorcycles are maintained by constant development work on designs, equipment and accessories. Because of this, your motorcycle may differ from the information supplied in the Rider's Manual. Nor can BMW Motorrad entirely rule out errors and omissions. We hope you will appreciate that no claims can be entertained on the basis of the data, illustrations or descriptions in this manual.

General views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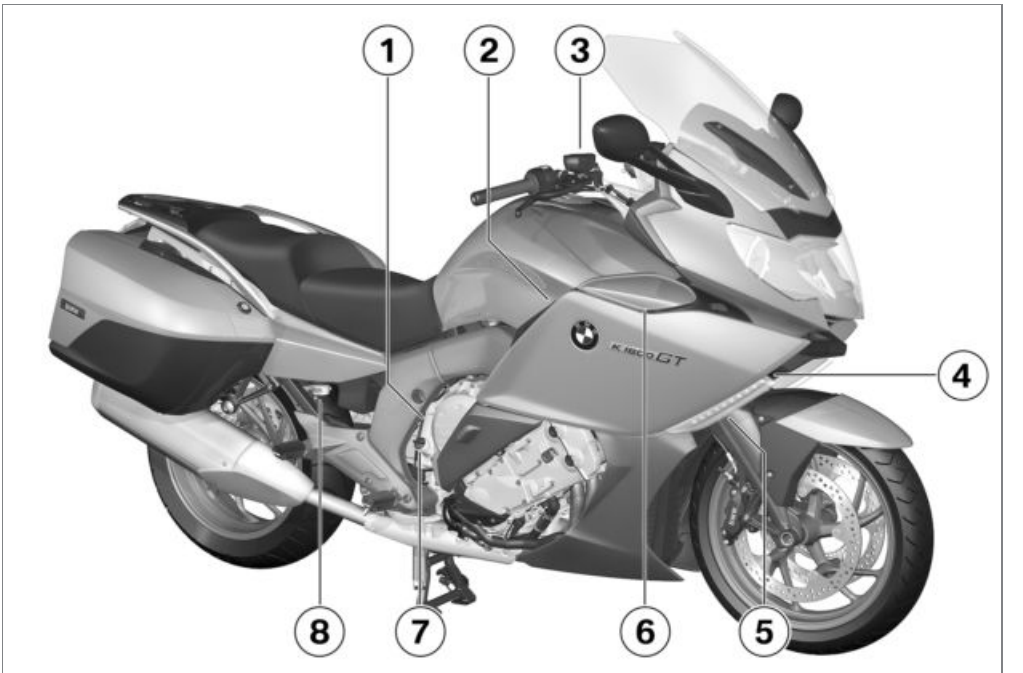
General view, left side

1 Clutch-fluid reservoir (➠ 143)
2 Fuel filler neck (➠ 105)
3 Seat lock (➠ 73)
4 Rear seat heating control (on rear seat) (➠ 70)
5 Payload table
Table of tyre pressures
6 Adjuster, spring preload (➠ 81)
7 Adjuster for damping characteristic (➠ 82)
8 Stowage compartment (➠ 79)
9 Slipstream deflector (➠ 76)


1
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K1600GT

General view, right side

1 Vehicle Identification Number (above the engine oil filler neck)
2 Power socket (➠ 122)
3 Brake-fluid reservoir, front (➠ 140)
4 Coolant level indicator (behind side panel) (➠ 142)
5 Type plate (on front suspension)
6 Slipstream deflector (➠ 76)
7 Engine-oil filler neck and oil dipstick (➠ 136)
8 Brake-fluid reservoir, rear (➠ 141)

Multifunction switch, left

1 High-beam headlight and headlight flasher (➠ 66)

2 – with daytime running light[OE]

Daytime riding light (➠ 63)

3 Cruise control system control (➠ 76)

4 Hazard warning flashers (➠ 68)

5 – with LED auxiliary headlights[OE]

or

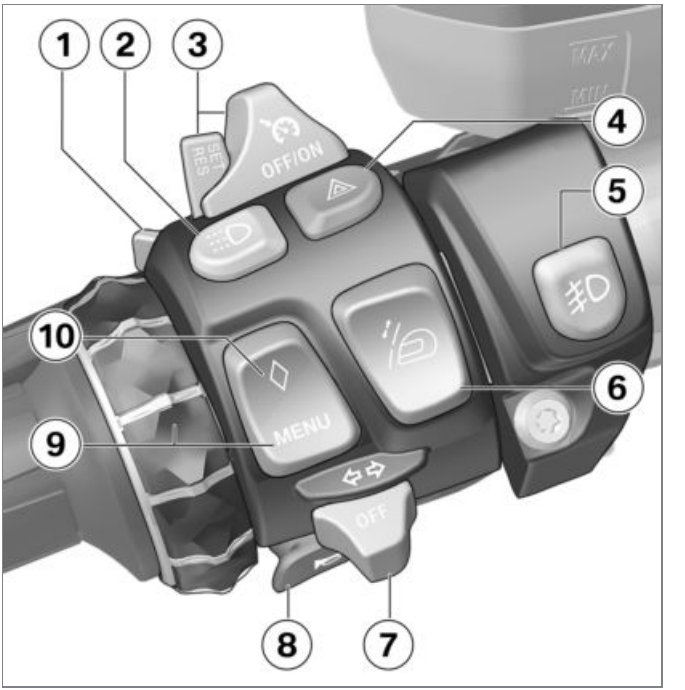
– with LED auxiliary headlights[OA]

Operation of the auxiliary headlights (➠ 67)

6 Windscreen control (➠ 75)

7 Operation of the turn indicators (➠ 68)

8 Horn



9 Multi-controller and MENU button
Operation of the multifunction display (➠ 57)
– with ECE audio system and preparation for navigation system[OE]
Operation of the audio system (see the appropriate operating instructions)
Control for DTC (➠ 72)
– with Electronic Suspension Adjustment (ESA)[OE]
Operating ESA (➠ 83)

10 Selecting favourite menu (➠ 60).

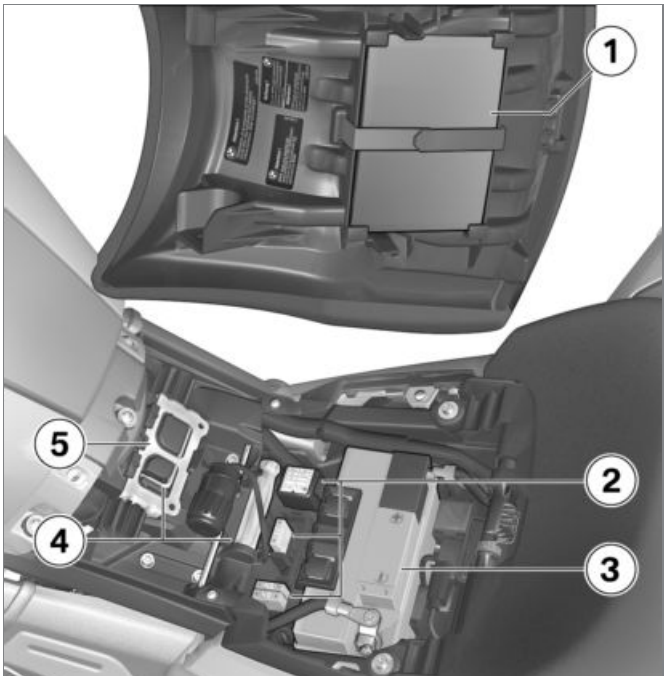
Multifunction switch, right

1 – with central locking system[OE]
Operation of the central locking system (➠ 84)

2 Selection of the ride mode (➠ 72)

3 Emergency off switch (kill switch) (➠ 69)

4 Starting engine (➠ 98)

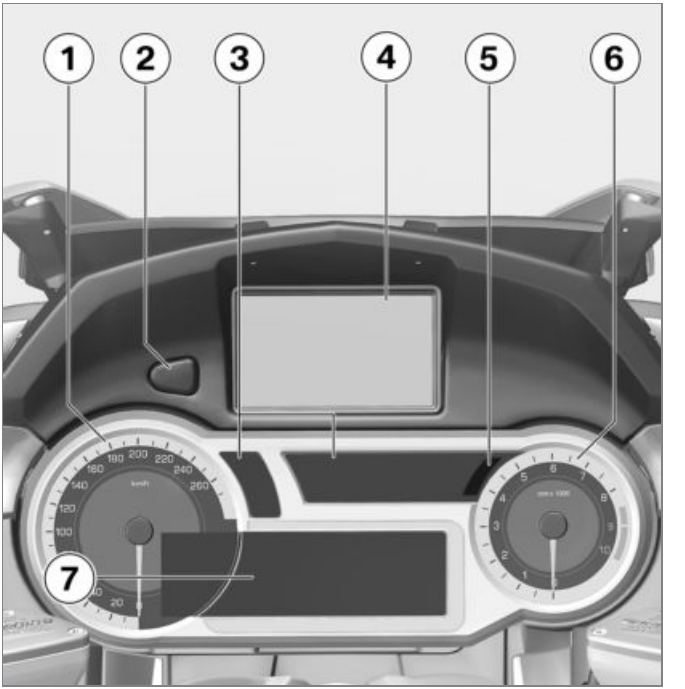


Underneath the seat

1 Rider's Manual
2 Fuses (➠ 160)
3 Battery (➠ 157)
4 Standard toolkit (➠ 136)
5 Seat-height adjustment (➠ 74)

Instrument panel

1 Speedometer
2 - with preparation for navigation device (OE)
Release for navigation slot
3 Warning and telltale lights (➠ 28)
4 – with preparation for navigation system OE
– with navigation system OA
Navigation device (➠ 123)
5 Ambient-light brightness sensor (for adapting the brightness of the instrument lighting)
6 Rev. counter
7 Multifunction display (➠ 22)



NOTICE

The brightness of the warning lights and telltale lights, the display and the instrument needle and gauge lighting is

adapted automatically to suit ambient brightness.◀

Status indicators

Multifunction display

1 Riding mode (➠ 72)

2 – with Hill Start Control OE
Hill Start Control Operation (➠ 78).

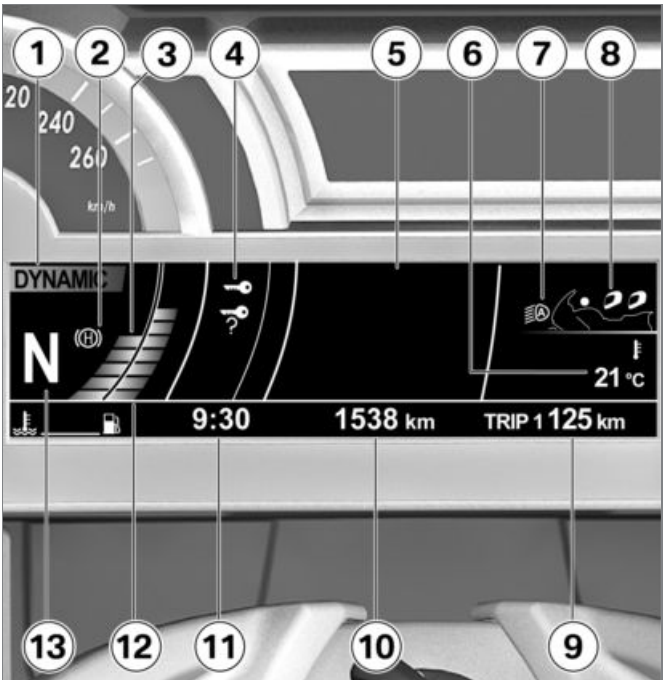
3 Coolant temperature

4 Warnings (➠ 31)

5 Menu area (➠ 57)
– with ECE audio system and preparation for navigation system OE
Area for messages relating to the audio system

6 On-board computer (➠ 61)
– with tyre pressure monitoring (RDC) OE
RDC readings

7 – with daytime running light OE
Daytime riding light (➠ 63)



8 Seat heating (➠ 70)
Grip heating (➠ 69)
– with Electronic Suspension Adjustment (ESA)[OE]
ESA settings (➠ 83)
9 Tripmeter (➠ 63)
10 Total distance covered
11 Clock (➠ 61)
12 Fuel level
13 Gear indicator; "N" indicates neutral

Meaning of symbols

Meanings of the symbols at position **1**:

Average fuel consumption since last reset (➠ 62)

Current consumption

Range with fuel now on board (➠ 24)

Average speed since last reset (➠ 62)

Ambient temperature (➠ 25)

Tyre pressures (➠ 25)

Stopwatch (➠ 62)

Travel times (➠ 62)

Date (display mode depends on the time format selected) (➠ 61)

On-board electrics voltage level

Oil level (➠ 25)

2 Rear-seat heating ON
3 Heated handlebar grips ON
4 Front-seat heating ON

– with Electronic Suspension Adjustment (ESA) OE

5 Damping
6 Vehicle load

Range

The range readout indicates how far you can ride with the fuel remaining in the tank. The figure for average consumption used to calculate range is not shown and might not be the same as the average-consumption reading that appears on the display.
You must put at least five litres of fuel into the fuel tank for the new level to be registered correctly.
If the sensor cannot register the new level the range readout cannot be updated.
When the motorcycle is propped on its side stand the slight angle of inclination means that the sensor cannot register the fuel level correctly. This is the reason why the range is calculated only when the side stand is in the retracted position.

NOTICE

The calculated range is only an approximate figure. Consequently, BMW Motorrad recommends that you should not try to use the full range before refuelling.◀

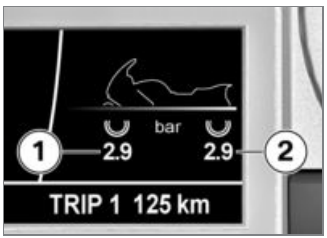
Ambient temperature

When the motorcycle is at a standstill the heat of the engine can falsify the ambient-temperature reading. If the effect of the engine's heat becomes excessive, −− temporarily appears on the display.

If ambient temperature drops below 3 °C this warning appears, drawing your attention to the risk of black ice forming. The display automatically switches from any other mode to the temperature reading when the temperature drops below this threshold for the first time.

Tyre pressures

– with tyre pressure monitoring (RDC)[OE]



The tyre-pressure readings are based on a reference tyre temperature of 20 °C. The front tyre pressure is on the left **1**; the reading on the right **2** is the rear tyre pressure. "−− −−" appears directly after the ignition is switched on, because the sensors do not transmit tyre pressures until the first time the motorcycle accelerates to more than 30 km/h.

If the pressure in a tyre drops to a critical level the corresponding status indicator shows red.

The tyre warning symbol also appears on the display.

The "General" warning light flashes red.

The detailed description of BMW Motorrad RDC starts on page (➠ 118).

Oil level

The oil-level indicator gives you an indication of the engine oil level.

The preconditions for the oil level check are as follows:

– Engine at operating temperature.

– Engine idling for at least ten seconds.
– Side stand retracted.
– Make sure the motorcycle is upright.

The readings mean:

OK: Oil level is correct.

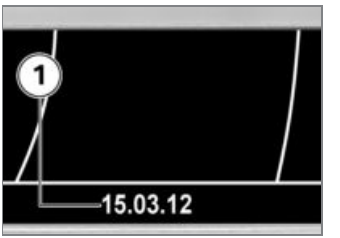
CHECK!: Check the oil level the next time you stop for fuel.

– – –: Oil level cannot be measured (conditions as stated above not satisfied).

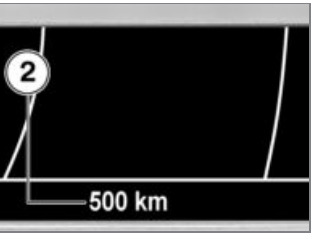
Service-due indicator

If a service is due, for a brief period after the preride check the service symbol appears on the display and the service-due date shows instead of the odometer reading.

If the service is overdue the 'General' warning light briefly shows yellow and the service symbol lights up and remains ON.



If the countdown to the next service is less than one month, service-due date **1** appears on the display.



If the vehicle covers long distances in the course of the year, under certain circumstances it might be necessary to have it serviced at a date in advance of the forecast due date. If the countdown distance to the early service is less than 1000 km, countdown distance **2** appears on the display.

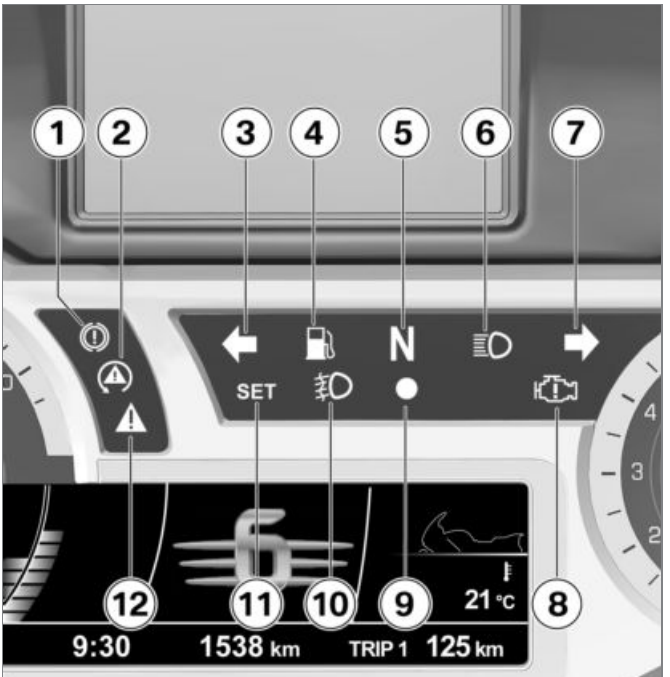
NOTICE

If the service-due indicator appears more than a month before the service date, the current date has to be corrected. This situ-

ation can occur if the battery was disconnected.◀

Warning and telltale lights

1 ABS warning light (➠ 42)
2 DTC warning light (➠ 42)
3 Telltale light of the left turn indicators
4 Warning light for fuel down to reserve (➠ 38)
5 Telltale light for neutral
6 High-beam headlight telltale light
7 Telltale light of the right turn indicators
8 Warning light for engine electronics
9 – with alarm system (DWA) OE
Anti-theft alarm telltale light (➠ 89)
– with Keyless Ride OE
Telltale light for the radio-operated key (➠ 55)



10 – with LED auxiliary headlights [OE]
or
– with LED auxiliary headlights [OA]
Telltale light for the auxiliary headlights (➠ 67)

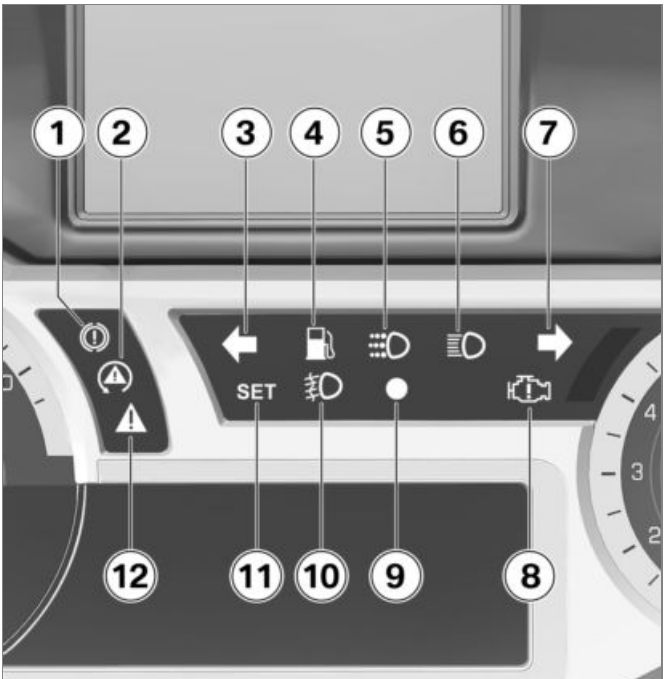
11 Telltale light of cruise control (➠ 76)

12 General warning light, in combination with warnings in the display (➠ 31)

Warning and telltale lights

– with daytime running light OE

1 ABS (➠ 42)
2 DTC (➠ 42)
3 Turn indicators, left
4 Fuel reserve (➠ 38)
5 Daytime riding light
6 High-beam headlight
7 Turn indicators, right
8 Engine electronics
9 – with alarm system (DWA) OE
DWA (➠ 89)
10 – with LED auxiliary headlights OE
or
– with LED auxiliary headlights OA
Auxiliary headlights (➠ 67)
11 Cruise-control system (➠ 76)

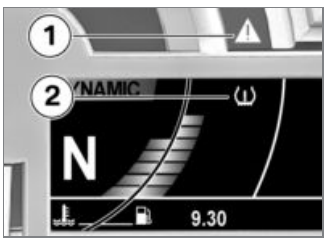


12 General warning light, in combination with warning symbols in the display (➠ 31)

Warnings

Mode of presentation

Warnings are indicated by the corresponding warning lights.



Warnings for which there is no dedicated warning light are indicated by 'General' warning light **1** showing in combination with a warning symbol such as, for example, **2** appearing in the multifunction display. The 'General' warning light shows red or yellow, depending on the urgency of the warning.

Up to four warning symbols can be displayed at any given time. The status of the 'General' warning light matches the most urgent warning.
The possible warnings are listed on the next pages.

Warnings, overview

Warning and telltale lights	Warning symbols in the display	Meaning
 Lights up yellow	 Appears on the display	Electronic immobiliser active (➠ 37)
 lights up yellow	ESA! appears on the display	ESA fault (➠ 37)
		Radio-operated key out of range (➠ 37)
		Replace the battery of the radio-operated key (➠ 37)
 lights up	Fuel-level reading turns yellow	Fuel down to reserve (➠ 38)
 Lights up red	Temperature reading turns red	Coolant temperature too high (➠ 38)
 Lights up		Engine fault (➠ 38)
 Flashes		Severe engine fault (➠ 39)

Warning and telltale lights	Warning symbols in the display	Meaning
	 Appears on the display	Engine-oil level too low (➠ 39)
 Lights up red	 appears on the display	Insufficient battery charge current (➠ 39)
	 appears on the display	On-board system voltage low (➠ 40)
 Lights up yellow	 appears on the display	On-board system voltage critical (➠ 40)
 Lights up yellow	 Appears on the display	Rear light failure (➠ 41)
 Lights up yellow	 Appears on the display	Front light failure (➠ 41)
 Lights up yellow	 Appears on the display	Light failure (➠ 41)
	 appears on the display	Outside temperature warning (➠ 41)

Warning and telltale lights	Warning symbols in the display	Meaning
 Flashes		ABS self-diagnosis not completed (➠ 42)
 Lights up		ABS fault (➠ 42)
 Quick-flashes		DTC intervention (➠ 42)
 slow-flashes		DTC self-diagnosis not completed (➠ 42)
 lights up		DTC switched off (➠ 42)
 lights up		DTC fault (➠ 43)
 Flashes red	 + tyre pressure in red	Tyre pressure outside permitted tolerance (➠ 43)
	 + "−−" or "−− −−" appears on the display	Signal transmission disrupted (➠ 44)

Warning and telltale lights	Warning symbols in the display	Meaning
 Lights up yellow	 + "−−" or "−− −−" appears on the display	Sensor defective or system error (➠ 44)
 Lights up yellow	 appears on the display	Battery of tyre-pressure sensor weak (➠ 45)
 Lights up red	 Appears on the display	Direction of throw of low-beam headlight unknown (➠ 45)
 Flashes yellow	 Appears on the display	Beam-throw adjustment of the low-beam headlight restricted (➠ 45)
	 Appears on the display	Headlight aiming changed (➠ 46)
	 appears on the display	Anti-theft alarm battery weak (➠ 46)
 Lights up yellow	 appears on the display	Anti-theft alarm battery flat (➠ 46)
	 Appears on the display	Central locking locked (➠ 47)

Warning and telltale lights	Warning symbols in the display	Meaning
 briefly shows yellow	 Appears on the display	Service overdue (➠ 47)

Electronic immobiliser active


General warning light shows yellow.


