BMW
MOTORRAD

RIDER'S MANUAL

R 1250 R

MAKE LIFE A RIDE

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)

YOUR 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

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.

If the time comes to sell your BMW, please remember to hand over this rider's manual to the new owner. It is an important part of the vehicle.

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

BMW Motorrad.

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GENERAL INSTRUCTIONS

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4 GENERAL INSTRUCTIONS

QUICK & EASY REFERENCE

An important aspect of this rider's manual is that it can be used for quick and easy reference. Consulting the extensive index at the end of this rider's manual is the fastest way to find information on a particular topic or item. To first read an overview of your motorcycle, please go to Chapter 2. All maintenance and servicing work on the motorcycle is documented in the "Service" section. The record of the maintenance work you have had performed on your vehicle is a precondition for generous treatment of goodwill claims.

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.

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

- 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.

NV National-market version.

OE Optional equipment. The vehicles are assembled complete with all the BMW Motorrad optional equipment 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.
ABS	Anti-lock brake system.
ASC	Automatic Stability Control.
EWS	Electronic immobiliser.
D-ESA	Electronic chassis and suspension adjustment.
DTC	Dynamic Traction Control.
DWA	Anti-theft alarm.
RDC	Tyre pressure monitoring.

EQUIPMENT

When you ordered your BMW Motorrad, you chose various items of custom equipment. These operating instructions describe the optional equipment (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment that you might not have selected. Please note, too, that on account of country-specific differences, your motorcycle might not be exactly as illustrated.
If your motorcycle contains equipment that has not been described, its description can be found in a separate manual.

TECHNICAL DATA

All dimensions, weights and power ratings stated in the operating instructions are quoted to the standards and comply with the tolerance requirements of the Deutsches Institut für Normung e.V. (DIN). Technical data and specifications in this rider's manual serve as reference points. The vehicle-specific data may deviate from these, for example as a result of selected optional equipment, the national-market version or country-specific measuring procedures. Detailed values can be taken from the vehicle registration documents, or can be obtained from your authorised BMW Motorrad retailer or another qualified service partner or specialist

workshop. The specifications in the vehicle documents always have priority over the information provided in this rider's manual.

CURRENCY

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 these operating instructions.

ADDITIONAL SOURCES OF INFORMATION

Authorised BMW Motorrad retailer

Your authorised BMW Motorrad retailer will be happy to answer any questions you may have.

Internet

The rider's manual for your vehicle, operating and installation instructions for accessories and general information about BMW Motorrad, in relation to technology, for example, are available for download from **bmw-motorrad.com/manuals**.

CERTIFICATES AND OPERATING LICENCES

The certificates for the vehicle and the official operating licences for accessories can be downloaded from **bmw-motorrad.com/certification**.

DATA MEMORY

General

Control units are installed in the vehicle. Control units process data that they receive, for example, from vehicle sensors, or that they generate themselves or exchange between each other. Some control units are required for the vehicle to function safely or provide assistance during riding, for example assistance systems. In addition, control units enable comfort or infotainment functions.

Information on data that has been stored or exchanged can be obtained from the manufacturer of the vehicle, for example via a separate booklet.

Personal reference
Each vehicle is identified with a clear vehicle identification number. Depending on the country, the vehicle identification number, the number plate and the corresponding authorities can be referenced to ascertain the vehicle owner. There are also other ways to use data obtained from the vehicle to trace the rider or vehicle owner, for example using the Connected-Drive user account.

Data protection rights
In accordance with applicable data protection laws, vehicle users have certain rights in relation to the manufacturer of the vehicle or in relation to companies which collect or process personal data.
Vehicle users have the right to obtain full information at no cost from persons or entities storing personal data of the vehicle user.
These entities may include:

–Manufacturer of the vehicle
–Qualified service partners
–Specialist workshops
–Service providers

Vehicle users have the right to request information on what personal data has been stored, for what purpose the data is used, and where the data comes from. To obtain this information, proof of ownership or use is required.
The right to information also includes information about data that has been shared with other companies or entities.
The website of the vehicle manufacturer contains the applicable data protection information. This data protection information includes information on the right to have data deleted or corrected.
The manufacturer of the vehicle also provides their contact details and those of the data protection officer on their website.
The vehicle owner can also request that a BMW Motorrad Retailer or another qualified service partner or specialist workshop read out the data that is stored in the vehicle for a charge.

8 GENERAL INSTRUCTIONS

The vehicle data is read out using the legally prescribed socket for on-board diagnosis (OBD) in the vehicle.

Legal requirements for the disclosure of data
As part of its legal responsibilities, the manufacturer of the vehicle is obligated to make its stored data available to the relevant authorities. This data is provided in the required scope in individual cases, for example to clarify a criminal offence.
In the context of applicable laws, public agencies are entitled in individual cases to read out data from the vehicle themselves.

Operating data in the vehicle
Control units process data to operate the vehicle.
This includes, for example:
– Status reports of the vehicle and its individual components, for example wheel revolutions, wheel speed, deceleration
– Environmental conditions, for example temperature

The data is only processed in the vehicle itself and is generally non-permanent. The data is not stored beyond the operating period.

Electronic components, for example control units, contain components for storing technical information. Information can be temporarily or permanently stored on the vehicle condition, component loads, incidents or errors.
This information is generally used to document the condition of a component, a module, a system or the surrounding area, for example:
– Operating conditions of system components, for example filling levels, tyre pressure
– Malfunctions and faults in important system components, for example light and brakes
– Response of the vehicle in special riding situations, for example engagement of the driving dynamics systems
– Information on incidents resulting in damage to the vehicle

The data is necessary for the provision of control unit functions. Furthermore, the data is used to detect and rectify malfunctions and to enable the vehicle manufacturer to optimise vehicle functions.
The vast majority of this data is non-permanent and is only processed in the vehicle it-

self. Only a small amount of the data is stored in incident or fault memories as required by events.
If services are accessed, for example repairs, service processes, warranty cases and quality assurance measures, this technical information can be read out of the vehicle together with the vehicle identification number.
The information can be read out by a BMW Motorrad Retailer or another qualified service partner or specialist workshop. The legally stipulated socket for on-board diagnosis (OBD) in the vehicle is used to read out the data. The data is obtained, processed and used by the relevant parts of the retailer network. The data is used to document the technical conditions of the vehicle, to help with error localization, to comply with warranty obligations and to improve quality.
In addition, the manufacturer has various product monitoring obligations arising from product liability legislation. To meet these obligations, the vehicle manufacturer requires technical data from the vehicle. The data from the vehicle can also be used to check warranty claims from the customer.
Error and incident memories in the vehicle can be reset during servicing or repair work by a BMW Motorrad Retailer or another qualified service partner or specialist workshop.

Data input and data transfer in the vehicle

General

Depending on the equipment, comfort and customised settings can be stored in the vehicle and can be changed or reset at any time.
This includes, for example:
– Settings of the windscreen position
– Chassis and suspension settings

If required, data can be entered in the entertainment and communication system of the vehicle, for example using a smartphone.
Depending on the individual equipment, this includes:
– Multimedia data, such as music for playback
– Contacts data for use in connection with a communication system or an integrated navigation system

–Entered destinations
–Data on the use of internet services. This data can be stored locally in the vehicle or is located on a device that is connected to the vehicle, for example smartphone, USB stick, MP3 player. If this data is stored in the vehicle, the data can be deleted at any time.

This data is transferred to third parties only if personally requested within the context of using online services. This depends on the selected settings when using the services.

Incorporation of mobile end devices

Depending on the equipment, mobile end devices connected to the vehicle, for example smartphones, can be controlled using the operating elements of the vehicle.

The image and sound of the mobile end device can then be output via the multimedia system. At the same time, specific information is transferred to the mobile end device. Depending on the type of integration, this includes, for example, position data and additional general vehicle information. This enables optimal use of the selected apps, for example navigation or music playback.

The type of additional data processing is determined by the provider of the respective app. The scope of the possible settings depends on the corresponding app and the operating system of the mobile end device.

Services

General

If the vehicle has a wireless connection, this enables the exchange of data between the vehicle and other systems. The wireless connection is enabled by the vehicle's own transmitter and receiver unit or using personally integrated mobile end devices, for example smartphones. Online functions can be used using this wireless connection. These include online services and apps that are provided by the vehicle manufacturer or by other providers.

Services of the vehicle manufacturer

For online services of the vehicle manufacturer, the individual functions are described at suitable points, for example rider's manual, website of the manufacturer. At the same time, information

is also provided on the relevant data protection law. Personal data may be used to provide online services. Data is exchanged using a secure connection, for example with the IT systems provided by the vehicle manufacturer. Obtaining, processing and using personal data outside of the normal provision of services requires legal permission, contractual agreement or consent. It is also possible to have the entire data connection activated or deactivated. Statutory functions are excluded from this.

Services from other providers

When using online services from other providers, these services are subject to the responsibility and the data protection and operating conditions of the individual provider. The vehicle manufacturer has no influence on the content that is exchanged in this instance. Information on the type, scope and purpose of the data capture and use of personal data as part of the services of third parties can be ascertained from the individual provider.

INTELLIGENT EMERGENCY CALL SYSTEM

–with intelligent emergency call OE

Principle

The intelligent emergency call system enables manual or automatic emergency calls, for example in the event of an accident.

The emergency calls are received by an emergency call centre that is commissioned by the vehicle manufacturer.

For information on operating the intelligent emergency call system and its functions, please refer to "Intelligent emergency call".

Legal basis

Processing of personal data using the intelligent emergency call system is in line with the following regulations:

–Protection of personal data: Directive 95/46/EC of the European Parliament and of the Council.

–Protection of personal data: Directive 2002/58/EC of the European Parliament and of the Council.

The legal basis for the activation and function of the intelli-

gent emergency call system is the concluded ConnectedRide contract for this function, as well as the corresponding laws, ordinances and directives of the European Parliament and of the European Council.
The relevant ordinances and directives regulate the protection of natural persons during the processing of personal data.
The processing of personal data by the intelligent emergency call system satisfies the European directives for the protection of personal data.
The intelligent emergency call system processes personal data only with the agreement of the vehicle owner.
The intelligent emergency call system and other services with additional benefits can process personal data only with the express permission of the person affected by the data processing, for example the vehicle owner.

SIM card
The intelligent emergency call system operates via the mobile phone network using the SIM card installed in the vehicle.
The SIM card is permanently logged into the mobile phone network to enable rapid connection setup. Data is sent to the vehicle manufacturer in the event of an emergency.

Improving quality
The data that is transferred in an emergency is also used by the manufacturer of the vehicle to improve product and service quality.

Location determination
The position of the vehicle can be determined exclusively by the mobile phone network provider based on the mobile phone site locations. It is not possible for the provider to trace a connection between the vehicle's VIN and the phone number of the installed SIM card. Only the manufacturer of the vehicle can link a VIN and the phone number of the SIM card installed in a particular vehicle.

Log data of emergency calls
The log data of emergency calls is stored in a memory of the vehicle. The oldest log data is regularly deleted. The log data includes, for example, information on when and where an emergency call was made.
In exceptional cases, the log data can be read out of the

vehicle memory. As a rule, log data is only read out following a court order, and this is only possible if the corresponding devices are connected directly to the vehicle.

Automatic emergency call
The system is designed so that, following a sufficiently serious accident, which is detected by sensors in the vehicle, an emergency call is automatically activated.

Sent information
When making an emergency call using the intelligent emergency call system, the system forwards the same information to the designated emergency call centre as is forwarded to the public emergency operations centre by the statutory emergency call system eCall. In addition, the intelligent emergency call system sends the following additional information to an emergency call centre commissioned by the vehicle manufacturer and, if required, to the emergency services:

– Accident data, for example the direction of impact detected by the vehicle sensors, to assist the emergency services response.
– Contact details, for example the phone number of the installed SIM card and the phone number of the rider, if available, to enable rapid contact with those involved in the accident if required.

Data storage
The data for an activated emergency call is stored in the vehicle. The data contains information on the emergency call, for example the location and time of the emergency call. The voice recordings of the emergency call are stored at the emergency call centre. The voice recordings of the customer are stored for 24 hours in case details of the emergency call need to be analysed. After this, the voice recordings are deleted. The voice recordings of the employee of the emergency call centre are stored for 24 hours for quality assurance purposes.

14 GENERAL INSTRUCTIONS

Information on personal data
The data that is processed as part of the intelligent emergency call is processed exclusively to carry out the emergency call. As part of its statutory obligation, the manufacturer of the vehicle provides information about the data that it has processed and any data that it still has stored.

GENERAL VIEWS

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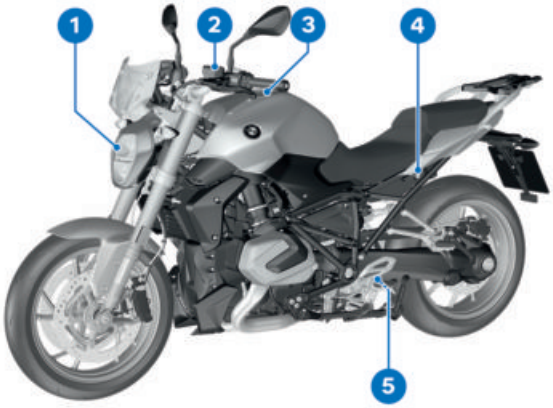
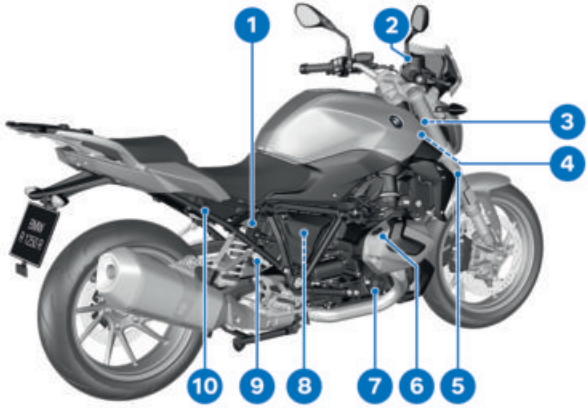
GENERAL VIEW, LEFT SIDE



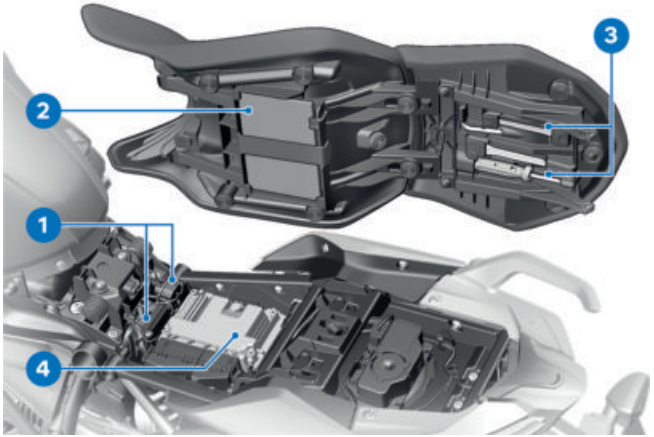
1 –with daytime riding light[OE]
Manual daytime riding light (➠ 73).
2 Clutch-fluid reservoir (➠ 181)
3 Fuel filler neck (➠ 145)
4 Seat lock (➠ 92)
5 Setting the rear damping (down at the spring strut) (➠ 127)

GENERAL VIEW, RIGHT SIDE



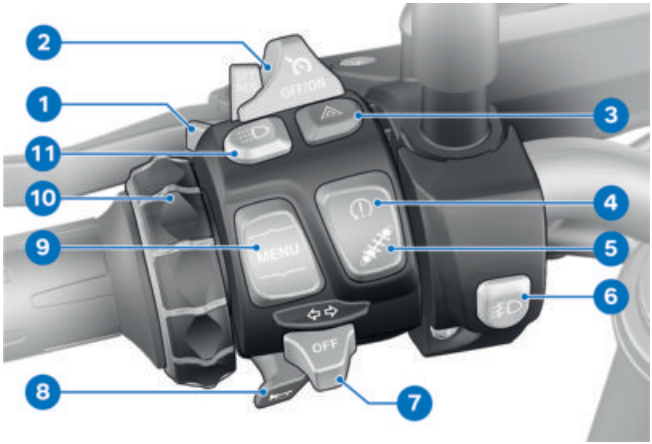
1 Adjustment of spring preload for rear wheel (➠ 126)
2 Brake-fluid reservoir, front (➠ 179)
3 Vehicle identification number (VIN) (on steering head, right)
Type plate (on steering head, left)
4 Coolant-level indicator (➠ 181)
Coolant reservoir (➠ 182)
5 Tyre pressures table
6 Oil filler opening (➠ 176)
7 Engine oil level indicator (➠ 175)
8 Behind the side trim panel:
Battery (➠ 201)
Remote positive terminal (➠ 199)
Diagnostic connector (➠ 206)
9 Brake-fluid reservoir, rear (➠ 180)
10 Power socket (➠ 210)

UNDERNEATH THE SEAT



1 Fuses (➠ 205)
2 Rider's manual
3 Standard toolkit (➠ 173)
4 Payload table

MULTIFUNCTION SWITCH, LEFT



1 High-beam headlight and headlight flasher (➠ 71)
2 –with cruise control[OE] Cruise control (➠ 83).
3 Hazard warning lights (➠ 75)
4 ASC/DTC (➠ 76)
5 –with Dynamic ESA[OE] Dynamic ESA possible settings (➠ 77)
6 –with LED additional headlight[OA] Auxiliary headlights (➠ 72).
7 Turn indicators (➠ 75)
8 Horn
9 MENU rocker button (➠ 97)
10 Multi-Controller Controls (➠ 97)
11 –with daytime riding light[OE] Manual daytime riding light (➠ 73).

MULTIFUNCTION SWITCH, RIGHT

–with intelligent emergency call[OE]

1 –with heated grips[OE]
Heated grips (➠ 91).
2 Riding mode (➠ 80)
3 Emergency-off switch (kill switch) (➠ 68)
4 Starter button
Start the engine (➠ 135).
5 SOS button
Intelligent emergency call (➠ 69)

MULTIFUNCTION SWITCH, RIGHT

–without intelligent emergency call OE

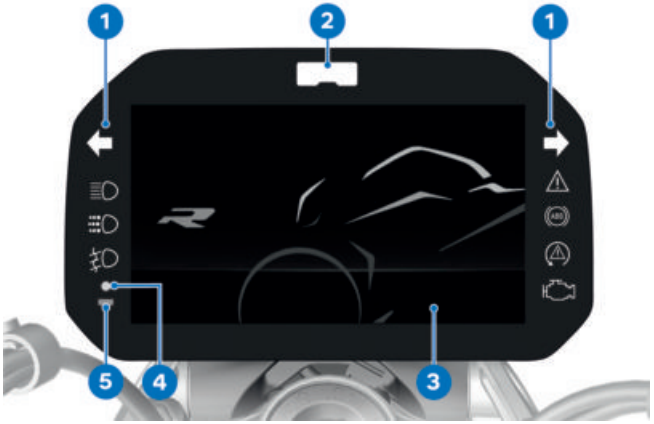
1 –with heated grips OE
Heated grips (➠ 91).

2 Riding mode (➠ 80)

3 Emergency-off switch (kill switch) (➠ 68)

4 Starter button
Start the engine (➠ 135).

INSTRUMENT CLUSTER



1 Indicator and warning lights (➠ 28)

2 –with riding modes Pro[OE] Shift light (➠ 140)

3 TFT display (➠ 29) (➠ 30)

4 Alarm system LED
–with anti-theft alarm (DWA)[OE]
Alarm signal (➠ 89)
–with Keyless Ride[OE]
Indicator light for the radio-operated key
Switch on the ignition (➠ 65).

5 Photosensor (for adapting the brightness of the instrument lighting)

STATUS INDICATORS

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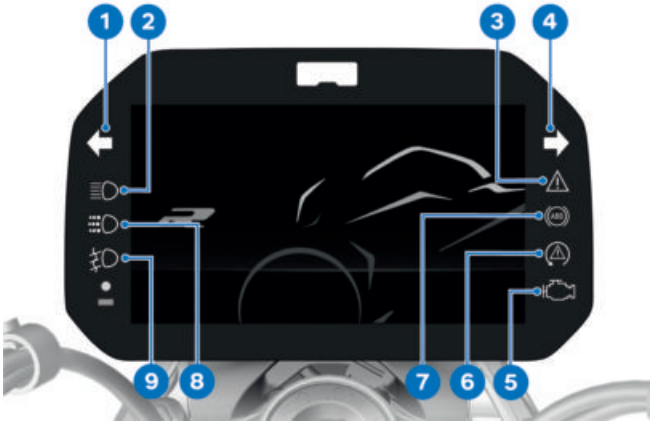
28 STATUS INDICATORS

INDICATOR AND WARNING LIGHTS



1 Turn indicators, left (➠ 75)

2 High-beam headlight (➠ 71)

3 General warning light (➠ 31)

4 Turn indicators, right (➠ 75)

5 Warning light, drive malfunction (➠ 45)

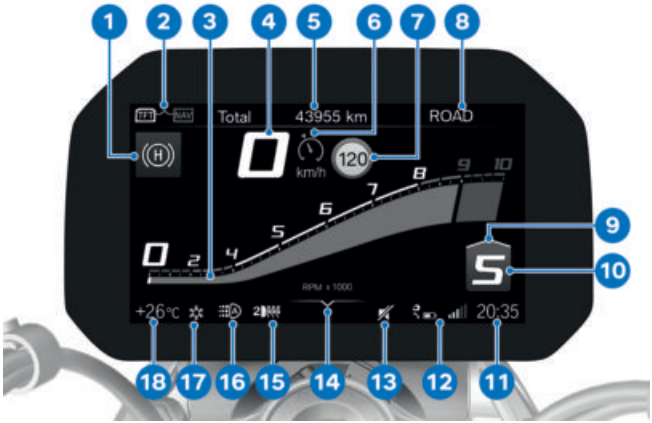
6 ASC (➠ 53)
–with riding modes Pro[OE] DTC (➠ 53)

7 ABS (➠ 52)

8 –with daytime riding light[OE]
Manual daytime riding light (➠ 73).

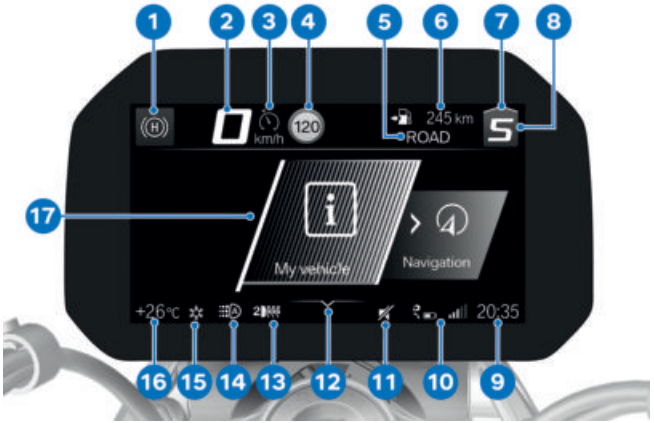
9 –with LED additional headlight[OA]
Auxiliary headlights (➠ 72).

TFT DISPLAY IN PURE RIDE VIEW



1 Hill Start Control (➠ 56)
2 Change of operating focus (➠ 101)
3 Rev. counter (➠ 103)
4 Speedometer
5 Status line (➠ 101)
6 –with cruise control[OE] Cruise control (➠ 83).
7 Speed Limit Info (➠ 103)
8 Riding mode (➠ 80)
9 Recommendation to upshift (➠ 104)
10 Gear indicator; "N" indicates neutral.
11 Clock (➠ 105)
12 Connection status (➠ 107)
13 Muting (➠ 104)
14 Operating help
15 Heating stages, handlebar grips (➠ 91)
16 Automatic daytime riding light (➠ 74)
17 Outside temperature warning (➠ 38)
18 Ambient temperature

TFT DISPLAY IN MENU VIEW



1 Hill Start Control (➠ 56)
2 Speedometer
3 –with cruise control[OE] Cruise control (➠ 83).
4 Speed Limit Info (➠ 103)
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9 Clock
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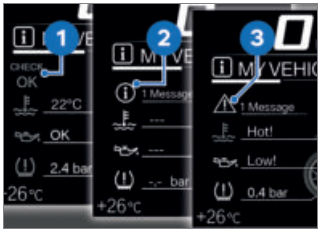
11 Muting (➠ 104)
12 Operating help
13 Heating stages, handlebar grips (➠ 91)
14 Automatic daytime riding light (➠ 74)
15 Outside temperature warning (➠ 38)
16 Ambient temperature
17 Menu section

WARNING INDICATORS

Mode of presentation

Warnings are indicated by the corresponding warning lights. Warnings are indicated by the 'General' warning light showing in combination with a dialogue in the TFT display. The 'General' warning light shows yellow or red, depending on the urgency of the warning.

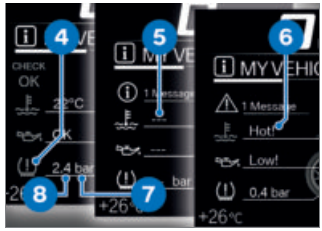
The status of the 'General' warning light matches the most urgent warning.
The possible warnings are listed on the next pages.



Check Control display

The messages differ in how they show on the display. Different colours and symbols are used depending on priority:

–Green CHECK OK **1**: no message, optimum values.
–White circle with small "i" **2**: information.
–Yellow warning triangle **3**: warning, value not ideal.
–Red warning triangle **3**: warning, value critical



Values display

Symbols **4** differ in how they show on the display. The colours used differ and reflect the urgency of the message. Along with numerical values **8** with units **7**, texts **6** are displayed as well:

Colour of the symbol

–Green: (`OK`) Current value is ideal.
–Blue: (`Cold!`) Current temperature is low.
–Yellow: (`Low!/High!`) Current value is too low or too high.
–Red: (`Hot!/High!`) Current temperature or value is too high.

–White: (---) No valid value available. Dashes **5** are displayed instead of a numerical value.

The assessment of some values is only possible from a certain journey duration or speed. If a measured value is still not being displayed because the conditions for measurement have not been met, dashes are displayed instead as a placeholder. If there are no valid measured values, there will be no assessment in the form of a coloured symbol.

Check Control dialogue

Messages are output as Check Control dialogues **1**.

–If there are two or more Check Control messages of equal priority, the messages keep changing in the order of their occurrence until they are acknowledged.

–If symbol **2** is actively displayed, it can be acknowledged by tilting the Multi-Controller to the left.

–Check Control messages are dynamically attached as additional tabs on the pages in the `My vehicle` menu (➠ 99). You can go to the message again as long as the fault persists.

Warnings, overview

Indicator and warning lights	Display text	Meaning
	 is displayed.	Outside temperature warning (➠ 38)
 lights up yellow.	 `Remote key not in range.`	Radio-operated key outside of reception area (➠ 38)
 lights up yellow.	 `Keyless Ride failure`	Keyless Ride failed (➠ 39)
 lights up yellow.	 `Remote key battery at 50%.`	Replacing battery of remote key (➠ 39)
	 `Remote key battery weak.`	
	 is displayed in yellow.	Voltage of the vehicle electrical system too low (➠ 39)
	 `Vehicle voltage low.`	
 lights up yellow.	 is displayed in yellow.	Voltage of the vehicle electrical system critical (➠ 40)
	 `Vehicle voltage critical!`	
 flashes yellow.	 is displayed in yellow.	Charging voltage critical (➠ 40)
	 `Battery voltage critical!`	
 lights up yellow.	 The faulty bulb is displayed.	Light source faulty (➠ 41)
 lights up yellow.	 `Light control failure!`	Light control failed (➠ 42)

34 STATUS INDICATORS

Indicator and warning lights	Display text	Meaning
	Alarm system batt. capacity weak.	Anti-theft alarm battery weak (➠ 42)
	Alarm system battery empty.	Anti-theft alarm battery flat (➠ 43)
	Alarm system failure	DWA failed (➠ 43)
	Engine oil level Check engine oil level.	Electronic oil-level check: Check the engine oil level (➠ 44)
lights up red.	Coolant temperature too high!	Coolant temperature too high (➠ 44)
lights up.	Engine!	Drive malfunction (➠ 45)
flashes red.	Serious fault in the engine control!	Serious drive malfunction (➠ 45)
flashes.		
lights up yellow.	No communication with engine control.	Engine control failed (➠ 45)
lights up.		
lights up yellow.	Fault in the engine control.	Engine in emergency-operation mode (➠ 46)
flashes red.	Serious fault in the engine control!	Serious fault in engine control (➠ 46)

Indicator and warning lights	Display text	Meaning
 lights up yellow.	 is displayed in yellow.	Tyre pressure in limit range of the permitted tolerance (➠ 48)
	 `Tyre pressure does not match setpoint`	
 flashes red.	 is displayed in red.	Tyre pressure outside the permitted tolerance (➠ 48)
	 `Tyre pressure does not match setpoint`	
	 `Tyre press. control. Loss of pressure.`	
	 `"---"`	Transmission fault (➠ 49)
 lights up yellow.	 `"---"`	Sensor faulty or system fault (➠ 50)
 lights up yellow.	 `Tyre pressure check failure!`	Tyre pressure control (RDC) failed (➠ 50)
 lights up yellow.	 `RDC sensor battery weak.`	Battery for tyre pressure sensor weak (➠ 50)
	 `Drop sensor faulty.`	Drop sensor defective (➠ 51)
 lights up yellow.	 `Emergency call failure.`	Emergency call function restricted (➠ 51)
 lights up yellow.	 `Side stand monitoring faulty.`	Side stand monitoring is faulty (➠ 51)

36 STATUS INDICATORS

Indicator and warning lights	Display text	Meaning
 flashes.		ABS self-diagnosis not completed (➠ 51)
 lights up yellow.	 Limited ABS availability!	ABS fault (➠ 52)
 lights up.		
 lights up yellow.	 ABS failure!	ABS failed (➠ 52)
 lights up.		
 lights up.	 ABS Pro failure!	ABS Pro failed (➠ 53)
 quick-flashes.		ASC/DTC intervention (➠ 53)
 slow-flashes.		ASC/DTC self-diagnosis not completed (➠ 53)
 lights up.	 Off!	ASC/DTC switched off (➠ 54)
	 Traction control deactivated.	
 lights up.	 Traction control limited!	ASC/DTC restricted (➠ 54)
 lights up.	 Traction control failure!	ASC/DTC fault (➠ 54)
 lights up yellow.	 Spring strut adjustment faulty!	D-ESA fault (➠ 55)

Indicator and warning lights	Display text	Meaning
	 `Tank reserve level reached.`	Fuel down to reserve (➠ 55)
	 shows green.	Hill Start Control active (➠ 56)
	 flashes yellow.	Hill Start Control automatically deactivated (➠ 56)
	 is displayed.	Hill Start Control cannot be activated (➠ 56)
	 The gear indicator flashes.	Gear not trained (➠ 56)
 flashes green.		Hazard warning lights system is switched on (➠ 57)
 flashes green.		
	 is displayed in white.	Service due (➠ 57)
	`Service due!`	
 lights up yellow.	 is displayed in yellow.	Service-due date has passed (➠ 57)
	`Service overdue!`	

Ambient temperature
The ambient temperature is displayed status line of the TFT display.
When the vehicle is at a standstill, the heat of the engine can falsify the ambient-temperature reading. If the heat of the engine is affecting it too much, dashes are temporarily shown in place of the value.

 There is a risk of black ice if the ambient temperature falls below the following limit value.

 Threshold for ambient temperature
approx. 3 °C

The first time the temperature drops below this value, the ambient-temperature reading and the ice crystal symbol flash in the status line of the TFT display.

Outside temperature warning
 is displayed.

Possible cause:

 The air temperature measured at the vehicle is lower than:
approx. 3 °C

WARNING

Risk of black ice also applicable at over 3 °C
Risk of accident
- 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.

Radio-operated key outside of reception area
–with Keyless Ride OE

 lights up yellow.

 `Remote key not in range. Not possible to switch on ignition again.`

Possible cause:
Communication between radio-operated key and engine electronics is disturbed.
- Check battery in the radio-operated key.

–with Keyless Ride OE
- Replace the battery of the radio-operated key (➠ 67).
- Use spare key for rest of journey.

–with Keyless Ride OE
- Loss of the radio-operated key (➠ 66).
- If the Check Control dialogue appears while riding, keep calm. You can continue riding, the engine will not switch off.
- Have the faulty radio-operated key replaced by an authorised BMW Motorrad Retailer.

Keyless Ride failed

 lights up yellow.

 Keyless Ride failure Do not stop the engine. It may not be poss. to restart the engine.

Possible cause:
The Keyless Ride control unit has diagnosed a communication fault.
- Do not switch off the engine. Proceed as directly as possible to an authorised workshop, preferably an authorised BMW Motorrad retailer.

» Engine start with Keyless Ride no longer possible.
» DWA can no longer be activated.

Replacing battery of remote key

 lights up yellow.

 Remote key battery at 50%. No functional impairment.

 Remote key battery weak. Limited central locking function. Change battery.

Possible cause:
- The battery of the remote key has lost a significant proportion of its original capacity. The function of the remote key is only still ensured for a limited time.

–with Keyless Ride OE
- Replace the battery of the radio-operated key (➠ 67).

Voltage of the vehicle electrical system too low

 is displayed in yellow.

 Vehicle voltage low. Switch off unnecessary consumers.

The voltage of the vehicle electrical system is too low. If you continue to ride the motorcycle the on-board electronics will drain the battery.
Possible cause:
Consumers with high power consumption are in operation (such as heated body warmers), too many consumers are

in operation at one time, or battery faulty.
- Switch off non-essential consumers or disconnect them from the vehicle's electrical system.
- If the fault persists or occurs without consumers connected, have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Voltage of the vehicle electrical system critical

 lights up yellow.

 is displayed in yellow.

 `Vehicle voltage critical! Consumers were switched off. Check battery condition.`

WARNING

Failure of the vehicle systems
Risk of accident
- Do not continue your journey.

The voltage of the vehicle electrical system is critical. If you continue to ride the motorcycle the on-board electronics will drain the battery.
Possible cause:
Consumers with high power consumption are in operation (such as heated body warmers), too many consumers are in operation at one time, or battery faulty.
- Switch off non-essential consumers or disconnect them from the vehicle's electrical system.
- If the fault persists or occurs without consumers connected, have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Charging voltage critical

 flashes yellow.

 is displayed in yellow.

 `Battery voltage critical! Accident risk. Stop driving.`

WARNING

Failure of the vehicle systems
Risk of accident
- Do not continue your journey.

The battery is not being charged. If you continue to ride the motorcycle the onboard electronics will drain the battery.
Possible cause:
The alternator or alternator drive is faulty, battery is faulty or the fuse for the alternator regulator has blown.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Light source faulty

 lights up yellow.

 The faulty bulb is displayed:

 `High beam faulty!`

 `Front left turn indicator faulty!` or `Front right turn indicator faulty!`

 `Low-beam headlight faulty!`

 `Front side light faulty!`

–with daytime riding light OE

 `Daytime riding light faulty!`◁

–with LED additional headlight OA

 `Left additional headlight faulty!` or `Right additional headlight faulty!`◁

 `Tail light faulty!`

 `Brake light faulty!`

 `Rear left turn indicator faulty!` or `Rear right turn indicator faulty!`

 `Number plate light faulty!`

–`Have it checked by a specialist workshop.`

WARNING

Vehicle overlooked in traffic due to failure of the lights on the vehicle
Safety risk
- Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible.

Possible cause:
One or more bulbs faulty.
- Identify faulty bulb or bulbs by visual check.
- Replacing bulbs for low-beam and high-beam headlight (➠ 195).
- Replace the LED side light (➠ 195).
- Replacing bulbs for front and rear turn indicators (➠ 193).
- Replacing LED rear light (➠ 195).

–with LED flashing turn indicator OE
- Replacing LED turn indicators (➠ 195).

Light control failed
lights up yellow.

Light control failure! Have it checked by a specialist workshop.

WARNING

Vehicle overlooked in traffic on account of failure of the vehicle lighting
Safety risk
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Possible cause:
Light control has diagnosed a communication fault.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Anti-theft alarm battery weak
–with anti-theft alarm (DWA) OE

Alarm system batt. capacity weak. No restrictions. Make an appointment at a specialist workshop.

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 Retailer.

Anti-theft alarm battery flat
–with anti-theft alarm (DWA) OE

Alarm system battery empty. No independent alarm. Make an appointment at a specialist workshop.

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 Retailer.

DWA failed

Alarm system failure Have it checked by a specialist workshop.

Possible cause:
The DWA control unit has diagnosed a communication fault.
- Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

» DWA can no longer be activated or deactivated.
» False alarm possible.

Electronic oil-level check

The electronic oil-level check assesses the oil level in the engine as OK or Low!

The following preconditions have to be satisfied for electronic oil-level checking, and several measurements might have to be taken:
–Rider is sitting on the vehicle and vehicle has just been ridden at a speed of at least 10 km/h.
–Engine idling for at least 20 seconds.
–Engine is at operating temperature.
–Vehicle is standing upright on a smooth, level surface.

–Side stand is retracted and vehicle is not propped on its centre stand.
–The spring strut is appropriately set for the load status, or D-ESA is in Auto load mode.

If measurement is incomplete or if these conditions are not met, the oil level cannot be judged by the system. Dashes (---) appear on the display instead of a reading.

Electronic oil-level check: Check the engine oil level


Engine oil level Check engine oil level.

Possible cause:
The electronic oil-level sensor has registered a low oil level.
If the vehicle is not standing upright on a smooth, level surface, the message might appear even though the oil level is correct. The next time you stop for fuel:
- Check the engine oil level (➠ 175).

If the oil level in the sight glass is too low:
- Top up the engine oil (➠ 176).

If the oil level is correct:
- Check whether the preconditions for the electronic oil-level check are met.

If the message appears repeatedly, even though the oil level is slightly below the maximum mark:
- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad dealer.

Coolant temperature too high


lights up red.


Coolant temperature too high! Check coolant level. Continue driving in part. load to cool down.

ATTENTION

Riding with overheated engine
Engine damage
- Compliance with the information set out below is essential.

Possible cause:
The coolant level is too low.
- Check the coolant level (➠ 181).

If the coolant level is too low:
- Allow the engine to cool down.
- Top up coolant (➠ 182).
- Have the cooling system checked by a specialist

workshop, preferably by a BMW Motorrad partner.

Possible cause:
The coolant temperature is too high.
- If possible, ride in the part-load range to cool down the engine.

If the coolant temperature is frequently too high:
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Drive malfunction

 lights up.

 `Engine! Have it checked by a specialist workshop.`

Possible cause:
The engine control unit has diagnosed a fault which affects the pollutant emissions.
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

» You can continue riding; pollutant emissions are higher than the threshold values.

Serious drive malfunction

 flashes red.

 flashes.

 `Serious fault in the engine control! Riding at mod. speed pos. Damage possible. Have checked by workshop.`

Possible cause:
The engine control unit has diagnosed a fault that can lead to damage to the exhaust system.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

» It is possible to continue to ride but not recommended.

Engine control failed

 lights up yellow.

 lights up.

 `No communication with engine control. Multiple sys. affected. Ride carefully to the next specialist workshop.`

Engine in emergency-operation mode

 lights up yellow.

 Fault in the engine control. Onward journey possible Ride carefully to next specialist workshop.

WARNING

Unusual ride characteristics when engine running in emergency-operation mode
Risk of accident
- Avoid accelerating sharply and overtaking.

Possible cause:
The engine control unit has diagnosed a fault which impairs the engine performance or throttle response. The engine is in emergency-operation mode. In exceptional cases, the engine stops and refuses to start.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

» It is possible to continue riding, however the engine performance and engine speed range may be impaired and not function as normal.

Serious fault in engine control

 flashes red.

 Serious fault in the engine control! Riding at mod. speed pos. Damage possible. Have checked by workshop.

WARNING

Engine damage when running in emergency-operation mode
Risk of accident
- Ride slowly, avoid accelerating sharply and overtaking.
- If possible, have the vehicle picked up and have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

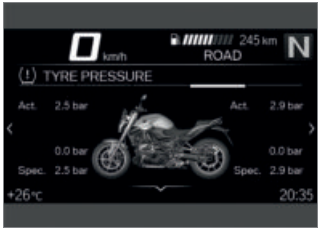
Possible cause:
The engine control unit has diagnosed a fault which may cause severe secondary faults. The engine is in emergency-operation mode.
- It is possible to continue to ride but not recommended.
- Avoid high load and rpm ranges if possible.

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

Tyre pressure

–with tyre pressure control (RDC) OE

In addition to the MY VEHICLE menu screen and the Check Control messages, there is also the TYRE PRESSURE screen for the display of the tyre pressures:



The values on the left are for the front wheel; those on the right are for the rear wheel. Actual and specified tyre pressures and the difference between them are displayed for each wheel.
Immediately after the ignition is switched on, only dashes are displayed. The sensors do not start transmitting tyre pressure signals until the first time the vehicle accelerates to more than the minimum speed stated below:

RDC sensor is not active
min 30 km/h (The RDC sensor does not transmit its signal to the vehicle until a certain minimum speed has been reached.)

The tyre pressures are shown in the TFT display as temperature compensated and always refer to the following tyre air temperature:
20 °C

If the tyre symbol appears as well, showing yellow or red, this is a warning. The pressure difference is highlighted with an exclamation point in the same colour.

If the value in question is close to the limit of the permissible tolerance range, the reading is accompanied by the 'General' warning light showing yellow.

 The 'General' warning light flashes red if the tyre pressure registered by the sensor is outside the permissible tolerance range.

For further information about BMW Motorrad RDC see the section entitled "Engineering details" from page (➠ 164) onward.

Tyre pressure in limit range of the permitted tolerance

–with tyre pressure control (RDC) OE

 lights up yellow.

 is displayed in yellow.

 `Tyre pressure does not match setpoint Check tyre pressure.`

Possible cause:
Measured tyre pressure is close to the limit of permitted tolerance.

- Correct tyre pressure.
- Before adjusting the tyre pressure, observe the information on temperature compensation and pressure adaptation in the section entitled "Engineering details":

» Temperature compensation (➠ 165)
» Pressure adaptation (➠ 165)
» Find the correct tyre pressures in the following places:

–On the back cover of the rider's manual
–Display in the `TYRE PRESSURE` view
–Sign under the seat

Tyre pressure outside the permitted tolerance

–with tyre pressure control (RDC) OE

 flashes red.

 is displayed in red.

 `Tyre pressure does not match setpoint Stop immediately! Check tyre pressure.`

 `Tyre press. control. Loss of pressure. Stop immediately! Check tyre pressure.`

WARNING

Tyre pressure outside the permitted tolerance.
Risk of accident, degradation of the vehicle's driving characteristics.

- Adapt your style of riding accordingly.

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:
- Correct the tyre pressure at the earliest possible opportunity.
- Before adjusting the tyre pressure, observe the information on temperature compensation and pressure adaptation in the section entitled "Engineering details":

» Temperature compensation (➠ 165)
» Pressure adaptation (➠ 165)
» Find the correct tyre pressures in the following places:

–On the back cover of the rider's manual
–Display in the TYRE PRESSURE view
–Sign under the seat

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

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.

Transmission fault
–with tyre pressure control (RDC) OE


"– – –"

Possible cause:
The vehicle has not reached the minimum speed (➠ 164).

 RDC sensor is not active
min 30 km/h (The RDC sensor does not transmit its signal to the vehicle until a certain minimum speed has been reached.)

- Observe the RDC display at higher speeds.

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 Retailer.

Possible cause:
The radio link to the RDC sensors is faulty. Radio systems are located in the surrounding area which are interfering with the transmission between

the RDC control unit and the sensors.
- Observe the RDC displays in other surrounding areas.

 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 Retailer.

Sensor faulty or system fault

–with tyre pressure control (RDC) OE

 lights up yellow.

 "---"

Possible cause:
Wheels not equipped with RDC sensors have been fitted.
- Fit wheels and tyres equipped with RDC sensors.

Possible cause:
One or two RDC sensors have failed or there is a system fault.
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Tyre pressure control (RDC) failed

–with tyre pressure control (RDC) OE

 lights up yellow.

 `Tyre pressure check failure! Function limited. Have it checked by a specialist workshop.`

Possible cause:
The tyre pressure control (RDC) control unit has diagnosed a communication fault.
- Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

» Tyre pressure warnings not available.

Battery for tyre pressure sensor weak

–with tyre pressure control (RDC) OE

 lights up yellow.

 `RDC sensor battery weak. Function limited. Have it checked by a specialist workshop.`

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

Possible cause:
The tyre pressure sensor battery no longer provides its full capacity. The tyre pressure monitoring function will be available for a limit time only.
- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Drop sensor defective


Drop sensor faulty. Have it checked by a specialist workshop.

Possible cause:
The drop sensor is not available.
- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Emergency call function restricted

–with intelligent emergency call OE


lights up yellow.


Emergency call failure. Make an appointment at a specialist workshop.

Possible cause:
The emergency call cannot be cannot be made automatically or via BMW.
- Observe the information on operating the intelligent emergency call from page (➠ 69).
- Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Side stand monitoring is faulty


lights up yellow.


Side stand monitoring faulty. Onward journey possible. Engine stop. when stationary! Have checked by workshop.

Possible cause:
The side-stand switch or its wiring are damaged. The engine is shut down when speed drops below 5 km/h and you cannot resume your journey.
- Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

ABS self-diagnosis not completed


flashes.

Possible cause:

ABS self-diagnosis not completed
The ABS function is not available, because self-diagnosis did not complete. (The motorcycle has to reach a defined minimum speed for the wheel speed sensors to be checked: 5 km/h)

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

ABS fault


lights up yellow.


lights up.


`Limited ABS availability! Onward journey possible. Ride carefully to next specialist workshop.`

Possible cause:
The ABS control unit has detected a fault. The partially integral function and the Dynamic Brake Control function have failed. The ABS function has limited availability.

- You can continue to ride. Take note of the more detailed information on certain situations that can lead to an ABS fault message (➠ 156).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

ABS failed


lights up yellow.


lights up.


`ABS failure! Onward journey possible. Ride carefully to next specialist workshop.`

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

- You can continue to ride. Bear in mind the more detailed information on situations that can lead to an ABS fault message (➠ 156).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

ABS Pro failed
–with riding modes Pro[OE]

 lights up.

 `ABS Pro failure! Onward journey possible. Ride carefully to next specialist workshop.`

Possible cause:
Monitoring of the ABS Pro function has detected a fault. The ABS Pro function is not available. The ABS function is still available. ABS provides support only for braking in straight-ahead driving.

- You can continue to ride. Bear in mind the more detailed information on certain situations that can lead to an ABS Pro fault message (➠ 156).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

ASC/DTC intervention
 quick-flashes.

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

ASC/DTC self-diagnosis not completed
 slow-flashes.

Possible cause:

 ASC/DTC self-diagnosis not completed
The ASC/DTC function is not available, because self-diagnosis did not complete. (The motorcycle has to reach a defined minimum speed with the engine running for the wheel-speed sensors to be checked: min 5 km/h)

- Pull away slowly. The ASC/DTC indicator and warning light must go out after a few metres.

If the ASC/DTC indicator and warning light continues flashing:

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

ASC/DTC switched off

 lights up.


Off!


Traction control deactivated.

Possible cause:
The rider has switched off the ASC/DTC system.
- Switch on the ASC/DTC function (➠ 76).

ASC/DTC restricted

 lights up.


Traction control limited! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:
The ASC/DTC control unit has detected a fault.

ATTENTION

Damaged components
Damage to sensors, for example, which causes malfunctions
- Do not transport any objects underneath the driver or passenger seat.
- Secure the toolkit.
- Do not damage the angular rate sensor.
- Bear in mind that the ASC/DTC function is restricted.
- You can continue to ride. Bear in mind the more detailed information on situations that can lead to a ASC/DTC fault (➠ 158).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

ASC/DTC fault

 lights up.


Traction control failure! Onward journey possible. Ride carefully to next specialist workshop.

Possible cause:
The ASC/DTC control unit has detected a fault.

ATTENTION

Damaged components
Damage to sensors, for example, which causes malfunctions
- Do not transport any objects underneath the driver or passenger seat.
- Secure the toolkit.

- Do not damage the angular rate sensor.
- Bear in mind that the ASC/DTC function is not available or the functionality is subject to certain restrictions.
- You can continue to ride. Take note of the more detailed information on situations that can lead to an ASC/DTC fault (➠ 158).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

D-ESA fault

–with Dynamic ESA[OE]

 lights up yellow.

 `Spring strut adjustment faulty! Onward journey possible. Ride carefully to next specialist workshop.`

Possible cause:

The D-ESA control unit has detected a fault. The damping and/or spring adjuster may be the cause. In Auto the cause may also be a fault in the riding position equaliser. In this condition, the motorcycle may have too much damping and is uncomfortable to drive, especially on roads in poor condition. Alternatively, the spring setting may be set incorrectly.

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

» Dynamic ESA possible settings (➠ 77)

Fuel down to reserve

 `Tank reserve level reached. Ride to the next filling station.`

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 (➠ 145).

Hill Start Control active

 shows green.

Possible cause:
The driver has activated Hill Start Control (➠ 167).
- Switching Hill Start Control on or off (➠ 85).

Hill Start Control automatically deactivated

 flashes yellow.

Possible cause:
Hill Start Control has been automatically deactivated.
- Side stand has been folded out.

» Hill Start Control is deactivated when the side stand is folded out.
- Engine has been switched off.

» Hill Start Control is deactivated when the engine is switched off.
- Operate Hill Start Control (➠ 85).

Hill Start Control cannot be activated

 is displayed.

Possible cause:
Hill Start Control cannot be activated.
- Fold in side stand.

» Hill Start Control functions only when the side stands are folded in.
- Start the engine.

» Hill Start Control functions only when the engine is running.

Gear not trained

–with shift assistant Pro[OE]

 The gear indicator flashes.

Possible cause:
–with shift assistant Pro[OE]
The gearbox sensor is not fully trained.
- Engage neutral gear N and, with the vehicle at a standstill, let the engine run for at least 10 seconds to train the idle gear.
- Engage all gears with clutch actuation and ride at least 10 seconds with the engaged gear.

» The gear indicator starts to flash when the gearbox sensor has been trained successfully.

–Shift assistant Pro will operate as described (➠ 166) once the transmission sensor has been completely taught-in.

- If the training process was not successful, have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Hazard warning lights system is switched on

 flashes green.

 flashes green.

Possible cause:
The driver has switched on the hazard warning lights system.
- Operating hazard warning flashers (➠ 75).

Service-due indicator

 If service is overdue, the due date or the odometer reading at which service was due is accompanied by the general warning light showing yellow.

If the service is overdue, a yellow CC message is displayed. Exclamation marks also draw your attention to the displays for service, service appointment and countdown distance in the MY VEHICLE and SERVICE REQUIREMENTS menu screens.

 If the service-due indicator appears more than a month before the service date, the current date has to be corrected. This situation can occur if the battery was disconnected.

Service due

 is displayed in white.

`Service due! Have service performed by a specialist workshop.`

Possible cause:
Service is due because of the driving performance or the date.
- Have your motorcycle serviced regularly by a specialist workshop, preferably by an authorised BMW Motorrad Retailer.

» The operational and road safety of the motorcycle remain intact.
» The motorcycle's value is maintained as best as possible.

Service-due date has passed

 lights up yellow.

 is displayed in yellow.

`Service overdue! Have service performed by a specialist workshop.`

Possible cause:
Service is overdue because of the driving performance or the date.

- Have your motorcycle serviced regularly by a specialist workshop, preferably by an authorised BMW Motorrad Retailer.

» The operational and road safety of the motorcycle remain intact.
» The motorcycle's value is maintained as best as possible.