Key appears on the display.

Possible cause:

The key being used is not authorised for starting, or communication between key and engine electronics is disrupted.

- Remove all other vehicle keys from the same ring as the ignition key.
- Use the reserve key.
- Have the defective key replaced, preferably by an authorised BMW Motorrad dealer.

ESA fault


The "General" warning light shows yellow.

ESA! appears on the display.

Possible cause:

The ESA control unit has detected a fault. In this condition, the motorcycle has too much damping and is uncomfortable to drive, especially on roads in poor condition.

- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Radio-operated key out of range

– with Keyless Ride[OE]


Telltale light for "radio-operated key not within range" shows.

Possible cause:

Communication between R/C key and engine electronics is disrupted.

- Check the battery in the radio-operated key.
- Use the emergency key to continue your journey.

– with Keyless Ride[OE]

- Battery of the radio-operated key is empty or loss of the radio-operated key (➠ 55).
- Remain calm if the warning symbol appears while you are riding. You can continue your journey, the engine will not switch off.
- Have the defective radio-operated key replaced by an authorised BMW Motorrad dealer.

Replace the battery of the radio-operated key

– with Keyless Ride[OE]


The battery symbol appears on the display.

Possible cause:

- The integral battery in the radio-operated key has lost a significant proportion of its original capacity. There is no assurance of how long the R/C key can remain operational.

Fuel down to reserve


Reserve-fuel symbol lights up.

Fuel-level reading turns yellow.

WARNING

Irregular engine operation or engine shutdown due to lack of fuel.

Risk of accident. Damage to catalytic converter.

- Do not run the fuel tank dry.◀

Possible cause:

The fuel tank contains no more than the reserve quantity of fuel.

 Reserve fuel
approx. 4 l

- Refuelling (➠ 105).

Coolant temperature too high


General warning light shows red.

The temperature reading turns red.

ATTENTION

Riding with overheated engine.

Engine damage

- Compliance with the information set out below is essential.◀

Possible cause:

The coolant temperature is too high.

- If possible, ride in the part-load range to cool down the engine.
- In traffic jams, switch off the engine, but leave the ignition switched on so that the radiator fan continues to operate.
- If the coolant temperature is frequently too high, have the fault rectified as soon as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Engine fault


The engine symbol lights up.

Possible cause:

The engine control unit has diagnosed a fault.

WARNING

Unusual ride characteristics when engine running in emergency-operation mode.

Risk of accident

- Adapt your style of riding accordingly.
- Avoid accelerating sharply and overtaking.◀
- If you continue to ride be prepared for unusual engine behaviour (low power, poor throttle response, abrupt stalling, etc.).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Severe engine fault

The engine symbol flashes.

Possible cause:

The engine control unit has diagnosed a severe fault.

WARNING

Engine damage when running in emergency-operation mode.

Risk of accident

- Adapt your style of riding accordingly: Ride slowly, avoid sharp accelerating and overtaking.
- If possible, have the vehicle brought in and the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀
- If you continue to ride be prepared for unusual engine behaviour (low power, poor throttle response, abrupt stalling, etc.).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Engine-oil level too low

The oilcan symbol appears on the display.

Possible cause:

The electronic oil-level sensor has registered an excessively low oil level. Check the engine-oil level with the dipstick the next time you stop to refuel:

- Checking engine oil level (➠ 136).

If the oil level is too low:

- Top up the engine oil (➠ 137).

Insufficient battery charge current

General warning light shows red.

The battery symbol appears on the display.

WARNING

Non-availability of various systems such as lights, engine or ABS on account of discharged battery.

Risk of accident

- Do not continue your journey.◀

Battery is not being charged. If you continue to ride the motorcycle the on-board electronics will drain the battery.

Possible cause:

Alternator or alternator drive defective.

- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

On-board system voltage low

The split battery symbol appears on the display.

Generator power is only just sufficient to supply all consumers and charge the battery.

Possible cause:

Too many consumers switched on. On-board system voltage tends to drop particularly at low engine rpm and when the engine is idling.

- When riding at low engine rpm switch off consumers that are not necessary for road safety (e.g. heated body warmer or auxiliary headlights).

On-board system voltage critical

General warning light shows yellow.

The split battery symbol appears on the display.

Generator power is no longer sufficient to supply all consumers and charge the battery. In order to ensure that the engine can be started and the motorcycle ridden, the on-board electronics switch off the electricity supply to the on-board sockets and the auxiliary headlights. In extreme cases the seat heating and the grip heating might also be shut down.

Possible cause:

Too many consumers switched on. On-board system voltage tends to drop particularly at low engine rpm and when the engine is idling.

- When riding at low engine rpm switch off consumers that are not necessary for road safety (e.g. heated body warmer or auxiliary headlights).

Rear light failure


General warning light shows yellow.


Bulb symbol with arrow pointing to the rear appears on the display.

Possible cause:

Rear light, brake light or rear flashing turn indicator defective. The LED rear light must be replaced.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Front light failure


General warning light shows yellow.


Bulb symbol with arrow pointing to the front appears on the display.

Possible cause:

Low-beam headlight, high-beam headlight, parking light or front flashing turn indicator defective. The low-beam headlight or one of the LED turn indicators must be replaced.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.
- Replacing bulb for high-beam headlight (➠ 153).

Light failure


General warning light shows yellow.


Bulb symbol with two arrows appears on the display.

Possible cause:

A combination of light failures has occurred.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Outside temperature warning


The ice-crystal symbol appears on the display.

Possible cause:

The air temperature measured at the motorcycle is lower than 3 °C.

⚠ WARNING

Risk of black ice forming at temperatures above 3 °C, even though no ambient-temperature warning is issued.

Risk of accident due to icy surface.

- Always take extra care when temperatures are low; remember that there is particular danger of black ice forming on bridges and where the road is in shade.◀

- Ride carefully and think well ahead.

ABS self-diagnosis not completed


ABS warning light flashes.

Possible cause:

Self-diagnosis did not complete, so the ABS function is not available. The motorcycle must be ridden at a speed of at least 5 km/h in order for ABS self-diagnosis to complete.

- Pull away slowly. Bear in mind that the ABS function is not available until self-diagnosis has completed.

ABS fault


ABS warning light shows.

Possible cause:

The ABS control unit has detected a fault. The ABS function is not available.

- You can continue to ride the vehicle, but make due provision for the fact that the ABS function is not available. Bear in mind the more detailed information on situations that can lead to an ABS fault (➠ 115).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

DTC intervention


DTC warning light quick-flashes.

The DTC has detected a degree of instability at the rear wheel and has intervened to reduce torque. The warning light flashes for longer than DTC intervention lasts. This affords the rider visual feedback on control intervention even after the critical situation has been dealt with.

DTC self-diagnosis not completed


DTC warning light slow-flashes.

Possible cause:

Self-diagnosis did not complete, so the DTC function is not available. The engine must be running and the motorcycle must reach a speed of at least 5 km/h in order for DTC self-diagnosis to complete.

- Pull away slowly. Bear in mind that the DTC function is not available until self-diagnosis has completed.

DTC switched off


DTC warning light shows.

Possible cause:

The rider has switched off the DTC system.

- Switch on DTC.

DTC fault

 DTC warning light shows.

Possible cause:

The DTC control unit has detected a fault. The DTC function is not available.

- You can continue to ride. Bear in mind that the DTC function is not available. Bear in mind the more detailed information on situations that can lead to a DTC fault (➠ 117).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Tyre pressure outside permitted tolerance

– with tyre pressure monitoring (RDC) OE

 General warning light flashes red.

 + The critical tyre pressure shows red.

Possible cause:

Measured tyre pressure is outside permitted tolerance.

- Check the tyre for damage and to ascertain whether the vehicle can be ridden with the tyre in its present condition.

If the vehicle can be ridden with the tyre in its present condition:

WARNING

Tyre pressure outside permitted tolerance.

Impairment of the vehicle's handling characteristics.

- Adapt your style of riding accordingly.◀
- Correct the tyre pressure at the earliest possible opportunity.

NOTICE

Before you adjust tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details".◀

- Have the tyre checked for damage by a specialist workshop, preferably an authorised BMW Motorrad dealer.

If you are unsure whether the vehicle can be ridden with the tyre in its present condition:

- Do not continue your journey.
- Notify the breakdown service.

Signal transmission disrupted

– with tyre pressure monitoring (RDC) OE

 + "– –" or "– – – –" appears on the display.

Possible cause:

The vehicle has not yet accelerated past the threshold of approximately 30 km/h. The RDC sensors do not start transmitting signals until the motorcycle reaches a speed above this threshold for the first time (➠ 118).

- Increase speed above this threshold and observe the RDC readings. Assume that a permanent fault has not occurred unless the 'General' warning light comes on to accompany the symptoms. Under these circumstances:
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Possible cause:

Wireless communication with the RDC sensors has been disrupted. Possible causes include radio-communication systems operating in the vicinity and interfering with the link between the RDC control unit and the sensors.

- Move to another location and observe the RDC readings. Assume that a permanent fault has not occurred unless the 'General' warning light comes on to accompany the symptoms. Under these circumstances:
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Sensor defective or system error

– with tyre pressure monitoring (RDC) OE

 General warning light shows yellow.

 + "– –" or "– – – –" appears on the display.

Possible cause:

Motorcycle is fitted with wheels not equipped with RDC sensors.

- Fit wheels and tyres equipped with RDC sensors.

Possible cause:

One or two RDC sensors have failed.

- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Possible cause:

A system error has occurred.

- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Battery of tyre-pressure sensor weak

– with tyre pressure monitoring (RDC)[OE]


General warning light shows yellow.


The RDC battery symbol appears on the display.

NOTICE

This error message shows briefly only after the Pre-Ride-Check completes.◀

Possible cause:

The integral battery in the tyre-pressure sensor has lost a significant proportion of its original capacity. There is no assurance of how long the tyre pressure control system can remain operational.

- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad dealer.

Direction of throw of low-beam headlight unknown


General warning light shows red.


Headlight with question mark appears on the display.

Illumination of the road ahead is no longer optimum; there is a possibility of dazzling oncoming traffic.

Possible cause:

Light direction and range of the low-beam headlight are unknown, adjustment is no longer possible.

- If it is dark leave the motorcycle where it is or have it picked up, if possible.
- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Beam-throw adjustment of the low-beam headlight restricted


General warning light flashes yellow.


Headlight with zero appears on the display.

Illumination of the road ahead is no longer optimum.

Possible cause:

Only restricted adjustment of light direction and range of the low-beam headlight possible.

- Have the defect rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Headlight aiming changed

– with adaptive cornering light OE

 appears on the display. Corning light control for the low-beam headlight is switched off.

Possible cause:

Headlight alignment has been changed from the as-delivered condition.

- Adjusting for traffic driving on right or driving on left (➠ 66).

Anti-theft alarm battery weak

– with alarm system (DWA) OE

 The anti-theft alarm battery symbol appears on the display.

NOTICE

This error message shows briefly only after the Pre-Ride-Check completes.◀

Possible cause:

The integral battery in the anti-theft alarm has lost a significant proportion of its original capacity. There is no assurance of how long the anti-theft alarm can remain operational if the vehicle's battery is disconnected.

- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad dealer.

Anti-theft alarm battery flat

– with alarm system (DWA) OE

 General warning light shows yellow.

 The anti-theft alarm battery symbol appears on the display.

NOTICE

This error message shows briefly only after the Pre-Ride-Check completes.◀

Possible cause:

The integral battery in the anti-theft alarm has lost its entire original capacity. There is no assurance that the anti-theft alarm will be operational if the vehicle's battery is disconnected.

- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad dealer.

Central locking locked

– with central locking system OE

The locked symbol appears on the display.
All locks in the central locking system are locked.

Service overdue

appears on the display.

General warning light briefly shows yellow after the pre-ride check.

Possible cause:

A necessary service has not been carried out.

- Have servicing carried out as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Operation

Ignition switch/steering lock

Keys

You receive 2 ignition keys. Please consult the information on the electronic immobiliser (EWS) if a key is lost or mislaid (➠ 52).
Ignition switch/steering lock, tank filler cap lock, stowage compartment, seat lock and cases are all operated with the same ignition key.

– with topcase[OA]

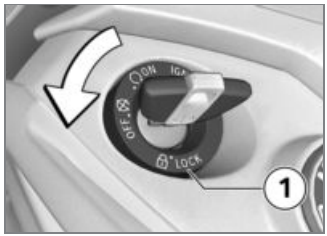
If you wish you can arrange to have the topcase fitted with a lock that can be opened with the same ignition key. Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Lock the handlebars

ATTENTION

Handlebars turned in wrong direction when motorcycle propped on side stand.
Risk of damage to parts if vehicle topples.

- On level ground, always turn the handlebars to the left to set the steering lock.
- In all other cases it is the lie of the ground that determines the direction in which the handlebars should be turned.◀
- Turn the handlebars to the full left or right lock position.

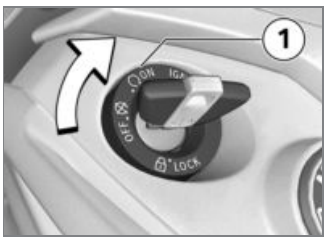


- Turn the ignition key to position **1**, while moving the handlebars slightly.

» Ignition, lights and all function circuits switched off.
» Handlebars locked.
» Ignition key can be removed.

Ignition

Switch on ignition



- Turn the ignition key to position **1**.

» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-ride check is performed. (➠ 99)
» ABS self-diagnosis is performed. (➠ 100)
» DTC self-diagnosis is performed. (➠ 100)

Switch off ignition

- Turn the ignition key to position **1**.

» Lights switched off.
» Handlebars not locked.
» Ignition key can be removed.
» The windscreen automatically moves to the bottom limit position.

Electronic immobiliser EWS

The on-board electronics access the data saved in the vehicle key via a ring aerial in the R/C ignition lock. The ignition is not enabled for starting until the engine control unit has recognised the ignition key as "authorised" for your motorcycle.

NOTICE

A spare key attached to the same ring as the ignition key used to start the engine could "irritate" the electronics, in which case the enabling signal for starting is not issued. The EWS warning appears in the multifunction display.
Always keep the spare key separately from the ignition key.◀

If you lose your key, you can have it barred by your BMW Motorrad authorised dealer. If you wish to do this, you will need to bring all other keys for the motorcycle with you. The engine cannot be started by a barred ignition key, but an

ignition key that has been barred can subsequently be reactivated. You can obtain emergency/extra keys only through an authorised BMW Motorrad dealer. The ignition keys are part of an integrated security system, so the dealer is under an obligation to check the legitimacy of all applications for replacement/extra keys.

Ignition with Keyless Ride

– with Keyless Ride OE

Keys

You receive one radio-operated key and one emergency key. Please consult the information on the electronic immobiliser (EWS) if a key is lost or mislaid (➠ 52). Ignition, fuel filler cap, central locking system and anti-theft alarm system all work with the radio-operated key. Seat lock, stowage compartments, topcase and cases can be locked and unlocked manually.

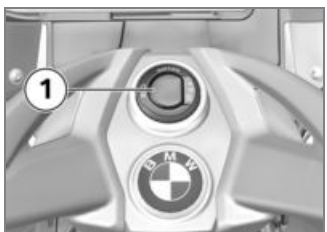
NOTICE

The vehicle cannot be started or the central locking system locked or unlocked if the radio-operated key is not within range (e.g. key inside one of the cases or the topcase).
If the key is taken out of range the ignition is switched off after approximately 1.5 minutes, but the central locking system is **not** locked.
It is advisable to keep the radio-operated key on your person (e.g. in a jacket pocket) and to have the emergency key with you as an alternative.◀

Range of the Keyless Ride radio-operated key
approx. 1 m

Lock the handlebars

Handlebars turned to the right or left full-lock position.
Radio-operated key is within range.



ATTENTION

Handlebars turned in wrong direction when motorcycle propped on side stand.
Risk of damage to parts if vehicle topples.

- On level ground, always turn the handlebars to the left to set the steering lock.

- In all other cases it is the lie of the ground that determines the direction in which the handlebars should be turned.◀
- Press and hold down button **1**.

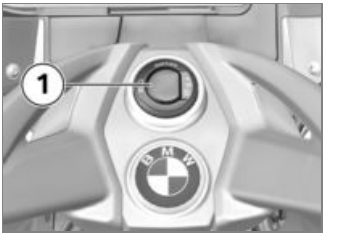
» The steering lock engages with an audible click.
» Ignition, lights and all function circuits switched off.

- Short-press button **1** to disengage the steering lock.

Switching on ignition

Radio-operated key is within range.

- There are two ways of activating the ignition:



- **Version 1**
- Short-press button **1**.

» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-ride check is performed. (➠ 99)
» ABS self-diagnosis is performed. (➠ 100)
» DTC self-diagnosis is performed. (➠ 100)

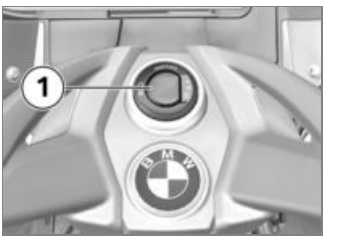
- **Version 2**
- Steering lock is engaged; press and hold down button **1**.

» The steering lock disengages.
» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-ride check is performed. (➠ 99)
» ABS self-diagnosis is performed. (➠ 100)
» DTC self-diagnosis is performed. (➠ 100)

Switching off ignition

Radio-operated key is within range.

- There are two ways of deactivating the ignition:



- **Version 1**
- Short-press button **1**.

» Light is switched off.
» Handlebars (steering lock) are not locked.
» The windscreen automatically moves to the bottom limit position.

- **Version 2**
- Turn the handlebars to the full left or right lock position.
- Press and hold down button **1**.

» Light is switched off.
» The steering lock engages.
» The windscreen automatically moves to the bottom limit position.

Electronic immobiliser EWS

The on-board electronics access the data saved in the radio-operated key via a ring aerial in the R/C ignition lock. The ignition is not enabled for starting until the engine control unit has recognised the radio-operated key as "authorised" for your motorcycle.

NOTICE

A spare key attached to the same ring as the ignition key used to start the engine could "irritate" the electronics, in which case the enabling signal for starting is not issued. The EWS warning appears in the multifunction display.
Always keep the spare key separately from the ignition key.◀

If you mislay a radio-operated key you can have the key in question barred by your authorised BMW Motorrad dealer. In order to have a key barred you must bring along all the other keys belonging to the motorcycle.
The engine cannot be started by a barred radio-operated key, but a radio-operated key that has been barred can subsequently be reactivated.
You can obtain emergency/extra keys only through an authorised BMW Motorrad dealer. The radio-operated keys are part of an integrated security system, so the dealer is under an obligation to check the legitimacy of all applications for replacement/extra keys.

Battery of the radio-operated key is empty or loss of the radio-operated key

NOTICE

The aerial is in front of the fuel filler cap, underneath the fuel tank cover.◀

- Consult the information on the electronic immobiliser (EWS) if a key is lost or mislaid.

- If you happen to lose or mislay the radio-operated key while on a journey, you can start the vehicle with the emergency key.
- If the battery of the radio-operated key is empty, touching the radio-operated key against the tank cover will start the engine.

- Hold emergency key **1** or radio-operated key with empty battery **2** at the tank cover above aerial **3**.

Time during which the engine has to be started. The unlocking procedure has to be repeated if this time is allowed to expire.
30 s

» Pre-Ride-Check is performed.
– Key has been recognised.
– Engine can be started.
- Start the engine (➠ 98).

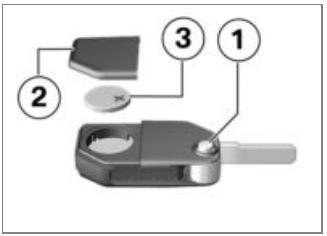
Replacing battery of radio-operated key

If the radio-operated key does not react when you short-press or long-press a button:

- The integral battery in the R/C key has lost a significant proportion of its original capacity.

» Change the battery.

The battery symbol appears on the display.



- Press button **1**.

» Bitted key flips out.
- Push up battery cover **2**.
- Remove battery **3**.
- Dispose of the old battery in accordance with all applicable laws and regulations; do not attempt to dispose of batteries as domestic waste.

ATTENTION

Batteries unsuitable or not inserted not in compliance with correct procedure.
Component damage

- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, always make sure polarity is correct.◀
- Insert the new battery with the positive terminal up.

Battery type
for Keyless Ride-radio-operated key
CR 2032

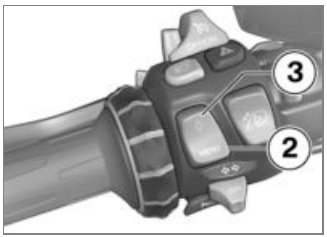
- Install seal **1** and battery cover **2**.

» Red LED on the instrument panel flashes.

» The remote control is again ready for use.

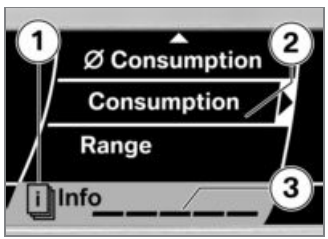
Multifunction display

Selecting menu



Press button **2** to step through the sequence of menus, starting with the `Info` menu. Each time you press button **2** you call up the next menu in the sequence; the number of menus depends on the options fitted to the motorcycle.
You also have the option of pressing button **3** for direct access to a favourite menu of your choice.

With the exception of the `Audio` section, you cannot access the `Settings` menu unless the motorcycle is at a complete standstill.



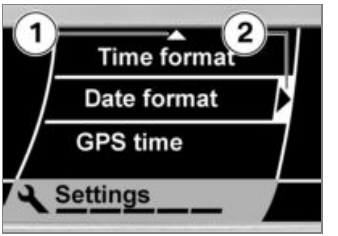
The type of menu shows at position **1**; cursor **2** indicates the current selection. Each line **3** indicates a menu that can be selected. The line representing the menu you are currently viewing is greyed to show you where you are in the sequence of menus.

NOTICE

See the separate Quick Reference Guide for an overview of all menus.◀

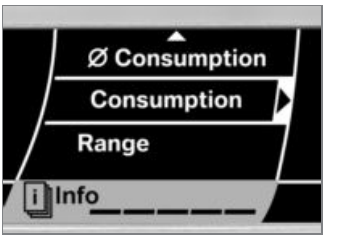
Selecting menu item

Use Multi-Controller **1** to move the cursor in a menu.