OPERATION

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IGNITION SWITCH/STEERING LOCK

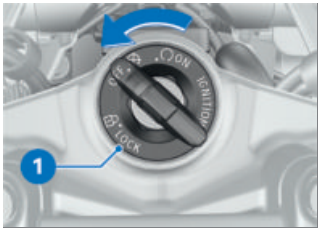
Keys

You receive 2 vehicle keys.
If a key is lost or mislaid, consult the notes on the electronic immobiliser (EWS) (➠ 63).
Ignition switch/steering lock, fuel filler cap lock and seat lock are all operated with the same ignition key.

If you wish you can arrange to have the cases and the topcase fitted with locks that can be opened with the ignition key as well. Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

Engaging steering lock

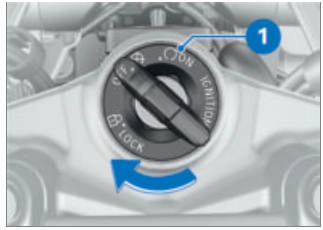
- Turn the handlebars all the way to the left.



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

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

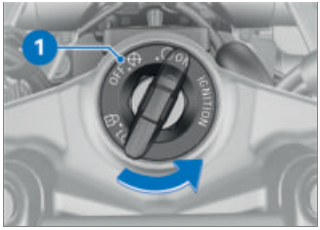
Switching on ignition



- Insert the vehicle key into the ignition switch and turn it to position **1**.

» Side lights and all function circuits are switched on.
–with LED additional headlight OA
» LED auxiliary headlights are switched on.◁
» Pre-Ride-Check is performed. (➠ 136)
» ABS self-diagnosis is in progress. (➠ 137)
» ASC/DTC self-diagnosis is in progress. (➠ 137)

Switching off ignition



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

» When the ignition is switched off, the instrument cluster remains switched on for a short time and displays any existing fault messages.
» Handlebars not locked.
» Electrically powered accessories remain operational for a limited period of time.
» The battery can be recharged via the socket.
» Vehicle key can be removed.

–with daytime riding light OE

- The daytime riding light goes out soon after the ignition is switched off.◁

–with LED additional headlight OA

- The LED auxiliary headlights go out soon after the ignition is switched off.◁

Electronic immobiliser (EWS)

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

A second ignition 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.
Always keep the ignition keys separate from each other.

If you lose an ignition key, you can have it barred by your authorised BMW Motorrad retailer.
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 extra keys only through an authorised BMW Motorrad retailer. The ignition keys are part of an integrated security system,

so the retailer is under an obligation to check the legitimacy of all applications for replacement/extra keys.

IGNITION WITH KEYLESS RIDE

–with Keyless Ride[OE]

Keys

The telltale light for the radio-operated key flashes while the search for the radio-operated key is in progress. The light goes out as soon as the radio-operated key or the emergency key is found. The light goes out briefly if the search times out without the radio-operated key or the emergency key being found.

You receive one radio-operated key and one spare key. If a key is lost or mislaid, consult the notes on the electronic immobiliser (EWS) (➠ 63). Ignition, fuel filler cap and anti-theft alarm system all work with the radio-operated key. Seat lock, topcase and cases can be locked and unlocked manually.

The vehicle cannot be started if the radio control key is not within range (e.g. key inside one of the cases or the topcase). If the radio-operated key remains out of range, the ignition is switched off after about 1.5 minutes to protect the battery. 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

Locking the steering lock
Requirement

Handlebars are turned to the left. Radio-operated key is within range.

- Press and hold down button **1**.

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

- To unlock the steering lock, briefly press button **1**.

Switching on ignition
Requirement
Radio-operated key is within range.

- The steering lock can be unlocked once the ignition is switched on.

Steering lock is engaged:
- Press and hold down button **1**.

» The steering lock disengages.
» Side lights and all function circuits are switched on.
–with daytime riding light[OE]
» Daytime riding light is switched on.◁
–with LED additional headlight[OA]
» LED auxiliary headlights are switched on.◁
» Pre-Ride-Check is performed. (➠ 136)
» ABS self-diagnosis is in progress. (➠ 137)
» ASC/DTC self-diagnosis is in progress. (➠ 137)

The steering lock is disengaged:
- Short-press button **1**.

» Side lights and all function circuits are switched on.
–with daytime riding light[OE]
» Daytime riding light is switched on.◁
–with LED additional headlight[OA]
» LED auxiliary headlights are switched on.◁
» Pre-Ride-Check is performed. (➠ 136)
» ABS self-diagnosis is in progress. (➠ 137)
» ASC/DTC self-diagnosis is in progress. (➠ 137)

Switching off ignition
Requirement
Radio-operated key is within range.

- The steering lock can be locked once the ignition is switched off.

To switch off the ignition and engage the steering lock:
- Turn the handlebars all the way to the left.
- Press and hold down button **1**.

» Light is switched off.
» The steering lock engages.

To switch off the ignition and do not engage the steering lock:
- Short-press button **1**.

» Light is switched off.
» The steering lock does not engage.
- Locking the steering lock (➠ 64).

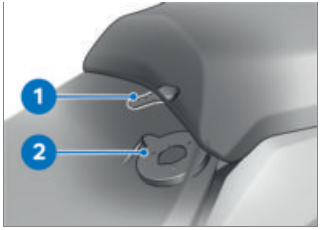
Electronic immobiliser EWS
The on-board electronics access the data saved in the radio-operated key via a ring aerial in the R/C ignition lock. The ignition is not enabled for starting until the engine control unit has recognised the radio-operated key as "authorised" for your motorcycle.

A second radio-operated key attached to the same ring as the radio-operated key used to start the engine could "irritate" the electronics, in which case the enabling signal for starting is not issued. Always keep the radio-operated keys separate from each other.

If you lose a radio-operated key, you can have it barred by your authorised BMW Motorrad retailer. 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 radio-operated key, but a radio-operated key that has been barred can subsequently be reactivated.
You can obtain extra keys only through an authorised BMW Motorrad retailer. The radio-operated keys are part of an integrated security system, so the retailer is under an obligation to check the legitimacy of all applications for replacement/extra keys.

Loss of the radio-operated key

Consult the information on the electronic immobiliser (EWS) if a key is lost or mislaid.
If the radio-operated key is lost or mislaid while you are on a journey, you can use the spare key to start the vehicle.



- Insert spare key **1** into the slot between the rider's seat and the passenger seat, in such a way that the spare key is positioned above aerial **2**.

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.
– Spare key has been recognised.
– Engine can be started.
– Spare key can be removed.
- Start the engine (➠ 135).

Replacing battery of radio-operated key

If the radio-operated key does not react when you short-press or long-press a button:
- Battery of the radio-operated key is not at full capacity.

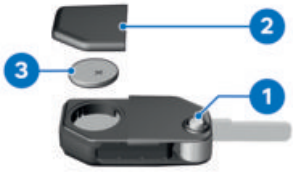
`Remote key battery weak. Limited central locking function. Change battery.`

DANGER

Swallowing a battery

Risk of injury or death
- An ignition key contains a button cell as its battery. Batteries or button cells, if swallowed, can cause serious or fatal injury within two hours, for example resulting from internal burns or caustic action.
- Keep ignition keys and batteries out of reach of children.
- If there is any suspicion that a battery or button cell has been swallowed or is inside a part of the body, seek medical assistance immediately.

- Change the battery.



- Press button **1**.
» Key bit flips out.
- Push battery cover **2** up.
- 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

Unsuitable or incorrectly inserted batteries
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

Battery type
CR 2032

- Install battery cover **2**.
» Red LED in the instrument cluster flashes.
» The radio-operated key is again ready for use.

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)

INTELLIGENT EMERGENCY CALL

–with intelligent emergency call OE

Emergency call via BMW
Press the SOS button in an emergency only.
Even if an emergency call using BMW is not possible, the system may make an emergency call to a public emergency call number. This depends on the respective mobile phone network and the national regulations.
The emergency call is not able to be ensured because of technical reasons due to unfavourable conditions, e.g. in areas where there is no mobile phone reception.

Language for emergency call
Each vehicle has a language assigned to it depending on the market for which it is intended. The BMW Call Center answers in this language.

The language for the emergency call can only be changed by the BMW Motorrad partner. The language assigned to the vehicle differs from the display languages that can be selected by the rider in the TFT display.

Manual emergency call
Requirement
An emergency call has occurred. The vehicle is at a standstill. The ignition is switched on.

- Open cover **1**.
- Short-press SOS button **2**.

The time until transmission of the emergency call is displayed. During this time, the emergency call can be cancelled by pressing and holding the SOS button.

- Operate the emergency-off switch to stop the engine.
- Remove helmet.

» After expiry of the timer, a voice contact to the BMW Call Center is established.

The connection was established.

- Provide information to the emergency services using the microphone **3** and speaker **4**.

Automatic emergency call

The intelligent emergency call is active after the ignition is switched on and reacts if a fall or crash occurs.

Emergency call in the event of a light fall

- A minor fall or a crash is detected.

» An acoustic signal is sounded.

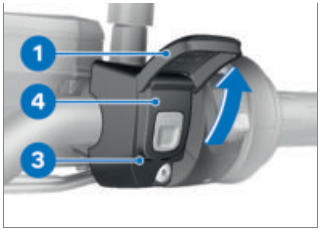
The time until transmission of the emergency call is displayed. During this time, the emergency call can be cancelled by

pressing and holding the SOS button.

- If possible, remove helmet and stop engine.

» A voice contact connection to the BMW Call Center is established.

The connection was established.



- Open cover **1**.
- Provide information to the emergency services using the microphone **3** and speaker **4**.

Emergency call in the event of a severe fall

- A severe fall or a crash is detected.

» The emergency call is placed automatically without delay.

LIGHTS

Low-beam headlight and sidelights

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

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

The low-beam headlight switches on automatically when the engine is started.

–with daytime riding light OE

In daytime the daytime riding light can be switched on as an alternative to the low-beam headlight.

High-beam headlight and headlight flasher

- Switch on the ignition (➠ 62).

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

Headlight courtesy delay feature

- Switch off the ignition.

- Immediately after switching off the ignition, pull switch **1** back and hold it in that position until the headlight courtesy delay feature comes on.

» The vehicle's lights come on for one minute and then switch off automatically.

– This can be used to light up the path to the house door after the vehicle has been parked, for example.

Parking lights

- Switch off the ignition (➠ 63).

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

Auxiliary headlights

– with LED additional headlight OA

Requirement

The low-beam headlight must be switched on.

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.

- Start the engine (➠ 135).

- Press button **1** to switch on the additional headlight.

The indicator light for the additional headlight illuminates.

- Press button **1** again to switch off the additional headlight.

DAYTIME RIDING LIGHT

–with daytime riding light[OE]

Manual daytime riding light
Requirement
Automatic daytime riding light is switched off.

WARNING

Switching on the daytime riding light in the dark.
Risk of accident
- Do not use the daytime riding light in the dark.

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 (➠ 135).
- Navigate to `Settings`, `Vehicle settings`, `Lights` and switch off the `Auto. daytime light` function.

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

The indicator light for the daytime riding light lights up.

» The low-beam headlight and the front side lights 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 and front side light.

If the high-beam headlight is switched on while the daytime riding light is on, the daytime riding light is switched off after approx. 2 seconds and the high-beam headlight, low-beam headlight and front side light are switched on.
If the high beam headlight is switched off again, the daytime running light is not automatically reactivated, but must be switched on again if required.

Automatic daytime riding light

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

WARNING

The automatic daytime riding light is not a substitute for the rider's personal judgement of the light conditions
Risk of accident
- Switch off the automatic daytime riding light in poor light conditions.

- In the `Settings`, `Vehicle settings`, `Lights` menu, switch on the `Auto. daytime light` function.


The indicator light for the automatic daytime riding light lights up.

» 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.


The indicator light for the daytime riding light shows if the daytime riding light is active.

Manual operation of the light when the automatic system is switched on

– If you press the button for the daytime riding light, the automatic daytime riding light is switched off and the low-beam headlight and front side lights are switched on (e.g. when you ride into a tunnel and the response of the automatic daytime riding light to the change in ambient brightness is delayed). The auxiliary headlight switches on again when the daytime riding light is switched off.
– Pressing the daytime riding light button again reactivates the automatic daytime

riding light, in other words, the daytime riding light is switched on again when ambient brightness is adequate.

HAZARD WARNING LIGHTS

Operating hazard warning flashers

- Switch on the ignition (➠ 62).

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 lights.

» Ignition can be switched off.

- To switch off the hazard warning lights, switch on the ignition if necessary and press button **1** again.

TURN INDICATORS

Operating turn indicators

- Switch on the ignition (➠ 62).

- 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.
- Centre button **1** to cancel the turn indicators.

Comfort turn indicator

If button **1** has been pressed to the right or left, the turn indicators are automatically switched off under the following circumstances:

– Speed below 30 km/h: after 50 m distance covered.
– Speed between 30 km/h and 100 km/h: after a speed-dependent distance covered or in case of acceleration.
– Speed over 100 km/h: after flashing five times.

If button **1** is pressed to the right or left slightly longer, the turn indicators only switch off automatically once the speed-dependent distance covered is reached.

TRACTION CONTROL (ASC/DTC)

Switch off the ASC/DTC function

- Switch on the ignition (➠ 62).

You have the option of deactivating the ASC/DTC function while the motorcycle is on the move.

- Press and hold down button **1** until the ASC/DTC indicator and warning light changes its status.

Immediately after button **1** is pressed, the ASC/DTC system status `ON` is displayed.


lights up.

Possible ASC/DTC system status `OFF!` is displayed.

- Release button **1** after the ASC/DTC system status changes.

The new ASC/DTC system status `OFF!` is displayed briefly.


remains lit.

» The ASC/DTC function is switched off.

Switch on the ASC/DTC function

- Press and hold down button **1** until the ASC/DTC indicator and warning light changes its status.

Immediately after button **1** is pressed, the ASC/DTC system status OFF! is displayed.

 goes out; if self-diagnosis has not completed it starts flashing.

The new ASC/DTC system status ON is displayed briefly.
- Release button **1** once the status has changed.

 remains off or continues to flash.

Possible ASC/DTC system status ON is displayed.

» The ASC/DTC function is switched on.

–without riding modes Pro OE
- Alternatively, switch the ignition off and on again.◁
- See the section entitled "Engineering details" for more information on traction control (ASC/DTC):

» How does traction control work? (➠ 157)

ELECTRONIC SUSPENSION ADJUSTMENT (D-ESA)

Dynamic ESA possible settings

–with Dynamic ESA OE

The electronic chassis and suspension setting Dynamic ESA is able to adjust your motorcycle automatically to the load. If the spring setting is set to Auto, the rider does not have to change the load setting.
See the "Engineering details" section for more information on Dynamic ESA (➠ 160).

Available damping modes

–For on-road mode: Road and Dynamic

Available load settings

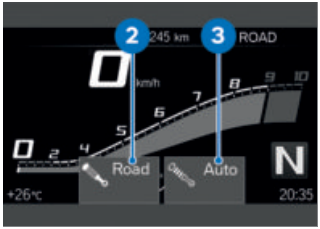
–Predefined minimum spring setting: Min
–Active riding position equaliser with automatic spring setting: Auto
–Predefined maximum spring setting: Max

 BMW Motorrad recommends the Auto chassis and suspension setting.

Viewing suspension settings
–with Dynamic ESA[OE]

- Switch on the ignition (➠ 62).

- Short-press button **1** to view the current setting.



Immediately after pressing the button **1**, the chassis and suspension adjustments for damping action **2** and spring setting **3** are displayed.

» The setting shows briefly, then disappears automatically.

Adjusting suspension damping
–with Dynamic ESA[OE]

- Switch on the ignition (➠ 62).

- Short-press button **1** to view the current setting.

To adjust damping:

- Press button **1** briefly repeatedly until the setting you want to use appears on the display.

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

Selection arrow **4** is displayed.

» The selection arrow **4** disappears after the status is changed.

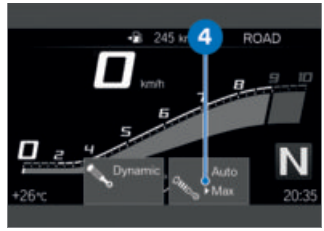
The following settings are available:
– Road: Damping for comfortable on-road riding
– Dynamic: Damping for dynamic on-road riding

Adjusting spring preload

To adjust spring preload:
- Start the engine (➠ 135).
- Repeatedly long-press button **1** until the setting you want to use is displayed.

The spring setting cannot be changed while riding.

The following message is displayed if no setting is possible: Load adjustment only avail. stopped.

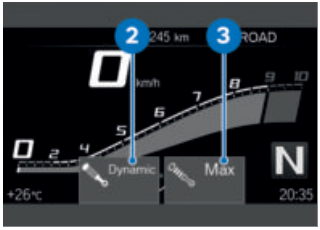


Selection arrow **4** is displayed.

» The selection arrow **4** disappears after the status is changed.

The following settings are available:
– Min: Minimum spring setting (only suitable for one-up mode)
– Auto: Automatic spring setting (recommended chassis and suspension setting)
– Max: Maximum spring setting (only suitable for two-up mode)

» The settings for damping and spring preload shown on the display are automatically accepted if you allow a certain length of time to pass without pressing button **1**.



The new chassis and suspension adjustments for damping action **2** and spring setting **3** are briefly displayed.

- If the temperature is very low, take the weight off the motorcycle before increasing spring preload; if applicable, have your passenger dismount.

» The chassis and suspension settings disappear once adjustment is complete.

» In `Auto` loading mode, the spring preload is adjusted only once the motorcycle is driven off.

RIDING MODE

Using the riding modes

BMW Motorrad has developed operational scenarios for your motorcycle from which you can select the scenario suitable for your situation:

Series

–RAIN: Riding on a rain-wet roadway.

–ROAD: Riding on a dry roadway.

–with riding modes Pro OE

with Pro riding modes

–DYNAMIC: Dynamic riding on a dry roadway.

–DYNAMIC PRO: For dynamic riding on dry roadways while taking into account the settings made by the rider.

The optimum interplay of engine characteristic, ABS control and ASC/DTC is provided for each of these scenarios.

–with Dynamic ESA OE

The chassis and suspension adjustment can also be adjusted in the scenario selected.

See the "Engineering details" section for more information on the riding modes (➠ 161).

Selecting riding mode

- Switch on the ignition (➠ 62).

• Press button **1**.

The riding mode currently active **2** is sent to the back and is displayed in the pop-up **3**. The guide **4** indicates how many riding modes are available.

• Repeatedly press button **1** until the riding mode you want appears on the display.

The following ride modes can be selected:
– RAIN: For riding on rain-wet roads.
– ROAD: For riding on dry roads.

– with riding modes Pro OE
The following riding mode can be selected:
– DYNAMIC: For dynamic riding on dry roads.
– DYNAMIC PRO: For dynamic riding on dry roads with provision for the rider's custom settings.◁

» With the motorcycle at a standstill, the selected mode is activated after approximately 2 seconds.
» The following conditions must be satisfied for activation of a new riding mode while riding:
– Throttle grip is in idle position.
– Brake is not applied.
– Cruise control is not active.
» The selected riding mode is retained with the engine-characteristic, ASC/DTC and Dynamic ESA adaptation settings even after the ignition has been switched off.

RIDING MODE PRO

–with riding modes Pro[OE]

Adjustment option

The PRO riding mode can be set individually.

Setting up PRO riding mode

- Switch on the ignition (➠ 62).
- Call up the `Settings`, `Vehicle settings` menu.

» The following PRO riding mode can be adapted:

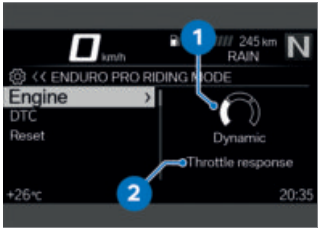
–`DYNAMIC PRO riding mode`

- Select and confirm riding mode.

Setting up Dynamic Pro

–with riding modes Pro[OE]

- Setting up PRO riding mode (➠ 82).



The `Engine` system has been selected. The current setting is displayed as a diagram **1** with explanatory texts relating to the system **2**.

- Select system and confirm.

You can browse through the available settings **3** and the corresponding explanations **4**.

- Set up the system.

» The `Engine` and `DTC` systems can be set up in the same way. See the "Engineering details" section for more information on all these systems:

» Selection (➠ 161)

- The settings can be reset to the factory settings:
- Resetting riding mode settings (➠ 82).

Resetting riding mode settings

- Setting up PRO riding mode (➠ 82).
- Select `Reset` and confirm.

» The following factory settings apply for `DYNAMIC PRO RIDING MODE`:

–`DTC`: `Dynamic`

–`ENGINE`: `Dynamic`

CRUISE CONTROL

–with cruise control[OE]

Display when adjusting settings (Speed Limit Info not active)

The symbol **1** for cruise control is displayed in the Pure Ride view and in the top status line.

Display when adjusting settings (Speed Limit Info active)

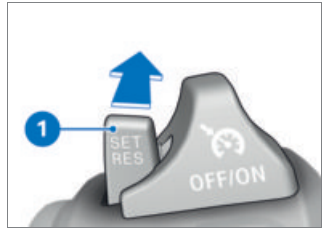
The symbol **1** for cruise control is displayed in the Pure Ride view and in the top status line.

Switching on cruise control

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

» Button **2** is enabled for operation.

Setting road speed



- Short-push button **1** forward.

Adjustment range for cruise control
20...210 km/h

Indicator light for cruise control shows.

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

Accelerating

- Short-push button **1** forward.
» Speed is increased by approx. 1 km/h each time you push the button.
- Push button **1** forward and hold it in this position.
» The vehicle accelerates smoothly.
» The current speed is maintained and saved if button **1** is not pushed again.

Decelerating

- Short-push button **1** back.
» Speed is reduced by approx. 1 km/h each time you push the button.
- Push button **1** back and hold it in this position.
» The vehicle decelerates smoothly.
» The current speed is maintained and saved if button **1** is not pushed again.

Deactivating cruise control

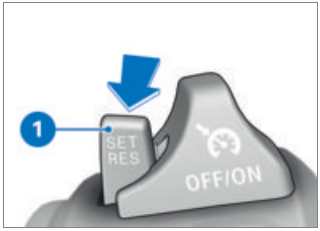
- Brake, pull the clutch lever or turn the throttle grip (close the throttle by turning the grip back past the idle position) to deactivate cruise control.

For safety reasons, cruise control is automatically deactivated when Gear Shift Assistant Pro downshifts.

For safety reasons, cruise control is automatically deactivated whenever ASC/DTC intervention occurs.

» Indicator light for cruise control goes out.

Resuming former cruising speed

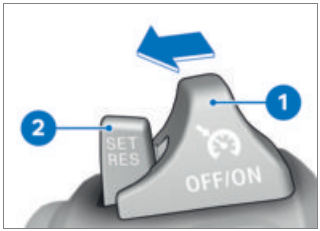


- Short-push button **1** back to return to the speed saved beforehand.

Opening the throttle does not deactivate cruise control. When the twistgrip is released the motorcycle decelerates only to the speed saved in memory, even if the rider intended slowing to a lower speed.

Indicator light for cruise control shows.

Switching off cruise control



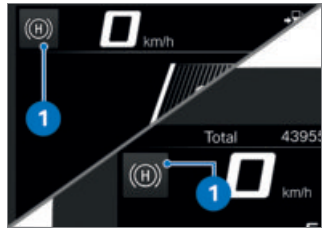
- Slide switch **1** to the left.

» The system is deactivated.

» Button **2** is disabled.

HILL START CONTROL (HILL START CONTROL)

Display



Symbol **1** for Hill Start Control is displayed in the Pure Ride view and in the top status line.

Switching Hill Start Control on or off

- Switch on the ignition (➠ 62).
- Call up the `Settings`, `Vehicle settings` menu.
- Switch `Hill Start Control` on or off.

Operating Hill Start Control

Requirement

Vehicle stationary and upright, engine running. Hill Start Control is switched on.

ATTENTION

Failure of Hill Start Control
Risk of accident
- Apply the brakes manually to hold the vehicle.

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.

- Apply firm pressure to handbrake lever **1** or to the footbrake lever and then quickly release the lever.

shows green.

» Hill Start Control is activated.
- To switch off Hill Start Control, operate handbrake lever **1** or the footbrake lever again.

disappears.

- Alternatively, ride off in 1st or 2nd gear.

In order for the motorcycle to pull away from rest with Hill Start Control, the throttle grip has to be turned to open the throttle for pullaway.

Once the brake has been fully released, the holding symbol disappears.

» Hill Start Control is deactivated.
- See the section entitled "Engineering details" for more information on Hill Start Control:

» Hill Start Control function (➠ 167)

Setting up Hill Start Control Pro

–with riding modes Pro OE

- Switch on the ignition (➠ 62).
- Navigate to `Settings`, `Vehicle settings`.
- Select `HSC Pro`.
- To switch off Hill Start Control Pro, select `Off`.

» Hill Start Control Pro is deactivated.
- To switch on manual Hill Start Control Pro, select `Manual`.

» Hill Start Control Pro can be activated by forcefully oper-

ating the handbrake or footbrake lever.
- To switch on automatic Hill Start Control Pro, select Auto.

» Hill Start Control Pro can be activated by forcefully operating the handbrake or footbrake lever.
» If the brake is actuated for approximately one second after the vehicle has come to a standstill and the motorcycle is on a gradient of at least 3%, Hill Start Control Pro is automatically activated.
» The selected setting remains stored even after the ignition is switched off.

Operating
Hill Start Control Pro
–with riding modes Pro OE

Requirement
Vehicle stationary and upright, engine running.

ATTENTION

Failure of Hill Start Control
Risk of accident
- Apply the brakes manually to hold the vehicle.

The drive-off assistant Hill Start Control Pro is only a comfort system to enable easier riding off on gradients and should not be confused with an electromechanical holding brake.

The Hill Start Control Pro drive-off assistant should not be used on inclines of over 40 %.

- Apply firm pressure to handbrake lever **1** or to the footbrake lever and then quickly release the lever.
- Alternatively, apply the brake for about one second beyond the vehicle reaching a standstill on an incline of at least 3 %.

shows green.