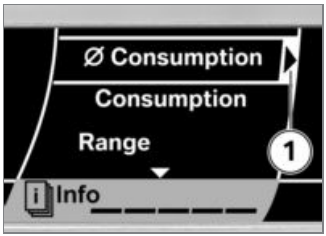


An arrow **1** at the top or bottom of the display indicates that there are other items in this menu that you can view by turning the Multi-Controller in the corresponding direction.
If the cursor shows arrow **2**, a submenu opens when you push the Multi-Controller to the right. For different meanings of average values and list selection see (➠ 58).

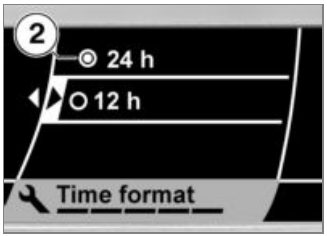
Setting parameters



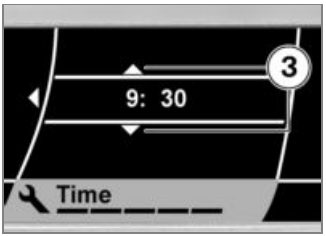
Direct selection:
If you move the cursor to a menu item that requires no other settings, your selection goes active right away.



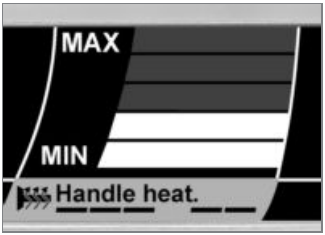
Resetting values:
You can reset average values marked with an arrow **1** by long-pressing the Multi-Controller to the right.



Selecting from a list:
A circle **2** beside each selectable item means that the items are part of a selection list. A circle with a dot indicates the item that is currently selected.
If you want to change the selection move the cursor to some other item in the list and press the Multi-Controller to the right to either activate or deactivate the parameter you selected.

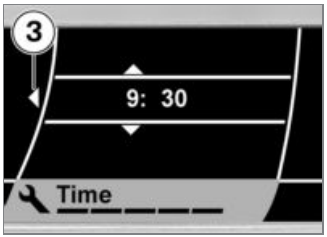


Setting numerical values:
If there are one or more numerical values between the arrows **3**, you can increase the values by turning the Multi-Controller up or reduce the values by turning it down. You can toggle between the values by pressing the Multi-Controller to the right or left.

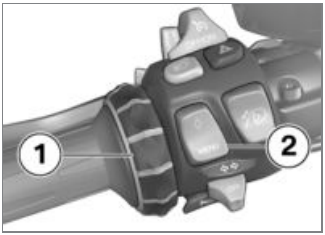


Setting relative values:
A bar indicator enables you to set a value in a range between two limits. Turn the Multi-Controller up to increase the setting or down to reduce the setting.

Exiting menu



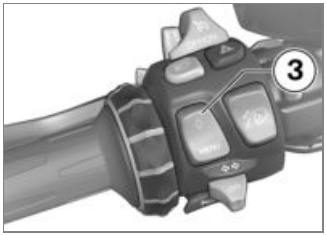
Arrow **3** appears when you are in a submenu.



Press Multi-Controller **1** to the left to return to the next highest menu; press MENU button **2** to return to the main menu.
If you want to hide the menus, press Multi-Controller **1** to the left in a main menu.

Selecting favourite menu

- Select the main menu of your choice.



• Press and hold down button **3**.

The lozenge appears to the right of the menu designation.

» The menu you have selected will subsequently be called up whenever you press button **3**.

Adapting mode of presentation

• Switch on the ignition.
• Call up the `Settings` menu and select `User`.

The settings you can choose are as follows:

– `Language`: Display language (German, English, Spanish, Italian, French, Dutch, Portuguese)
– `Time format - 12 h / 24 h`: Clock in 12-hour format (`12 h`) or in 24-hour format (`24 h`)
– `Time format - Date format`: Date in day . month . year format (`dd . mm . yy`) or in month / day / year format (`mm / dd / yy`)
– `Time format - GPS time`: Accept GPS time and GPS date from the built-in navigation system (`On`), (`Off`)
– `Brightness`: Brightness of the display and the instruments
– `Start logo`: Show start logo after the ignition is switched on (`On`), (`Off`)
– `Background`: Image on the display when the radio is off: `Empty`: No image, `Logo`: 6-cylinder logo, `Speedo`: Digital speedometer reading
– `Fact. settings`: Restore factory defaults (when `Reset!` appears on the display press the Multi-Controller to the right and hold in this position)
• Use the Multi-Controller to configure the desired settings.

On-board computer

Selecting readings

• Call up the `Info` menu and select the item of information of your choice.

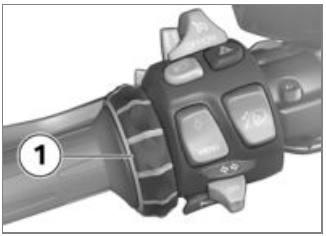
The following items of information can be displayed in panel **3**:
- ØConsump.: Average fuel consumption
- Consump.: Current fuel consumption
- Range: Range with fuel remaining in fuel tank
- ØSpeed: Average speed
- Temperature: Ambient temperature
- Tire pressure: Tyre pressures
- Stopwatch: Stopwatch
- Travel times: Travel times
- Date: Current date
- Oil level: Engine-oil level
- Off: No reading

Resetting average values

- Call up the Info menu and select the average value you want to reset.
- Push theMulti-Controller to the right and hold it in this position until the average value is reset.

Operate stopwatch

- Call up the Info menu and select Stopwatch.



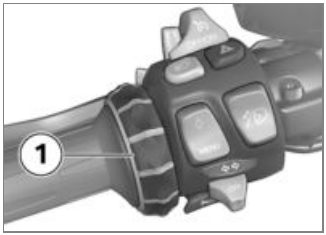
- With the stopwatch stopped, push Multi-Controller **1** to the right to start the stopwatch.

» The stopwatch continues timing even if you select some other reading or switch off the ignition.

- With the stopwatch running, push Multi-Controller **1** to the right to stop the stopwatch.
- Push Multi-Controller **1** to the right and hold it in this position to reset the stopwatch.

Measuring travel times

- Call up the Info menu and select Travel times.



- Push Multi-Controller **1** to the right and hold it in this position to reset the travel time.

» Timing continues even if you select some other reading or switch off the ignition.

Total time during which the vehicle was on the move since the last reset.

Time during which the vehicle was at a standstill since the last reset.

Trip meter

Selecting the tripmeter

- Switch on the ignition.

- Press button **1** to select the `Trip` menu and then select tripmeter **2** of your choice.

The following counters can be displayed:

– Tripmeter 1 (`Trip 1`)
– Tripmeter 2 (`Trip 2`)
– Automatic tripmeter (`Trip Auto`) resets automatically eight hours after ignition OFF.

Resetting tripmeter

- Switch on the ignition.
- Select the desired tripmeter.

- Push Multi-Controller **1** to the right and hold it in this position until tripmeter **2** is reset.

Daytime riding light

– with daytime running light[OE]

Manual daytime riding light

Precondition: automatic daytime riding light is switched off.

WARNING

Activation of daytime riding light in the dark.

Poorer vision and oncoming traffic dazzled.

- Do not use the daytime running light when it is dark.◀

NOTICE

By comparison with the low-beam headlight, the daytime running light makes the vehicle more visible to oncoming traffic. This improves daytime visibility.◀

- Start the engine (➠ 98).
- Call up the `Settings` menu and select `Vehicle`.
- Select `Day run lights` from the menu and set `Auto. DRL` to `Off`.

- Press button **1** to switch on the daytime riding light.

The indicator light for the daytime riding light illuminates.

» The low-beam headlight, the front side lights and the auxiliary headlight are switched off.

- In the dark or in tunnels: Press button **1** again to switch off the daytime riding light and switch on the low-beam headlight. The auxiliary headlight is also switched on again.

NOTICE

If you switch on the high-beam headlight on while the daytime running light is on, the daytime riding light is switched off after approx. 2 seconds and the high-beam headlight, low-beam headlight, front side lights and, if applicable, the auxiliary headlights are switched on.

If the high beam headlight is switched off again, the daytime riding light is not automatically reactivated, but must be switched on again if required.◀

Automatic daytime riding light

WARNING

The automatic riding light control system cannot replace your personal assessment of lighting conditions,

particularly in foggy or misty weather.

Safety risk

- Manually switch on the low-beam headlight in poor lighting conditions.◀

NOTICE

The changeover between daytime running light and low beam headlight including front side lights can be effected automatically.◀

NOTICE

On account of the limited space available, the beams that are part of the light symbol do not show when the volume bar appears on the display.◀

- Call up the `Settings` menu and select `Vehicle`.
- Select `Day run lights` from the menu and set `Auto. DRL` to `On`.


The symbol for the automatic daytime riding light shows in the display.

» If the ambient brightness decreases below a certain value, the low beam headlight is automatically switched on (e. B. in a tunnel). When sufficient ambient brightness is detected, the daytime riding light is switched back on. When the daytime riding light is active, the daytime riding light symbol is displayed in the multifunction display.

Lights

Side light

The side lights switch on automatically when the ignition is switched on.

NOTICE

The side lights place a strain on the battery. Do not switch the ignition on for longer than absolutely necessary.◀

Low-beam headlight

The low-beam headlight switches on automatically when you start the engine.

High-beam headlight and headlight flasher

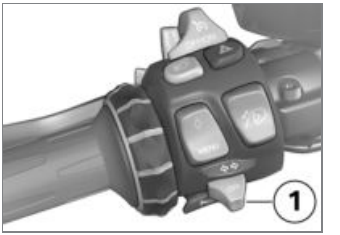
- Push switch **1** forward to switch on the high-beam headlight.
- Pull switch **1** back to operate the headlight flasher.

NOTICE

The high-beam headlight can also be switched on when the engine is not running.◀

Parking light

- Switch off the ignition.



- Immediately after switching off the ignition, push button **1** to the left and hold it in this position until the parking lights come on.
- Switch the ignition on and off again to switch off the parking lights.

Adjusting for traffic driving on right or driving on left

– with adaptive cornering light OE

- Switch on the ignition.
- Call up the `Settings` menu and select `Vehicle - Headlight`.

– `R-hand traffic`: for countries in which the traffic drives on the right-hand side of the road.
– `L-hand traffic`: for countries in which the traffic drives on the left-hand side of the road.

- Select the appropriate setting.

 appears on the display.

» The cornering light function is not active for as long as the setting is changed.

Beam throw

The xenon headlight has continuous beam throw control that keeps beam throw constant regardless of how the motorcycle is ridden and the load it carries.

Operating auxiliary headlights

– with LED auxiliary headlights OE

or

– with LED auxiliary headlights OA

NOTICE

The auxiliary headlights have approval as fog lights and their use is permissible in bad weather conditions only. Always comply with the road traffic regulations in force in the country in which the vehicle is used.◀

- Press button **1** to switch on the auxiliary headlights.

The telltale light shows.

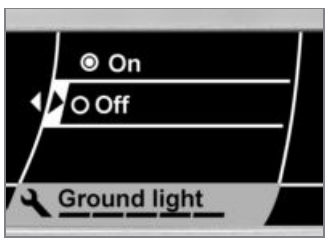
If this warning symbol appears it tells you that the on-board system voltage is low. If applicable, the auxiliary headlights might have been temporarily switched off.

- Press button **1** again to switch off the auxiliary headlights.

Operating ground lighting

– with ground lighting OA

- Switch on the ignition.
- Call up the `Settings` menu and select `Vehicle - Ground light`.



– `On`: Ground lighting comes on for a brief period after the ignition is switched off.

– `Off`: Ground lighting does not come on after the ignition is switched off.

– with central locking system OE
» If the function is switched off as described above, the ground lighting switches on nonetheless when you unlock the central locking system.◁

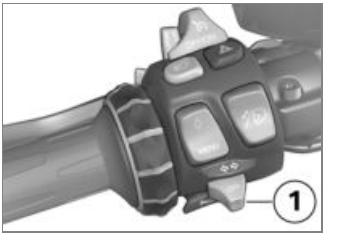
Turn indicators

Operating the turn indicators

• Switch on the ignition.

NOTICE

The turn indicators are cancelled automatically after the defined time and distance. The defined time and distance can be set by an authorised BMW Motorrad dealer.◀



• Push button **1** to the left to switch on the left turn indicators.
• Push button **1** to the right to switch on the right turn indicators.
• Operate centre button **1** to cancel the turn indicators.

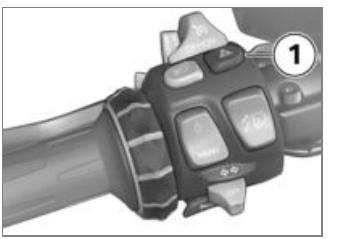
Hazard warning flashers

Operating hazard warning flashers

• Switch on the ignition.

NOTICE

The hazard warning flashers place a strain on the battery. Do not use the hazard warning flashers for longer than absolutely necessary.◀



• Press button **1** to switch on the hazard warning flashers.
» Ignition can be switched off.

To switch off the hazard warning flashers:

• Switch on the ignition and press button **1**.

Emergency off switch (kill switch)

1 Emergency off switch (kill switch)

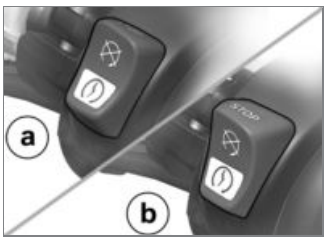
WARNING

Operation of the kill switch while riding.

Risk of fall due to rear wheel locking.

- Do not operate the kill switch when riding.◀

The emergency off switch is a kill switch for switching off the engine quickly and easily.



a Engine switched off
b Normal operating position (run)

Grip heating

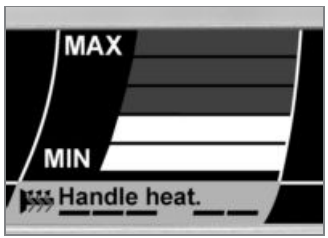
Operating grip heating

- Start the engine.

NOTICE

The heating in the heated handlebar grips can be activated only when the engine is running.◀

- Call up the `Handle heat.` menu.



The grips have five-stage heating. Stage five is for heating the grips quickly: it is advisable to switch back to a lower stage as soon as the grips are warm.

- Select the heating stage you want.

Symbol **1** appears on the display, indicating that the handlebar grip heating is ON.

If this warning symbol appears it tells you that the on-board system voltage is low. If applicable, the handlebar grip heating might have been temporarily switched off.

Seat heating

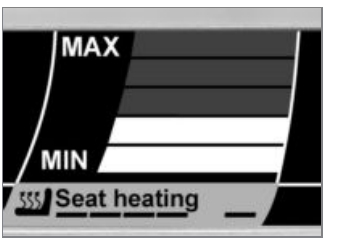
Front-seat heating

- Start the engine.

NOTICE

Seat heating can be activated only when the engine is running.◀

- Call up the `Seat heating` menu.



The front seat has five-stage heating. Stage five is for heating the seat quickly: it is advisable to switch back to a lower stage as soon as the seat is warm.

- Select the heating stage you want.

Symbol **1** appears on the display, indicating that the seat heating is ON.

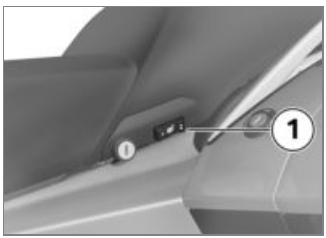
If this warning symbol appears it tells you that the on-board system voltage is low. If applicable, the seat heating might have been temporarily switched off.

Rear-seat heating

- Start the engine.

NOTICE

Seat heating can be activated only when the engine is running.◀



- Set switch **1** to the desired heating stage.

The rear seat has two-stage heating. Stage two is for heating the seat quickly: it is advisable to switch back to stage one as soon as the seat is warm.

– **2** Switch centred: Heating off.
– **3** One-dot section of switch pressed: 50 % heating power.
– **4** Two-dot section of switch pressed: 100 % heating power.

Symbol **1** appears on the display, indicating that the rear seat heating is ON.

If this warning symbol appears it tells you that the on-board system voltage is low. If applicable, the seat heating might have been temporarily switched off.

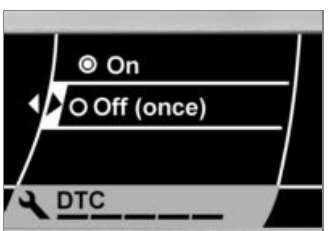
Dynamic Traction Control DTC

Switching DTC off and on

- Switch on the ignition.
- Call up the `Settings` menu and select `DTC`.

NOTICE

This menu cannot be called up while the motorcycle is on the move.◀



- Select `Off (once)` to switch DTC off once, in other words until the ignition is next switched on.

The DTC warning light shows to indicate that DTC has been switched off.

- Select `On` to switch on DTC. Alternatively: Switch the ignition off and then on.

DTC warning light goes out; if self-diagnosis has not completed the DTC warning light starts flashing.

Riding mode

Setting riding mode

- Switch on the ignition.

- Press button **1**.

NOTICE

See the section entitled "Engineering details" for more information on the various ride modes that can be selected.◀

The current setting is shown at position **2**; each time the button is pressed one of the possible riding modes is shown at position **3**.

- Repeatedly press the button until the reading shows the riding mode you want.

» With the motorcycle at a standstill, the mode you select is activated after a brief delay.

» The newly selected riding mode is activated as you ride only when the following preconditions are satisfied:

– Brake not applied

– Throttle twistgrip in fully closed position

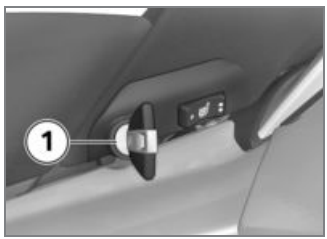
– Clutch pulled

» Once the new riding mode has been activated, the selection display disappears.

» The mode selected in this way is retained with the engine-characteristic and DTC adaptation settings even after the ignition has been switched off.

Front seat

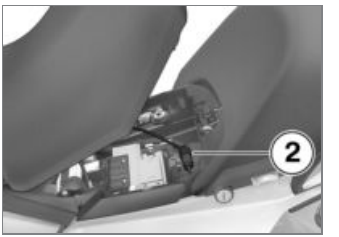
Remove front seat



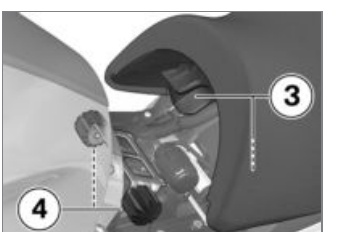
- Use the ignition key to unlock seat lock **1** and lift the rear of the front seat.

- Disconnect plug **2** of the seat heating and remove the front seat.
- Place the seat, upholstered side down, on a clean surface.

Installing front seat



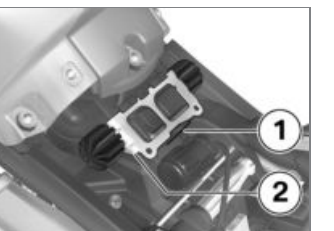
- Connect plug **2** of the seat heating.



- Position the front seat with mounts **3** in rubber buffers **4** on left and right.
- Lower the rear of the front seat and engage the seat in the latching mechanism.

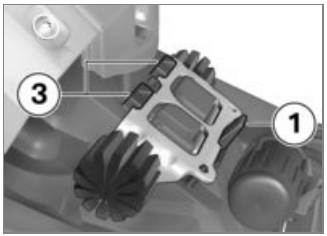
Adjusting seat height

- Remove front seat (➠ 73).



- Pull latch **1** to the rear and remove adjusting plate **2**.

- Turn adjusting plate to position **A** to lower the height of the seat.
- Turn adjusting plate to position **B** to raise the height of the seat.



- Insert the adjusting plate in the desired position into holders **3** and then press into retainers **1**.
- Install the front seat (➠ 74).

Windscreen

Adjusting windscreen

- Switch on the ignition.

» When you pull away the windscreen automatically returns to the position it was in before the ignition was switched off.

- Press top section of button **1** to raise the windscreen.
- Press bottom section of button **1** to lower the windscreen.
- Switch off the ignition.

» The windscreen automatically moves to the bottom limit position.

» If the windscreen encounters resistance before it reaches its limit position the pressure-sensitive finger guard system goes active. The windscreen is stopped and raised slightly. After a delay of a few seconds the windscreen again attempts

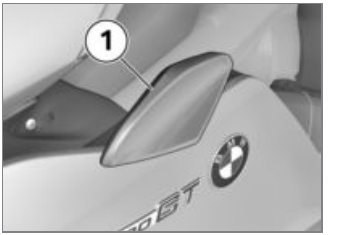
to move to the bottom limit position.

There is no guarantee that the pressure-sensitive finger guard system will function correctly if a windscreen that does not have BMW approval is installed.

- Under these circumstances: Before switching off the ignition always check that there is nothing to obstruct movement of the windscreen.

Slipstream deflector

Adjusting slipstream deflectors



WARNING

Adjusting slipstream deflectors while riding.

Risk of falling

- Do not attempt to adjust the slipstream deflectors unless the motorcycle is at a standstill.◀
- Turn slipstream deflector **1** in or out to adjust the airflow for the rider. In this process, note the outer limit stop.

Cruise-control system

Switching on cruise control

- Slide switch **1** to the right.

» Button **2** is operational.

Saving road speed

- Briefly push button **2** forward.

NOTICE

Cruise control can be set within a speed range from 30 km/h to 220 km/h.◀

SET Telltale light for cruise control shows.

» The motorcycle maintains your current cruising speed and the setting is saved.

Accelerating

- Briefly push button **2** forward.

» Speed is increased by approx. 1 km/h each time you push the button.

- Push button **2** forward and hold it in this position.

» The motorcycle accelerates steplessly.

» The current speed is maintained and saved if button **2** is not pushed again.

Decelerating

- Briefly push button **2** back.

» Speed is reduced by approx. 1 km/h each time you push the button.

- Push button **2** back and hold it in this position.

» The motorcycle decelerates steplessly.

» The current speed is maintained and saved if button **2** is not pushed again.

Deactivate cruise control

- Brake, pull the clutch lever or turn the throttle twistgrip

(close the throttle by turning the twistgrip back past the idle position) to deactivate the cruise-control system.

» Telltale light for cruise-control goes out.

Resuming former cruising speed

- Briefly push button **2** back to return to the speed saved beforehand.

NOTICE

Opening the throttle does not deactivate the cruise-control system. If you release the twistgrip the motorcycle will decelerate only to the cruising speed saved in memory, even though you might have intended slowing to a lower speed.◀

SET Telltale light for cruise control shows.

Switching off cruise control

- Slide switch **1** to the left.

» The system is deactivated.

» Button **2** is disabled.

Hill Start Control

– with Hill Start Control[OE]

Hill Start Control Operation

ATTENTION

Switching off engine or ignition, extending the side stand, timeout (approx. 20 minutes) or if a fault develops.

Brake failure of the pullaway assistant.

- It is essential to apply the brakes manually to hold the vehicle.◀

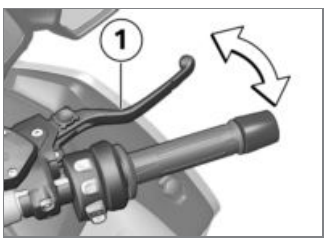
NOTICE

Hill Start Control is purely a comfort system to facilitate holding the machine and pulling way on uphill gradients and should

not be confused with a parking brake.◀

NOTICE

See the section entitled "Engineering details" for more information on Hill Start Control.◀



- Firmly pull and then release handbrake lever **1**.