» Hill Start Control Pro is activated.
- To switch off Hill Start Control Pro, operate handbrake lever **1** or the footbrake lever again.

If Hill Start Control Pro has been deactivated by means of the handbrake lever, automatic Hill Start Control is deactivated for the next 4 m.

 disappears.

- Alternatively, ride off in 1st or 2nd gear.

In order for the motorcycle to pull away from rest with Hill Start Control Pro, the throttle grip has to be turned to open the throttle for pullaway.

 Once the brake has been fully released, the holding symbol disappears.

» Hill Start Control Pro is deactivated.

- See the section entitled "Engineering details" for more information on Hill Start Control Pro:

» Hill Start Control function (➠ 167)

SHIFT LIGHT

–with riding modes Pro OE

Switching shift light on and off

- Call up the `Settings`, `Vehicle settings` menu.
- Switch `Shift light` on or off.

Setting shift light

- Switch on the `Shift light` function.
- Navigate to `Settings`, `Vehicle settings`, `Configuration` (under `Shift light`).

» The following settings are available:

–`Start RPM`
–`End RPM`
–`Brightness`
–`Frequency`. A flashing frequency of 0 Hz corresponds to steady light.

» Changes to brightness and flashing frequency are demonstrated by the shift light lighting up or flashing.

ANTI-THEFT ALARM (DWA)

–with anti-theft alarm (DWA) OE

Activation

- Switch on the ignition (➠ 62).
- Customising anti-theft alarm settings (➠ 91).
- Switch off the ignition.

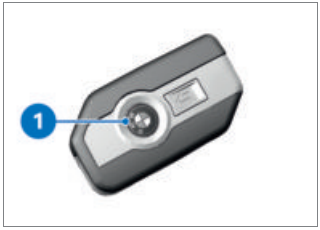
» If the alarm system is activated, then the alarm system will be automatically activated when the ignition is switched off.

» Activation takes approximately 30 seconds to complete.

» Turn indicators flash twice.

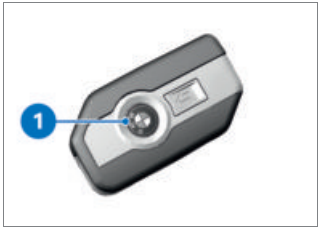
» Confirmation tone sounds twice (if programmed).
» Anti-theft alarm is active.

–with Keyless Ride OE



- Switch off the ignition.
- Press button **1** on the radio-operated key twice.

» Activation takes approximately 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 radio-operated key again during the activation phase.

» Turn indicators flash three times.
» Confirmation tone sounds three times (if programmed).
» Motion sensor has been deactivated.◁

Alarm signal

A DWA alarm can be triggered by:

–Motion sensor
–Switch-on attempt with an unauthorised vehicle key.
–Disconnection of the DWA anti-theft alarm from the motorcycle's battery (DWA internal battery in the anti-theft alarm provides power - acoustic alarm only, the turn indicators do not flash)

–with Keyless Ride OE

When the radio-operated key is within range, an alarm triggered by the tilt sensor is suppressed.◁

All functions are sustained even if the internal battery of the DWA 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. The type of acoustic alarm tone can be set by an authorised BMW Motorrad retailer.

–with Keyless Ride[OE]

The activated alarm can be aborted at any time by pressing the **1** button on the radio-operated key, without deactivating the anti-theft alarm.

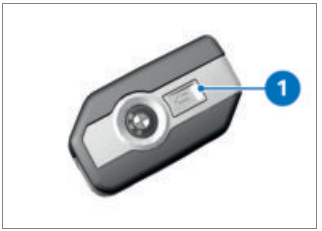
If an alarm was triggered while the motorcycle was unattended, the rider is notified accordingly by an alarm tone sounding once when the ignition is switched on. The DWA LED then indicates the reason for the alarm for one minute.

Light signals issued by the indicator light:

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

Deactivating DWA

• Switch on the ignition.
–with Keyless Ride[OE]



• Short-press button **1**.
» Turn indicators flash once.
» Confirmation tone sounds once (if programmed).
» DWA is switched off.◁

Possibilities for adjustment

`Warning signal`: Set the increasing and decreasing or intermittent alarm tone.
`Tilt sensor`: Activate tilt sensor to monitor the inclination of the vehicle. The anti-theft alarm is tripped if any at-

tempt is made to steal a wheel or lift the vehicle for towing, for example.

When the vehicle is going to be transported, deactivate the tilt sensor to prevent the anti-theft alarm (DWA) from being triggered.

`Arming tone`: In addition to turn indicators flashing, alarm tone sounds as confirmation of activation/deactivation of the DWA.

`Arm automatically`: Automatic activation of the alarm function after the ignition is switched off.

Customising anti-theft alarm settings

- Switch on the ignition (➠ 62).
- Call up the `Settings`, `Vehicle settings`, `Alarm system` menu.

» The following adaptation settings are available:

– Adapt `Warning signal`
– Switch `Tilt sensor` on or off
– Switch `Arming tone` on or off
– Switch `Arm automatically` on or off

TYRE PRESSURE CONTROL (RDC)

– with riding modes Pro OE
– with tyre pressure control (RDC) OE

Switching target-pressure warning on or off

- The system can be set to issue a target-pressure warning if tyre pressure drops to the defined minimum.
- Navigate to `Settings`, `Vehicle settings`, `RDC`.
- Switch `Target pressure warn.` on or off.

HEATED GRIPS

– with heated grips OE

Operating heated handlebar grips

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

The increase in power consumption caused by having the heated handlebar grips switched on can drain the battery if you are riding at low engine speeds. If the charge level is low, the heated handlebar grips are switched off to ensure the battery's starting capability.

- Start the engine (➠ 135).

- Repeatedly press button **1** until desired heating stage **2** appears in front of heated grip symbol **3**.

The handlebar grips have two-stage heating.

1 medium heating power

2 high heating power

» Stage 2 is for heating the grips quickly: it is advisable to switch back to stage 1 as soon as the grips are warm.

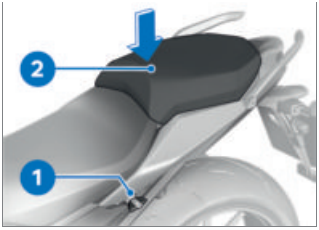
» The selected heating stage will be saved if you allow a certain length of time to pass without making further changes.

- To switch off the heated grips, repeatedly press button **1** until heated grip symbol **3** disappears.

FRONT AND REAR SEATS

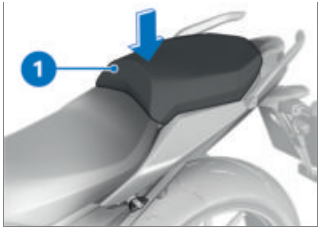
Removing passenger seat

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



- Press down on the front part of passenger seat **2** and at the same time turn seat lock **1** to the left with the ignition key and hold it in this position.
- Slightly raise passenger seat **2** at the front and release the ignition key.
- Remove rear seat **2** and place it, upholstered side down, on a clean surface.

Installing passenger seat



- Begin by pushing the rear of passenger seat **1** into the mounts.
- Press down firmly on passenger seat **1** at the front.

» The passenger seat engages with an audible click.

Removing front seat

- Remove the passenger seat (92).

Front seat is unlocked.

- Work the front seat to the rear to remove and place it, upholstered side down, on a clean surface.

Installing rider's seat

- Remove the passenger seat (92).

- Push the front seat all the way into front mounts **1** and then lower it into position at the back.

TFT DISPLAY

05

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GENERAL NOTES

Warnings

WARNING

Using a smartphone while riding or while the engine is running

Risk of accident

- Always comply with the road traffic regulations in force where you are riding.
- No use (with the exception of applications without operation, such as hands-free telephony) while riding.

WARNING

Distraction from the road and loss of control

Operating the integrated information system and communication devices while driving results in a risk of accident

- Operate those systems or devices only when the traffic situation allows for it.
- If necessary, stop and operate the systems or devices when stationary.

Connectivity functions

Connectivity functions include media, telephony and navigation. Connectivity functions can be used when the TFT display is paired with a mobile end device and a helmet (➠ 106). For more information on the Connectivity functions go to: **bmw-motorrad.com/connectivity**

If the fuel tank is between the mobile device and the TFT display, the Bluetooth connection may be restricted. BMW Motorrad recommends storing the device above the fuel tank (e.g. in your jacket pocket).

Depending on the mobile device, the scope of the Connectivity functions may be restricted.

BMW Motorrad Connected app

The BMW Motorrad Connected app contains usage and vehicle information. For some functions, such as navigation, the app must be installed on the mobile device and connected to the TFT display. The app is used to start route guidance and adjust the navigation.

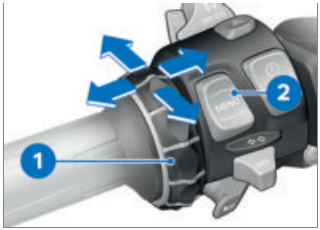
On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Connected App must be opened before use.

Currency

The TFT display may be updated after the publication date. Because of this, your motorcycle may differ from the information supplied in the Rider's Manual. Up-to-date information is available at: **bmw-motorrad.com/service**

PRINCIPLE

Controls



All display content is controlled by means of Multi-Controller **1** and MENU rocker button **2**. Depending on the context, the following functions are possible.

Multi-Controller functions

Turn the Multi-Controller up:
- Move the cursor up in lists.
- Adjust settings.
- Increase volume.

Turn the Multi-Controller down:
- Move the cursor down in lists.
- Adjust settings.
- Decrease volume.

Tilt the Multi-Controller to the left:
- Activate the function in accordance with the operation feedback.
- Activate the function to the left or back.
- Go back to the Menu view after making the settings.
- In Menu view: Change up one level.
- In the My Vehicle menu: advance one menu screen.

Tilt the Multi-Controller to the right:
- Activate the function in accordance with the operation feedback.
- Confirm selection.
- Confirm settings.
- Advance a menu step.
- Scroll to the right in lists.
- In the My Vehicle menu: advance one menu screen.

MENU rocker button functions

Instructions given by the navigation system are displayed in a dialogue box if the `Navigation` menu has not been called up. Operation of the MENU rocker button is temporarily restricted.

Short-press the top section of the MENU button:

–In Menu view: Change up one level.
–In Pure Ride view: Change the display for status line.

Long-press the top section of the MENU button:

–In Menu view: Call up Pure Ride view.
–In Pure Ride view: Change operating focus to the Navigator.

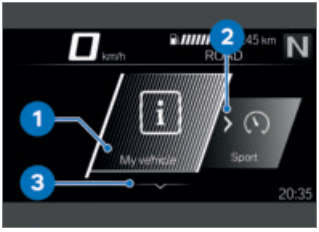
Short-press the bottom section of the MENU button:

–Change down a level.
–No function if the lowest hierarchical level has been reached.

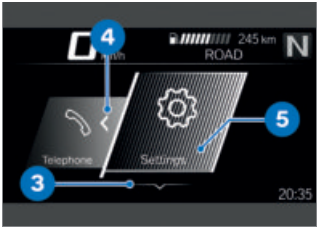
Long-press the bottom section of the MENU button:

–Change back to the last menu after a previous menu change effected by long-pressing the top section of the MENU rocker button.

Operating pointers in the main menu



Operating pointers show whether interactions are possible, and which ones.

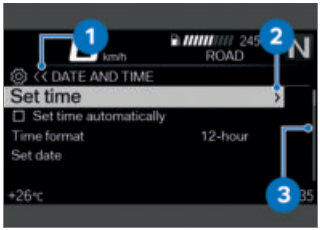


Meaning of the operating pointers:

–Operating pointer **1**: Left end reached.
–Operating pointer **2**: You can scroll to the right.
–Operating pointer **3**: You can scroll down.
–Operating pointer **4**: You can scroll to the left.
–Operating pointer **5**: Right end reached.

Operating pointers in submenus

In addition to the operating pointers in the main menu, there are additional operating pointers in the submenus.



Meaning of the operating pointers:

–Operating pointer **1**: The current display is in a hierarchical menu. One symbol represents one submenu level. Two symbols represent two or more submenu levels. The colour of the symbol changes, depending on whether you can return to a higher level.

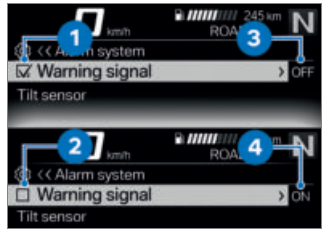
–Operating pointer **2**: One more submenu level can be accessed.

–Operating pointer **3**: There are more entries than can be displayed.

Display Pure Ride view

- Long-press the top section of the MENU rocker button.

Switching functions on and off



Some menu items have a check box in front of them. The check box shows whether the function is on or off. Action symbols after the menu items indicate what action you can trigger by short-tilting the Multi-Controller to the right.

Examples for switching on and off:

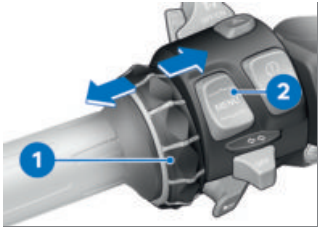
–Symbol **1** shows that the function is switched on.

–Symbol **2** shows that the function is switched off.

–Symbol **3** shows that the function can be switched off.

–Symbol **4** shows that the function can be switched on.

Calling up menu



- Display Pure Ride view (➠ 99).
- Short-press the bottom section of button **2**.

The following menus can be called up:

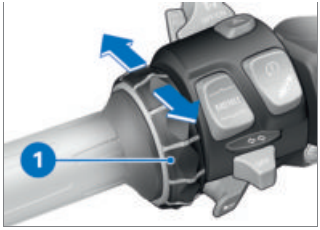
–My vehicle
–Navigation
–Media
–Telephone
–Settings

–with riding modes Pro[OE] additionally:
–Sport◁

- Repeatedly short-push Multi-Controller **1** to the right until the menu item you want is highlighted.
- Short-press the bottom section of button **2**.

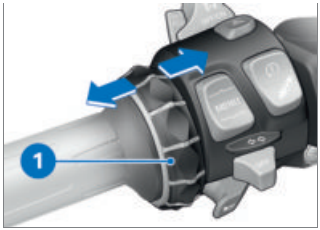
The Settings menu can only be called up when the vehicle is stationary.

Moving cursor in lists



- Call up the menu (➠ 100).
- To move the cursor down in a list, turn Multi-Controller **1** down until the entry you want is highlighted.
- To move the cursor up in a list, turn Multi-Controller **1** up until the entry you want is highlighted.

Confirming selection



- Select the desired entry.
- Short-push Multi-Controller **1** to the right.

Call up the last menu used

- In Pure Ride view: press and hold the MENU rocker button.

» The last menu used is called up. The last entry highlighted is selected.

Change of operating focus

–with preparation for navigation system OE

If the Navigator is connected, it is possible to switch between operation of the Navigator and the TFT display.

Changing operating focus

–with preparation for navigation system OE

–with navigation system OA

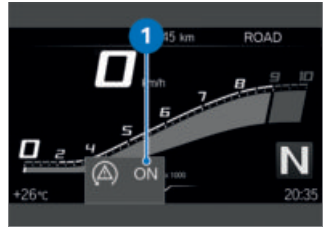
- Secure the navigation system (➠ 217).
- Display Pure Ride view (➠ 99).
- Long-press the top section of the MENU rocker button.

» Operating focus switches to the Navigator or the TFT display, as applicable. The active device is highlighted on the left in the top status line. Operator actions affect the currently active device until the operating focus is changed again.

» Operating navigation system (➠ 218)

System status displays

The system status is displayed in the lower area of the menu if a function is switched on or off.



Examples of what the system statuses mean:

–System status **1**: ASC/DTC function is switched on.

Changing display for status line

Requirement

The vehicle is at a standstill. The Pure Ride view is displayed.

- Switch on the ignition (➠ 62).

» The TFT display shows all the information necessary for riding on public roads from the on-board computer (e.g. `TRIP` **1**) and the trip computer (e.g. `TRIP` **2**). The information can be displayed in the top status line.

–with tyre pressure control (RDC) OE

» Information from the tyre pressure control can also be displayed.◁

- Select the content of the status line (➠ 102).

- Long-press button **1** to obtain the Pure Ride view.
- Repeatedly short-press button **1** to select the value in the top status line **2**.

The following values can be displayed:

Total distance

Current distance 1

Current distance 2

Consumption 1 (Average)

Consumption 2 (Average)

Riding time 1

Riding time 2

Break 1

Break 2

Speed 1 (Average)

Speed 2 (Average)

–with tyre pressure control (RDC) OE

Tyre pressure◁

Range

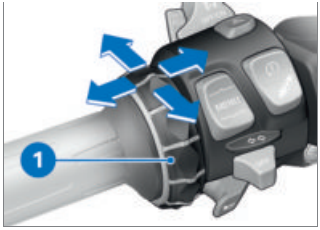
Fuel tank level

Selecting content of status line

- Navigate to Settings, Display, Status line content.
- Switch on the desired displays.

» You can switch between the selected displays in the status line. If no displays are selected, only the range will be displayed.

Adjust settings



- Select and confirm the desired settings menu.
- Turn Multi-Controller **1** down until the setting you want is highlighted.
- If an operating pointer shows, tilt Multi-Controller **1** to the right.
- If no operating pointer shows, tilt Multi-Controller **1** to the left.

» The setting is saved.

Switching Speed Limit Info on or off

Requirement

Vehicle is connected with a compatible mobile end device. The BMW Motorrad Connected app is installed on the mobile end device.

- `Speed Limit Info` displays the maximum speed currently permitted.
- Call up the `Settings`, `Display` menu.
- Switch `Speed Limit Info` on or off.

PURE RIDE VIEW

Rev. counter

1 Scale
2 Low engine speed range
3 Upper/red engine speed range
4 Unit for engine speed display:
1000 revolutions per minute
5 Needle
6 Secondary indicator

The red engine speed range changes depending on the coolant temperature: The colder the engine, the lower the engine speed at which the red engine speed range starts.
The warmer the engine, the higher the speed at which the red engine speed range starts. When operating temperature is reached, the display of the red

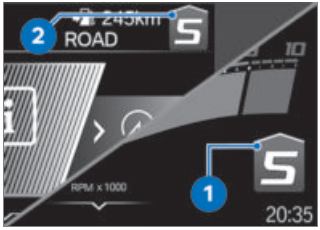
engine speed range no longer changes.

Range

The range readout **1** indicates how far you can ride with the fuel remaining in the tank. This distance is calculated on the basis of average consumption and the quantity of fuel on board.

– When the vehicle 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 recalculated only when the side stand is in the retracted position.
– The range is shown together with a warning once the fuel reserve has been reached.
– After a refuelling stop, range is recalculated if the amount of fuel in the tank is greater than the reserve quantity.
– The calculated range is only an approximate figure.

Recommendation to upshift



The recommendation to upshift in **1** view **2** or in status line indicates the best time to upshift to conserve fuel.

GENERAL SETTINGS

Adjusting volume

- Connect rider's and passenger's helmet (➠ 108).
- Increase volume: turn the multi-controller upwards.
- Decrease volume: turn the multi-controller downwards.
- Mute: turn the multi-controller all the way down.

Setting the date

- Switch on the ignition (➠ 62).
- Navigate to `Settings`, `System settings`, `Date and time`, `Set date`.
- Set `Day`, `Month` and `Year`.
- Confirm setting.

Set date format
- Navigate to `Settings`, `System settings`, `Date and time`, `Date format`.
- Select the desired setting.
- Confirm setting.

Setting clock
- Switch on the ignition (➠ 62).
- Navigate to `Settings`, `System settings`, `Date and time`, `Set time`.
- Set `Hour` and `Minute`.

Setting time format
- Navigate to `Settings`, `System settings`, `Date and time`, `Time format`.
- Select the desired setting.
- Confirm setting.

Setting units of measurement
- Navigate to `Settings`, `System settings`, `Units`.

The following units of measurement can be set:
–with tyre pressure control (RDC) OE
–Pressure◁
–Temperature
–Speed
–Consumption

Setting language
- Navigate to `Settings`, `System settings`, `Language`.

The following languages can be set:
–German
–English (UK)
–English (US)
–Spanish
–French
–Italian
–Dutch
–Polish
–Portuguese
–Turkish
–Russian
–Ukrainian
–Chinese
–Japanese
–Korean
–Thai

Adjusting brightness
- Navigate to `Settings`, `Display`, `Brightness`.
- Adjust display brightness.

» When ambient brightness drops below a defined threshold, the display is dimmed to the brightness set here.

Resetting all settings
- All the settings in the `Settings` menu can be reset to the factory settings.
- Call up the `Settings` menu.
- Select `Reset all` and confirm.

The settings in the following menus are reset:
–`Vehicle settings`
–`System settings`
–`Connections`
–`Display`

– Information

» Existing Bluetooth connections are not deleted.

BLUETOOTH

Short-range wireless technology

Bluetooth is a short-range wireless technology. Bluetooth devices are short-range devices transmitting on the license-free ISM band (Industrial, Scientific, Medical) between 2.402 GHz and 2.480 GHz. They can be operated anywhere in the world without a licence being required.

Although Bluetooth is designed to establish and sustain robust connections over short distances, as with every other wireless technology disruptions are possible. Interference can affect connections or connections can sometimes fail. Particularly when multiple devices operate in a Bluetooth network, with wireless technology of this nature it is not possible to ensure fault-free communications in every situation.

Possible sources of interference:

– interference zones due to transmission masts and similar.
– devices with non-compliant Bluetooth implementations.
– proximity of other Bluetooth-compatible devices.

Pairing

Two Bluetooth devices have to recognise each other before they can communicate. This process of mutual recognition is known as pairing. When two devices have paired they remember each other, so the pairing process is conducted only once, on initial contact.

On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Connected App must be opened before use.

During the pairing process, the TFT display searches for other Bluetooth-compatible devices within its reception range. The conditions that have to be satisfied before the audio system can recognise another device are as follows:

–The device's Bluetooth function must be active
–The device must be "visible" to others
–The device must support the A2DP profile
–Other Bluetooth-compatible devices must be OFF (e.g. mobile phones and navigation systems).

Please consult the operating instructions for your communication system.

Pairing

- Call up the `Settings`, `Connections` menu.

» Bluetooth connections can be established, managed and deleted in the `CONNECTIONS` menu. The following Bluetooth connections are displayed:

–`Mobile device`
–`Rider's helmet`
–`Passenger helm.`

The connection status for mobile devices is displayed.

Connect mobile device

- Pairing (➠ 107).
- Activate the mobile device's Bluetooth function (see mobile device's operating instructions).
- Select `Mobile device` and confirm.
- Select `Pair new mobile device` and confirm.

Mobile devices are being searched for.


flashes in the bottom status line during pairing.

Mobile devices found are displayed.

- Select and confirm mobile device.
- Follow the instructions on the mobile device.
- Confirm that the code matches.

» The connection is established and the connection status updated.

» If the connection is not established, consult the troubleshooting chart in the section entitled "Technical data". (➠ 232)

» Depending on the mobile device, telephone data is transferred to the vehicle automatically.

» Telephone data (➠ 117)

» If the telephone book is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (➠ 233)

» If the Bluetooth connection is not working as expected, consult the troubleshooting

chart in the section entitled "Technical data". (➠ 233)

Connect rider's and passenger's helmet

- Pairing (➠ 107).
- Select `Rider's helmet` or `Passenger helm.` and confirm.
- Make the helmet's communication system visible.
- Select `Pair new rider's helmet` or `Pair new passeng. helmet` and confirm.

Helmets are searched for.


flashes in the bottom status line during pairing.

Helmets found are displayed.

- Select and confirm helmet.

» The connection is established and the connection status updated.

» If the connection is not established, consult the troubleshooting chart in the section entitled "Technical data". (➠ 232)

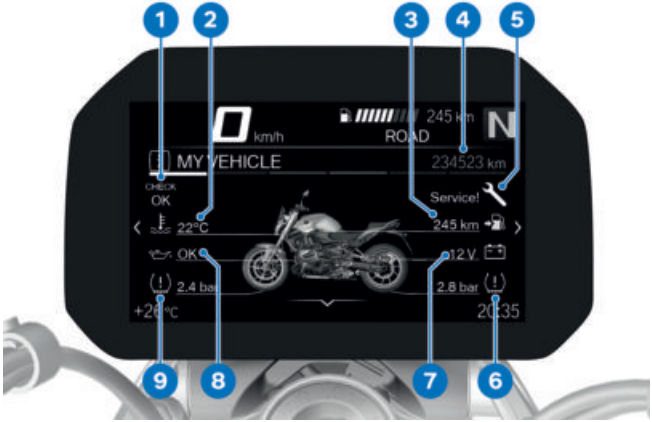
» If the Bluetooth connection is not working as expected, consult the troubleshooting chart in the section entitled "Technical data". (➠ 233)

Deleting connections

- Call up the `Settings`, `Connections` menu.
- Select `Delete connections`.
- To delete an individual connection, select the connection and confirm.
- To delete all connections, select `Delete all connections` and confirm.

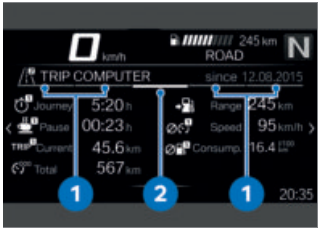
MY VEHICLE

Start screen



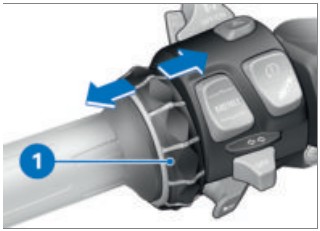
1 Check Control display
Mode of presentation
(➠ 31)
2 Coolant temperature
(➠ 44)
3 Range (➠ 104)
4 Odometer
5 Service display (➠ 57)
6 Tyre pressure, rear
(➠ 47)
7 On-board voltage
(➠ 202)
8 Engine oil level (➠ 44)
9 Tyre pressure, front
(➠ 47)

Operating pointers



–Operating pointer **1**: Indicators showing how far you can scroll to the left or right.
–Operating pointer **2**: Indicator showing the position of the current menu screen.