Telltale light for Hill Start Control appears on the display.

» Hill Start Control is activated.
- Pull handbrake lever **1** again to switch off Hill Start Control.

NOTICE

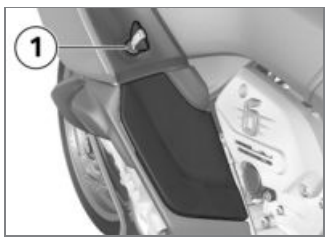
Hill Start Control is deactivated automatically when the motorcycle pulls away.◀

- The 'General' waning light and the telltale light show briefly in the display and both telltale lights for Hill Start Control go out when the brakes are fully released.

» Hill Start Control is switched off.

Stowage compartments

Operate the stowage compartment



- Use the ignition key to open or close lock **1** of the stowage compartment.
- To open the lid, push the unlocked lock barrel down.

– with preparation for audio system and navigation system OE
- The description applies by analogy to the stowage compartment on the right side.◁

ATTENTION

Particularly in summer, high temperatures inside the stowage compartments.
Damage to objects stowed away, particularly electronic devices such as mobile phones and MP3 players.

- Consult the operating instructions of your electronic device and check for possible usage restrictions.◀
- In summer, do not place heat-sensitive objects in the stowage compartments.

Clutch

Adjusting clutch lever

WARNING

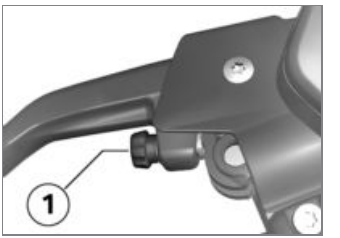
Changed position of the clutch fluid reservoir.
Air in clutch system.

- Do not turn the handlebar fitting on the handlebar.◀

WARNING

Adjusting the clutch lever while riding.
Risk of accident

- Do not attempt to adjust the clutch lever unless the motorcycle is at a standstill.◀



- Turn adjusting screw **1** clockwise to increase the span between the clutch lever and the handlebar grip.
- Turn adjusting screw **1** counter-clockwise to reduce the span between the clutch lever and the handlebar grip.

NOTICE

The adjusting screw is easier to turn if you push the clutch lever forward.◀

Brakes

Adjusting handbrake lever

WARNING

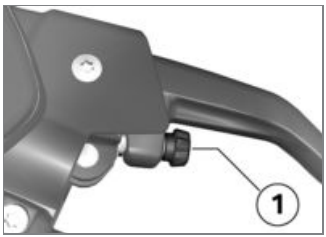
Changed position of the brake fluid reservoir.
Air in the brake system.

- Do not turn the handlebar fitting on the handlebar.◀

WARNING

Adjusting the brake lever while riding.
Risk of accident

- Do not attempt to adjust the brake lever unless the motorcycle is at a standstill.◀



- Turn adjusting screw **1** clockwise to increase the span between the brake lever and the handlebar grip.
- Turn adjusting screw **1** counter-clockwise to reduce the span between the brake lever and the handlebar grip.

NOTICE

The adjusting screw is easier to turn if you push the brake lever forward.◀

Mirrors

Adjusting mirrors

- Pivot the mirror to the correct position by pressing gently at the edge.

Spring preload

Adjustment

It is essential to set spring preload of the rear suspension to suit the load carried by the motorcycle. Increase spring preload when the vehicle is heavily loaded and reduce spring preload accordingly when the vehicle is lightly loaded.

Adjust spring preload for rear wheel

- Make sure the ground is level and firm and place the motorcycle on its stand.

WARNING

Adjusting spring preload while riding.
Risk of accident

- Do not attempt to adjust spring preload unless the motorcycle is at a standstill.◀
- Pull knob **1** out for better accessibility.

⚠ WARNING

Spring preload setting and spring-strut damping setting not matched.

Impaired handling.

- Adjust spring-strut damping to suit spring preload.◀
- If you want to increase spring preload, turn the knob in the direction indicated by the HIGH arrow.
- If you want to reduce spring preload, turn the knob in the direction indicated by the LOW arrow.

Basic setting of spring preload, rear
– without Electronic Suspension Adjustment (ESA)[OE]
Knob turned as far as it will go in the direction indicated by the LOW arrow (Full load of fuel, with rider 85 kg)◁

- Push the knob back in to its original position.

Damping

Setting

Damping must be adapted to suit the surface on which the motorcycle is ridden and to suit spring preload.

– An uneven surface requires softer damping than a smooth surface.
– An increase in spring preload requires firmer damping, a reduction in spring preload requires softer damping.

Adjust the damping for rear wheel

- Make sure the ground is level and firm and place the motorcycle on its stand.

- If you want a harder damping characteristic, use the tool from the on-board toolkit to turn adjusting screw **1** in the direction indicated by the H arrow.
- If you want a softer damping characteristic, use the tool from the on-board toolkit to turn ad-

justing screw **1** in the direction indicated by the S arrow.

Basic setting of rear-suspension damping characteristic
– without Electronic Suspension Adjustment (ESA) OE
Turn the adjusting screw as far as it will go in the direction indicated by the H arrow and then turn it back one and a half turns in the direction indicated by the S arrow (Full load of fuel, with rider 85 kg)◁

Electronic Suspension Adjustment ESA

– with Electronic Suspension Adjustment (ESA) OE

Settings

Electronic Suspension Adjustment ESA provides a convenient way of adapting the motorcycle to the load it carries and the surface over which you intend riding. This entails selecting the load variant and the damping characteristic.

You have a choice of three load variants with any of three damping characteristics selectable for each one.

The current setting appears in display field **1**.

The detailed description of the ESA II Electronic Suspension Adjustment system is on page (➠ 119).

Adjusting suspension

• Start the engine.

NOTICE

You can adjust the damping characteristic while the motorcycle is on the move.◀

- Call up the ESA menu.

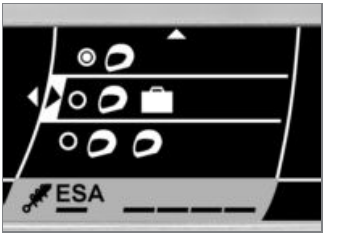
The possible settings for the damping characteristic appear on the display.

– Comfort: comfort mode
– Normal: normal mode
– Sport: sport mode

- Select the damping characteristic you want or move the cursor down to set the vehicle load.

NOTICE

The load cannot be set while the motorcycle is in motion.◀



The possible settings for vehicle load appear on the display.

One-up

One-up with luggage

Two-up (with luggage)

- Select the vehicle load variant you want.

» The suspension adjusts to suit the new setting and the ESA reading changes accordingly. The symbols for vehicle load and damping characteristic are greyed while adjustment is in progress.

Central locking

Lock

– with central locking system[OE]

- Switch on the ignition and press button **1**.

NOTICE

Only vehicles without Keyless Ride are shipped accompanied by a separate remote control for the central locking system and the alarm system.◀

- Alternatively: Press button **2** on the remote control or the radio-operated key.

» The stowage compartment in the left side panel and the cases are locked.

– with preparation for audio system and navigation system OE

» The stowage compartment in the right side panel is locked.◁

– with topcase OA

» The topcase is locked.◁

» These locks cannot subsequently be unlocked manually.

The locked symbol appears on the display.

– with alarm system (DWA) OE

» The functions of the remote control for the anti-theft alarm are described in the corresponding section.◁

Unlocking

– with central locking system OE

- Switch on the ignition and press button **1**.
- Alternatively: Press button **2** on the remote control or the radio-operated key.

» The stowage compartment in the left side panel and the cases are unlocked.

– with preparation for audio system and navigation system OE

» The stowage compartment in the right side panel is unlocked.◁

– with topcase OA

» The topcase is unlocked.◁

» Once a lock has been locked manually it subsequently has to be unlocked manually as well.

– with alarm system (DWA) OE

» The functions of the remote control for the anti-theft alarm are described in the corresponding section.◁

– with ground lighting OA

» If you use the remote control to unlock with the ignition switched off, the ground lighting is switched on for a brief period.◁

Emergency unlocking

– with central locking system OE

If the central locking system refuses to unlock, you can open the cases, topcase and stowage compartments manually. The procedure is as follows:

- Remove cases (➠ 127).

- Open cases (➠ 126).

- First turn the key in the top-case lock 45° past the LOCK position, then turn it to the dot position and press in the lock barrel.

» The release lever pops open.

- Turn the key in the stowage-compartment lock 45° out past the vertical position and press in the lock barrel.

» The stowage-compartment lid pops open.

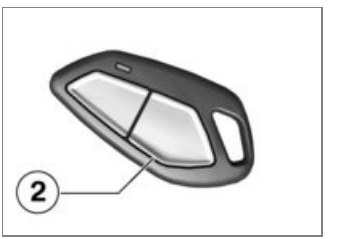
Logon of remote controls

– with central locking system OE
– with alarm system (DWA) OE
– without Keyless Ride OE

If a remote control has been mislaid and a replacement acquired or if you are going to use an additional remote control, you must invariably log on all the remote controls in the set.

- Enable logon of the remote controls as follows:

- Switch on the ignition.



- Press button **2** on the remote control three times.

» One acoustic signal sounds.

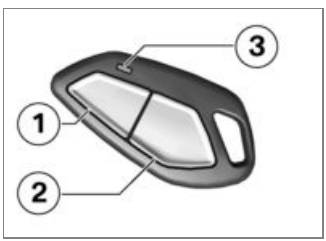
- Within ten seconds, switch off the ignition.
- Press button **2** on the remote control three times.

» One acoustic signal sounds.

- Within ten seconds, switch on the ignition.

You can now proceed to log on all the remote controls.

- Step through the following procedure with each remote control in turn:



- Press and hold down buttons **1** and **2** until LED **3** stops flashing.

» LED **3** flashes for about ten seconds.

- Release buttons **1** and **2**.

» LED **3** lights up.

- Press button **1** or button **2**.

» One acoustic signal sounds, LED **3** goes out.

To complete logon:

- Switch off the ignition.

» Three acoustic signals sound.

» Logon is also ended when

– four remote controls have been logged on.

– if you have logged on the first remote control and then do not press a button within approximately 30 seconds.

Synchronise the remote controls

– with central locking system OE

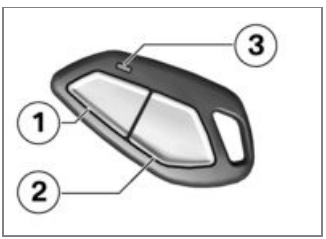
– with alarm system (DWA) OE

– without Keyless Ride OE

If the central locking system stops responding to the signals from a remote control, the unit in question has to be synchronised. This can happen, for example, if the buttons on the remote control were pressed too frequently while the remote control was out of range of the anti-theft alarm.

- The procedure for synchronising the remote controls is as follows:

- Switch on the ignition.



- Press and hold down buttons **1** and **2** until LED **3** stops flashing.

» LED **3** flashes for about ten seconds.

- Release buttons **1** and **2**.

» LED **3** lights up.

- Press button **1** or button **2**.

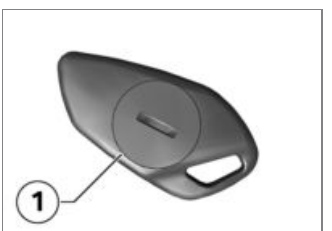
» LED **3** goes out.

Replacing battery of remote control

– with central locking system OE
– with alarm system (DWA) OE
– without Keyless Ride OE

If you press a button on the remote control and the LED does not show or lights up only briefly:

- Replace the battery of remote control.



- Open lid of battery compartment **1**.
- Dispose of the old battery in accordance with all applicable laws and regulations; do not attempt to dispose of batteries as domestic waste.

ATTENTION

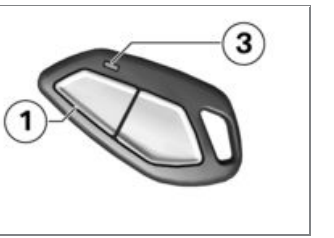
Batteries unsuitable or not inserted not in compliance with correct procedure.

Component damage

- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, always make sure polarity is correct.◀
- Insert the new battery with the positive terminal up.

Battery type and rated battery voltage
for remote control
CR 1632 lithium 3 V

» The LED on the remote control lights up; the remote control has to be synchronised.



- Press button **1** twice.

» LED **3** flashes for a few seconds.
» The remote control is again ready for use.

Anti-theft alarm (DWA)

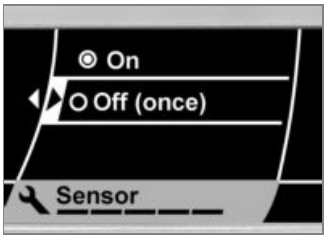
– with alarm system (DWA) OE

Activation without remote control or radio-operated key

- If applicable, switch on automatic activation of the anti-theft alarm after ignition OFF.
- Customising anti-theft alarm settings (➠ 92).
- Switch off the ignition.

» Activation takes 30 seconds to complete.
» Turn indicators flash twice.
» Confirmation tone sounds twice (if programmed).
» Anti-theft alarm is active.

- To deactivate the motion sensor (for example if you are about to transport the motorcycle on a train and the swaying movement of the moving train could trip the alarm), call up the `Settings` menu before switching off the ignition.
- Select `Vehicle - Alarm syst. - Sensor`.



- Select `Off (once)` to switch off the motion sensor this once.
- Switch off the ignition.

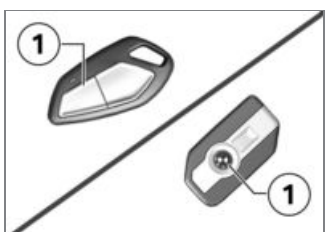
» Activation takes 30 seconds to complete.
» Turn indicators flash three times.
» Confirmation tone sounds three times (if programmed).
» The anti-theft alarm is active, the motion sensor is deactivated.

Activation with remote control or radio-operated key

NOTICE

Only vehicles without Keyless Ride are shipped accompanied by a separate remote control for the central locking system and the alarm system.◀

- Switch off the ignition.

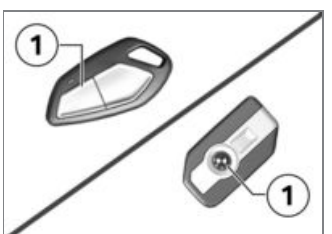


- Press button **1** on the remote control or the radio-operated key twice.

NOTICE

See also the other functions of the remote control for the central locking system.◀

» Activation takes 30 seconds to complete.
» Turn indicators flash twice.
» Confirmation tone sounds twice (if programmed).
» Anti-theft alarm is active.



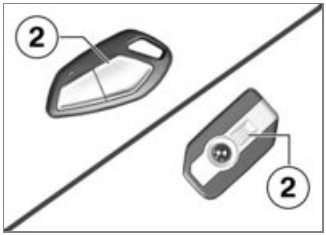
• To deactivate the motion sensor (for example if you are about to transport the motorcycle on a train and the swaying movement of the moving train could trip the alarm), press button **1** on the remote control or the radio-operated key again during the activation phase.
» Turn indicators flash three times.
» Confirmation tone sounds three times (if programmed).
» Motion sensor is deactivated.

Alarm

An alarm can be triggered by
– the motion sensor
– an attempt to use an unauthorised key to switch on the ignition
– disconnection of the anti-theft alarm from the motorcycle's battery (internal battery in the anti-theft alarm provides power - acoustic alarm only, the turn indicators do not flash).

All functions are sustained even if the internal battery of the anti-theft alarm system is flat; the only difference is that an alarm cannot be triggered if the system is disconnected from the motorcycle's battery.

An alarm lasts for approximately 26 seconds. While an alarm is in progress an alarm tone sounds and the turn indicators flash. You can select the type of alarm tone in the multifunction display.



You can cancel an alarm at any time without deactivating the anti-theft alarm by pressing button **2** on the remote control or the radio-operated key.

If an alarm was triggered while the motorcycle was unattended, the rider is notified accordingly by an alarm tone sounding once when the ignition is switched on. The anti-theft alarm telltale light then signals the reason for the alarm for one minute.
The meanings of the flash codes are as follows:

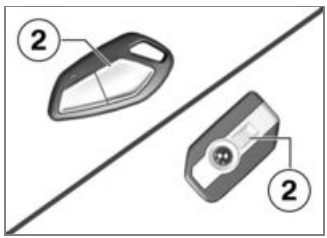
– Flashes 1x: Motion sensor 1
– Flashes 2x: Motion sensor 2
– Flashes 3x: Ignition switched on with unauthorised key
– Flashes 4x: Disconnection of the anti-theft alarm from the motorcycle's battery
– Flashes 5x: Motion sensor 3

Deactivation without remote control or radio-operated key

- Kill switch in operating position (run).
- Switch on the ignition.

» Turn indicators flash once.
» Confirmation tone sounds once (if programmed).
» Anti-theft alarm is deactivated.

Deactivation with remote control or radio-operated key



- Press button **2** on the remote control or the radio-operated key once.

NOTICE

See also the other functions of the remote control for the central locking system.◀

NOTICE

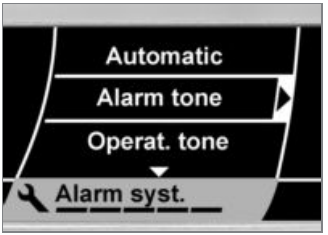
If the alarm function is deactivated by the remote control and

the ignition is not subsequently switched on, the alarm function automatically goes active again after 30 seconds if "Activation after ignition OFF" is programmed.◀

» Turn indicators flash once.
» Confirmation tone sounds once (if programmed).
» Anti-theft alarm is deactivated.

Customising anti-theft alarm settings

- Call up the `Settings` menu and select `Vehicle` - `Alarm syst.`.



The following settings are available:

– `Automatic` - `On`: Anti-theft alarm is activated automatically when the ignition is switched off.
– `Automatic` - `Off`: Anti-theft alarm has to be activated with the remote control when the ignition is switched off.
– `Alarm tone`: Type of alarm tone.
– `Operat. tone` - `On`: Turn indicators flash and one tone sounds as confirmation when the alarm is switched on or off.
– `Operat. tone` - `Off`: Turn indicators flash as only confirmation when anti-theft alarm is switched on or off.

- Configure the desired settings using the Multi-Controller.

Tyres

Checking tyre pressure

WARNING

Incorrect tyre pressure.
Impairment of the motorcycle's handling characteristics. Shorter useful tyre life.

- Always check that the tyre pressures are correct.◀
- Make sure the ground is level and firm and place the motorcycle on its stand.

- Check tyre pressures against the data below.

 Tyre pressure, front
2.9 bar (Tyre cold)

 Tyre pressure, rear
2.9 bar (Tyre cold)

If tyre pressure is too low:

- Correct tyre pressure.

Riding

Safety instructions

Rider's equipment

Do not ride without the correct clothing! Always wear:
– Helmet
– Motorcycling jacket and trousers
– Gloves
– Boots

This applies even to short journeys, and to every season of the year. Your authorised BMW Motorrad dealer will be glad to advise you on the correct clothing for every purpose.

Load correctly

⚠ WARNING

Handling adversely affected by overloading and imbalanced loads.
Risk of falling

- Do not exceed the permissible gross weight and be sure to comply with the instructions on loading.◀
- Set spring preload, damping characteristic and tyre pressures to suit total weight.
- Make sure that the weight is uniformly distributed between right and left.
- Pack heavy items at the bottom and toward the inboard side.
- Note the maximum permissible payload and the speed limit for riding with cases fitted, as stated on the label inside the case (see also the section entitled "Accessories").

– with topcase OA

- Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the case (see also the section entitled "Accessories").◁

– with tank bag OA

- Note the maximum permissible payload of the tankbag and the speed limit for riding with a tankbag on the motorcycle.

 Payload of tankbag
≤5 kg

 Maximum permissible speed for riding with the tankbag fitted to the motorcycle
≤160 km/h◁

Speed

If you ride at high speed, always bear in mind that various boundary conditions can adversely affect the handling of your motorcycle:

– Settings of the spring-strut and shock-absorber system
– Imbalanced load
– Loose clothing
– Insufficient tyre pressure
– Poor tyre tread
– Etc.

Risk of poisoning

Exhaust fumes contain carbon monoxide, which is colourless and odourless but highly toxic.

WARNING

Exhaust gases adversely affecting health.

Risk of asphyxiation

- Do not inhale exhaust fumes.
- Do not run the engine in an enclosed space.◀

Risk of burn injury

CAUTION

Engine and exhaust system become very hot when the vehicle is in use.

Risk of burn injury

- When you park the vehicle make sure that no-one and no objects can come into contact with the hot engine and exhaust system.◀

Catalytic converter

If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.

For this reason, observe the following points:

– Do not run the fuel tank dry.
– Do not attempt to start or run the engine with a spark-plug cap disconnected.
– Stop the engine immediately if it misfires.
– Use only unleaded fuel.
– Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in catalytic converter.

Damage to catalytic converter.

- Note the points listed for protection of the catalytic converter.◀

Risk of overheating

ATTENTION

Engine running for prolonged period with vehicle at standstill.

Overheating due to insufficient cooling. In extreme cases, the motorcycle could catch fire.

- Do not allow the engine to idle unnecessarily.
- Ride away immediately after starting the engine.◀

Manipulation

ATTENTION

Tampering with the motorcycle (e.g. engine management ECU, throttle valves, clutch).

Damage to the affected parts, failure of safety-relevant functions. Damage due to tampering is not covered by the warranty.

- Do not tamper with the vehicle in any way that could result in tuned performance.◀

Comply with checklist

- At regular intervals, use the checklist below to check your motorcycle.

Always before riding off:

- Operation of the brake system
- Operation of the lights and signalling equipment
- Checking clutch function (➠ 143).
- Check the tyre tread depth (➠ 144).
- Cases correctly installed and luggage secured

Every 3rd refuelling stop:

– without Electronic Suspension Adjustment (ESA) OE

- Adjust spring preload for rear wheel (➠ 81).◁

– without Electronic Suspension Adjustment (ESA) OE

- Adjust the damping for rear wheel (➠ 82).◁

– with Electronic Suspension Adjustment (ESA) OE

- Adjusting suspension (➠ 83).◁
- Checking engine oil level (➠ 136).
- Checking front brake pad thickness (➠ 138).
- Check rear brake pad thickness (➠ 139).
- Check brake-fluid level, front brakes (➠ 140).
- Check the brake-fluid level, rear brakes (➠ 141).
- Check coolant level (➠ 142).

Starting

Starting engine

- Switch on the ignition.

» Pre-ride check is performed. (➠ 99)

» ABS self-diagnosis is performed. (➠ 100)

» DTC self-diagnosis is performed. (➠ 100)

- Select neutral or, if a gear is engaged, pull the clutch lever.

NOTICE

You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch itself off if you start it with the gearbox in neutral and then engage a gear before retracting the side stand.◀

- When starting a cold engine at low ambient temperatures: disengage the clutch and turn the twistgrip slightly to open the throttle.

- Press starter button **1**.