Scrolling through menu screens



- Call up the My vehicle menu.
- To scroll to the right, short-press Multi-Controller **1** to the right.
- To scroll to the left, short press Multi-Controller **1** to the left.

The My Vehicle menu contains the following screens:
–MY VEHICLE
–Check Control messages (if any)
–ON-BOARD COMPUTER
–TRIP COMPUTER
–with tyre pressure control (RDC) OE
–TYRE PRESSURE◁
–SERVICE REQUIREMENTS

- For more information on tyre pressures and Check Control messages, see the section on displays (➠ 31).

Check Control messages are attached dynamically to the menu screens as additional tabs in the My vehicle menu.

On-board computer and trip computer

The ON-BOARD COMPUTER and TRIP COMPUTER menu screens display vehicle and trip data, such as average values.

Calling up the on-board computer

- Call up the My vehicle menu.
- Scroll to the right until the ON-BOARD COMPUTER menu screen is displayed.

Resetting on-board computer

- Calling up the on-board computer (➠ 110).
- Press down the MENU rocker button.
- Select `Reset all values` or `Reset individual values` and confirm.

The following values can be reset:

–`Break`
–`Journey`
–`Current` (`TRIP 1`)
–`Speed`
–`Consump.`

Calling up the trip computer

- Calling up the on-board computer (➠ 110).
- Scroll to the right until the `TRIP COMPUTER` menu screen is displayed.

Resetting trip computer

- Calling up the trip computer (➠ 111).
- Press down the MENU rocker button.
- Select `Autom. reset` or `Reset all values` and confirm.

» If `Autom. reset` is selected, the on-board computer is automatically reset if a minimum of six hours have passed and the date has changed since the ignition was switched off.

Service requirements

When the next service is due within less than a month or within 1000 km, a white Check Control message is displayed.

SPORT

–with riding modes Pro[OE]

Sport overview

1 Maximum DTC torque reduction
2 Actual DTC torque reduction
3 Rev. counter
4 Maximum heel angle, left
5 Actual heel angle in corners for left and right
6 Maximum heel angle, right
7 Current retardation rate during braking
8 Maximum retardation rate

Resetting the maximum values

The maximum values for DTC torque reduction, heel angle and deceleration are automatically reset after the ignition has been switched off.

NAVIGATION

Warnings

WARNING

Using a smartphone while riding or while the engine is running
Risk of accident
- Always comply with the road traffic regulations in force where you are riding.
- No use (with the exception of applications without operation, such as hands-free telephony) while riding.

WARNING

Distraction from the road and loss of control
Operating the integrated information system and communication devices while driving results in a risk of accident
- Operate those systems or devices only when the traffic situation allows for it.
- If necessary, stop and operate the systems or devices when stationary.

Precondition
The vehicle is connected via Bluetooth to a compatible mobile device.

The BMW Motorrad Connected app is installed on the connected mobile device.

On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Connected App must be opened before use.

Entering destination address
- Connect mobile device (➠ 107).
- Call up the BMW Motorrad Connected app and start the route guidance.
- Call up the `Navigation` menu in the TFT display.

» Active route guidance is displayed.

» If the active route guidance is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (➠ 233)

Selecting destination from recent destinations
- Call up the `Navigation`, `Recent destinations` menu.
- Select and confirm destination.

- Select Start route guidance.

Selecting destination from favourites

- The FAVOURITES menu displays all the destinations saved as favourites in the BMW Motorrad Connected app. You cannot use the TFT display to add favourites to the list.
- Navigate to Navigation, Favourites.
- Select and confirm destination.
- Select Start guidance.

Entering special destinations

- Special destinations, such as points of interest, can be displayed on the map.
- Call up the Navigation, POIs menu.

The following locations can be selected:

–At current location
–At destination
–Along the route

- Select where the special destinations should be looked for.

For example, the following special destination can be selected:

–Filling station

- Select and confirm the special destination.
- Select Start route guidance and confirm.

Setting route criteria

- Call up the Navigation, Route criteria menu.

The following criteria can be selected:

–Route type
–Avoid

- Select desired Route type.
- Switch desired Avoid on or off.

The number of avoidances activated is displayed in brackets.

Ending route guidance

- Call up the Navigation, Active route guidance menu.
- Select End route guidance and confirm.

Switching spoken instructions on or off

- Connect rider's and passenger's helmet (➠ 108).
- The navigation can be read out by a computer voice. For this purpose, Spoken instruction must be switched on.
- Call up the Navigation, Active route guidance menu.
- Switch Spoken instruction on or off.

Repeating last spoken instruction

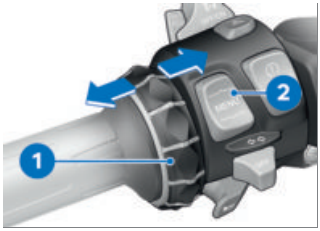
- Call up the Navigation, Active route guidance menu.
- Select Current instruction and confirm.

MEDIA

Precondition

The vehicle is connected to a compatible mobile device and helmet.

Control music playback



- Call up the Media menu.

BMW Motorrad recommends setting the volume on the mobile end device for media and calls to maximum before setting off.

- Adjust the volume (➠ 104).
- Next track: Short-tilt Multi-Controller **1** to the right.
- Last track or start of the current track: Short-tilt Multi-Controller **1** to the left.
- Fast forward: Long-tilt Multi-Controller **1** to the right.
- Rewind: Long-tilt Multi-Controller **1** to the left.
- Call up context menu: Press bottom section of button **2**.

Depending on the mobile device, the scope of the Connectivity functions may be restricted.

» The following functions can be used in the context menu:
– Playback or Pause.
– Select the Now playing, All artists, All albums or All tracks category for search and playback.
– Select Playlists.

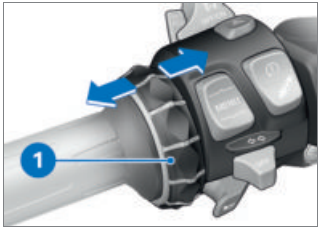
You can make the following adjustments in the Audio settings submenu:
– Switch Shuffle on or off.
– Select Repeat: Off, One (current track) or All.

TELEPHONE

Precondition

The vehicle is connected to a compatible mobile device and helmet.

Telephone calls



- Call up the `Telephone` menu.
- Accept call: Tilt Multi-Controller **1** to the right.
- Reject call: Tilt Multi-Controller **1** to the left.
- End call: Tilt Multi-Controller **1** to the left.

Muting

During active phone calls, the microphone in the helmet can be muted.

Phone calls with multiple participants

While a phone call is in progress, a second call can be accepted. The first phone call is put on hold. The number of active calls is shown in the `Telephone` menu. It is possible to switch between two phone calls.

Telephone data

Depending on the mobile device, when pairing (➠ 106) completes telephone data are automatically sent to the vehicle.

`Phone book`: List of contacts saved on the mobile device

`Call list`: List of calls with the mobile device

`Favourites`: List of favourites saved on the mobile device

DISPLAY SOFTWARE VERSION

- Navigate to `Settings`, `Information`, `Software version`.

DISPLAY LICENCE INFORMATION

- Navigate to `Settings`, `Information`, `Licences`.

ADJUSTMENT

06

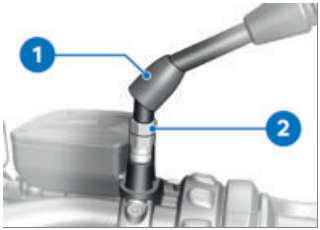
MIRRORS 120
HEADLIGHT 121
CLUTCH 122
GEARSHIFT LEVER 123
BRAKES 123
FOOTRESTS 125
SPRING PRELOAD 126
DAMPING 127

MIRRORS

Adjusting mirrors

- Turn the mirror to the appropriate position.

Adjusting mirror arm



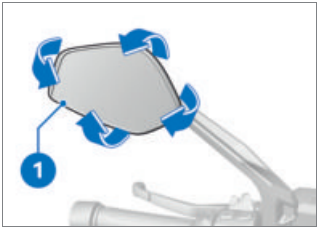
- Push protective cap **1** over the threaded fastener of the mirror arm up to expose the threaded fastener.
- Slacken nut **2**.
- Turn the mirror arm to the appropriate position.
- Tighten the nut to the specified torque, while holding the mirror arm to ensure that it does not move out of position.

	Mirror (locknut) to adapter
M10 x 1.25	
22 Nm (Left-hand thread)	

- Push protective cap **1** over the threaded fastener.

Adjusting mirrors

–with Option 719 Billet Pack Classic II[OE]
or
–with Option 719 Billet Pack Storm II[OE]
or
–with Option 719 Billet Pack Shadow II[OE]

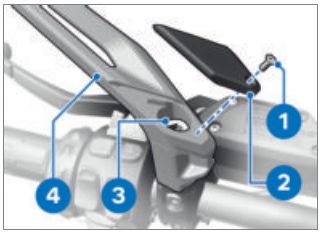


- Turn the mirror **1** to the correct position.

Adjusting mirror arm

–with Option 719 Billet Pack Classic II[OE]
or
–with Option 719 Billet Pack Storm II[OE]
or
–with Option 719 Billet Pack Shadow II[OE]

A small and a large angle screwdriver is supplied with the vehicle for adjusting the mirror arm.



- Remove bolt **1** and cover **2**.
- Loosen adjusting screw **3** and turn the mirror arm **4** to the desired position.
- Tighten adjusting screw **3**, while holding the mirror arm.
- Attach cover **2** and fit bolt **1**.

Mirror on handlebars
M10 x 30
25 Nm

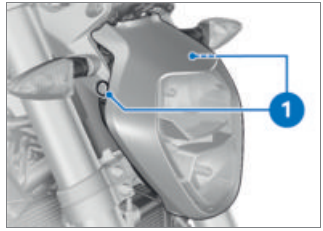
HEADLIGHT

Headlight beam throw and spring setting

The headlight beam throw generally remains constant by adjustment of the spring setting to the load status.
Adjustment of the spring setting may only be inadequate if the load is very high. In this case, the headlight beam throw must be adjusted to the weight.

If there are doubts about the correct headlight beam throw, have the setting checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Adjusting headlight beam throw



If, with a high load, the adjustment of the spring setting is no longer sufficient not to dazzle oncoming traffic:

- Slacken screws **1** with the tool from the on-board toolkit.

Do not place the motorcycle on its centre stand or side stand.

- Pivot the headlight down slightly (depending on the load carried on the motorcycle) to shorten the headlight beam throw.

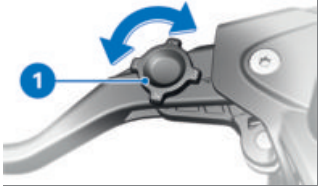
When the motorcycle is again ridden with a lower load:
- Have the basic settings of the headlight restored by a specialist workshop, preferably an authorised BMW Motorrad retailer.
- Tighten screws **1** with the tool from the on-board toolkit.

CLUTCH

Adjusting clutch lever

WARNING

Adjusting the clutch lever while riding
Risk of accident
- Adjust the clutch lever only when the motorcycle is at a standstill.



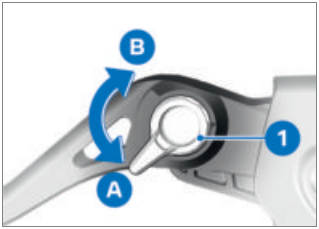
- Turn adjuster knob **1** to the desired position.

The adjuster is easier to turn if you push the clutch lever forward.

» Adjustment options:

–Position 1: Narrowest span between handlebar grip and clutch lever
–Position 4: Widest span between handlebar grip and clutch lever

–with Option 719 Billet Pack Classic II OE
or
–with Option 719 Billet Pack Storm II OE
or
–with Option 719 Billet Pack Shadow II OE



- Turn adjustment lever **1** to the desired position.

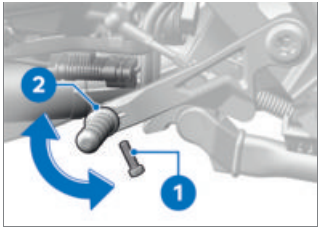
» Adjustment options:

–From position **A**: Narrowest span between handlebar grip and clutch lever.
–In 5 steps toward position **B** to increase the span between handlebar grip and clutch lever.◁

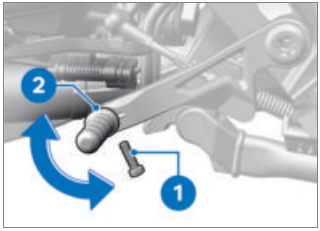
GEARSHIFT LEVER

–with Option 719 Billet Pack Classic II OE
or
–with Option 719 Billet Pack Storm II OE
or
–with Option 719 Billet Pack Shadow II OE

Adjusting gearshift lever peg



- Foot clearance and height relative to peg **2** can be adjusted by turning to different positions.
- Remove screw **1**.



- Clean the threads.
- Turn peg **2** to the desired position.
- Install **new** screw **1**.

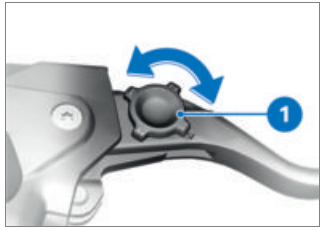
	Peg to gearshift lever
M6 x 20	
Thread-locking compound: micro-encapsulated	
10 Nm	

BRAKES

Adjusting handbrake lever

WARNING

Adjusting the handbrake lever while riding
Risk of accident
- Do not attempt to adjust the handbrake lever unless the motorcycle is at a standstill.

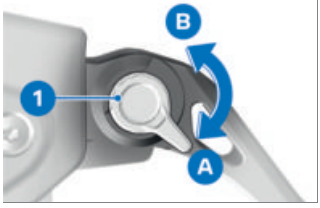


- Turn adjuster knob **1** to the desired position.

The adjuster is easier to turn if you push the brake lever forward.

» Adjustment options:
– Position 1: Narrowest span between handlebar grip and handbrake lever
– Position 4: Widest span between handlebar grip and handbrake lever

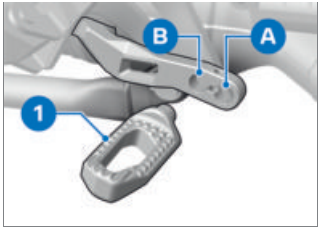
– with Option 719 Billet Pack Classic II OE
or
– with Option 719 Billet Pack Storm II OE
or
– with Option 719 Billet Pack Shadow II OE



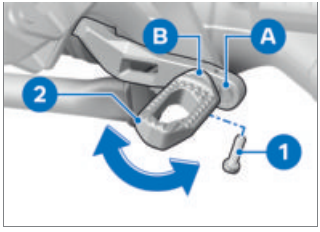
- Turn adjustment lever **1** to the desired position.

» Adjustment options:
– From position **A**: Narrowest span between handlebar grip and handbrake lever.
– In 5 steps toward position **B** to increase the span between handlebar grip and handbrake lever.◁

Adjusting footbrake lever peg
– with Option 719 Billet Pack Classic II OE
or
– with Option 719 Billet Pack Storm II OE
or
– with Option 719 Billet Pack Shadow II OE



- Foot distance and height to peg **1** can be adjusted by turning through 180° and installation in position **A** or **B**.



- Remove screw **1**.
- Clean the threads.
- Install peg **2** in desired position **A** or **B**.

- Turn peg **2** to the desired position.
- Install **new** screw **1**.

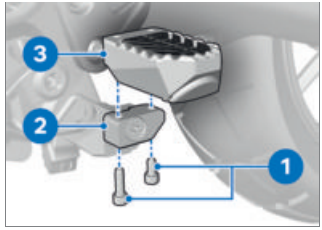
	Peg to footbrake lever
M6 x 20	
Thread-locking compound: micro-encapsulated	
10 Nm	

FOOTRESTS

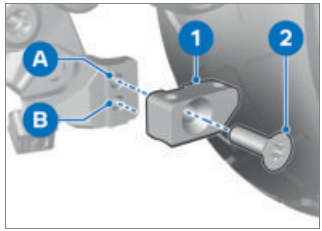
–with Option 719 Billet Pack Classic II OE
or
–with Option 719 Billet Pack Storm II OE
or
–with Option 719 Billet Pack Shadow II OE

Adjusting footrests

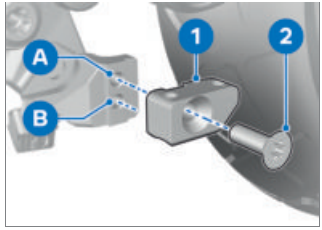
- The footrest is adjusted on the right and left in the same way.
- The position of the footrest must be set identically on the right and on the left.



- Remove screws **1**.
- Remove footrest **3** from clamping block **2**.

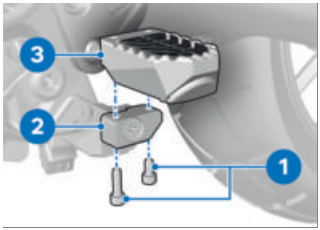


- Remove screw **2**.
- Remove clamping block **1** from position **A** or **B**.



- Install clamping block **1** in required position **A** or **B** and tighten bolt **2**.

Clamping block on footrest hinge
M8 x 25
20 Nm



- Position footrest **3** on clamping block **2**.
- Install screws **1**.

Footrest on clamping block
M6 x 20 / M6 x 12
10 Nm

- Remove and refit the footrest on the other side in the same way.

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.

Adjusting spring preload for rear wheel

–without Dynamic ESA OE

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

WARNING

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

Impaired handling.

- Adjust spring-strut damping to suit spring preload.

WARNING

Adjusting spring preload while riding.

Risk of accident

- Do not attempt to adjust spring preload unless the motorcycle is at a standstill.

- To reduce spring preload, turn adjuster knob **1** in the direc-

tion indicated by the LOW arrow.
- To increase spring preload, turn adjuster knob **1** in the direction indicated by the HIGH arrow.

Basic setting of spring preload, rear
Turn the adjuster knob as far as it will go in the LOW direction. (One-up without luggage)
Turn the adjuster knob as far as it will go in the LOW direction, then turn it 15 turns in the HIGH direction. (One-up with luggage)
Turn the knob as far as it will go in the HIGH direction. (Two-up with luggage)

DAMPING

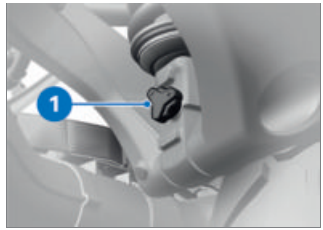
–without Dynamic ESA[OE]

Adjustment

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.

Adjusting damping for rear wheel

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Set the damping from the left-hand vehicle side.



- Turn adjuster knob **1** clockwise to increase damping.
- Turn adjuster knob **1** counterclockwise to reduce damping.

Basic setting of rear-suspension damping characteristic
Turn the knob clockwise as far as it will go, then back it off 6 clicks in the counterclockwise direction. (One-up riding without luggage)
Turn the knob clockwise as far as it will go, then back it off 4 clicks in the counterclockwise direction. (One-up with luggage)

 Basic setting of rear-suspension damping characteristic
Turn the knob clockwise as far as it will go. (Two-up with luggage)

RIDING

07

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SAFETY INFORMATION

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.

Loading

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.

- Adapt spring setting and damping adjustment to the total weight.
- Ensure that the case volumes on the left and right are equal.
- 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 maximum speed for riding with cases fitted, as stated on the label inside the case (see also the chapter "Accessories").

–with topcase OA
- Note the maximum permissible payload and maximum speed for riding with topcase fitted, as stated on the label inside the topcase (see also the chapter "Accessories").◁

–with tank bag, small OA
- Note the maximum permissible payload and the speed limit for riding with the small tank rucksack fitted.

 Payload of the tank rucksack, small
max 5 kg

 Speed limit for riding with tank rucksack, small, fitted to the vehicle
max 180 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:

– Spring-strut and shock-absorber system not set up correctly
– 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.

WARNING

Inhalation of harmful vapours

Health hazard

- Do not inhale vapours from operating fluid and plastics.
- Use the vehicle only outdoors.

Risk of burning

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.

WARNING

Opening radiator cap

Risk of burning

- Do not open the radiator cap when the system is hot.
- Check and, if necessary, top up the coolant in the expansion tank only.

Catalytic converter

If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.
The following guidelines must be observed:
–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 vehicle fire
- Do not allow the engine to idle unnecessarily.
- Ride away immediately after starting the engine.

Tampering

ATTENTION

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

Damage to the affected parts, failure of safety-relevant functions, voiding of warranty
- Do not tamper with the vehicle in any way that could result in tuned performance.

REGULAR CHECK

Comply with checklist

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

Always before riding off

- Check operation of the brake system.
- Check operation of the lights and signalling equipment.
- Checking clutch function (➠ 181).
- Checking tyre tread depth (➠ 183).
- Checking tyre pressure (➠ 182).

–without Dynamic ESA[OE]

- Adjust the spring preload for rear wheel (➠ 126).
- Adjust the damping for rear wheel (➠ 127).◁

–with Dynamic ESA[OE]

- Adjust the spring preload (➠ 79).
- Adjust the suspension damping (➠ 78).◁
- Check security of cases and luggage.

Every 3rd refuelling stop

- Check the engine oil level (➠ 175).
- Check the brake pad thickness, front brakes (➠ 177).
- Check the brake pad thickness, rear brakes (➠ 178).
- Check the brake-fluid level, front brakes (➠ 179).
- Check the brake-fluid level, rear brakes (➠ 180).
- Check the coolant level (➠ 181).

STARTING

Starting engine

- Switch on the ignition.

» Pre-Ride-Check is performed. (➠ 136)

» ABS self-diagnosis is in progress. (➠ 137)

» ASC/DTC self-diagnosis is in progress. (➠ 137)

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

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.

- For a cold engine start and low temperatures: pull clutch.

–with M Lightweight battery[OE]

» Low temperatures can impact on the starting response. Repeated, brief application of load on the battery causes battery temperature to rise, so more battery power is available for starting the engine.◁

- Press the starter button **1**.

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.
» If the engine refuses to start, consult the troubleshooting chart in the section entitled "Technical data". (➠ 232)

Recharge the battery before you try again to start the engine, or use jump leads and a donor battery to start:

- Charge battery when connected (➠ 202).
- Jump-starting (➠ 199).

The start attempt is automatically interrupted if battery voltage is too low.

Pre-Ride-Check
When the ignition is switched on, the instrument cluster runs a test of the instrument dials and the indicator and warning lights known as the "Pre-Ride-Check". The test is aborted if you start the engine before it completes.

Phase 1
The speedometer needle swings to the limit value on its scale. At the same time, all the indicator and warning lights are switched on in succession. The "General" warning light shows red.

Phase 2
The speedometer needle swings to the start position on its scale. At the same time, all the indicator and warning lights switched on in the initial phase are switched off in reverse sequence. The 'General' warning light changes from red to yellow.

The malfunction indicator lamp only goes out after 15 seconds.

If the needle of the speedometer did not move or if an indicator or warning light was not switched on:

WARNING

Faulty warning lights
No indication of malfunctions
- Check all the telltale and warning lights.

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

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

Phase 1
» Test of the diagnosable system components with the vehicle at a standstill.
 flashes.

Phase 2
» Test of the wheel-speed sensors as the vehicle pulls away from rest.
 flashes.

ABS self-diagnosis completed
» The ABS telltale and warning light goes out.

- Check all the indicator and warning lights.

 ABS self-diagnosis not completed
The ABS function is not available, because self-diagnosis did not complete. (The motorcycle has to reach a defined minimum speed for the wheel speed sensors to be checked: 5 km/h)

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.

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

Phase 1

» Test of the diagnosable system components with the vehicle at a standstill.

ASC/DTC indicator and warning light flashes slowly.

Phase 2

» Test of the diagnosis-compatible system components while the motorcycle is on the move.

ASC/DTC indicator and warning light flashes slowly.

ASC/DTC self-diagnosis completed

» The ASC DTC indicator and warning light goes out.

- Check all the indicator and warning lights.

 ASC/DTC self-diagnosis not completed
The ASC/DTC function is not available, because self-diagnosis did not complete. (The motorcycle has to reach a defined minimum speed for the wheel speed sensors to be checked: 5 km/h)

If an indicator showing an ASC/DTC fault appears when ASC/DTC self-diagnosis completes:

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

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.
- Comply with the rpm limits for running in.

 Running-in speeds
<5000 min^{-1} (Odometer reading 0...1000 km)
No full load (Odometer reading 0...1000 km)

- Note the mileage after which the running-in check should be carried out.

Mileage until the running-in check
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

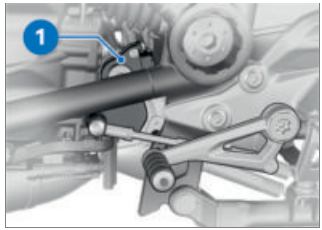
New tyres losing grip on wet roads and at extreme bank angles
Risk of accident
- Ride carefully and avoid extremely sharp inclines.

SHIFTING GEAR

Gear Shift Assistant Pro
–with shift assistant Pro OE

See the section entitled "Engineering details" for more information on Gear Shift Assistant Pro.

For safety reasons, cruise control is automatically deactivated when Gear Shift Assistant Pro downshifts.

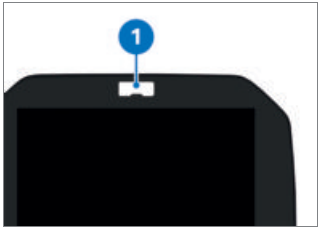


- You select the gear in the usual way by means of the foot-operated shift lever.

» The sensor **1** on the gearshift shaft registers the gearshift

request and triggers shift assistance.
» When riding at a steady speed in a low gear at high engine rpm, an attempt to shift gear without pulling the clutch can cause a severe load-change reaction. BMW Motorrad recommends disengaging the clutch for shifts in these circumstances. It is advisable to avoid using Gear Shift Assistant Pro at engine speeds close to the limits at which the governor cuts in to limit engine rpm.
» Shift assistance is not available in the following situations:
– With clutch lever pulled.
– Gearshift lever not in its initial position
– Upshifts with the throttle valve closed (engine overrun) and when slowing.
– Downshifts with throttle valve open and when accelerating.
• Once the gearshift has completed, the gearshift lever must be fully released before another gearshift with the Gear Shift Assistant Pro can take place.

Shift light
– with riding modes Pro OE



Shift light **1** indicates that the engine speed at which the rider should upshift is approaching.
– Shift light flashes at preset frequency: Approaching upshift rpm
– Shift light goes out: Engine revving at upshift rpm

The engine-speed thresholds and the way in which the shift light indicates the various states can be customised by navigating to `Settings`, `Vehicle settings`; also see the (➠ 88) section.

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 vehicle 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 extreme sudden-stop 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.

Emergency 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 mostly with the rear brake on mountain descents
Brake fade, destruction of the brakes due to overheating
- Use both front and rear brakes, and make use of the engine's braking effect as well.

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 vehicle 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 dirty surfaces.

WARNING

Wetness and dirt result in diminished braking efficiency
Risk of accident
- 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
–with ABS Pro[OE]

Physical limits applicable to motorcycling

WARNING

Braking when cornering
Risk of crash despite ABS Pro
- 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.

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.

ABS Pro was not developed to enhance individual braking performance with the motorcycle banked into corners.

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.

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.

- Extend the side stand and prop the motorcycle on the stand.
- Turn the handlebars all the way to left.
- On a gradient, the motorcycle should always face uphill; select 1st gear.

Centre stand
–with centre stand[OE]

- 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.
- On a gradient, the motorcycle should always face uphill; select 1st gear.

REFUELLING

Fuel grade

Requirement

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

ATTENTION

Engine operation with 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).

- Observe the maximum ethanol content of the fuel.

Fuel additives clean the fuel injection system and the combustion zone. It is advisable to use fuel additives when the engine is operated with low-grade fuel or if the vehicle is to be out of use for a lengthy period of time. More information is available from your authorised BMW Motorrad retailer.

Recommended fuel grade
E5 E10 Premium unleaded (maximum 15 % ethanol, E15) 95 ROZ/RON 90 AKI
Alternative fuel grade
E5 E10 Regular unleaded (power- and consumption-related restrictions) (maximum 15 % ethanol, E15) 91 ROZ/RON 87 AKI

» Pay attention to the following symbols in the fuel filler cap and on the fuel pump:

E5

E10

» After refuelling with fuels of poor-quality, sporadic knocking noises may be perceptible.

Refuelling

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.

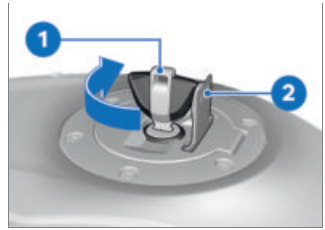
ATTENTION

Wetting of plastic surfaces by fuel
Damage to the surfaces (surfaces become unsightly or dull)
- Clean plastic surfaces immediately after contact with fuel.

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

–with centre stand[OE]

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



- Open the protective cap **2**.
- Unlock the cap of the fuel tank by turning ignition key **1** clockwise in the lock and pop the cap open.

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

When refuelling after running on reserve, make sure that you top up the tank to a level above reserve, so that the new level is detected and the fuel reserve indicator light is switched off.

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

 Usable fuel capacity
approx. 18 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]

Requirement
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

Wetting of plastic surfaces by fuel
Damage to the surfaces (surfaces become unsightly or dull)
- Clean plastic surfaces immediately after contact with fuel.

- Make sure the ground is level and firm and place the motorcycle on its side stand.
- Switch off the ignition (➠ 63).

The fuel filler cap can be opened within the defined waiting time after the ignition has been switched off, without

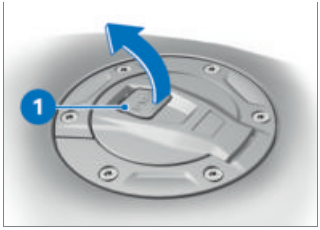
the radio-operated key being within range.

Waiting time for opening the fuel filler cap
2 min

» There are **two variant ways** of opening the fuel filler cap:
– Within the after-running period.
– After the after-running period has expired.

Version 1
– with Keyless Ride OE

Requirement
Within the waiting time:



- Slowly pull tab **1** on the fuel filler cap up.

» Fuel filler cap unlocks.

- Fully open the fuel filler cap.

Version 2
– with Keyless Ride OE

Requirement
After the waiting time has expired:

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

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

- Slowly pull tab **1** on the fuel filler cap up again.

» 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.

When refuelling after running on reserve, make sure that you top up the tank to a level above reserve, so that the new level is detected and the fuel reserve indicator light is switched off.

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

Usable fuel capacity
approx. 18 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.

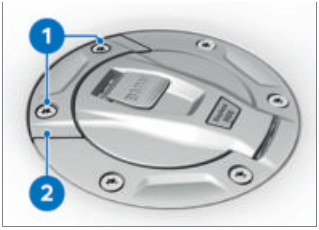
» The engaged fuel filler cap locks immediately when you secure the steering lock or switch on the ignition.

Opening fuel filler cap emergency release

–with Keyless Ride OE

Fuel filler cap cannot be opened.

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



- Remove screws **1**.
- Remove emergency release **2**.

» Fuel filler cap unlocks.

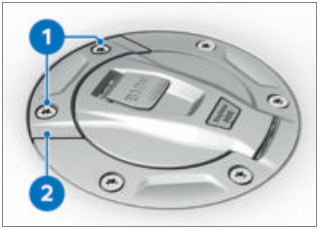
- Fully open the fuel filler cap.
- Refuelling (➠ 146).

Closing fuel filler cap emergency release

–with Keyless Ride OE

Requirement

Fuel filler cap is in closed position.



- Hold emergency release **2** in position.
- Install screws **1**.

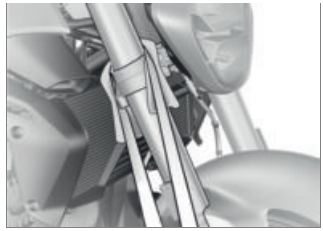
SECURING MOTORCYCLE FOR TRANSPORTATION

- 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.

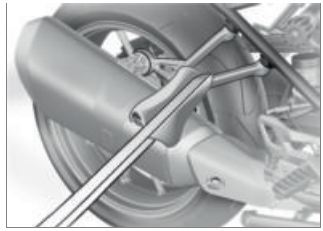
- Push the motorcycle onto the transportation flat and hold it in position: do not place it on the side stand or centre stand.



ATTENTION

Trapping of components
Component damage
- Do not trap components such as brake lines or cable legs.

- Pass the straps on left and right through the fork bridge and strap the motorcycle down.



- At the rear, secure the straps to the holders for the passenger footrests on both sides and tighten the straps.

- Tension all the straps uniformly to hold the vehicle securely.

ENGINEERING DETAILS

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GENERAL NOTES

To find out more about engineering, go to:
bmw-motorrad.com/technik

ANTILOCK BRAKE SYSTEM (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.
When actively intervening in the braking process, the BMW Motorrad Integral ABS adapts braking-force distribution between front and rear brakes to suit the load on the motorcycle, and so ABS intervention helps achieve the shortest possible stopping distance.

ATTENTION

Attempted burn-out despite Integral braking function
Damage to rear brake and clutch
• Do not burn out tyres.

How does ABS work?
The amount of braking force that can be transferred to the road depends on factors that 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 and 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 transferable limit, the wheels start to lock and the vehicle loses its directional stability; a fall is imminent. Before this situation can occur, ABS intervenes and adapts braking pressure to the maximum transferable braking force. The wheels continue to turn and the driving stability is retained irrespective of the road condition.

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 cir-

cumstances 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 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 ABS?

If the ABS 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

Under very severe and sudden deceleration, however, under certain circumstances it is possible that the ABS will be unable to prevent the rear wheel from lifting clear of the ground. If this happens the outcome can be a highsiding 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 ABS?

Within the limits imposed by physics, the ABS ensures directional stability on any surface. The system is not optimised for special requirements that apply under extreme competitive situations on the track. The driving behaviour should be ad-

apted to actual driving skills and the road conditions.

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 ABS, exceptional riding conditions can also cause a fault message to be issued:
– 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 or slippery surface.

If a fault message is issued on account of exceptional riding conditions, 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 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.

WARNING

Braking when cornering
Risk of accident despite ABS
- 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 margin of safety offered by this system.

Evolution of ABS to ABS Pro
–with ABS Pro[OE]

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.
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.

TRACTION CONTROL (ASC/ DTC)

How does traction control work?
Traction control is available in two versions
–**without** provision for the bank angle: Automatic Stability Control ASC
–ASC is a rudimentary function intended to prevent falls.
–**with** provision for bank angle: Dynamic Traction Control DTC
–DTC regulation is more delicate and more comfortable thanks to the additional bank angle and acceleration information.

Traction control compares the front and rear wheel circumferential velocities. 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 management system intervenes and adapts engine torque accordingly. BMW Motorrad ASC/DTC is designed as an assistant system for the rider and for use on public roads. The extent to which the rider affects ASC/DTC control can be considerable (weight shifts when cornering, items of luggage loose on the motorcycle), especially when the 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 conditions off-road or on the track. The BMW Motorrad ASC/DTC can be deactivated in these cases.

WARNING

Risky riding
Risk of accident despite ASC/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 ability to accelerate is restricted more and more as the angle of heel increases. Consequently, there can be a perceptible reduction in acceleration out of very tight bends.

The speeds of the front and rear wheels are compared and DTC, unlike ASC, also takes the bank angle into account in processing data to detect the rear wheel's incipient tendency to spin or slip sideways.

–with riding modes Pro[OE]
If the electronic processor receives values for the bank angle that it considers implausible over a lengthy period, a dummy value is used for the bank angle or the DTC function

is switched off. Under these circumstances the indicator for a DTC fault shows. Self-diagnosis has to complete before fault messages can be issued.
The BMW Motorrad Traction Control can shut down automatically under the exceptional riding conditions outlined below.

Exceptional riding conditions:

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

 Minimum speed for activation of DTC
min 5 km/h

If the front wheel lifts clear of the ground under severe acceleration, the ASC or DTC reduces engine torque in the RAIN and ROAD riding modes until the front wheel regains contact with the ground.
In the DTC settings DYNAMIC and DYNAMIC PRO, front wheel lift-off detection allows short wheelies.
In RAIN, ROAD and DYNAMIC riding modes, the DTC setting corresponds to the riding mode.
In DYNAMIC PRO riding mode, DTC can be set up differently (➠ 82).
BMW Motorrad recommends turning the throttle grip back slightly when lifting the front wheel in order to reach a stable driving condition again as soon as possible.

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. With dynamic engine brake control, this loss of stability can be prevented.

DYNAMIC ENGINE BRAKE CONTROL (MSR)

–with riding modes Pro[OE]

How does dynamic engine brake control work?
The purpose of dynamic engine brake control is to prevent the unstable riding states that can be produced by excessive engine braking moment acting on the rear wheel. Depending on the road condition and riding dynamic, excessive braking torque can produce a sharp rise in rear-wheel slip and impair directional stability. Dynamic engine brake control limits this slip at the rear wheel to a safe mode-dependent and bank-angle-dependent regulated slip.

Causes for excessive slip at the rear wheel:
–Riding with engine overrun on a surface with a low coefficient of friction (e.g. wet leaves).
–Rear-wheel hop when rider downshifts.
–Sharp braking during sporty riding.

In the same way as DTC traction control, dynamic engine brake control compares the wheel circumferential velocities of the front and rear wheels. Additional information on the bank angle enables dynamic engine brake control to calculate slip and the reserve of stability at the rear wheel.
If slip overshoots the applicable limit, the throttle valves are opened very slightly to increase engine torque. Slip is reduced and the vehicle is stabilised.

Effect of dynamic engine brake control
–In RAIN and ROAD riding modes: Maximum stability.
–In DYNAMIC and DYNAMIC PRO riding modes: High stability.
–In ENDURO riding mode: Minimum stability.
–in ENDURO PRO riding mode, dynamic engine brake control is inactive.

DYNAMIC ESA

–with Dynamic ESA[OE]

Riding position equaliser
The electronic chassis and suspension setting Dynamic ESA is able to adjust your motorcycle automatically to the load. If the spring setting is set to `Auto`, the rider does not have to change the load setting.

BMW Motorrad recommends the Auto chassis and suspension setting.

When driving off and when riding, the system monitors the suspension at the rear wheel and corrects the spring setting in order to set the correct riding position. The damping is also adjusted automatically to the load.

Via ride height sensors, Dynamic ESA detects the movements in the chassis and suspension and responds by adjusting the EDC valves. The chassis and suspension will thus be adapted to the characteristics of the terrain. Dynamic ESA calibrates itself at regular intervals to ensure the system functions correctly.

Possible settings

Damping modes

–Road: Damping action for comfortable on-road riding
–Dynamic: Damping action for dynamic on-road riding

Load settings

–Auto: Active riding position equaliser with automatic adjustment of the spring setting and damping (recommended chassis and suspension adjustment)
–Min: Minimum spring setting (only suitable for one-up mode)
–Max: Minimum spring setting (only suitable for two-up mode)

RIDING MODE

Selection

To adjust the motorcycle to the road condition and the desired driving experience, the following riding modes can be selected:

–RAIN
–ROAD (default mode)

–with riding modes Pro OE
–DYNAMIC
–DYNAMIC PRO

For each of these riding modes, there is a matching setting for the ABS and ASC/DTC systems and for throttle response.

–with Dynamic ESA OE

The adjustment of the Dynamic ESA also depends on the riding mode selected.

ASC/DTC can be switched off in each riding mode. The explanations below always refer to the dynamic safety systems that are switched on.

Throttle response
–In RAIN riding mode: Restrained
–In ROAD riding mode: Direct
–In DYNAMIC and DYNAMIC PRO riding modes: dynamic
–In DYNAMIC PRO riding mode, throttle response can be set up differently using SETUP (➠ 80).

ABS
–The rear wheel lift-off detection is activated in all riding modes.
–In RAIN, ROAD, DYNAMIC and DYNAMIC PRO riding modes, the ABS is set up for on-road riding.

–with riding modes Pro[OE]
–In RAIN, ROAD, DYNAMIC and DYNAMIC PRO riding modes, ABS Pro is fully available. The tendency of the motorcycle to straighten up when the brakes are applied with the machine banked for cornering is reduced to a minimum.

ASC
–The front wheel lift-off detection is activated in all riding modes.
–ASC is set up for on-road riding.
–ASC provides high driving stability in ROAD riding mode and maximum driving stability in RAIN riding mode.

–with riding modes Pro[OE]
DTC
Tyres
–In the DTC settings RAIN, ROAD and DYNAMIC, DTC is set up for on-road riding with road tyres.

Riding stability
–In the DTC setting RAIN, DTC intervenes early to maximise riding stability.
–In the DTC setting ROAD, DTC intervenes later than in the RAIN riding mode. This prevents the rear wheel from spinning whenever possible.
–In the DTC settings for RAIN and ROAD, the front wheel is prevented from lifting.
–In the DTC setting DYNAMIC, DTC intervenes later than in the DTC setting ROAD, so slight drift can be induced when exiting corners and brief wheelies are also possible.

In RAIN, ROAD and DYNAMIC riding modes, the DTC setting corresponds to the riding mode.
In DYNAMIC PRO riding mode, DTC can be set up differently (➠ 82).

Mode changes
The riding mode can be changed while the vehicle is stationary with the ignition on. Under the following precondition, it is also possible to change modes while riding:
–No drive torque on the rear wheel.
–No brake pressure in the brake system.

The following steps must be taken to change the riding mode:
–Close the throttle twistgrip.
–Release the brake levers.
–Deactivate cruise control.

The desired riding 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.

DYNAMIC BRAKE CONTROL

–with riding modes Pro[OE]

How Dynamic Brake Control works
The Dynamic Brake Control function assists the rider in emergency braking situations.
Detection of emergency braking
–Sudden, sharp application of the front brake is interpreted as emergency braking.

Behaviour in emergency braking
–If emergency braking occurs at a speed in excess of 10 km/h, the ABS function is further assisted by Dynamic Brake Control.
–When partially integral braking at a high brake pressure gradient is initiated, Dynamic Brake Control increases the integral brake pressure at the rear wheel. The stopping distance shortens and controlled braking is possible.

Behaviour during accidental actuation of the throttle grip
–If the throttle is accidentally opened (throttle grip position > 5 %) during emergency braking, Dynamic Brake Control ensures the desired braking effect by ignoring actuation of the throttle grip. The

effectiveness of emergency braking is ensured.
– If the throttle is closed (throttle grip position < 5 %) while Dynamic Brake Control is in action, the engine torque requested by the ABS brake system is restored.
– If emergency braking ceases and the rider still has not changed the position of the throttle grip, Dynamic Brake Control steadily ramps engine torque back to the rider's requested level.

TYRE PRESSURE CONTROL (RDC)

– with tyre pressure control (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 centrifugal-force tripswitch that does not enable transmission of the measured values until the motorcycle has exceeded a defined minimum speed for the first time.

Minimum speed for transmission of the RDC measured values:
min 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 some time after the vehicle comes to a stop.

Time for transmission of measured values after vehicle comes to a stop:
min 15 min

An error message is issued if wheels without sensors are fitted to a vehicle equipped with an RDC control unit.

Tyre pressure ranges

The RDC control unit differentiates between three tyre-pressure ranges, all of which are parameterised for the motorcycle:
– Tyre pressure within permitted tolerance.
– Tyre pressure close to limit of permitted tolerance.
– Tyre pressure outside permitted tolerance.

Temperature compensation
Tyre pressure is a temperature-sensitive variable: pressure increases as tyre-air temperature rises and decreases as tyre-air temperature drops. Tyre-air temperature depends on ambient temperature as well as on the style of riding and the duration of the ride.

 The tyre pressures are shown in the TFT display as temperature compensated and always refer to the following tyre air temperature:
20 °C

The air lines available to the public in petrol stations and motorway service areas have gauges that do not compensate for temperature; the reading shown by a gauge of this nature is the temperature-dependent tyre-air pressure. As a result, the values displayed there usually do not correspond to the values displayed in the TFT display.

Pressure adaptation
Compare the RDC value on the TFT display with the value in the table on the back cover of the Rider's Manual. Then use the air-line gauge at a service station to compensate for the difference between the RDC reading and the value in the table.

 Example
According to the Rider's Manual, the tyre pressure should be the following value:
2.5 bar
The following display is shown in the TFT display:
2.3 bar
Missing:
0.2 bar
The tester on the filling station shows:
2.4 bar
The tyre pressure must be increased to the following value to reach the correct tyre pressure:
2.6 bar

GEAR SHIFT ASSISTANT

–with shift assistant Pro[OE]

Shift assistant Pro

Your vehicle is equipped with a Pro shift assistant, a system originally developed for racing and now adapted for touring. It permits upshifts and downshifts without declutching or closing the throttle in virtually all load and rpm ranges.

Advantages

–70-80 % of all gearshifts on a trip can be done without using the clutch.
–Less relative movement between rider and passenger because the shift pauses are shorter.
–It is not necessary to close the throttle valve when shifting under acceleration.
–When braking and downshifting (throttle valve closed), engine speed is adjusted by blipping the throttle.
–Shift time is shorter than a gearshift with clutch actuation.

In order for the system to identify a gearshift request, the rider has to move the gearshift lever from its idle position in the desired direction against the spring force through a certain "overtravel" at ordinary speed or rapidly and keep the gearshift lever in this position until the gearshift is completed. It is not necessary to increase the force applied to the shift lever while shifting is in progress. Once the gearshift has completed the shift lever has to be fully released before another gearshift with the Pro shift assistant can take place. When shifting gears with the Pro shift assistant, the rider has to keep load state (throttle grip position) constant before and during the gearshift. A change in the position of the throttle grip during a gearshift can cause the function to abort and/or lead to a missed shift. The Pro shift assistant provides no assistance for the gearshift if the rider declutches.

Downshifting

– Downshifting is assisted until maximum rpm for the target gear to be selected is reached. This prevents overrevving.

 Maximum engine speed
max 9000 min^{-1}

Upshifting

– Upshifting is only possible when the current speed is higher than the respective release threshold of the next higher gear.
– This prevents the engine from dropping below idle speed.

 Idle speed
1050 min^{-1} (Engine at regular operating temperature)

 Release thresholds
1st gear
min 1350 min^{-1}
2nd gear
min 1400 min^{-1}
3rd gear
min 1450 min^{-1}
4th gear
min 1500 min^{-1}

 Release thresholds
5th gear
min 1550 min^{-1}
6th gear
min 1600 min^{-1}

HILL START CONTROL (HILL START CONTROL)

Hill Start Control function

Hill Start Control assistant prevents the motorcycle from rolling backwards uncontrolled on gradients by intervening specifically with the ABS brake system without the driver having to constantly operate the brake lever. Pressure in the rear brake system is built up when Hill Start Control is activated in order to keep the motorcycle stationary on an incline.

The brake pressure in the brake system is dependent on the gradient.

Effect of an incline on brake pressure and drive-off behaviour

– If the motorcycle is stopped on a gentle incline, only low brake pressure is built up. In this case, the brakes are quickly released when driving off. The motorcycle can

be moved off more gently. It is not necessary to turn the throttle grip again.
–If the motorcycle is stopped on a steep incline, high brake pressure is built up. In this case, the brakes take longer to release when driving off. More torque is required for driving off which also requires the rider to turn the throttle grip again.

Behaviour when the motorcycle rolls or slips
–If the motorcycle rolls when Hill Start Control is activated, the brake pressure is increased.
–If the rear wheel slips, the brake is released again after approx. 1 m. This prevents, for example, slipping due to a blocked rear wheel.

Releasing brake when stopping the engine or timeout
Hill Start Control is deactivated when the engine is stopped using the emergency-off switch, when the side stand is folded out or after timeout (10 minutes).
In addition to the indicator and warning lights, the rider should be made aware that Hill Start Control has been deactivated by the following behaviour:
Brake warning jolt
–The brake is released briefly and reactivated immediately.
–This creates a jolt which the rider feels.
–The ABS brake system with partially integral function sets a speed of approx. 1-2 km/h.
–The rider must brake the motorcycle manually.
–After two minutes, or when the brake is actuated, Hill Start Control is completely deactivated.

The holding pressure is released immediately without a brake warning jolt as soon as the ignition is switched off.

SHIFTCAM

Functional principle of ShiftCam
The vehicle features BMW ShiftCam technology for varying valve timing and valve lift on the intake side. The heart of this technology is a one-piece shifting intake camshaft that has two lobes for each valve: a partial-load cam and a full-load cam. The partial-load cam is fine-tuned for consumption optimisation

and engine smoothness. As well as adapting valve timing, the partial-load cam also reduces intake-valve lift. With the partial-load cams activated, moreover, the lobes for the cylinder's left and right intake valves produce staggered valve lift and offset angles of rotation. Consequently the two intake valves open at very slightly different times and the distance to which they open also differs. The advantage: The fuel/air mixture flowing into the combustion chamber is swirled more thoroughly and combusted effectively - so all in all the fuel is utilised more efficiently and engine operation is perceptibly smoother. The full-load cam is designed for optimised engine power and it maximises intake valve lift. The intake camshaft is shifted axially to vary valve timing and valve lift. The pins of an electromechanical actuator engage a shift gate on the intake camshaft. This permits load-dependent and speed-dependent actuation of the intake valves and, consequently, a no-compromises combination of performance and low fuel consumption.

MAINTENANCE

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GENERAL NOTES

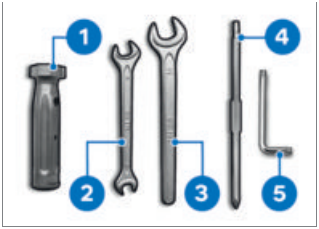
The Maintenance chapter describes straightforward procedures for checking and replacing certain wear parts.

Microencapsulated screws
The microencapsulation is a chemical thread-locker. An adhesive compound creates a secure connection between bolt and nut or between screw and component. Consequently, microencapsulated screws are for once-only use and are not intended for re-installation after being slackened.
After removal of the screw, clean the internal thread to remove all traces of thread-locking compound. Always use new microencapsulated screws when re-assembling. Consequently, prior to disassembly make sure that you have suitable tools for cleaning the threads and a new replacement for each screw to be removed. If the job is not done correctly there is no guarantee that the screw will remain secure, which means that you would be putting yourself at risk!

Further information
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, available from your authorised BMW Motorrad retailer.

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 retailer.

TOOLKIT



1 Screwdriver handle
–Use with screwdriver insert
–Top up the engine oil (➠ 176).

2 Open-ended spanner
Width across flats 8/10 mm
–Removing battery (➠ 203).

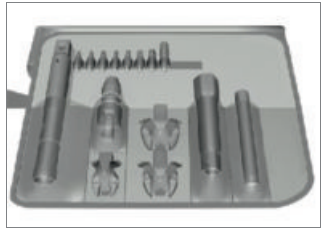
3 Open-ended spanner
Width across flats 14 mm
–Adjust the mirror arm (➠ 120).

4 Reversible screwdriver blade
Phillips PH1 and Torx T25
–Removing bulbs for front and rear turn indicators (➠ 193).
–Remove the battery cover (➠ 203).

5 Torx wrench, T40

SERVICE TOOL KIT

–with service toolkit[OA]



BMW Motorrad has assembled a service toolkit that is ideal for carrying out extended service work (e.g. removing and installing wheels) on this motorcycle. This toolkit is available from your authorised BMW Motorrad retailer.

FRONT-WHEEL STAND

Installing front-wheel stand

ATTENTION

Use of the BMW Motorrad front wheel stand without 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.

- Make sure the motorcycle is standing firmly.
- Place the motorcycle on an auxiliary stand; BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Install the rear-wheel stand (➠ 174).

- See the instructions issued with the front-wheel stand for the details of the correct procedure for installation.
- BMW Motorrad offers an auxiliary stand suitable for every vehicle. Your BMW Motorrad retailer will be happy to help you with the selection of a suitable auxiliary stand.