NOTICE

The start attempt is automatically interrupted if battery voltage is too low. Recharge the battery before you start the engine, or use jump leads and a donor battery to start.
See the subsection on jump starting in "Maintenance" for more details.◀

» The engine starts.
» Consult the troubleshooting chart below if the engine refuses to start. (➠ 168)

Pre-ride check

When you switch on the ignition the instrument panel control unit runs a test of the telltale and warning lights for the ABS and ASC systems and the 'General' warning light and the needles of the instruments. The logo appears on the display and remains visible while these checks are in progress.

Phase 1

General warning light shows yellow.

Phase 2

General warning light shows red.

SET The SET light lights up.

If the 'General' warning light does not show:

WARNING

Faulty "General" warning light.

No indication of malfunctions.

- Check that the 'General' warning light comes on, and that it shows red and yellow.◀
- Have the fault rectified as quickly as possible by a

specialist workshop, preferably an authorised BMW Motorrad dealer.

ABS self-diagnosis

BMW Motorrad Integral ABS performs self-diagnosis to ensure its operability. Self-diagnosis starts automatically when you switch on the ignition.

Phase 1

» Test of the diagnosis-compatible system components with the vehicle at a standstill.

 ABS warning light flashes.

Phase 2

» Test of the wheel sensors as the vehicle pulls away from rest. The motorcycle must reach a speed of at least 5 km/h in order for ABS self-diagnosis to complete.

 ABS warning light flashes.

ABS self-diagnosis completed

» The ABS warning light goes out.

If an indicator showing an ABS fault appears when ABS self-diagnosis completes:

- You can continue to ride. Bear in mind that neither the ABS function nor the integral braking function is available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

DTC self-diagnosis

BMW Motorrad DTC performs self-diagnosis to ensure its operability. Self-diagnosis is performed automatically when you switch on the ignition.

Phase 1

» Test of the diagnosis-compatible system components with the vehicle at a standstill.

 DTC warning light slow-flashes.

Phase 2

» Test of the diagnosis-compatible system components while the motorcycle is on the move. The engine must be running and the motorcycle must reach a speed of at least 5 km/h in order for DTC self-diagnosis to complete.

 DTC warning light slow-flashes.

DTC self-diagnosis completed

» The DTC symbol no longer shows.

If an indicator showing a DTC fault appears after DTC self-diagnosis completes:

- You can continue to ride. Bear in mind that the DTC function is not available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Running in

Engine

- Until the first running-in check, vary the throttle opening and engine-speed range frequently; avoid riding at constant engine rpm for prolonged periods.
- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding high-speed main roads and highways if possible.
- Comply with the rpm limits for running in.

 Running-in speed
<5000 min^{-1} (Odometer reading 0...300 km)
<6000 min^{-1} (Odometer reading 300...1000 km)
no full throttle (Odometer reading 0...1000 km)

- Do not omit the first running-in check after 500 - 1200 km.

Brake pads

New brake pads have to bed down before they can achieve their optimum friction levels. You can compensate for this initial reduction in braking efficiency by exerting greater pressure on the levers.

WARNING

New brake pads.

Longer stopping distance. Risk of accident.

- Apply the brakes in good time.◀

Tyres

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

WARNING

New tyres losing grip on wet roads and at extreme bank angles.

Risk of accident

- Ride carefully and avoid extremely sharp inclines.◀

Brakes

How can stopping distance be minimised?

Each time the brakes are applied, a load distribution shift takes place with the load shifting forward from the rear to the front wheel. The sharper the motorcycle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking.

To optimise stopping distance, apply the front brakes rapidly and keep on increasing the force you apply to the brake lever. This makes the best possible use of the dynamic increase in load at the front wheel. Remember to pull the clutch at the same time. In the "panic braking situations" that are trained so frequently braking force is applied as rapidly as possible and with the rider's full force applied to the brake levers; under these circumstances the dynamic shift in load distribution cannot keep pace with the increase in deceleration and the tyres cannot transmit the full braking force to the surface of the road.

BMW Motorrad Integral ABS prevents the front wheel from locking up.

Hazard braking

If you brake sharply from a speed in excess of 50 km/h the brake light flashes rapidly as a warning for road users behind you.

If you brake until your speed is less than 15 km/h the hazard warning lights start to flash as well. The hazard warning lights switch off automatically as soon as you start to accelerate and vehicle speed reaches 20 km/h.

Descending mountain passes

WARNING

Braking only with the rear brake on mountain descents.
Brake fade. Destruction of the brakes due to overheating.
- Use the front brake and utilise engine braking.◀

Wet and dirty brakes

Wetness and dirt on the brake discs and the brake pads diminish braking efficiency.

Delayed braking action or poor braking efficiency must be reckoned with in the following situations:
- Riding in the rain or through puddles of water.
- After the motorcycle has been washed.
- Riding on salted or gritted roads.

– After work has been carried on the brakes, due to traces of oil or grease.
– Riding on dirt-covered surfaces or off-road.

WARNING

Moisture and dirt.
Diminished braking effect.
- Apply the brakes lightly while riding to remove wetness and dirt, or dismount and clean the brakes.
- Think ahead and brake in good time until full braking efficiency is restored.◀

ABS Pro

Physical limits applicable to motorcycling

WARNING

Braking when cornering.
Risk of crash despite ABS Pro
- Invariably, the rider bears responsibility for assessing road and traffic conditions and adopting his or her style of riding accordingly.
- Do not take risks that would negate the additional safety offered by this system.◀

ABS Pro is available in all riding modes.

Possibility of a fall not precluded

Although ABS Pro provides the rider with valuable assistance and constitutes a huge advance in safety for braking with the motorcycle banked for cornering, it cannot under any circumstances be considered as redefining the physical limits that apply to motorcycling. It is still possible for these limits to be overshot due to misjudgement or rider error. In extreme cases this can result in a crash.

Use on public roads

ABS Pro helps make the motorcycle even safer for riding on public roads. When the brakes are applied because of an unforeseen hazard when the motorcycle is banked for cornering, within the physical limits that apply to motorcycling the system prevents the wheels from locking and skidding away.

NOTICE

ABS Pro was not developed to enhance individual braking performance with the motorcycle banked into corners in situations approaching the limits of performance.◀

Parking your motorcycle

Side stand

- Switch off the engine.

ATTENTION

Poor ground underneath the stand.
Risk of damage to parts if vehicle topples.

- Always check that the ground under the stand is level and firm.◀
- Extend the side stand and prop the motorcycle on the stand.

ATTENTION

Additional weight placing strain on the side stand.
Risk of damage to parts if vehicle topples.

- Do not sit or lean on the vehicle while it is propped on the side stand.◀
- If the camber of the roadway permits, turn the handlebars all the way to the left.
- On a gradient, the motorcycle should always face uphill; select 1st gear.

Centre stand

- Switch off the engine.

ATTENTION

Poor ground underneath the stand.
Risk of damage to parts if vehicle topples.

- Always check that the ground under the stand is level and firm.◀

ATTENTION

Centre stand retracts due to severe movements.
Risk of damage to parts if vehicle topples.

- Do not lean or sit on the vehicle with the centre stand extended.◀
- Extend the centre stand and lift the motorcycle onto the stand.

Refuelling

Fuel grade

For optimum fuel consumption, fuel should be sulphur-free or as low-sulphur as possible.

ATTENTION

Leaded fuel.
Damage to catalytic converter.

- Do not attempt to run the vehicle on leaded fuel or fuel with metallic additives, e.g. manganese or iron.◀
- You can run the engine on fuel with a maximum ethanol content of 10 %, i.e. E10.

Recommended fuel grade
Super unleaded (max. 10 % ethanol, E10) 95 ROZ/RON 89 AKI

Refuelling

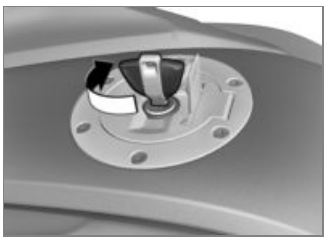
WARNING

Fuel is highly flammable.
Risk of fire and explosion.
- Do not smoke. Never bring a naked flame near the fuel tank.◀

ATTENTION

Fuel attacks plastic surfaces.
Surfaces become unsightly or dull.
- Clean plastic parts immediately after contact with fuel.◀

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Open the protective cap.



- Use the ignition key to unlock the fuel filler cap and pop the cap open.

WARNING

Escape of fuel due to heat-induced expansion if fuel tank is overfilled.
Risk of falling
- Do not overfill the fuel tank.◀
- Refuel with fuel of the grade stated below; do not fill the tank past the bottom edge of the filler neck.

NOTICE

When refuelling after running on reserve, make sure that you top up the tank to a level above re-

serve, as otherwise the new level will not be registered and the fuel warning light indicating that the level is down to reserve will not be switched off.◀

 Usable fuel capacity
approx. 24 l

 Reserve fuel
approx. 4 l

- Press the fuel tank cap down firmly to close.
- Remove the ignition key and close the protective cap.

Refuelling

– with Keyless Ride OE

The steering lock is disengaged.

WARNING

Fuel is highly flammable.
Risk of fire and explosion.
- Do not smoke. Never bring a naked flame near the fuel tank.◀

WARNING

Escape of fuel due to heat-induced expansion if fuel tank is overfilled.
Risk of falling
- Do not overfill the fuel tank.◀

ATTENTION

Fuel attacks plastic surfaces.
Surfaces become unsightly or dull.
- Clean plastic parts immediately after contact with fuel.◀
- Make sure the ground is level and firm and place the motorcycle on its side stand.

NOTICE

The volume of the tank can be utilised to the full only when the motorcycle is propped on its side stand.◀

– with Keyless Ride OE
- Switching off ignition (➠ 54).

NOTICE

The fuel filler cap can be opened within the defined waiting time after the ignition has been switched off, without the radio-operated key being within range.◀

 Waiting time for opening fuel filler cap
2 min

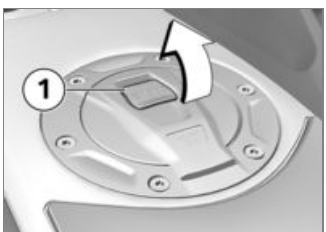
» There are **two variant ways** of opening the fuel filler cap:
– Within the waiting time

– After the waiting time has expired

Version 1

– with Keyless Ride[OE]

Within the waiting time



- Pull up tab **1** of the fuel filler cap slowly.

» Fuel filler cap unlocks.

- Fully open the fuel filler cap.

Version 2

– with Keyless Ride[OE]

After the waiting time has expired

- Bring the radio-operated key into range.
- Slowly pull tab **1** up.

» The telltale light for the radio-operated key flashes while the search for the radio-operated key is in progress.

- Again slowly pull up tab **1** of the fuel filler cap.

» Fuel filler cap unlocks.

- Fully open the fuel filler cap.

- Refuel with fuel of the grade stated above; do not fill the tank past the bottom edge of the filler neck.

NOTICE

When refuelling after running on reserve, make sure that you top up the tank to a level above reserve, as otherwise the new level will not be registered and the fuel warning light indicating that the level is down to reserve will not be switched off.◀

NOTICE

The "usable fuel capacity" specified in the technical data is the quantity that the fuel tank could hold if it had been run dry and the engine had cut out due to a lack of fuel.◀

Usable fuel capacity
approx. 24 l

Reserve fuel
approx. 4 l

- Press down firmly on the filler cap of the fuel tank.

» The fuel filler cap engages with an audible click.

» The fuel filler cap locks automatically when the waiting time expires.

» The engaged fuel filler cap locks immediately when you secure the steering lock or switch on the ignition.

Securing motorcycle for transportation

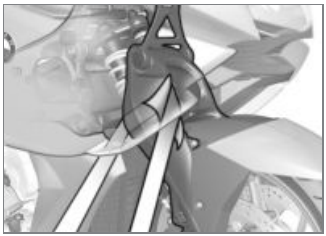
- Make sure that all components that might come into contact with straps used to secure the motorcycle are adequately protected against scratching. Use adhesive tape or soft cloths, for example, for this purpose.

ATTENTION

Vehicle topples to side when being lifted on to stand.

Risk of damage to parts if vehicle topples.

- Secure the vehicle to prevent it toppling, preferably with the assistance of a second person.◀
- Push the motorcycle onto the transportation flat and hold it in position: do not place it on the side stand or centre stand.



ATTENTION

Incorrect routing of retaining straps.

Damage to brake lines, Bowden cables, bearings and trim panels.

- Carefully route retaining straps.
- Use a cloth to protect painted components from scratches.◀
- Pass the straps on left and right through the suspension and strap the motorcycle down.
- At the rear, secure the straps to the rear frame on both sides and tighten the straps.
- Do not pull the straps over the footrests.
- Uniformly tighten all the straps.

Engineering details

Riding mode

Selection

Three riding modes enable the motorcycle's characteristics to adapt to the prevailing weather conditions, the road and traffic, and the rider's style of riding:
– RAIN
– ROAD
– DYNAMIC

Each of these modes produces perceptible differences in the way the motorcycle behaves. DTC can be switched off in each mode; the explanations below invariably refer to conditions with the system switched ON. The mode last selected is automatically reactivated after the ignition has been switched off and then on again.
The basic rule is: the sportier the mode you select, the more directly can you tap into the engine's reserves of power. At the same time, the level of rider assistance that the DTC system offers decreases accordingly. Consequently, you must always bear the following in mind with regard to your selection of a ride mode: the sportier the setting, the greater the challenge to your riding skill!

RAIN
The engine's full power is not made available. Power increase when you open the throttle is reserved, engine response is correspondingly soft.
The DTC system intervenes early enough to prevent the rear wheel from spinning. On road surfaces with high to medium grip (dry and wet asphalt to dry cobblestones) the vehicle remains very stable; movements of the tail are clearly perceptible only on slippery road surfaces (wet bitumen or wet cobblestones).

ROAD
The engine's full power is available in this mode. Power increase when you open the throttle is more direct than in RAIN mode, the engine responds more rapidly.
DTC system intervention is later than in RAIN mode. On road surfaces with high to medium grip (dry and wet asphalt to dry cobblestones) the motorcycle remains stable. Slight rear-wheel drift is perceptible. Movements of the tail are clearly perceptible on slippery road surfaces (wet bitumen or wet cobblestones).

DYNAMIC
The DYNAMIC mode is the sportiest mode.
Power increase and engine response are the same as in ROAD mode. Response to rider input, however, is considerably more direct.

DTC system intervention is even later, which means that even on dry asphalt drifting is possible under sharp acceleration when cornering.

Mode changes

A mode change involving functions in the engine management system and the DTC system is possible only when drive torque is not applied to the rear wheel.
In order to achieve this state,
– the motorcycle must be at a standstill with the ignition switched on,

or
– the throttle twistgrip must be in the fully closed position,
– the clutch lever must be pulled and the clutch disengaged.

The desired ride mode is initially preselected. The mode change does not take place until the systems in question are all in the appropriate state.
The selection menu does not disappear from the display until the mode change has taken place.

Hill Start Control

Hill Start Control

– with Hill Start Control OE
Hill Start Control is a pullaway assistant that operates on the partially integral ABS system to prevent the vehicle from rolling back on a gradient without the rider having to keep pressure applied to the brake lever. When Hill Start Control is activated pressure is built up in the rear brake system to keep the machine at a standstill on a gradient. The holding pressure built up in the brake system depends on the steepness of the gradient.

Brake system with BMW Motorrad Integral ABS

Partially integral brakes

Your motorcycle is equipped with partially integral brakes. Both front and rear brakes are applied when you pull the handbrake lever. The footbrake lever acts only on the rear brake.
While the brakes are slowing the motorcycle, the BMW Motorrad Integral ABS adapts braking-force distribution between front and rear brakes to suit the load on the motorcycle.

ATTENTION

The integral function means that it is not possible to make the rear wheel spin

with the front brake applied (Burn Out).
Damage to rear brake and clutch.
• Do not attempt Burn Out.◀

How does ABS work?

The amount of braking force that can be transferred to the road depends on factors hat include the coefficient of friction of the road surface. Loose stones, ice and snow or a wet road all have much lower coefficients of friction than a clean, dry asphalt surface. The lower the coefficient of friction, the longer the braking distance.
If the rider increases braking pressure to the extent that braking force exceeds the maximum transferrable limit, the wheels start to lock and the motorcycle loses its directional stability; a fall is imminent. Before this situation can occur, ABS intervenes and adapts braking pressure to the maximum transferrable braking force, so the wheels continue to turn and directional stability is maintained irrespective of the condition of the road surface.

What are the effects of surface irregularities?

Humps and surface irregularities can cause the wheels to lose contact temporarily with the road surface; if this happens the braking force that can be transmitted to the road can drop to zero. If the brakes are applied under these circumstances the ABS has to reduce braking force to ensure that directional stability is maintained when the wheels regain contact with the road surface. At this instant the BMW Motorrad Integral ABS must assume an extremely low coefficient of friction, so that the wheels will continue to rotate under all imaginable circumstances, because this is the precondition for ensuring directional stability. As soon as is registers the actual circumstances, the system reacts instantly and adjusts braking force accordingly to achieve optimum braking.

What feedback does the rider receive from the BMW Motorrad Integral ABS?

If the ABS system has to reduce braking force on account of the circumstances described above, vibration is perceptible through the handbrake lever.
When the handbrake lever is pulled, brake pressure is also built up at the rear wheel by the integral function. If the brake pedal is depressed after the handbrake lever is pulled, the brake pressure built up beforehand is perceptible as counter-pressure sooner than is

the case when the brake pedal is depressed either before or at the same time as the brake lever is pulled.

Rear wheel lift

Even under severe braking, a high level of tyre grip can mean that the front wheel does not lock up until very late, if at all. Consequently, ABS does not intervene until very late, if at all. Under these circumstances the rear wheel can lift off the ground, and the outcome can be a high-siding situation in which the motorcycle can flip over.

⚠ WARNING

Rear wheel lift due to severe braking.

Risk of falling

- When you brake sharply, bear in mind that ABS control cannot always be relied on to prevent the rear wheel from lifting clear of the ground.◀

What is the design baseline for BMW Motorrad Integral ABS?

Within the limits imposed by physics, the BMW Motorrad Integral ABS ensures directional stability on any surface. The system is not optimised for special requirements that apply under extreme competitive situations off-road or on the track.

Special situations

The speeds of the front and rear wheels are compared as one means of detecting a wheel's incipient tendency to lock. If the system registers implausible values for a lengthy period the ABS function is deactivated for safety reasons and an ABS fault message is issued. Self-diagnosis has to complete before fault messages can be issued. In addition to problems with the BMW Motorrad Integral ABS, exceptional riding conditions can lead to a fault message being issued.

Exceptional riding conditions:

– Heating up with the motorcycle on the centre stand or an auxiliary stand, engine idling or with a gear engaged.
– Rear wheel locked by the engine brake for a lengthy period, for example while descending on a loose surface.

If a fault message is issued on account of exceptional riding conditions as outlined above, you can reactivate the ABS function by switching the ignition off and on again.

What significance devolves on regular maintenance?

WARNING

Brake system not regularly serviced.

Risk of accident

- In order to ensure that the ABS is always maintained in optimum condition, it is essential for you to comply strictly with the specified inspection intervals.◀

Reserves for safety

The potentially shorter braking distances which BMW Motorrad 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.

Take care when cornering! When you apply the brakes on a corner, the motorcycle's weight and momentum take over and even BMW Motorrad Integral ABS is unable to counteract their effects.

Evolution of ABS to ABS Pro

Until now, the BMW Motorrad ABS helped ensure a very high degree of safety for braking with the motorcycle upright and travelling in a straight line. Now ABS Pro offers enhanced safety for braking in corners as well. ABS Pro prevents the wheels from locking even under sharp braking. ABS Pro reduces abrupt changes in steering force, particularly in panic-braking situations, counteracting the vehicle's otherwise natural but undesirable tendency to straighten up.

ABS intervention

Technically speaking, depending on the riding situation ABS Pro adapts ABS intervention to the motorcycle's bank angle. Signals for rate of roll and rate of yaw and lateral acceleration are used to calculate bank angle. These signals come from the angular rate sensor, an integral component of Dynamic Traction Control DTC and Dynamic ESA.

As the motorcycle is heeled over more and more as it banks into a corner, an increasingly strict limit is imposed on the brake-pressure gradient for the start of brake application. This slows the build-up of brake pressure to a corresponding degree. Additionally, pressure modulation is more uniform across the range of ABS intervention.

Advantages for the rider

The advantages of ABS Pro for the rider are sensitive response and high braking and directional stability combined with best-case deceleration of the motorcycle, even when cornering.

Electronic engine management with BMW Motorrad DTC

How does DTC work?

The BMW Motorrad DTC compares the speed of rotation of the front wheel and the rear wheel. The differential is used to compute slip as a measure of the reserves of stability available at the rear wheel. If slip exceeds a certain limit, the engine control intervenes and adapts the engine torque accordingly.

⚠ WARNING

Risky riding.

Risk of accident despite DTC.

- Invariably, it remains the rider's responsibility to adapt riding style to riding conditions.
- Do not take risks that would negate the additional safety offered by this system.◀

What is the design baseline for BMW Motorrad DTC?

BMW Motorrad DTC is designed as an assistant system for the rider and for use on public roads. The extent to which the rider affects DTC control can be considerable (weight shifts when cornering, items of luggage loose on the motorcycle), especially when style of riding takes rider and machine close to the limits imposed by physics.

The system is not optimised for special requirements that apply under extreme competitive situations off-road or on the track. You have the option of deactivating the BMW Motorrad DTC system for these circumstances.

⚠ WARNING

Risky riding.

Risk of accident despite DTC.

- Invariably, it remains the rider's responsibility to adapt riding style to riding conditions.
- Do not take risks that would negate the additional safety offered by this system.◀

Special situations

In accordance with the laws of physics, the accelerating ability is restricted more and more as the heel angle increases. Consequently, there can be a per-

ceptible reduction in acceleration out of very tight bends.

The speeds of the front and rear wheels are compared and the angle of heel taken into account as one means of detecting the rear wheel's incipient tendency to spin or slip sideways. If the electronic processor receives values that it considers implausible over a lengthy period, a dummy value is used for the angle of heel or the DTC function is switched off. Under these circumstances, the indicator for a DTC fault is displayed. Self-diagnosis has to complete before fault messages can be issued.
The BMW Motorrad DTC can issue an error message under the exceptional riding conditions outlined below.

Exceptional riding conditions:

– Riding for a lengthy period with the front wheel lifted off the ground (wheelie) with DTC deactivated.
– Rear wheel rotating with the vehicle held stationary by applying the front brake (burnout).
– Heating up with the motorcycle on an auxiliary stand, in neutral or with a gear engaged.

If the front wheel lifts clear of the ground under severe acceleration, the DTC reduces engine torque until the front wheel regains contact with the ground. Under these circumstances, BMW Motorrad recommends rolling the throttle slightly closed so as to restore stability with the least possible delay.

When riding on a slippery surface, never snap the throttle twistgrip fully closed without pulling the clutch at the same time. Engine braking torque can cause the rear wheel to skid, with a corresponding loss of stability. The BMW Motorrad DTC is unable to control a situation of this nature.

Tyre pressure monitoring RDC

– with tyre pressure monitoring (RDC)[OE]

Function

A sensor integrated into each tyre measures the air temperature and the air pressure inside the tyre and transmits this information to the control unit. Each sensor has a tripswitch that does not enable transmission of the measured values until the motorcycle has accelerated

to about 30 km/h. The display shows "−−" for each tyre until the tyre-pressure signal is received for the first time. The sensors continue to transmit the measured-value signals for approximately 15 minutes after the motorcycle comes to a stop.
An error message is issued if wheels without sensors are fitted to a motorcycle equipped with an RDC control unit.

Temperature compensation

Tyre pressure is a temperature-sensitive variable: pressure increases as tyre temperature rises and decreases as tyre temperature drops. Tyre temperature depends on ambient temperature, on the style of riding and the duration of the ride.
The tyre-pressure readings shown by the multifunction display are temperature-compensated; the reference tyre temperature for these readings is always 20 °C. The gauges on forecourt air lines do not compensate for temperature. The tyre pressure recorded depends on tyre temperature. In most instances, therefore, these gauge readings will not tally with the pressures shown by the multifunction display. The warmer the tyre, the higher the gauge reading by comparison with the reading shown on the display.

Pressure adaptation

Compare the RDC readings on the multifunction display with the value in the table on the inside cover of the Rider's Manual. Then use the air line to compensate for the difference between the RDC reading and the value in the table.

Example: According to the Rider's Manual, tyre pressure should be 2.9 bar, but the reading in the multifunction display is 2.7 bar, so pressure is low by 0.2 bar. The gauge on the air line shows 2.5 bar. You must now increase tyre pressure by the 0.2 bar difference between the value in the table and the RDC reading; when the air-line gauge shows 2.7 bar, the tyre is inflated to the correct pressure.

Electronic Suspension Adjustment ESA II

– with Electronic Suspension Adjustment (ESA)[OE]

Suspension adjustments

Depending on the load on the motorcycle, the appropriate load status must first be selected when the motorcycle is stationary. The damping characterist-

ics on both spring struts and the spring mount and the spring rate on the rear spring strut are adjusted on the basis of the riding mode that is then selected. If the selected driving mode is changed, the damping characteristics on both spring struts and the spring rate on the rear spring strut are also adjusted. This allows the suspension to be very accurately adapted to all riding conditions, even when the motorcycle is in motion.

- The combination of spring mount, suspension and spring rate ensure that the suspension geometry is always perfectly adjusted.
- The static normal position is almost maintained even while riding.
- The different riding conditions and load statuses are compensated, so that the handling of the motorcycle remains constant.

It is possible to change the spring rate electronically by combining a conventional coil spring and a plastic element (Elastogran), the lateral expansion of which can be restricted electro-hydraulically using a displaceable sleeve. The more the sleeve encloses the plastic element, the more the expansion of the plastic element is restricted, causing the spring rate to increase. The maximum spring rate is achieved when the sleeve completely encloses the plastic element and rests on the steel spring. By the same token, the spring rate decreases when the sleeve allows the plastic element to expand further.

Accessories

General instructions

⚠ CAUTION

Use of other-make products.
Safety risk

- BMW Motorrad cannot examine or test each product of outside origin to ensure that it can be used on or in connection with BMW vehicles without constituting a safety hazard. Country-specific official authorisation does not suffice as assurance. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW vehicles and, consequently, they are not sufficient in some circumstances.
- Use only parts and accessories approved by BMW for your vehicle.◀

BMW has conducted extensive testing of the parts and accessory products to establish that they are safe, functional and suitable. Consequently, BMW accepts product liability. BMW accepts no liability whatsoever for parts and accessories that it has not approved.
Whenever you are planning modifications, comply with all the legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country.
Also bear in mind the information on the effect of wheel size on suspension-control systems (➠ 144).
Your BMW Motorrad dealer can offer expert advice on the choice of genuine BMW parts, accessories and other products.
You can examine all the optional accessories from BMW Motorrad by visiting our website: **"www.bmw-motorrad.com"**.

Power sockets

Notes on use of power sockets:

Automatic shutdown


If this warning symbol appears it tells you that the on-board system voltage is low. The on-board sockets might be temporarily switched off.

The on-board sockets are also switched off when the engine is being cranked by the starter and if maximum load capability as stated in the technical data is exceeded.
If more than one socket is used, total current must not exceed the maximum load capability.

Operating electrical accessories
You can start using electrical accessories connected to an on-board socket only when the ig-

nition is switched on. If you subsequently switch off the ignition the sockets are also switched off if the power drain caused by their electrical consumers is high. If the power drain is low the sockets remain operational for a certain period of time before being switched off.

Cable routing

The cables from the power sockets to the auxiliary devices must be routed in such a way that they:

– Do not impede the rider
– Do not restrict the steering angle or obstruct handling
– cannot be trapped.

Navigation device

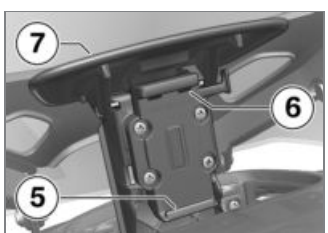
Installing navigation device

– with preparation for navigation system OE
– with navigation system OA

• Switch on the ignition.

• Press button **1** to open the slot for the navigation device.
» Slot cover pops open, windscreen moves to top limit position.
• Pull slot cover up as far as it will go.
• From behind, push out cap **2**.

• Operate latch **3** and remove cover **4**.



• Initially insert the navigation device into mount **5**,

then press it into latching mechanism **6**.
- Check that the navigation device is secure in the cradle.
- Press cover **7** to push cradle with navigation device into the slot until it snaps into position.

Remove the navigation device

– with navigation system[OA]

- Switch on the ignition.

- Press button **1** to open the compartment for the navigation device.

» Compartment cover pops open, windscreen moves to its top limit position.
- Pull the compartment cover up as far as possible.

- Operate latch mechanism **3**, work the navigation device forward out of holder **6** and lift it up to remove.

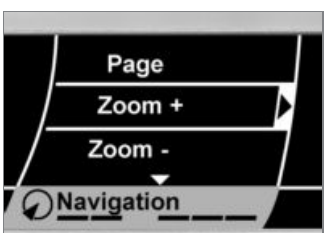
- Install cover **4**.
- Press cover **7** to push the cradle into the compartment until it snaps into position.

- Install cap **2**.

Operating navigation device

– with preparation for navigation system[OE]
– with navigation system[OA]

- If applicable, switch on the navigation device.
- Call up the Navigation menu.



The options for using the navigation device appear on the display.

– Page: You can page from view to view; the choices are main menu, map and on-board computer.
– Zoom +: Performs functions marked with a plus sign (+) in the navigation system. In the map view, for instance, the view zooms in on the map detail.
– Zoom –: Performs functions marked with a minus sign (-) in the navigation system. In the map view, for instance, the view zooms out from the map detail.
– Speak: The last navigation announcement is spoken again. The announcement is spoken again even if automatic spoken announcement have been switched off in the settings of the navigation system.
– Mute: Automatic spoken announcements are toggled off and on.
– Display Off: The display of the navigation device is toggled off and on.

- Select the function you want and implement the function by pushing the Multi-Controller to the right.

Special functions

– with preparation for navigation system[OE]
– with navigation system[OA]

Integration of the BMW Motorrad Navigator IV into the K 1600 GT series has produced a number of deviations from the descriptions in the operating instructions for the Navigator.

Traffic channel (TMC)

If the motorcycle is fitted with an audio system, the audio system sends the traffic announcements to the Navigator. The symbol described in the operating instruc-

tions for the Navigator appears on the display.
It is not possible to receive traffic announcements from subscription services via the BMW Motorrad audio system.

Reserve fuel level warning
The settings for the fuel gauge enable you to define a distance that is covered per full tank of fuel. The motorcycle sends the figure for residual range possible with the fuel remaining in the fuel tank to the Navigator, so it is no longer necessary to enter this value.

Time and date
The Navigator sends time and date to the motorcycle. Acceptance of these data for the readings on the instrument panel has to be activated in the user settings for the motorcycle.

Security settings
The BMW Motorrad Navigator IV can be secured against unauthorised use with a four-digit PIN (Garmin Lock). If this function is activated, while the Navigator is cradled on the motorcycle and the ignition is switched on you are prompted to add the motorcycle to the list of secured vehicles. If you answer "Yes" at this prompt the Navigator saves the VIN of this vehicle in its internal memory.
A maximum of five VINs can be saved in this way.
Subsequently, the PIN does not have to be entered when the Navigator is switched on by ignition ON while cradled in any of these vehicles.
If the Navigator is removed from the vehicle while switched on, a security prompt asking for the PIN to be entered is issued.

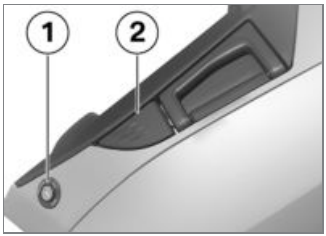
Screen brightness
Screen brightness is adjusted by the motorcycle while the unit is cradled. There is no provision for manual input.

Cases

Open cases

– with central locking system OE
• If applicable, open the central locking.◁

• Turn the key to the in the case lock to the position indicated by the dot.



- Push lock barrel **1** down.

» Lever **2** pops up.

- Pull the release lever all the way up and open the lid of the case.

Close cases

- Pull release lever **2** all the way up.
- Close the lid of the case and press it down. Check that nothing is trapped between the lid and the case.

NOTICE

The cases can also be locked by turning the lock to the LOCK position. In this case, ensure that the vehicle key is not left in the cases.◀

- Push release lever **2** down until it engages.
- Turn the key in the case lock to the LOCK position and remove the key from the lock.

Remove cases

- Turn the key to the RELEASE position in the case lock.

» The handle pops out.

- Pull carry handle **3** up as far as it will go.

» The case is released and can be removed.

Install cases

- Pull the handle up as far as it will go.

- Seat the case in holders **4**.

- Push handle **3** down until it engages.
- Turn the key in the case lock to the LOCK position and remove the key from the lock.

Maximum payload and maximum permissible speed

Note the maximum permissible payload and the speed limit for riding with cases fitted, as stated on the label inside the case. Contact your authorised BMW Motorrad dealer if you cannot find your combination of vehicle and cases on the label.
The values for the combination described here are as follows:

Maximum permissible speed for riding with cases fitted to the motorcycle
max 180 km/h

Payload per case
max 10 kg

Topcase

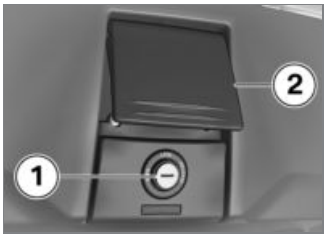
Opening topcase

– with topcase [OA]

– with central locking system [OE]

- If applicable, open the central locking.◁

- Turn the key to the in the topcase lock to the position indicated by the dot.



- Push lock barrel **1** forward.

» Lever **2** pops up.

- Pull the release lever all the way up and open the lid of the topcase.

Closing topcase

– with topcase [OA]

- Pull release lever **2** all the way up.
- Close the lid of the topcase and hold it down. Check that nothing is trapped between the lid and the case.

NOTICE

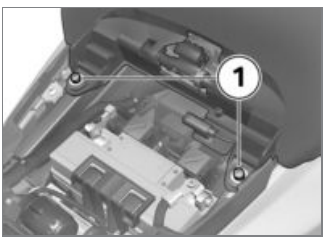
The topcase can also be locked by turning the lock to the LOCK position. In this case, ensure that the vehicle key is not left in the topcase.◀

- Push release lever **2** down until it engages.

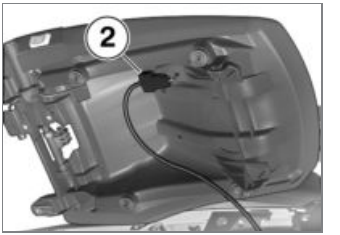
- Turn the key in the topcase lock to the LOCK position and remove the key from the lock.

Removing rear seat

- Switch off the ignition.
- Remove front seat (➠ 73).



- Remove screws **1**.
- Pull the rear seat slightly forward and lift it slightly.



- Disconnect plug **2** of the seat heating and remove the rear seat.
- Place the seat, upholstered side down, on a clean surface.

Installing rear seat

- Connect plug **2** of the seat heating.

- Slip the rear seat under mounts **3** and lower it into position.

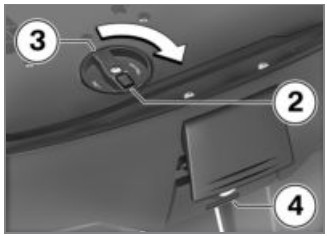
- Install screws **1**.

Removing topcase

– with topcase OA

- Remove front seat (➠ 73).
- Remove the rear seat (➠ 130).

- Disconnect plug **1**.
- Work the topcase-end plug through to the rear.
- Open the topcase.
- If applicable, empty the topcase and lift out the bottom mat.



- Push slide latch **2** toward the outside and hold it in this position.
- Turn rotary latch **3** in the direction indicated by the RELEASE arrow.

» Release warning **4** is visible.

- Close the topcase.

- Lift the topcase at the rear and remove it from the luggage carrier.

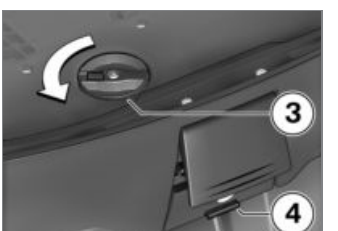
- Install the rear seat (➠ 130).
- Install the front seat (➠ 74).

Installing topcase

– with topcase[OA]

- Remove front seat (➠ 73).
- Remove the rear seat (➠ 130).
- If applicable, empty the topcase and lift out the bottom mat.

- Set the topcase on the luggage carrier.
- Opening topcase (➠ 129).

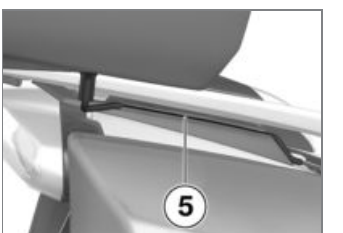


- Turn rotary latch **3** as far as it will go in the direction indicated by the LOCK arrow while pressing down on the back edge of the topcase.

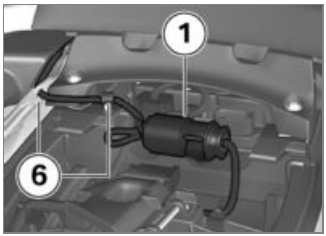
» Release warning **4** is no longer visible.

If the release warning is still visible the topcase is not correctly secured.

- Make sure that the topcase is correctly seated on the luggage carrier.



- Route the connecting cable forward in cable guide **5**.



- Work the cable into position at positions **6**.
- Connect plug **1**.

- Install the rear seat (➠ 130).
- Install the front seat (➠ 74).

Maximum payload and maximum permissible speed

Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the topcase.
Contact your authorised BMW Motorrad dealer if you cannot find your combination of vehicle and topcase on the label.
The values for the combination described here are as follows:

Maximum permissible speed for riding with topcase fitted to the vehicle
max 180 km/h

Payload of topcase
max 10 kg

Maintenance

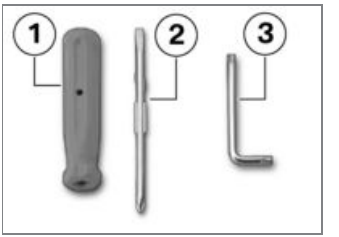
General instructions

The Maintenance chapter describes straightforward procedures for checking and replacing certain wear parts.
Special tightening torques are listed as applicable. The tightening torques for the threaded fasteners on your vehicle are listed in the section entitled "Technical data".
You will find information on more extensive maintenance and repair work in the Repair Manual on DVD for your vehicle, which is available from your authorised BMW Motorrad dealer.

Some of the work calls for special tools and a thorough knowledge of the technology involved. If you are in doubt consult a specialist workshop, preferably your authorised BMW Motorrad dealer.

Toolkit

Standard toolkit



1 Screwdriver handle
2 Reversible screwdriver blade
Phillips PH1 and Torx T25
– Adjust the damping for rear wheel (➠ 82).
3 Torx wrench, T25/T30
T25 on short end, T30 on long end
– Replacing bulb for high-beam headlight (➠ 153).
3 – Removing number-plate carrier.

Engine oil

Checking engine oil level

WARNING

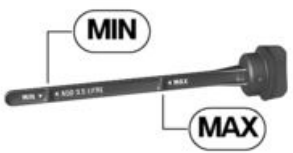
Engine-oil level too low.
Risk of accident due to the engine seizing.
- Always make sure that the oil level is correct.◀

ATTENTION

The oil level varies with the temperature of the oil. The higher the temperature, the higher the level of oil in the sump.
Misinterpretation of the oil level
- Check the oil level only after a lengthy ride or when the engine is at operating temperature.◀

- Check that the engine is at operating temperature, make sure the ground is level and firm and place the motorcycle on its centre stand.
- Allow the engine to idle until the fan starts up, then allow it to idle one minute longer.
- Switch off the engine and wait for about one minute to allow the oil to drain into the sump.
- Wipe the area around the oil filler neck clean.

- Remove oil dipstick **1** and wipe it with a clean, dry cloth.
- Seat the oil dipstick on the oil filler neck, but do not engage the threads.
- Remove the oil dipstick and check the oil level.



Engine oil, specified level
Between MIN and MAX marks (Engine at regular operating temperature)

Engine oil, quantity for topping up
max 0.5 l (Difference between MIN and MAX)

If the oil level is below the MIN mark:

- Top up the engine oil (➠ 137).

If the oil level is above the MAX mark:

- Have the oil level corrected by a specialist workshop, preferably an authorised BMW Motorrad dealer.

- Install the oil dipstick.

Topping up engine oil

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Wipe the area around the filler neck clean.

- Remove oil dipstick **1**.

ATTENTION

Not enough or too much engine oil.

Engine damage

- Always make sure that the oil level is correct.◀
- Top up the engine oil to the specified level.
- Checking engine oil level (➠ 136).
- Install the oil dipstick.

Brake system

Checking function of brakes

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Pull the front brake lever.

» The pressure point must be clearly perceptible.

- Press the footbrake lever.

» The pressure point must be clearly perceptible.

If pressure points are not clearly perceptible:

ATTENTION

Work on brake system not in compliance with correct procedure.

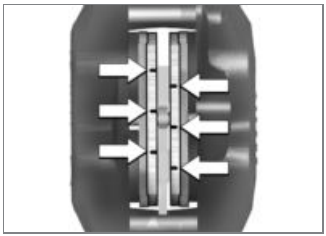
Risk to operational reliability of the brake system.

- Have all work on the brake system undertaken by trained and qualified specialists.◀
- Have the brakes checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Checking front brake pad thickness

- Make sure the ground is level and firm and place the motorcycle on its stand.

- Visually inspect the left and right brake pads to ascertain their thickness. Viewing direction: between wheel and front suspension toward brake pads **1**.



Brake-pad wear limit, front
min 1.0 mm (Friction pad only, without backing plate. The wear indicators (grooves) must be clearly visible.)

If the wear indicating marks are no longer clearly visible:

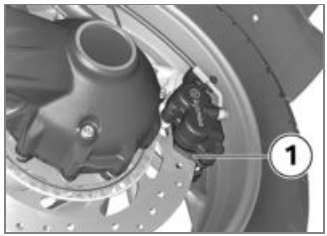
WARNING

Brake-pad thickness less than permissible minimum.
Diminished braking effect. Damage to the brakes.

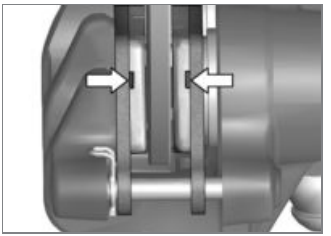
- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.◀
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Check rear brake pad thickness

- Make sure the ground is level and firm and place the motorcycle on its stand.



- Visually inspect the brake pads to ascertain their thickness. Viewing direction: from below toward brake pads **1**.



	Brake-pad wear limit, rear
min 1.0 mm (Friction pad only, without backing plate. Do not permit wear to progress to the point at which the wear indicators (grooves) are reached.)	

If the wear indicating mark is no longer visible:

WARNING

Brake-pad thickness less than permissible minimum.

Diminished braking effect. Damage to the brakes.

- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.◀
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Check brake-fluid level, front brakes

WARNING

Not enough brake fluid in brake fluid reservoir.

Considerably reduced braking power due to air in the brake system.

- Check the brake-fluid level at regular intervals.◀
- Make sure the ground is level and firm and place the motorcycle on its centre stand.

- Check the brake fluid level in front reservoir **1**.

NOTICE

Wear of the brake pads causes the brake fluid level in the reservoir to sink. The drop in fluid level is compensated by a clearly visible black rubber diaphragm.◀

Brake fluid level, front
Brake fluid, DOT4
It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal, motorcycle upright and handlebars centred.)

If the brake fluid level drops below the permitted level:

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

If the bottom edge of the black diaphragm in the brake-fluid reservoir is below the MAX mark:

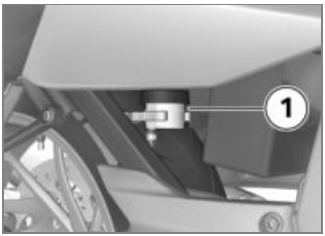
- Checking front brake pad thickness (➠ 138).

Check the brake-fluid level, rear brakes

WARNING

Not enough brake fluid in brake fluid reservoir.
Considerably reduced braking power due to air in the brake system.

- Check the brake-fluid level at regular intervals.◀
- Make sure the ground is level and firm and place the motorcycle on its centre stand.



- Check the brake fluid level in rear reservoir **1**.

NOTICE

Wear of the brake pads causes the brake fluid level in the reservoir to sink.◀

Brake fluid level, rear
Brake fluid, DOT4
It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal, motorcycle upright.)

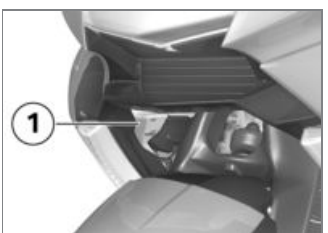
If the brake fluid level drops below the permitted level:

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

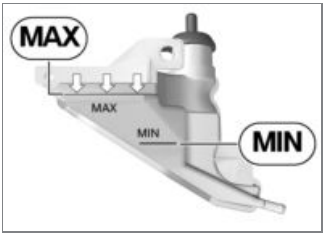
Coolant

Check coolant level

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Allow the engine to cool down.



- Check the coolant level in expansion tank **1**.



Specified coolant level
between MIN and MAX marks on the expansion tank (engine cold)

If the coolant drops below the permitted level:

- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Clutch

Checking clutch function

- Pull the clutch lever.

» The pressure point must be clearly perceptible.

If the pressure point is not clearly perceptible:

- Have the clutch checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Checking clutch fluid level

- Make sure the ground is level and firm and place the motorcycle on its centre stand.
- Move the handlebars to the straight-ahead position.

- Check the clutch fluid level in reservoir **1**.

NOTICE

Wear of the clutch causes the fluid level in the clutch fluid reservoir to rise.◀

Clutch-fluid level (visual inspection)
It is impermissible for the clutch fluid level to drop.