REAR-WHEEL STAND

Installing rear-wheel stand

- The description of how to fit the rear-wheel stand correctly will be found in the instructions for the stand.
- BMW Motorrad offers an auxiliary stand suitable for every

vehicle. Your BMW Motorrad retailer will be happy to help you with the selection of a suitable auxiliary stand.

ENGINE OIL

Checking engine oil level

- Make sure the ground is level and firm and hold the motorcycle upright.

–with centre stand OE

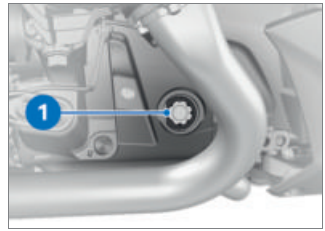
- Make sure the ground is level and firm and place the motorcycle on its centre stand.◁

ATTENTION

Misinterpretation of oil level reading, because oil level is temperature-dependent (the higher the temperature, the higher the oil level)
Engine damage
- Check the oil level only after a lengthy ride or when the engine is at operating temperature.

- Allow the engine to idle until the fan cuts in.
- Switch off the engine when it is at operating temperature.
- Wait five minutes for the oil to drain into the oil pan.

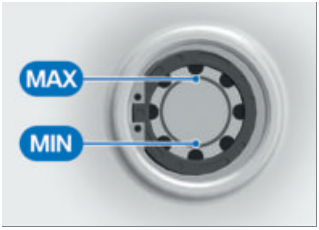
To protect the environment, BMW Motorrad recommends occasionally checking the engine oil after a journey of at least 50 km.



ATTENTION

Vehicle toppling sideways
Risk of damage to parts if vehicle topples
- Secure the vehicle, preferably with the assistance of a second person, so that it cannot topple sideways.

- Check the oil level in the display **1**.



Engine oil, specified level
Between **MIN** and **MAX** marks

If the oil level is below the **MIN** mark:

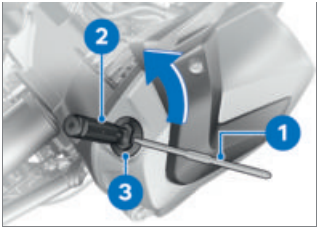
- Top up the engine oil (➠ 176).

If the oil level is above the **MAX** mark:

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

Topping up engine oil

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



- Wipe the area around the oil filler opening clean.
- Insert Torx end of reversible screwdriver insert **1** into screwdriver handle **2** (toolkit) for additional leverage.
- Engage this tool in cap **3** of the oil filler opening and turn anti-clockwise to remove.
- Check the engine oil level (➠ 175).

ATTENTION

Use of insufficient engine oil 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.

Engine oil, quantity for topping up
max 0.8 l (Difference between **MIN** and **MAX**)

- Check the engine oil level (➠ 175).

- Install cap **3** of the oil filler opening.

BRAKE SYSTEM

Checking function of brakes

- 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

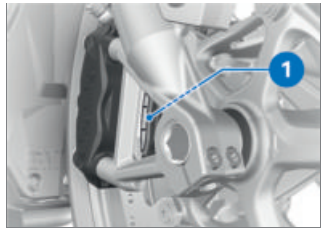
Risk to operational reliability of the brake system

- 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 brake pad thickness, front brakes

- 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
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:

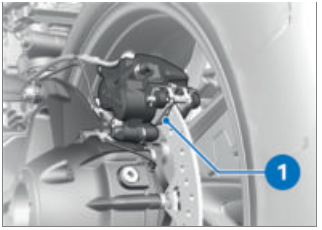
WARNING

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.

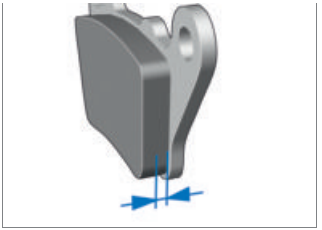
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Checking brake pad thickness, rear brakes

- 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 the rear toward brake pads **1**.



Brake-pad wear limit, rear
1.0 mm (Friction pad only, without backing plate)

If the wear limit has been reached:

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 retailer.

Checking brake-fluid level, front brakes

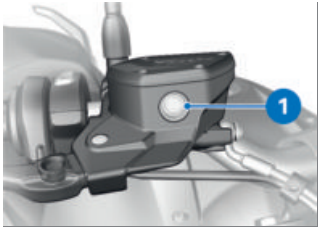
WARNING

Not enough brake fluid in brake fluid reservoir, or contaminants in brake fluid
Considerably reduced braking power due to presence of air, contaminants or water in the brake system
- Cease operation of the vehicle immediately and do not ride it until the fault has been rectified.
- Check the brake-fluid levels at regular intervals.
- Always make sure that the lid of the brake fluid reservoir and the area around the lid are cleaned before opening.
- Make sure that only fresh brake fluid from a sealed container is used.

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

–without centre stand OE
- Make sure the ground is level and firm and hold the motorcycle upright.◁

- Turn the handlebars to a position in which the brake fluid reservoir is horizontal.



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

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

Brake fluid level, front
Brake fluid, DOT4
The brake fluid level may not drop below the **MIN** mark. (Brake-fluid reservoir horizontal, motorcycle upright)

If the brake fluid level drops below the permitted level:

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

Checking brake-fluid level, rear brakes

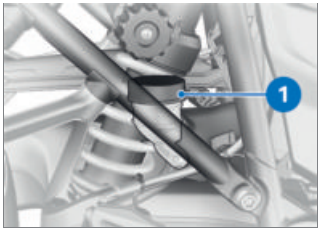
WARNING

Not enough brake fluid in brake fluid reservoir, or contaminants in brake fluid
Considerably reduced braking power due to presence of air, contaminants or water in the brake system

- Cease operation of the vehicle immediately and do not ride it until the fault has been rectified.
- Check the brake-fluid levels at regular intervals.
- Always make sure that the lid of the brake fluid reservoir and the area around the lid are cleaned before opening.
- Make sure that only fresh brake fluid from a sealed container is used.

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

–without centre stand OE
- Make sure the ground is level and firm and hold the motorcycle upright.◁



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

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

Brake fluid level, rear
Brake fluid, DOT4

Brake fluid level, rear
The brake fluid level may not drop below the **MIN** mark. (Brake-fluid reservoir horizontal, motorcycle upright)

If the brake fluid level drops below the permitted level:
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

CLUTCH

Checking clutch function

- Pull the clutch lever.

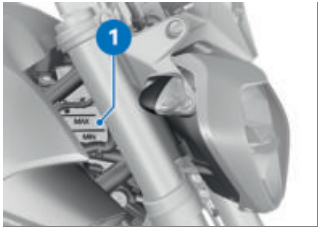
» The pressure point must be clearly perceptible.

If the pressure point is not clearly perceptible:
- Have the clutch checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

COOLANT

Checking coolant level

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



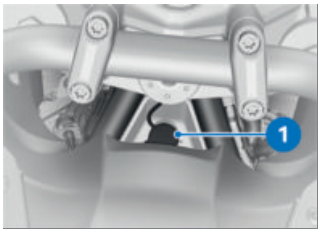
- Check the coolant level in expansion tank **1**.

» The coolant level must be between the **MIN** and **MAX** marks.

If the coolant level drops below the **MIN** mark:

- Top up the coolant.

Top up coolant



- Open cap **1** of the coolant expansion tank and top up the coolant to the specified level.
- Check the coolant level (➠ 181).
- Close the cap **1** of the coolant expansion tank.

TYRES

Checking tyre pressure

WARNING

Incorrect tyre pressure
Impaired handling characteristics of the motorcycle, shorter useful tyre life
- Always check that the tyre pressures are correct.

WARNING

Tendency of valve inserts installed vertically to open by themselves at high riding speeds
Sudden loss of tyre pressure
- Install valve caps fitted with rubber sealing rings and tighten firmly.

- 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
2.5 bar (with cold tyre; one-up and two-up riding)

 Tyre pressure, rear
2.9 bar (with cold tyre; one-up and two-up riding)

If tyre pressure is too low:
- Correct tyre pressure.

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 necessary, 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.

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

Effect of wheel size on chassis and suspension control systems

Wheel size is very important as a parameter for the frame and suspension control systems ABS and ASC/DTC. In particular, the diameter and the width of the 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.

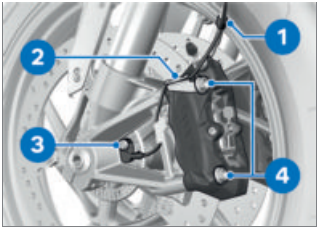
The sensor rings are essential for correct road-speed calculation, and they too must match the motorcycle's control systems and consequently cannot be changed.
If you decide that you would like to fit non-standard wheels to your motorcycle, it is very important to consult a specialist workshop beforehand, 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.

Removing front wheel

- Place the motorcycle on an auxiliary stand; BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Install the rear-wheel stand (➠ 174).

–with centre stand OE

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

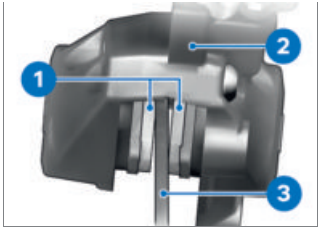


- Disengage the cable for the wheel speed sensor from holding clips **1** and **2**.
- Remove screw **3** and remove the wheel speed sensor from its bore.
- Mask off the parts of the wheel rim that could be scratched in the process of removing the brake calipers.

ATTENTION

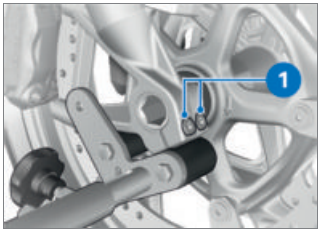
Unwanted inward movement of the brake pads
Component damage on attempt to install the brake caliper or because brake pads have to be forced apart
• Do not operate the brakes with a brake caliper not correctly secured.

- Remove mounting bolts **4** of the left and right brake calipers.

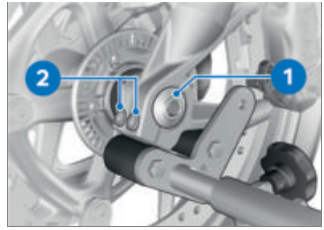


- Force brake pads **1** slightly apart by rocking brake caliper **2** back and forth against brake disc **3**.
- Carefully pull the brake calipers back and out until clear of the brake discs.

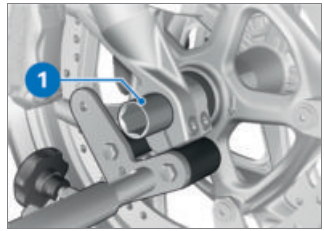
- Lift the front of the motorcycle until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Install the front-wheel stand (➠ 174).



- Slacken axle clamping screws **1**.



- Remove screw **1**.
- Slacken axle clamping screws **2**.
- Press quick-release axle slightly toward the inside, so as to be better able to grip it on the right-hand side.



- Withdraw quick-release axle **1**, support the front wheel when doing this.
- Set down front wheel and roll forwards out of the front suspension.

- Remove spacer bushing **1** from the wheel hub.

Installing front wheel

WARNING

Use of a non-standard wheel
Malfunctions during ABS and ASC/DTC intervention
- See the information on the effect of wheel size on the ABS and ASC/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.

- Lubricate the friction face of spacer bushing **1**.

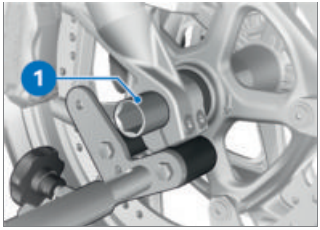
Lubricant
Optimoly TA

- Insert spacer bushing **1** into the wheel hub on the left side.

ATTENTION

Front wheel installed wrong way round
Risk of accident
- Note direction-of-rotation arrows on tyre or rim.

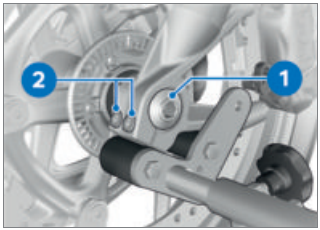
- Roll the front wheel into position between the forks of the front suspension.



- Lubricate quick-release axle **1**.

Lubricant
Optimoly TA

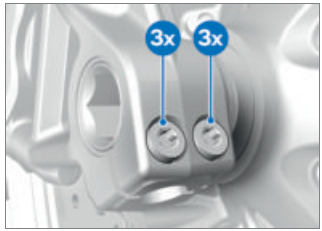
- Lift the front wheel slightly and install quick-release axle **1**.
- Remove front-wheel stand and firmly compress front forks several times. Do not operate the brake lever in this process.
- Install the front-wheel stand (➠ 174).



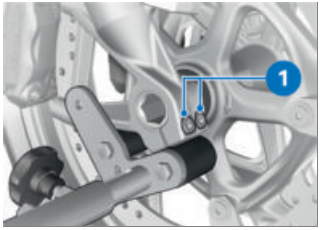
- Install screw **1** and tighten to specified torque. In this process, counter-hold the quick-release axle on the right side.

Quick-release axle in the telescopic forks
M20 x 1.5
50 Nm

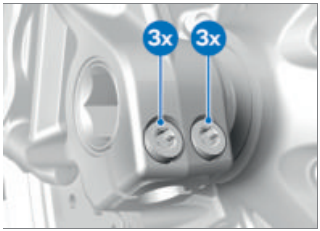
- Tighten axle clamping screws **2** to the specified torque.



Clamping screws in axle holder
Tightening sequence: Tighten screws six times in alternate sequence
M8 x 35
19 Nm

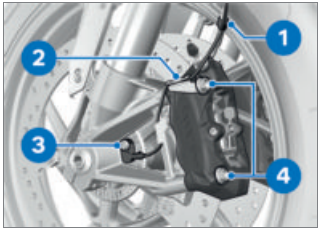


- Tighten axle clamping screws **1** to the specified torque.



Clamping screws in axle holder
Tightening sequence: Tighten screws six times in alternate sequence
M8 x 35
19 Nm

- Remove the front-wheel stand.
- Position left and right brake calipers on the brake discs.



- Install securing screws **4** on left and right and tighten to specified tightening torque.

Brake caliper on the telescopic forks
M10 x 65
38 Nm

- Remove the adhesive tape from the wheel rim

WARNING

Brake pads not lying against the brake disc
Risk of accident due to delayed braking effect.
- Before driving, check that the brakes respond without delay.

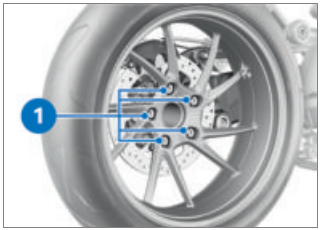
- Operate the brake several times until the brake pads are bedded.

- Insert the cable for the wheel speed sensor into holding clips **1** and **2**.
- Insert the wheel speed sensor into the bore hole and install screw **3**.

Wheel-speed sensor to fork leg
M6 x 16
Joining compound: Micro-encapsulated or medium-strength thread-locking compound
8 Nm

Removing rear wheel

- Remove the silencer (➠ 190).



- Engage first gear.
- Remove bolts **1** from the rear wheel, while supporting the wheel.
- Roll the rear wheel out toward the rear.

Installing the rear wheel

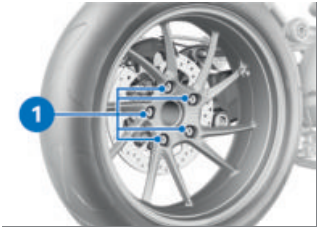
WARNING

Use of a non-standard wheel
Malfunctions during ABS and ASC/DTC intervention
- See the information on the effect of wheel size on the ABS and ASC/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.

- Seat the rear wheel on the rear-wheel adapter.



- Install wheel bolts **1** and tighten to specified torque.

Rear wheel to wheel flange
Tightening sequence: tighten in diagonally opposite sequence
M10 x 1.25 x 40
60 Nm

- Install the silencer (➠ 191).

SILENCER

Removing silencer

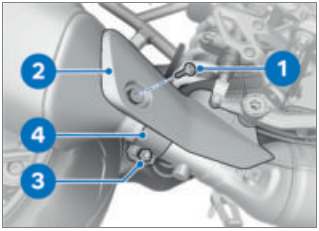
CAUTION

Hot exhaust system
Risk of burn injury
- Do not touch a hot exhaust system.

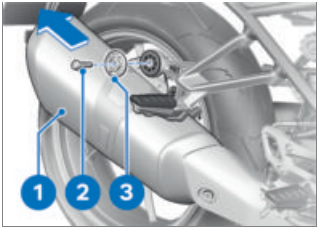
- Allow rear silencer to cool down.
- Make sure the ground is level and firm and place the motorcycle on a suitable auxiliary stand; BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Install the rear-wheel stand (➠ 174).

–with centre stand OE

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



- Remove the bolt **1** from the cover **2**.
- Slacken nut **3** in clamp **4**.



- Remove screw **2** and washer **3**.
- Remove silencer **1**.

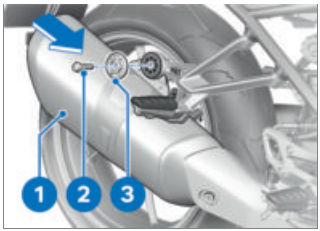
Install the silencer

ATTENTION

Tightening threaded fasteners to incorrect tightening torque

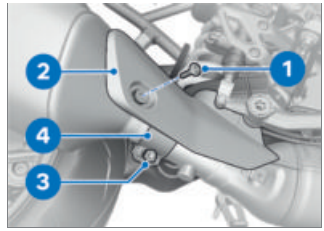
Damage, or threaded fasteners work loose

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



- Slip the clamp on to the silencer.
- Push silencer **1** to the limit position.
- Fit shim **3** and screw **2**.

Silencer to rear frame
M8 x 35
19 Nm



- Tighten the nut **3** of the clamp **4**.

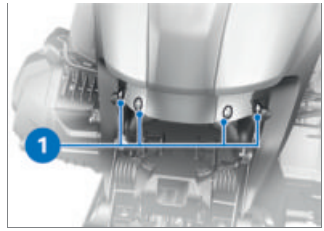
Clamp to silencer and exhaust manifold
24 Nm

- Fit the bolt **2** of the cover **1**.

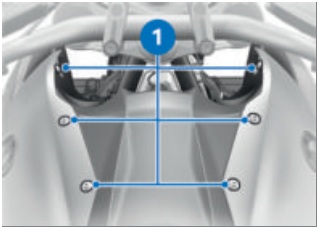
AIR FILTER

Replace air filter insert

- Removing front seat (➠ 93).



- Remove screws **1**.

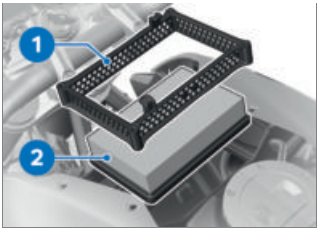


- Remove the screws **1** and press apart both side trim panels a little.

- Remove screws **1**.
- Remove the centre trim panel.

- Remove screws **1**.
- Remove the air filter cover.

- Remove frame **2**.
- Remove air filter insert **1**.



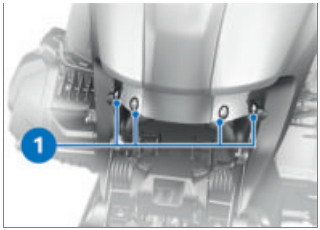
- Clean the air filter insert **2** or replace if necessary.
- Insert the air filter insert **2** and frame **1**.

- Install the air filter cover.
- Install screws **1**.

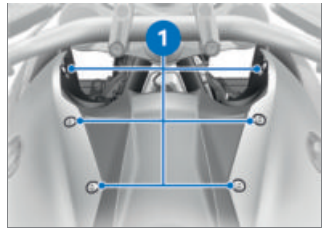
	Air filter cover to intake air silencer
Tightening sequence: in diagonally opposite sequence	
M5 x 50	
3 Nm	

- Place centre trim panel in position, paying attention to the connections to the side panels.

- Install screws **1**.



- Install screws **1**.



- Install screws **1**.
- Install the rider's seat (➠ 93).

LIGHTING

Replacing bulbs for front and rear turn indicators

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

- Remove screw **1**.

- Pull the glass out of the light housing at the threaded-fastener side.

- Turn bulb **1** counter-clockwise and remove it from the light housing.
- Replace the defective bulb.

Bulbs for turn indicators
RY10W / 12 V / 10 W
–with LED flashing turn indicator OE
LED◁

Bulbs for flashing turn indicators, rear
RY10W / 12 V / 10 W

Bulbs for flashing turn indicators, rear
–with LED flashing turn indicator OE
LED◁

- Use a clean, dry cloth to hold the bulb in order to keep the glass free of foreign matter.
- Turn bulb **1** clockwise to install it in the light housing.

- Working from the inboard side, insert the glass into the light housing and close the housing.

- Install screw **1**.

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.

Replacing LED turn indicators

–with LED flashing turn indicator OE

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

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

Replacing LED side light

- The LED side light can be replaced only as a complete unit. Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

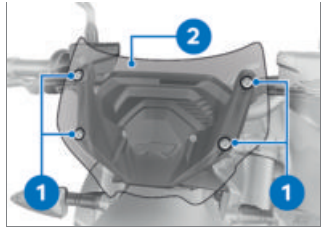
Replacing bulbs for low-beam and high-beam headlight

The arrangements of the connectors and the light sources may differ from the following figures.

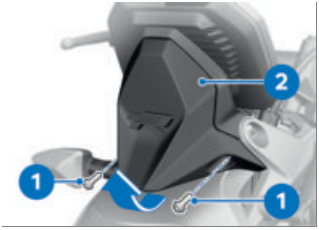
The procedure described here for replacing the low-beam headlight bulb applies by analogy for the high-beam headlight bulb.

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

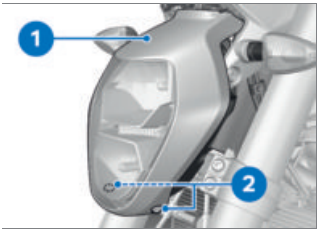
–with Sport windscreen OE



- Remove screws **1**. Make sure that the shouldered bushings from the grommets are not mislaid.
- Remove windscreen **2**.◁

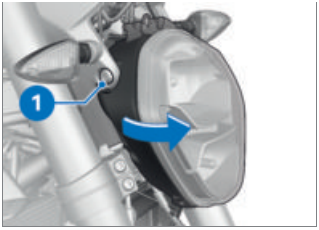


- Remove screws **1**.
- Carefully ease cover **2** up and remove.

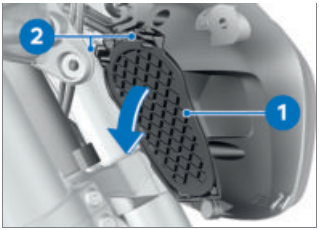


- Remove screws **2** and initially ease cover **1** out slightly at the top and then remove.

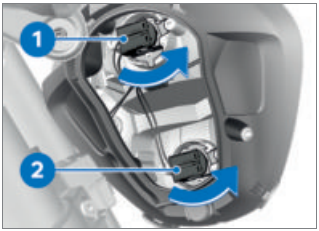
- Slacken screw **1** by 2 turns.



- Remove screw **1** and swivel the headlight aside.

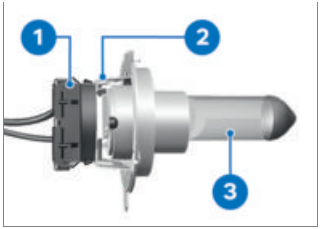


- Press retaining hooks **2** down slightly and remove cover **1** by pulling retaining hooks **2**.



- Turn connector with bulb **1** for the low-beam headlight counter-clockwise and remove.

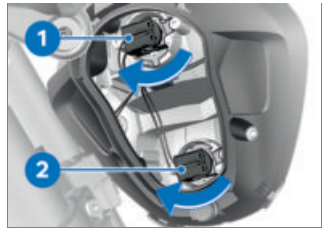
- Turn connector with bulb **2** for the high-beam headlight counter-clockwise and remove.



- Remove bulb **3** from connector **1**. Make sure that holder **2** remains on the connector.
- Replace the defective bulb.

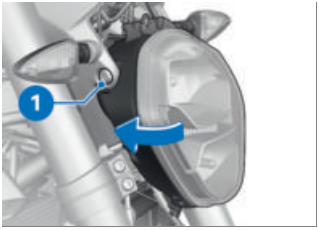
Bulbs for the low-beam headlight
H7 12 V 55 W

Bulb for high-beam headlight
H7 12 V 55 W



- Use a clean, dry cloth to hold the bulb in order to keep the glass free of dirt and foreign matter, or else hold the bulb by the base only, and insert it into the connector.
- Insert connector with bulb **1** for the low-beam headlight into the light housing and turn it clockwise.
- Insert connector with bulb **2** for the high-beam headlight into the light housing and turn it clockwise.

- Hold the cover in position at the bottom on connection **2** and secure retaining hooks **1** at top.

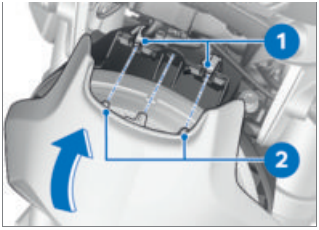


- Swing the headlight back to its original position and install screw **1**.

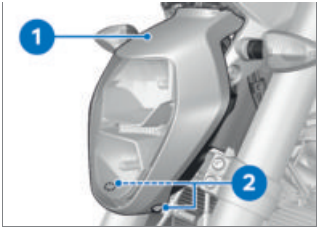
	Headlight to front panel carrier
M8 x 16	
19 Nm	

- Tighten screw **1**.

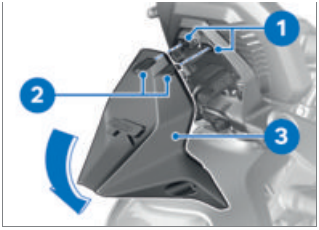
	Adjustment element to headlight
M6	
6 Nm	



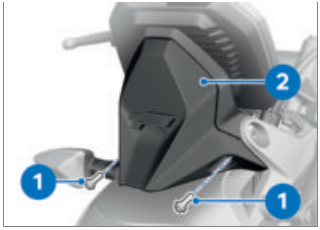
- Clip both retaining hooks **2** into holders **1**.