If the clutch-fluid level drops:

ATTENTION

Use of unsuitable fluids.
Damage to clutch system.

- Do not attempt to top up the system with fluids of any kind.◀
- Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Rims and tyres

Checking rims

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Visually inspect the rims for defects.
- Have any damaged rims inspected by a specialist workshop and replaced if neces-

sary, preferably by an authorised BMW Motorrad dealer.

Checking tyre tread depth

WARNING

Riding with badly worn tyres
Risk of accident due to impaired handling

- If applicable, have the tyres changed in good time before they wear to the minimum tread depth permitted by law.◀
- Make sure the ground is level and firm and place the motorcycle on its stand.
- Measure the tyre tread depth in the main tread grooves with wear marks.

NOTICE

Wear indicators are built into the main profile grooves on each tyre. The tyre is worn out when the tyre tread has worn down to the level of the marks. The locations of the marks are indicated on the edge of the tyre, e.g. by the letters TI, TWI or by an arrow.◀

If the tyre tread is worn to minimum:

- Replace tyre or tyres, as applicable.

Wheels

Tyre recommendation

For each size of tyre BMW Motorrad tests and classifies as roadworthy certain makes. BMW Motorrad cannot assess the suitability or provide any guarantee of road safety for other tyres.
BMW Motorrad recommends using only tyres tested by BMW Motorrad.
You can obtain detailed information from your authorised BMW Motorrad dealer or on the Internet at **"www.bmw-motorrad.com"**.

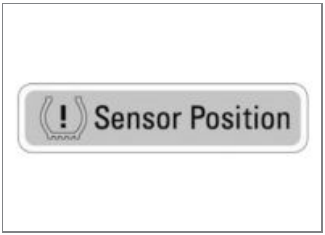
Effect of wheel size on chassis and suspension control systems

Wheel size is very important as a parameter for the running-gear control systems ABS and DTC. In particular, the diameter and the width of a vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects on the performance of the control systems.
The sensor rings are essential for correct road-speed calculation, and they too must match the motorcycle's control systems and consequently cannot be changed.

If you decide that you would like to fit non-standard wheels to your motorcycle, it is very important to consult a specialist workshop beforehand, preferably an authorised BMW Motorrad dealer. In some cases, the data programmed into the control units can be changed to suit the new wheel sizes.

RDC label

– with tyre pressure monitoring (RDC)[OE]



ATTENTION

Tyre removal not in compliance with correct procedure.
Damage to RDC sensors.

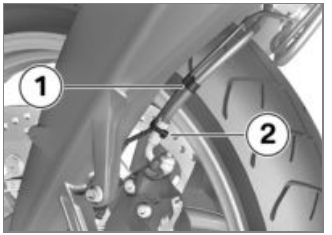
- Be sure to explain to the specialist workshop or authorised BMW Motorrad dealer that the wheel is fitted with an RDC sensor.◀

If the motorcycle is equipped with RDC, each wheel rim bears an adhesive label indicating the position of the RDC sensor. When changing the tyre, take care not to damage the RDC sensor. Be sure to draw the attention of the authorised BMW Motorrad dealer or specialist workshop to the fact that the wheel is fitted with an RDC sensor.

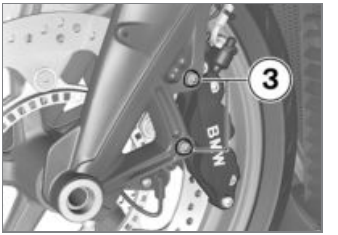
Remove the front wheel

- Make sure the ground is level and firm and place the motorcycle on its centre stand.

- Remove screws **1** on left and right.
- Pull the front-wheel cover forward to remove.



- Unclip retaining clip **1** of the sensor cable from the brake line.
- Remove cable tie **2**.
- Mask off the parts of the wheel rim that could be scratched in the process of removing the brake calipers.

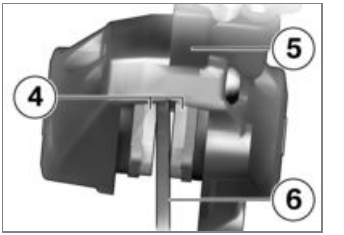


ATTENTION

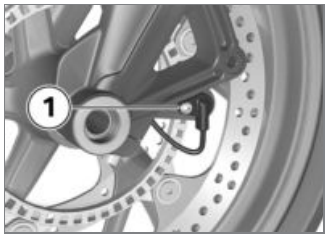
Brake pads pushed together with brake caliper removed.

It is not possible to slip the brake caliper over the brake disc.

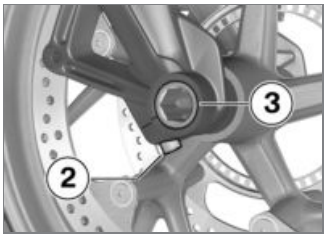
- Do not operate the brake lever while a brake caliper has been removed.◀
- Remove screws **3** of the brake calipers on left and right.



- Force the brake pads **4** slightly apart by rocking brake caliper **5** back and forth against brake disc **6**.
- Carefully pull the brake calipers back and out until clear of the brake discs.



- Remove screw **1** and remove the wheel-speed sensor from its bore.
- Lift the front of the motorcycle until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Installing front-wheel stand (➠ 151).



ATTENTION

Incorrect gap between sensor ring and wheel speed sensor due to misaligned threaded bush in front suspension.

Damage to wheel speed sensor. ABS malfunction.

- Left clamp locates the threaded bush; do not loosen or remove this clamp.◀
- Remove right-hand axle clamping screw **2**.
- Remove quick-release axle **3**, while supporting the wheel.
- Roll the front wheel forward to remove.

Installing front wheel

WARNING

Use of a non-standard wheel.

Malfunctions in operation of ABS and DTC.

- See the information on the effect of wheel size on the ABS and DTC systems at the start of this chapter.◀

ATTENTION

Tightening threaded fasteners to incorrect tightening torque.

Damage, or threaded fasteners work loose.

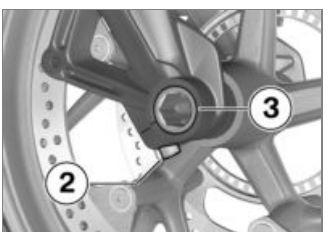
- Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

ATTENTION

Front wheel installed wrong way round.

Risk of accident

- Note direction-of-rotation arrows on tyre or rim.◀
- Roll the front wheel into position between the front forks.



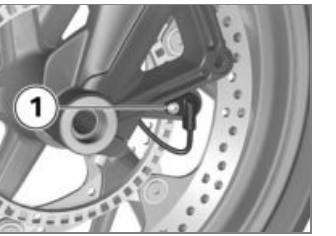
- Raise the front wheel, insert quick-release axle **3** and tighten to specified torque.

Quick-release axle in threaded bush (wheel carrier)
50 Nm

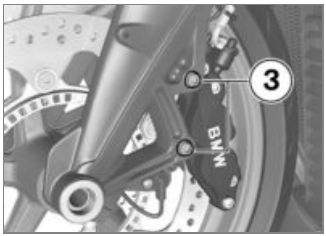
- Tighten right axle clamping screw **2** to the specified tightening torque.

Clamping screw for quick-release axle to wheel carrier
19 Nm

- Remove the front-wheel stand.

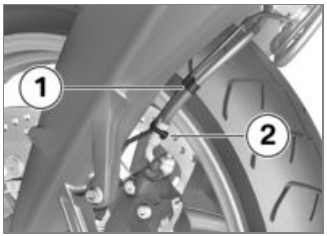


- Insert the ABS sensor into its bore and install screw **1**.
- Ease the brake calipers on to the brake discs.

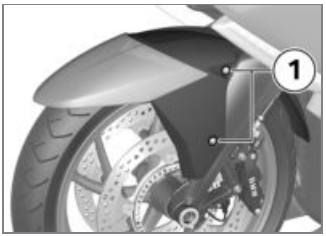


- Install securing screws **3** on left and right and tighten to specified tightening torque.

	Front brake caliper to wheel carrier
30 Nm	



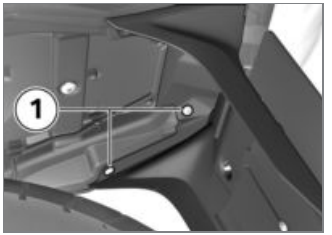
- Clip retaining clip **1** of the sensor cable to the brake line.
- Secure new cable tie **2**.
- Remove the adhesive tape from the wheel rim.
- Firmly pull the handbrake lever several times until a pressure point is perceptible.



- Hold the front-wheel cover in position and install bolts **1** on left and right.

Remove the rear wheel

- Make sure the ground is level and firm and place the motorcycle on its centre stand.
- If applicable, remove the cases.



- Remove screws **1** on left and right.
- Remove the number-plate carrier.
- Engage first gear.

CAUTION

Hot exhaust system.
Risk of burn injury
- Do not touch a hot exhaust system.◀
- Remove five screws **1** from the rear wheel, while supporting the wheel.
- Lower the rear wheel to the ground and roll it out to the rear.

Installing rear wheel

WARNING

Use of a non-standard wheel.
Malfunctions in operation of ABS and DTC.
- See the information on the effect of wheel size on the ABS and DTC systems at the start of this chapter.◀

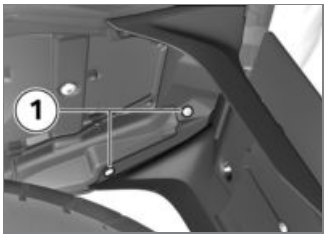
ATTENTION

Tightening threaded fasteners to incorrect tightening torque.
Damage, or threaded fasteners work loose.
- Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

- Roll the rear wheel into position at the rear-wheel adapter and attach it.

- Fit five bolts **1** and tighten to the specified torque in diagonally opposite sequence.

Rear wheel to wheel flange
Tightening sequence: tighten in diagonally opposite sequence
60 Nm



- Hold the number-plate carrier in position.
- Install screws **1** on left and right.

Front-wheel stand

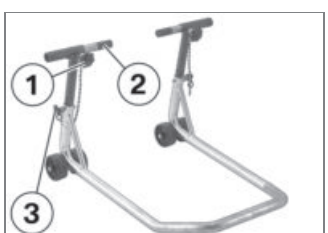
Installing front-wheel stand

ATTENTION

Use of the BMW Motorrad front wheel stand without also accompanying use of centre stand or auxiliary stand.

Risk of damage to parts if vehicle topples.

- Place the motorcycle on its centre stand or another auxiliary stand before lifting the front wheel with the BMW Motorrad front-wheel stand.◀
- Use basic stand with tool number (83 30 0 402 241) in combination with front-wheel adapter (83 30 0 402 243).
- Make sure the ground is level and firm and place the motorcycle on its centre stand.



- Slacken locating screws **1**.

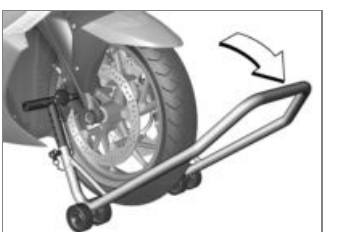
- Push the two pins **2** apart until the front suspension fits between them.
- Use locating pins **3** to set the front-wheel stand to the desired height.
- Centre the front-wheel stand relative to the front wheel and push it against the front axle.

ATTENTION

Left mounting pin moved too far.

Damage to sensor ring of the BMW Motorrad Integral ABS.

- Push the left pin in just far enough to ensure that it clears the sensor ring.◀
- Push both mounting pins **2** through the triangles of the brake caliper anchorages just far enough to allow the front wheel to be rolled between them.
- Tighten locating screws **1**.



ATTENTION

Centre stand retracts if motorcycle lifted too high.

Risk of damage to parts if vehicle topples.

- When raising the vehicle, make sure that the centre stand remains on the ground.◀
- Apply uniform pressure to push the front-wheel stand down and raise the motorcycle.

Jump-starting

CAUTION

Touching live parts of the ignition system when the engine is running.

Electric shock

- Do not touch parts of the ignition system when the engine is running.◀

ATTENTION

Excessive current flowing when the motorcycle is jump-started

Wiring smoulders/ignites or damage to the on-board electronics
- If the motorcycle has to be jump-started connect the leads to the battery terminals; never attempt to jump-start the engine by connecting leads to the on-board socket.◀

ATTENTION

Contact between crocodile clips of jump leads and vehicle.

Risk of short-circuit
- Use jump leads fitted with fully insulated crocodile clips at both ends.◀

ATTENTION

Jump-starting with a voltage greater than 12 V.

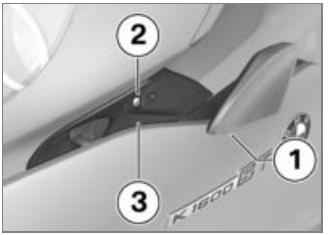
Damage to the on-board electronics.
- Make sure that the battery of the donor vehicle has a voltage rating of 12 V.◀
- When jump-starting the engine, do not disconnect the battery from the on-board electrical system.
- Remove front seat (➠ 73).
- Run the engine of the donor vehicle during jump-starting.
- Begin by connecting one end of the red jump lead to the positive terminal of the discharged battery and the other end to the positive terminal of the donor battery.
- Then connect one end of the black jump lead to the negative terminal of the donor battery, and the other end to the negative terminal of the discharged battery.
- Start the engine of the vehicle with the discharged battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt in order to protect the starter motor and the donor battery.
- Allow both engines to idle for a few minutes before disconnecting the jump leads.
- Disconnect the jump lead from the negative terminals first, then disconnect the second lead from the positive terminals.
- Install the front seat (➠ 74).

Lighting

Replacing bulb for high-beam headlight

NOTICE

The description below steps you through the procedure for replacing the left bulb. The procedure for working on the right side is the same.◀

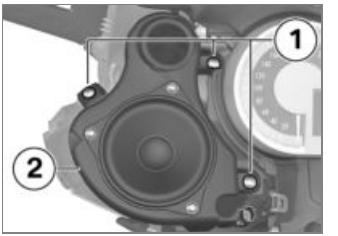


- Turn slipstream deflector **1** out.
- Remove screw **2** and work side cover **3** to the rear and remove.

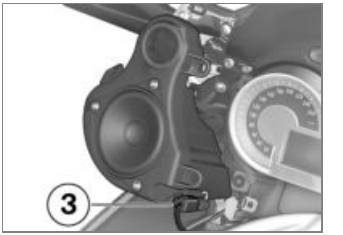
- Remove screw **1**.

- Switch on the ignition and raise the windscreen to its highest position.
- Remove screw **2** and work hand protector **3** to the side to remove.
- Switch off the ignition and wait until the windscreen has moved to its lowest position.

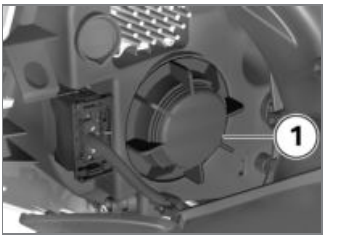
– with ECE audio system and preparation for navigation system OE



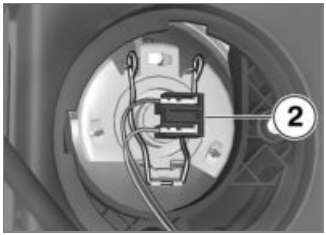
- Remove screws **1**.
- Work speaker unit **2** to the rear to remove.



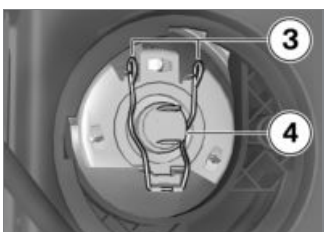
- Disconnect plug **3**.◁



- Turn covers **1** counter-clockwise to remove.



- Disconnect plug **2**.



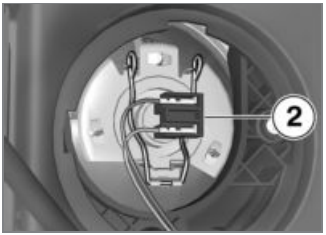
- Release spring clip **3** at left and right and swing it up.
- Remove bulb **4**.

- Replace the defective bulb.

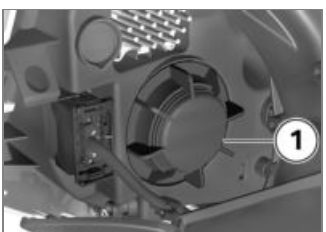
	Bulb for high-beam headlight
H7 / 12 V / 55 W	

- Hold the bulb by the base only, in order to keep the glass free of foreign matter.

- Install bulb **4**, making sure that tab **5** is correctly positioned.
- Engage spring clip **3**.

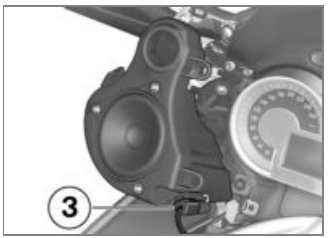


- Connect plug **2**.

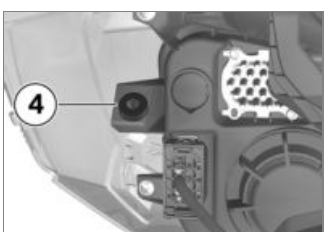


- Turn covers **1** clockwise to install.

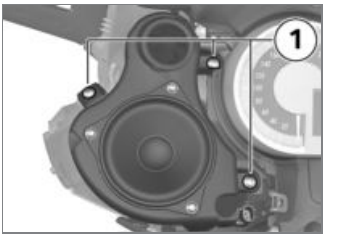
– with ECE audio system and preparation for navigation system[OE]



• Connect plug **3**.



• Seat the speaker unit in mount **4**.



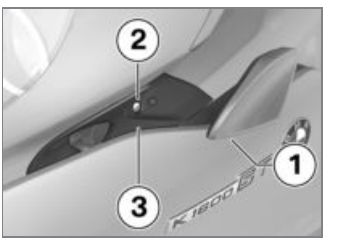
• Install screws **1**.◁

• Switch on the ignition and raise the windscreen to its highest position.

• Hold hand protector **3** in position and install screw **2**.

• Switch off the ignition and wait until the windscreen has moved to its lowest position.

• Install screw **1**.



• Hold side cover **3** in position and install screw **2**.

• Align slipstream deflector **1**.

Replacing LED auxiliary headlights

– with LED auxiliary headlights[OE]

– with LED auxiliary headlights[OA]

The LED auxiliary headlights can be replaced only as a complete unit.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Replace LED flashing turn indicators

The LED flashing turn indicators can be replaced only as a complete unit.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Replacing LED rear light

The LED rear light can be replaced only as a complete unit.

- Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Battery

Maintenance instructions

Correct upkeep, recharging and storage will prolong the life of the battery and are essential if warranty claims are to be considered.

Compliance with the points below is important in order to maximise battery life:

– Keep the surface of the battery clean and dry.
– Do not open the battery.
– Do not top up with water.
– Be sure to read and comply with the instructions for charging the battery on the following pages.
– Do not turn the battery upside down.

ATTENTION

On-board electronics (e.g. clock) draining connected battery.

Battery is deep-discharged; this voids the guarantee.

- Connect a float charger to the battery if the motorcycle is to remain out of use for more than four weeks.◀

NOTICE

BMW Motorrad has developed a float charger specially designed for compatibility with the electronics of your motorcycle. Using this charger, you can keep the battery charged during long periods of disuse, without having to disconnect the battery from the motorcycle's on-board systems. You can obtain additional information from your authorised BMW Motorrad dealer.◀

Charge battery when connected

ATTENTION

Charging connected battery via the battery terminals.
Damage to the on-board electronics.
- Disconnect the battery at the battery terminals before charging.◀

ATTENTION

Charging a fully discharged battery via the on-board socket or the extra socket.
Damage to the on-board electronics.
- If a battery has discharged to the extent that it is completely flat (battery voltage less than 9 V, status-indicator lights and multifunction display remain off when the ignition is switched on) **it has to be disconnected from the on-board circuits** and re-charged with the charger connected directly to the battery posts.◀

ATTENTION

Unsuitable battery chargers connected to an on-board socket.
Damage to charger and to frame and suspension electronics.
- Use suitable BMW chargers. The suitable charger is available from your authorised BMW Motorrad dealer.◀
- Charge via the charging socket, with the battery connected to the motorcycle's on-board electrical system.

NOTICE

The motorcycle's on-board electronics know when the battery is fully charged. The on-board socket is switched off when this happens.◀
- Comply with the operating instructions of the charger.

NOTICE

If you are unable to charge the battery through the on-board socket, you may be using a charger that is not compatible with your motorcycle's electronics. If this happens, disconnect the battery from the on-board systems and connect the charger directly to the battery.◀

Charging battery when disconnected

- Charge the battery using a suitable charger.
- Comply with the operating instructions of the charger.
- Once the battery is fully charged, disconnect the

charger's terminal clips from the battery terminals.

NOTICE

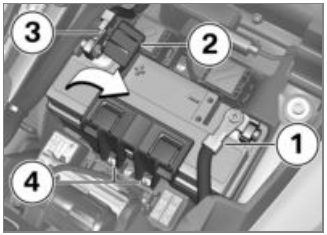
The battery has to be recharged at regular intervals in the course of a lengthy period of disuse. See the instructions for caring for your battery. Always fully recharge the battery before restoring it to use.◀

Removing battery

- Remove front seat (➠ 73).

– with alarm system (DWA)[OE]

- If applicable, switch off the anti-theft alarm.◁
- Switch off the ignition.



ATTENTION

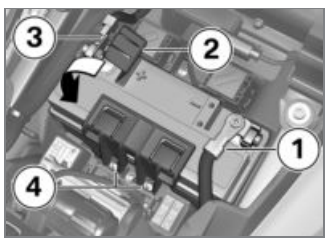
Battery not disconnected in accordance with correct procedure.

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.◀
- Remove battery negative lead **1**.
- Open cover **2** and remove battery positive lead **3**.
- Remove screws **4** and remove the retainer.
- Lift the battery up and out; work it slightly back and forth if it is difficult to remove.

Installing battery

- Place the battery in the battery compartment, positive terminal on the right in the forward direction of travel.



- Install the retainer and install screws **4**.

ATTENTION

Battery not connected in accordance with correct procedure.

Risk of short-circuit
- Always proceed in compliance with the specified installation sequence.◀
- Install battery positive lead **3** first and close cover **2**.
- Then install battery negative lead **1**.
- Install the front seat (➠ 74).
- Switch on the ignition.
- Set the time in `Settings - Time` and set the date in `Settings - Date`.

Fuses

Replacing fuses

- Switch off the ignition.
- Remove front seat (➠ 73).

ATTENTION

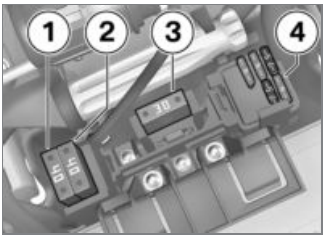
Jumpering of blown fuses.
Risk of short-circuit and fire.
- Always replace a defective fuse with a new fuse of the same amperage.◀
- Consult the fuse assignment diagram and replace the defective fuse.

NOTICE

If fuse defects recur frequently have the electric circuits checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

- Install the front seat (➠ 74).

Fuse assignment



1 40 A
Motorcycle electronics
2 40 A
Motorcycle electronics
– with Electronic Suspension Adjustment (ESA)[OE]
ESA
3 30 A
Engine electronics
4 Fuse box open with fuses assignment as follows:
-1 Not used
-2 Not used
-3 Not used

-4 4 A
Left handlebar fitting
– with tyre pressure monitoring (RDC) OE
RDC
– with topcase OA
Topcase light

-5 Not used
– with preparation for audio system and navigation system OE
7.5 A
Audio system

-6 4 A
Beam throw adjustment
– with adaptive cornering light OE
Adaptive cornering lights

-7 4 A
Main relay, instrument panel, ignition switch

-8 Not used
– with alarm system (DWA) OE
or
– with central locking system OE
7.5 A
Anti-theft alarm
Central locking

Care

Care products

BMW Motorrad recommends that you use the cleaning and care products you can obtain from your authorised BMW Motorrad dealer.
The substances in BMW CareProducts have been tested in laboratories and in practice; they provide optimised care and protection for the materials used in your vehicle.

ATTENTION

Use of unsuitable cleaning and care products.
Damage to vehicle parts.
- Do not use solvents such as cellulose thinners, cold cleaners, fuel or the like, and do not use cleaning products that contain alcohol.◀

Washing the vehicle

BMW Motorrad recommends that you use BMW insect remover to soften and wash off insects and stubborn dirt on painted parts prior to washing the vehicle.
To prevent stains, do not wash the vehicle immediately after it has been exposed to strong sunlight and do not wash it in the sun.
Make sure that the vehicle is washed frequently, especially during the winter months.
To remove road salt, clean the motorcycle with cold water immediately after every trip.

WARNING

Wet brake discs and brake pads after vehicle wash, after riding through water and in rainy conditions.
Diminished braking effect.
- Apply the brakes in good time to allow the friction and heat to dry the brake discs and brake pads.◀

ATTENTION

Effect of road salt intensified by warm water.
Corrosion
- Use only cold water to wash off road salt.◀

ATTENTION

Damage due to high water pressure from high pressure cleaners or steam cleaners.
Corrosion or short-circuit, damage to seals, to the hydraulic brake system, to the electrics and the seat.
- Exercise restraint when using a steam jet or high-pressure cleaning equipment.◀

Cleaning easily damaged components

Plastics

ATTENTION

Use of unsuitable cleaning agents.

Damage to plastic surfaces.

- Do not use cleaning agents that contain alcohol, solvents or abrasives.
- Do not use insect-remover pads or cleaning pads with hard, scouring surfaces.◀

Body panels

Clean the trim panels with water and BMW plastic care emulsion.

Windscreens and lenses made of plastic

Clean off dirt and insects with a soft sponge and plenty of water.

NOTICE

Soften stubborn dirt and insects by covering the affected areas with a wet cloth.◀

Chrome

Use plenty of water and BMW shampoo to clean chrome, particularly if it has been exposed to road salt. Use chrome polish for additional treatment.

Radiator

Clean the radiator regularly to prevent overheating of the engine due to inadequate cooling. For example, use a garden hose with low water pressure.

ATTENTION

Radiator fins easily bent.

Damage to radiator fins.

- Take care not to bend the radiator fins when cleaning.◀

Rubber

Treat rubber components with water or BMW rubber-care products.

ATTENTION

Application of silicone sprays to rubber seals.

Damage to the rubber seals.

- Do not use silicone sprays or care products that contain silicon.◀

Paint care

Washing the vehicle regularly will help counteract the long-term effects of substances that damage the paint, especially if your vehicle is ridden in areas with high air pollution or natural sources of dirt, for example tree resin or pollen.

Remove particularly aggressive substances immediately, however, as otherwise the paint can

be affected or become discoloured. Substances of this nature include spilt fuel, oil, grease, brake fluid and bird droppings. We recommend BMW vehicle polish or BMW paint cleaner for this purpose.
Marks on the paintwork are particularly easy to see after the motorcycle has been washed. Remove stains of this kind immediately, using cleaning-grade benzene or petroleum spirit on a clean cloth or ball of cotton wool. BMW Motorrad recommends BMW tar remover for removing specks of tar. Remember to wax the parts treated in this way.

Laying up the motorcycle

- Clean the motorcycle.
- Fill the motorcycle's fuel tank with fuel.
- Removing battery (➠ 159).
- Spray the brake and clutch lever pivots and the main and side stand pivots with a suitable lubricant.
- Coat bright metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).
- Stand the motorcycle in a dry room in such a way that there is no load on either wheel (preferably using the front-wheel and rear-wheel stands from BMW Motorrad).

Protective wax coating

BMW Motorrad recommends applying only BMW car wax or products containing carnauba wax or synthetic wax.
It is time to rewax the paintwork when water "puddles" on the surface, instead of forming beads.

Restoring motorcycle to use

- Remove the protective wax coating.
- Clean the motorcycle.
- Installing battery (➠ 159).
- Comply with checklist (➠ 98).

Technical data

Troubleshooting chart

Engine does not start or is difficult to start.

Possible cause	Rectification
Side stand is extended	Retract the side stand.
Gear engaged and clutch not disengaged	Select neutral or pull the clutch lever.
No fuel in tank	Refuelling (➠ 105).
Battery flat	Recharge the battery.

Threaded fasteners

Front wheel	Value	Valid
Front brake caliper to wheel carrier		
M8 x 30 - 10.9	30 Nm	
Clamping screw for quick-release axle to wheel carrier		
M8 x 30	19 Nm	
Quick-release axle in threaded bush (wheel carrier)		
M24 x 1.5	50 Nm	

Rear wheel	Value	Valid
Rear wheel to wheel flange		
M10 x 1.25 x 40	**tighten in diagonally opposite sequence**	
	60 Nm	

Engine

Location of engine number	Crankcase, right side, through engine oil filler neck
Engine design	Transverse straight-six four-stroke engine with four valves per cylinder and two overhead camshafts; liquid cooling, electronic fuel injection, integral six-speed cassette gearbox, dry-sump lubrication.
Displacement	1649 cm^3
Cylinder bore	72 mm
Piston stroke	67.5 mm
Compression ratio	12,2:1
Nominal output	118 kW, at engine speed: 7750 min^{-1}
– with power reduction OE	79 kW, at engine speed: 7750 min^{-1}
Torque	175 Nm, at engine speed: 5250 min^{-1}
– with power reduction OE	150 Nm, at engine speed: 4750 min^{-1}
Maximum engine speed	max 8500 min^{-1}
Idle speed	$900^{\pm 50}$ min^{-1}, Engine at regular operating temperature

Fuel

Recommended fuel grade	Super unleaded (max. 10 % ethanol, E10) 95 ROZ/RON 89 AKI
Usable fuel capacity	approx. 24 l
Reserve fuel	approx. 4 l
Exhaust emissions standard	EU 3

Engine oil

Engine oil, capacity	approx. 4.5 l, with filter change
Specification	SAE 5W-40, API SL / JASO MA2, Additives (e.g. molybdenum-based) are not permissible because they can attack coated components of the engine, BMW Motorrad recommends BMW Motorrad ADVANTEC Ultimate oil

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Clutch

Clutch type	Multiplate clutch running in oil bath

Transmission

Gearbox type	Claw-shift 6-speed gearbox, integrated into engine block
Gearbox transmission ratios	1.617, Primary transmission ratio 1.941 (33:17 teeth), 1st gear 1.428 (30:21 teeth), 2nd gear 1.148 (31:27 teeth), 3rd gear 0.958 (23:24 teeth), 4th gear 0.806 (25:31 teeth), 5th gear 0.686 (24:35 teeth), 6th gear 0.913 (21:23 teeth), Angular drive 1.258 (39:31 teeth), Countershaft

Rear-wheel drive

Type of final drive	Shaft drive with bevel gears
Type of rear suspension	Cast-aluminium single swinging arm with BMW Motorrad Paralever
Number of teeth in bevel gears (gear ratio)	2.75 (33:12)

Running gear

Front wheel	
Type of front suspension	BMW Motorrad Duolever
Design of front wheel suspension	Central suspension strut
– with Electronic Suspension Adjustment (ESA) OE	Central suspension strut with electrically adjustable damping.
Spring travel, front	125 mm, at wheel
Rear wheel	
Type of rear suspension	Central suspension strut pivoted to lever system. Spring preload and rebound-stage damping steplessly adjustable.
– with Electronic Suspension Adjustment (ESA) OE	Central suspension strut pivoted to lever system. Electrically adjustable damping and spring preload/ spring rate.
Spring travel, rear	135 mm, at wheel

Brakes

Type of front brake	Hydraulically operated twin disc brake with 4-piston fixed calipers and floating brake discs
Brake-pad material, front	Sintered metal
Brake disc thickness, front	min 4.5 mm, Wear limit
Type of rear brake	Hydraulically operated disc brake with 2-piston floating caliper and fixed disc
Brake-pad material, rear	Organic material
Brake disc thickness, rear	min 4.9 mm, Wear limit

Wheels and tyres

Recommended tyre sets	Your authorised BMW Motorrad dealer will be happy to supply an up-to-date list of the approved wheel/tyre combinations, or you can check the information posted on the bmw-motorrad.com website.
Speed category, front/rear tyres	W, required at least: 270 km/h

Front wheel	
Front wheel type	Cast aluminium, MT H2
Front wheel rim size	3.50" x 17"
Tyre designation, front	120 / 70 ZR 17
Load index, front tyre	min. 58
Permissible front-wheel imbalance	max 5 g
Rear wheel	
Rear-wheel type	Cast aluminium, MT H2
Rear wheel rim size	6.00" x 17"
Tyre designation, rear	190 / 55 ZR 17
Load index, rear tyre	min. 75
Permissible rear-wheel imbalance	max 45 g
Tyre pressure	
Tyre pressure, front	2.9 bar, Tyre cold
Tyre pressure, rear	2.9 bar, Tyre cold

Electrics

Electrical rating of on-board sockets	max 10 A, Total for all sockets
Battery	
Battery type	Gel battery
Battery rated voltage	12 V
Battery rated capacity	19 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8AI-8
Electrode gap of spark plug	0.8 mm, When new 1.0 mm, Wear limit
Lighting	
Bulb for high-beam headlight	H7 / 12 V / 55 W
Bulbs for the low-beam headlight	D1S / 35 W
Bulb for parking light	Lighting rings, integrated into headlight
Bulb for tail light/brake light	LED
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	LED

Fuses	
Fuse carrier 1	30 A, Engine electronics
Fuse carrier 2	40 A, Slot left: Vehicle electronics 40 A, Slot right: Vehicle electronics, ESA
Fuse box	Not used, Slot 1 Not used, Slot 2 Not used, Slot 3 4 A, Slot 4: Left handlebar fitting, tyre pressure monitoring (RDC), topcase interior light 7.5 A, Slot 5: Audio system 4 A, Slot 6: Beam throw control, Adaptive Headlight 4 A, Slot 7: Main relay, instrument cluster, ignition switch 7.5 A, Slot 8: Anti-theft alarm (DWA), central locking

Anti-theft alarm

– with alarm system (DWA)[OE]

Anti-theft alarm	
Activation time on arming	30 s
Alarm duration	26 s
Activation time between two alarms	10 s
Battery type	CR 123 A
Remote control	
Range of the remote control	10 m
Signal frequency	25 kHz, Broadband
Transmission frequency	433.92 MHz
Battery type and rated battery voltage (for remote control)	CR 1632 lithium 3 V

Frame

Frame type	Cast light alloy weldment with bolt-on light-alloy rear frame
Type plate location	Wheel carrier, front right
Position of the Vehicle Identification Number	Frame side section, front right (beside engine-oil filler neck)

Dimensions

Length of motorcycle	2340 mm, across luggage carrier
– with topcase[OA]	2456 mm, over topcase
Height of motorcycle	1440 mm, over windscreen at DIN unladen weight
Width of motorcycle	1000 mm, across mirrors 980 mm, without mirrors
Front-seat height	810...830 mm, without rider
– with front seat, low[OE]	780...800 mm, without rider
Rider's inside-leg arc, heel to heel	1830...1870 mm, without rider
– with front seat, low[OE]	1775...1810 mm, without rider

Weights

Unladen weight	332 kg, DIN unladen weight, with cases, ready for road, 90 % load of fuel, without OE
Permissible gross weight	540 kg
Maximum payload	208 kg

Riding specifications

Starting capability on uphill gradients (at permissible gross weight)	20 %
Top speed	>200 km/h

Service

BMW Motorrad Service

BMW Motorrad has an extensive service network in place to look after you and your motorcycle in more than 100 countries. Authorised BMW Motorrad dealerships have the technical information and the technical know-how to carry out reliably all maintenance and repair work on your BMW.

Visit our website www.bmw-motorrad.com to find out where the nearest authorised BMW Motorrad dealership is located.

WARNING

Maintenance and repair work not in compliance with correct procedure.

Risk of accident due to subsequent damage.

- BMW Motorrad recommends you to have all the associated work on your motorcycle carried out by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

In order to help ensure that your BMW is always in optimum condition, BMW Motorrad recommends compliance with the maintenance intervals specified for your motorcycle. Have all maintenance and repair work carried out confirmed in the "Service" chapter in this manual. For generous treatment of claims submitted after the warranty period has expired, evidence of regular maintenance is essential.

Your authorised BMW Motorrad dealer can provide information on BMW services and the work undertaken as part of each service.

BMW Motorrad Mobility services

As owner of a new BMW motorcycle, in circumstances in which assistance is required you can benefit from the protection afforded by the various BMW Motorrad mobility services (e.g. Mobile Service, breakdown service, vehicle recovery service). Your authorised BMW Motorrad dealer will be happy provide information about the mobility services available to you.

Maintenance work

BMW Pre-delivery Check

Your authorised BMW Motorrad dealer conducts the BMW pre-delivery check before handing over the vehicle to you.

BMW Running-in Check

The BMW running-in check has to be performed when the motorcycle has covered between 500 km and 1200 km.

BMW Service

The BMW Service is carried out once a year; the extent of servicing can vary, depending on the age of the vehicle and the distance it has covered. Your authorised BMW Motorrad dealer confirms that the service work has been carried out and enters the date when the next service will be due.
Riders who cover long distances in a year might have to bring in their vehicles for service before the next scheduled date. It is to allow for these cases that a maximum odometer reading is entered as well in the confirmation of service. Servicing has to be brought forward if this odometer reading is reached before the next scheduled date for the service.

The service-due indicator in the multifunction display reminds you about one month or 1000 km in advance when the time for a service is approaching, on the basis of the programmed values.

To find out more about service go to:
bmw-motorrad.com/service

The maintenance tasks necessary for your vehicle are set out in the maintenance schedule below:

	500 -1200 km 300 - 750 mls	10 000 km 6 000 mls	20 000 km 12 000 mls	30 000 km 18 000 mls	40 000 km 24 000 mls	50 000 km 30 000 mls	60 000 km 36 000 mls	70 000 km 42 000 mls	80 000 km 48 000 mls	90 000 km 54 000 mls	100 000 km 60 000 mls	12 months	24 months
①	X												
②												X	
③		X	X	X	X	X	X	X	X	X	X	X[a]	
④			X		X		X		X		X		
⑤				X			X			X			
⑥				X			X			X			
⑦			X		X		X		X		X		X[b]
⑧												X[c]	X[c]

Maintenance schedule

1 BMW Running-in check
2 Standard BMW service (➠ 186)
3 Engine-oil change, with filter
4 Replace air-filter element
5 Check valve clearance
6 Replace all spark plugs
7 Oil change in bevel gears
8 Change brake fluid, entire system

a annually or every 10,000 km (whichever comes first)
b every 2 years or every 20,000 km (whichever comes first)
c for the first time after one year, then every two years

Standard BMW service

A standard BMW service consists of the following maintenance work:

- Perform vehicle test with the BMW Motorrad diagnosis system.
- Drain the oil condensate hose.
- Visually inspect the brake pipes, brake hoses and connections.
- Check the front and rear brake-fluid levels.
- Check the front and rear brake pads and brake discs for wear.
- Check the clutch system.
- Check the coolant level.
- Check the tyre pressures and tread depth.
- Check the ease of movement of the side stand.
- Check the ease of movement of the centre stand.
- Check the lights and signalling equipment.
- Check that the engine start suppression system is in working order.
- Perform final inspection and check of roadworthiness.
- Set the service-due date and service countdown distance.
- Check the battery charge state.
- Confirm BMW service in the on-board documentation.

Confirmation of maintenance work

BMW Pre-delivery Check

Completed

on_____

Stamp, signature

BMW Running-in Check

Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

BMW Service
Completed

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if logged beforehand,

Odometer reading_____

Stamp, signature

Confirmation of service

The table is intended as a record of maintenance and repair work, the installation of optional accessories and, if appropriate, special campaign (recall) work.

Item	Odometer reading	Date

Item	Odometer reading	Date

Appendix

FCC Approval

Ring aerial in the ignition switch

To verify the authorization of the ignition key, the electronic immobilizer exchanges information with the ignition key via the ring aerial.

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

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. ◀

Approbation de la FCC

Antenne annulaire présente dans le commutateur d'allumage

Pour vérifier l'autorisation de la clé de contact, le système d'immobilisation électronique échange des informations avec la clé de contact via l'antenne annulaire.
Le présent dispositif est conforme à la partie 15 des règles de la FCC. Son utilisation est soumise aux deux conditions suivantes :

(1) Le dispositif ne doit pas produire d'interférences nuisibles, et
(2) le dispositif doit pouvoir accepter toutes les interférences extérieures, y compris celles qui pourraient provoquer une activation inopportune.

Toute modification qui n'aurait pas été approuvée expressément par l'organisme responsable de l'homologation peut annuler l'autorisation accordée à l'utilisateur pour utiliser le dispositif. ◀

Certifications

Remote Control for central locking system

Česky
Meta System S.p.A. tímto prohlašuje, že tento PF240009 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.

Dansk
Undertegnede Meta System S.p.A. erklærer herved, at følgende udstyr PF240009 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Deutsch
Hiermit erklärt Meta System S.p.A., dass sich das Gerät PF240009 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

Eesti
Käesolevaga kinnitab Meta System S.p.A. seadme PF240009 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

English
Hereby, Meta System S.p.A., declares that this PF240009 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español
Por medio de la presente Meta System S.p.A. declara que el PF240009 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Certifications

Ελληνική
ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Meta System S.p.A. ΔΗΛΩΝΕΙ ΟΤΙ PF240009 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Français
Par la présente Meta System S.p.A. déclare que l'appareil PF240009 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Italiano
Con la presente Meta System S.p.A. dichiara che questo PF240009 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Latviski
Ar šo Meta System S.p.A. deklarē, ka PF240009 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

Lietuvių
Šiuo Meta System S.p.A. deklaruoja, kad šis PF240009 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

Nederlands
Hierbij verklaart Meta System S.p.A. dat het toestel PF240009 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Malti
Hawnhekk, Meta System S.p.A., jiddikjara li dan PF240009 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Magyar
Alulírott, Meta System S.p.A. nyilatkozom, hogy a PF240009 megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.

Polski
Niniejszym Meta System S.p.A. oświadcza, że PF240009 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.

Português
Meta System S.p.A. declara que este PF240009 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Certifications

Slovensko
Meta System S.p.A. izjavlja, da je ta PF240009 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Slovensky
Meta System S.p.A. týmto vyhlasuje, že PF240009 spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Suomi
Meta System S.p.A. vakuuttaa täten että PF240009 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Svenska
Härmed intygar Meta System S.p.A. att denna PF240009 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Íslenska
Hér með lýsir Meta System S.p.A. yfir því að PF240009 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.

Norsk
Meta System S.p.A. erklærer herved at utstyret PF240009 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

USA, Canada

Product name: TX BMW MR
FCC ID: P3O98400
IC:4429A - TXBMWMR

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration Of Conformity

R&TTE Declaration Of Conformity (DoC)

CE 0470

We: **Meta System S.p.A.**

with the address: Via Majakovskij 10 b/c/d/e
42124 Reggio Emilia –Italy

Declare

Under own responsibility that the product:

TX BMW MR

To which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&TTE Directive (1999/5/EC).
This product is in conformity with the following standards:

Health & Safety (art.3.1)	EN 60950-1
EMC (art.3.2)	ETSI EN 301 489-1/-3
Spectrum	ETSI EN 300 220 - 2
Human exposure	EN 62311

According to Directive 1999/5/CE

Reggio Emilia , 14/07/2010

Technical Director
Lasagni Cesare

Certifications

BMW Keyless Ride ID Device

USA, Canada

Product name: BMW Keyless Ride ID Device
FCC ID: YGOHUF5750
IC: 4008C-HUF5750

Canada:
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

USA:
This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration Of Conformity

We declare under our responsibility that the product

BMW Keyless Ride ID Device (Model: HUF5750)

camplies with the appropriate essential requirements of the article 3 of the R&TIE and the other relevant provisions, when used for its intended purpose. Applied Standards:

1. Health and safety requirements contained in article 3 (1) a)
   - EN 60950-1:2006+A11:2009+A1:2010+A12:2011; Information technology equipment- Safety
2. Protection requirements with respect to electromagnetic compatibility article 3 (1) b)
   - EN 301 489-1 (V1 .9.2, 09/2011), Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
   - EN 301 489-3 (V1.4.1, 08/2002) Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for short range devices (SRD) operating on frequencies between 9 kHz and 40 GHz
3. Means of the efficient use of the radio frequency spectrum article 3 (2)
   - EN 300 220-1 & -2 (V2.4.1, 05/2012), electromagnetic compatibility and radio spectrum matters (ERM); Short range devices (SRD); Radio equipment tobe used in the 25 MHz to 1000 MHz frequency range with power leveis ranging up to 500 mW; Part 1: Technical characteristics and test methods. Part 2: Harmonized EN covering essential requirements under article 3.2 ofthe R&TIE directive

The product is labeted wilh the CE marking: CE

Velbert, October 15th, 2013

Benjamin A. Müller
Product Development Systems
Car Access and Immobilization – Electronics
Huf Hülsbeck & Fürst GmbH & Co. KG
Steeger Straße 17, D-42551 Velbert

Certification Tire Pressure Control (TPC)

FCC ID: MRXBC54MA4 IC: 2546A-BC54MA4	FCC ID: MRXBC5A4 IC: 2546A-BC5A4

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING: Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term “IC:” before the radio certification number only signifies that Industry Canada technical specifications were met.

Details described or illustrated in this booklet may differ from the vehicle's actual specification as purchased, the accessories fitted or the national-market specification. No claims will be entertained as a result of such discrepancies.
Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.
The right to modify designs, equipment and accessories is reserved.
Errors and omissions excepted.

Original rider's manual, printed in Germany.

Important data for refuelling:

Fuel	
Recommended fuel grade	Super unleaded (max. 10 % ethanol, E10) 95 ROZ/RON 89 AKI
Usable fuel capacity	approx. 24 l
Reserve fuel	approx. 4 l
Tyre pressure	
Tyre pressure, front	2.9 bar, Tyre cold
Tyre pressure, rear	2.9 bar, Tyre cold

For further information on all aspects of your motorcycle, visit bmw-motorrad.com

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Order No.: 01 41 8 522 671
08.2015, 7th edition, 01