- Engage cover **1** at bottom and install screws **2**.

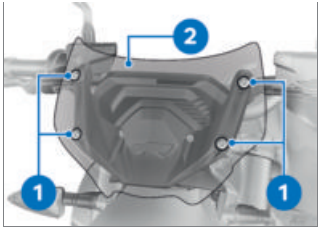


- Position cover **3** with retaining hook **2** in holder **1** and swing it down.



- Secure cover **2** with screws **1**.

–with Sport windscreen OE



- Hold windscreen **2** in position, noting the collared bushings and grommets.
- Install screws **1**.

	Windscreen to holder
M5 x 20	
4 Nm◁	

Replacing LED auxiliary headlights

–with LED additional headlight OA

The LED auxiliary headlights can only be replaced as a unit; it is not possible to replace individual LEDs.
Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

JUMP-STARTING

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.

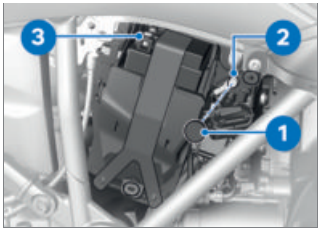
ATTENTION

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.

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Remove the battery cover (➠ 203).
- When jump-starting the engine, do not disconnect the battery from the on-board electrical system.



- Remove protective cap **1**.
- Use the red jump lead to connect remote positive terminal **2** of the discharged battery to the positive terminal of the donor battery.
- Connect one end of the black jump lead to the negative terminal of the donor battery, then connect the other end to negative terminal **3** of the discharged battery.
- Run the engine of the donor vehicle during jump-starting.
- 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.

Do not use proprietary start-assist sprays or other products to start the engine.

- Install the protective cap.
- Install the battery cover (➠ 205).

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.

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 the battery that is connected to the vehicle via the battery terminals
Damage to the on-board electronics
- Disconnect the battery at the battery terminals before charging.

ATTENTION

Recharging a fully discharged battery via the power socket or extra socket
Damage to the vehicle electronics
- If a battery has discharged to the extent that it is completely flat (battery voltage less than 12 V, indicator lights and multifunction display remain off when the ignition is switched on) always charge the **disconnected** battery with the charger connected directly to the battery terminals.

ATTENTION

Unsuitable chargers connected to a socket
Damage to charger and vehicle 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.

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.

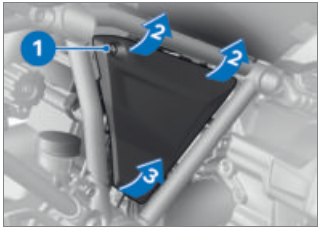
If you are unable to charge the battery through the on-board socket, you may be using a charger that is not compatible with your motorcycle's electronics. In this case, directly charge the battery at the terminals of the battery that has been disconnected from the vehicle.

Charge 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.

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.

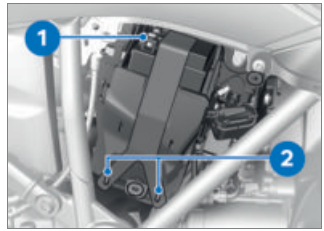
Removing battery



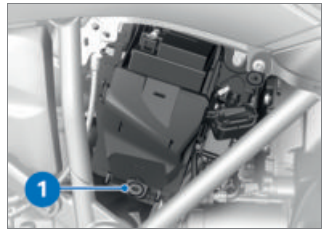
- Switch off the ignition.
- Remove screw **1**.
- Pull the battery cover slightly forward at the top at positions **2**.
- In order not to damage the battery cover or the mounting, work the battery cover up at position **3** to remove.

–with anti-theft alarm (DWA) OE

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



- Disconnect battery earth lead **1** and disengage rubber strap **2**.
- Wrap the end of negative battery cable **1** with insulating tape.



- Pull retaining panel in position **1** outwards and remove in an upward direction.
- Slightly lift the battery and ease it clear of the holder

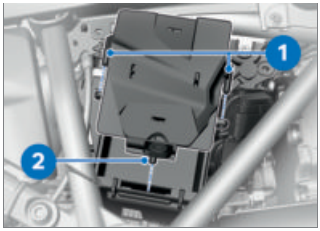
until the battery positive terminal is accessible.

- Disconnect battery negative lead **1** and remove the battery.

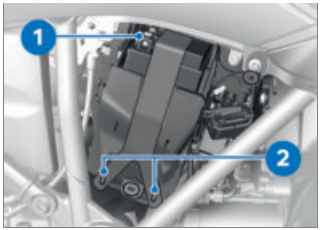
Installing battery

The fuse for the alternator regulator can blow if the 12 V battery is installed incorrectly or if the terminals are swapped (e.g. when using a starting aid).

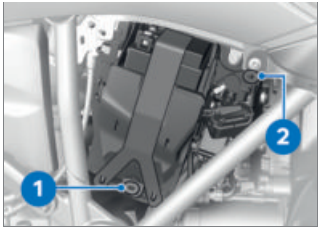
- Secure positive battery cable **1**.
- Push battery into the mounting.



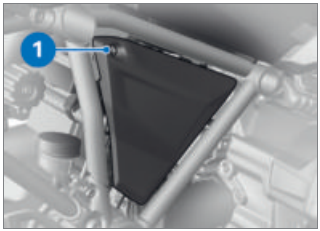
- First insert retaining plate into the mountings **1** and then push under the battery in position **2**.



- Remove the insulating tape from negative battery cable **1**.
- Secure negative battery cable **1**.
- Secure the battery with rubber strap **2**.



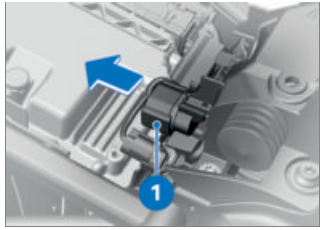
- Place battery cover into the mounting **1** and press into the mounting **2**.



- Install screw **1**.
- Set the clock (➠ 105).
- Set the date (➠ 104).

FUSES

Replacing fuses



- Switch off the ignition.
- Removing front seat (➠ 93).
- Disconnect connector **1**.

ATTENTION

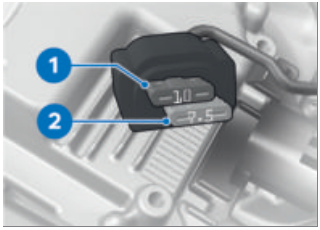
Jumpering of blown fuses
Risk of short-circuit and fire
- Never attempt to jumper a blown fuse.
- Always replace a defective fuse with a new fuse of the same amperage.

- Replace faulty fuse in accordance with the fuse allocation diagram.

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

- Install plug **1**.
- Install the rider's seat (➠ 93).

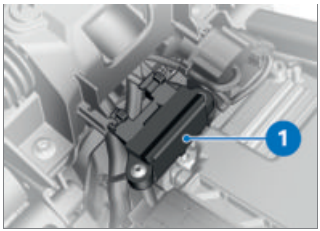
Fuse assignment



1 10 A
Instrument cluster
Anti-theft alarm (DWA)
Ignition switch
Main relay
Diagnostic socket

2 7.5 A
Multifunction switch, left
Tyre pressure control (RDC)
Angular rate sensor

Fuse for the alternator regulator



1 50 A
Alternator regulator

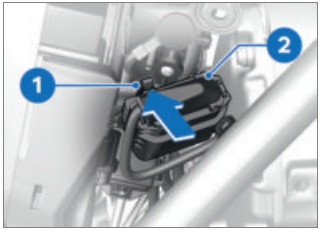
DIAGNOSTIC CONNECTOR

Disengaging diagnostic socket

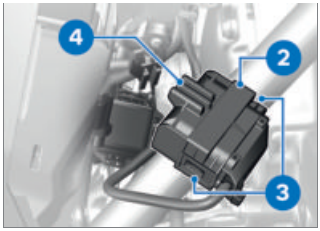
CAUTION

Incorrect disconnection of the diagnostic socket for on-board diagnosis
Malfunctions of the vehicle
- Do not disconnect the diagnostic socket or allow it to be disconnected except in the course of a BMW Motorrad service by a specialist workshop or by other authorised persons.
- Have the work carried out by appropriately trained personnel.
- Comply with the stipulations of the vehicle manufacturer.

- Remove the battery cover (➠ 203).



- Press hook **1** and pull diagnostic socket **2** up to remove.

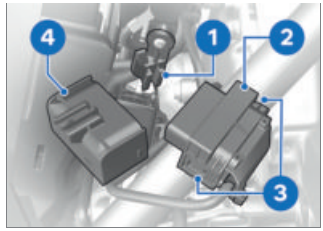


- Press locks **3** on both sides.
- Disengage diagnostic socket **2** from holder **4**.

» The interface to the diagnosis and information system can be connected to the diagnostic connector **2**.

Securing diagnostic socket

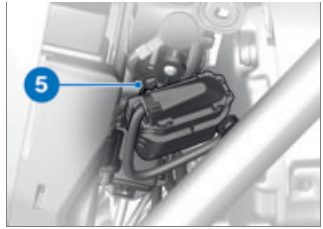
- Disconnect the interface for the diagnosis and information system.



- Insert diagnostic socket **2** into holder **4**.

» Locks **3** engage on both sides.

- Seat bracket **4** on mounting **1**.



- Make sure that hook **5** engages.
- Install the battery cover (➠ 205).

ACCESSORIES

10

GENERAL NOTES 210
POWER SOCKETS 210
CASES 211
TOPCASE 214
NAVIGATION SYSTEM 217

GENERAL NOTES

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 responsibility for the products. BMW accepts no liability whatsoever for parts and accessories that it has not approved.

All modifications must be in compliance with legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country.
Your authorised BMW Motorrad retailer can offer expert advice on the choice of genuine BMW parts, accessories and other products.
To find out more about accessories go to: **bmw-motorrad.com/equipment**.

POWER SOCKETS

Connection of electrical devices
– You can start using electrical devices connected to the motorcycle's sockets only when the ignition is switched on.

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.
– The cable routing should not restrict the steering angle or obstruct handling.
– The cables must not be trapped.

Automatic shutdown

– The sockets will be automatically switched off during the start procedure.
– The power supply to the sockets is switched off no more than 15 minutes after the ignition is switched off, in order to prevent overloading of the on-board electrics. Low-wattage electrical accessories might not be recognised by the vehicle's electronics. In such cases, power sockets are switched off very shortly after the ignition is turned off.
– If the battery charge state is too low to maintain the motorcycle's start capability, the power sockets are switched off.
– The power sockets are also switched off when the maximum load capability as stated in the technical data is exceeded.

CASES

– with touring cases OA

Opening cases

- Turn key **1** counter-clockwise to the **OPEN** position.
- Pull grey release lever **2** **OPEN** up and at the same time open the case lid.

Closing cases

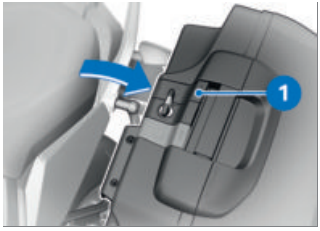
- Turn key **1** counter-clockwise to the **OPEN** position.
- Press catches **2** of the case lid into latches **3**. Check that nothing is trapped between the lid and the case.
- Pull grey release lever **4** **OPEN** up and at the same time close the case lid.

» The lid engages with an audible click.

- Turn key **1** in the case lock to the position in which it is parallel with the direction of travel and remove the key.

Removing cases

- Turn spare key **1** to the **RELEASE** position.



- Pull black release lever **1 RELEASE** up and at the same time pull the case out.
- Then lift the case out of the bottom mount.

Installing cases

- Turn spare key **1** to the **RELEASE** position.

- Position the case in case holder **1**, then pivot it until it rests against fixture **2**.
- Pull black release lever **3 RELEASE** up and at the same time push the case into top mount **2**.
- Push black release lever **3 RELEASE** down until it engages.
- Turn the key in the case lock to the position in which it is parallel with the direction of travel and remove the key.

Maximum payload and maximum speed

Note the maximum permissible payload and the speed limit for riding with cases fitted, as stated on the label inside the case.

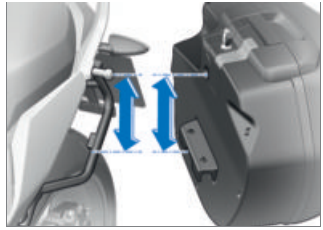
Contact your authorised BMW Motorrad Retailer if you cannot find your combination of vehicle and cases on the label.

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

Secure attachment



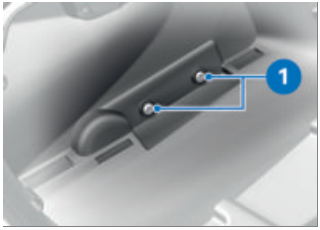
If a case wobbles or is difficult to install, it has to be adapted to the spacing between the top and bottom mounts.

WARNING

Case installation not in compliance with correct procedure.

Impairment of road safety.

- Cases may not wobble and must be secured free from play. Re-adjust the retainer if play develops over the course of time.

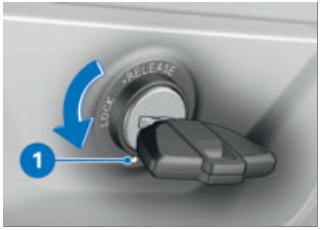


Screws **1** inside the case allow you to make this adjustment.

TOPCASE

–with topcase OA

Opening topcase



- Turn the key in the topcase lock to position **1**.

- Push lock barrel **1** forward.

» Release lever **2** pops up.

- Pull the release lever all the way up.

» Topcase lid can be opened.

Closing topcase

- Pull release lever **1** 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.

The topcase can also be closed when the lock is in the **LOCK** position. Make sure that the ignition key is not left inside the topcase.

- Push release lever **1** down until it engages.
- Turn the key in the topcase lock to the **LOCK** position and remove the key from the lock.

Removing topcase

- Turn the key in the topcase lock to position **1**.

» The handle pops out.

- Pull carry handle **1** up as far as it will go.
- Lift the topcase at the rear and remove it from the luggage carrier.

Installing topcase

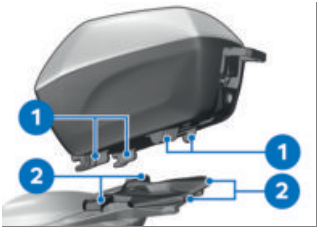
WARNING

Topcase not properly secured

Driving safety is impaired

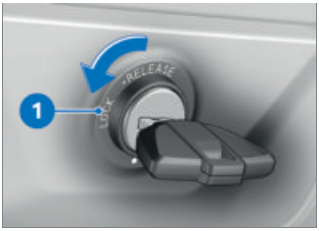
- The topcase must not wobble and must be secured free from play.

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



- Hook the topcase into position on the luggage carrier. Make sure that hooks **1** are securely seated in corresponding keepers **2**.

- Push carry handle **1** down until it engages.



- Turn the key in the topcase lock to position **1** and remove the key.

Maximum payload and maximum 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 retailer if you cannot find your combination of vehicle and topcase on the sign.

The values for the combination described here are as follows:

Maximum speed for riding with a laden Vario topcase
max 180 km/h

Payload of Vario topcase
max 5 kg

NAVIGATION SYSTEM

Securing navigation system

–with preparation for navigation system [OE]

–with navigation system [OA]

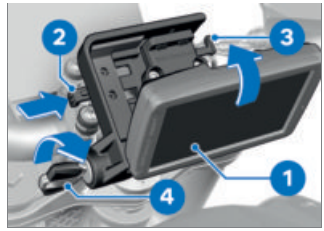
Navigation preparation is suitable from BMW Motorrad Navigator IV.

The latching system of the Mount Cradle is not designed to protect against theft.

Always remove the navigation system and stow it away safely as soon as you finish your ride.

- Turn ignition key **1** counterclockwise.
- Pull the lock retainer **2** to the **left**.
- Press the lock **3** in.

» The Mount Cradle is unlocked and cover **4** can be pivoted forward and removed.



- Insert the navigation system **1** at the bottom and swing it toward the rear in one rotational movement.

» The navigation system engages with an audible click.

- Push the lock retainer **2** all the way to the **right**.

» Lock **3** is locked.

- Turn ignition key **4** clockwise.

» The navigation system is secured and the ignition key can be removed.

Removing navigation system and installing cover

–with preparation for navigation system [OE]

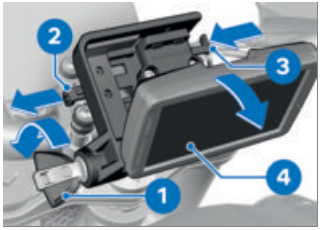
–with navigation system [OA]

ATTENTION

Dust and dirt on the Mount Cradle contacts

Damaged contacts

- Always reinstall the cover as soon as you finish your ride.



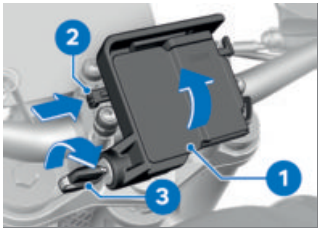
- Turn ignition key **1** anti-clockwise.
- Pull the lock retainer **2** all the way to the **left**.

» Lock **3** is unlocked.

- Push lock **3** all the way to the **left**.

» Navigation system **4** is unlocked.

- Tilt navigation system **4** and work it down to remove.



- Insert cover **1** in the lower section and swing to the top with a rotational movement.

» The cover engages with an audible click.

- Push lock retainer **2** to the **right**.
- Turn ignition key **3** clockwise.

» The cover **1** is secured.

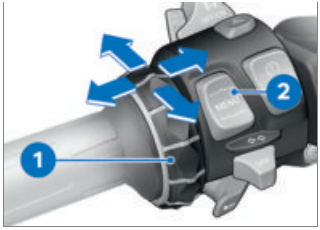
Operating navigation system

–with preparation for navigation system OE

The description below is based on the BMW Motorrad Navigator V and the BMW Motorrad Navigator VI. The BMW Motorrad Navigator IV does not support all the options described here.

Only the latest version of the BMW Motorrad communication system is supported. A software update of the BMW Motorrad communication system may be necessary. If this is the case, consult your authorised BMW Motorrad dealer.

If the BMW Motorrad Navigator is installed and the operating focus is switched to the Navigator (➠ 101), several of its functions can be operated directly from the handlebars.



The navigation system is operated using Multi-Controller **1** and MENU rocker button **2**.

Turning Multi-Controller 1 up and down
On the Compass and Mediaplayer pages: Increase or decrease the volume of a Bluetooth-connected BMW Motorrad communication system.
In the BMW special menu: Select menu item.

Short-tilting Multi-Controller 1 to the left and right
Switch between the main pages of the Navigator:
–Map view
–Compass
–Mediaplayer
–BMW special menu
–My Motorcycle page

Long-tilting Multi-Controller 1 to the left and right
Activate certain functions on the Navigator display. An arrow to the right or to the left above the corresponding button area on the display indicates a function that can be activated in this way.

Long-push to the right to activate this function.

Long-push to the left to activate this function.

Pressing bottom section of MENU rocker button 2
Switch operating focus to Pure Ride view.

In detail, the following functions can be controlled:
Map view
–Turn up: Zoom in.
–Turn down: Zoom out.

Compass page
–Turning increases or decreases the volume of a BMW Motorrad communication system connected via Bluetooth.

BMW special menu
–Speak: Repeat most recent navigation announcement.
–Waypoint: Save current location as a favourite.

–Home: Starts navigation to home address (greyed if no home address has been defined).
–Mute: Switch automatic navigation announcements off or on (off: a crossed-out lips symbol appears in the top line of the display). "Speak" will still activate navigation announcements. All other acoustic outputs remain switched on.
–Switch off display: Deactivate the display.
–Dial home number: Dials the home phone number saved in the Navigator (not shown unless a communication system and a telephone are connected).
–Diversion: Activates the diversion function (not shown unless a route is active).
–Skip: Skips the next waypoint (not shown unless the route has waypoints).

My Motorcycle

–Turn: Changes the number of data shown.
–Touch a data field on the display to open the menu for selecting data.
–The values available fr selection depend on the optional extras installed on the vehicle.

Mediaplayer

–Long-push to the left: Play preceding track.
–Long-push to the right: Play next track.
–Turning increases or decreases the volume of a BMW Motorrad communication system connected via Bluetooth.

The Mediaplayer function is only available when a Bluetooth device complying with the A2DP standard is used, for example a BMW Motorrad communication system.

Warnings and status messages

–with navigation system OA

Warning and status messages from the motorcycle are indicated by a symbol **1** appearing at the top left in the map view.

If a BMW Motorrad communication system is connected, warnings are accompanied by an acoustic signal.

If there are two or more active warnings the number appears below the warning triangle. Touching the warning triangle when more than one warning is active opens a list of all the warnings.
Additional information appears as soon as a message is selected.

Detailed information cannot be displayed for all warnings.

Special functions

– with preparation for navigation system OE

Integration of the BMW Motorrad Navigator has produced a number of deviations from the descriptions in the operating instructions for the Navigator.

Reserve fuel level warning

The settings for the fuel gauge are not available, because the reserve warning is transmitted from the vehicle to the Navigator. Touch the message when it is active to view the locations of the nearest filling stations.

Security settings

The BMW Motorrad Navigator V and the BMW Motorrad Navigator VI 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 vehicle and the ignition is switched on you are prompted to add the vehicle 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.
It is then no longer necessary to enter the PIN when the Navigator is switched on by ignition ON on any of these vehicles.
If the Navigator is removed from the vehicle while switched on, a security prompt is issued asking for the PIN to be entered.

Screen brightness

Screen brightness is adjusted by the motorcycle while the unit is cradled. Manual input is not necessary.
Automatic setting can be switched off in the display settings for the Navigator if desired.

CARE

11

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CARE PRODUCTS

BMW Motorrad recommends that you use the cleaning and care products you can obtain from your authorised BMW Motorrad Retailer. The substances in BMW Care Products 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.

ATTENTION

Use of strongly acidic or strongly alkaline cleaning agents

Damage to vehicle parts

- Dilute in accordance with the dilution ratio stated on the packaging of the cleaning agent.
- Do not use strongly acidic or strongly alkaline cleaning agents.

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.

Remove dirt from the fork legs at regular intervals.

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.

After a ride in the rain, when humidity is high or after the vehicle has been washed, condensation might form inside the headlight. This can cause temporary fogging on the headlight lens. If moisture is constantly present inside the headlight consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

WARNING

Wet brake discs and brake pads after vehicle wash, after riding through water and in rainy conditions
Diminished braking effect, risk of accident
- 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 labels, seals, hydraulic brake system, electrical system and the motorcycle 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 trim panel components with water and BMW Motorrad solvent cleaner.

Plastic windscreens and headlight lenses
Remove dirt and insects with a soft sponge and generous amounts of water.

Soften stubborn dirt and insects by covering the affected areas with a wet cloth.


Clean with water and sponge only.


Do not use any chemical cleaning agents.

TFT display
Clean the TFT display with warm water and washing-up liquid. Then dry it with a clean cloth, e.g. a paper towel.

Chrome
Carefully clean chrome parts with plenty of water and motorcycle cleaner from the BMW Motorrad Care Products range. This is particularly important to counter the effects of road salt.
For an additional treatment, use BMW Motorrad metal polish.

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

Bending of radiator fins
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.

CARE OF PAINTWORK

Washing the vehicle regularly will help counteract the long-term effects of substances that can 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. For this, we recommend BMW Motorrad solvent cleaner followed by BMW Motorrad gloss polish for preservation.
Marks on the paintwork are particularly easy to see after the motorcycle has been washed. Remove stains of this kind at the earliest possible opportunity, using benzine or petroleum spirit on a clean cloth or ball of cotton wool. BMW Motorrad recommends using BMW tar remover for removing specks of tar. Then apply preserving agent to the areas treated in this way.

PAINTWORK PRESERVATION

If water no longer rolls off the paint, the paint must be preserved.
For paint preservation, BMW Motorrad recommends the use of BMW Motorrad gloss polish or agents containing carnauba wax or synthetic wax.

LAYING UP THE MOTORCYCLE

- Clean the motorcycle.
- Fill the motorcycle's fuel tank.

Fuel additives clean the fuel injection system and the combustion zone. It is advisable to use fuel additives when the engine is operated with low-grade fuel or if the vehicle is to be out of use for a lengthy period of time. More information is available from your authorised BMW Motorrad retailer.

- Removing battery (➠ 203).
- 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).

RESTORING MOTORCYCLE TO USE

- Remove the protective wax coating.
- Clean the motorcycle.
- Install the battery (➠ 204).
- Comply with checklist (➠ 134).

TECHNICAL DATA

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TROUBLESHOOTING CHART

The engine doesn't start.

Possible cause	Rectification
Side stand extended and gear engaged	Fold in side stand.
Gear engaged and clutch not pressed	Select neutral or pull the clutch lever.
No fuel in tank	Refuelling (➠ 145).
Battery flat	Charge battery when connected (➠ 202).
Overheating protection for starter motor has been activated. Starter motor can only be operated for a limited period of time.	Allow the starter motor to cool down for approx. 1 minute before using it again.

The Bluetooth connection is not established.

Possible cause	Rectification
The steps required for pairing were not carried out.	Check the necessary steps for pairing in the operating instructions for the communication system.
The communication system was not connected automatically despite successful pairing.	Switch off the helmet's communication system and reconnect it after a minute or two.
Too many Bluetooth devices are saved on the helmet.	All pairing entries on the helmet are deleted (see the communication system operating instructions).
There are other vehicles with Bluetooth-capable devices in the vicinity.	Avoid simultaneously pairing with more vehicles.

Bluetooth connection is interrupted.

Possible cause	Rectification
The Bluetooth connection to the mobile end device is interrupted.	Switch off energy saving mode.
The Bluetooth connection to the helmet is interrupted.	Switch off the helmet's communication system and reconnect it after a minute or two.
The volume in the helmet cannot be adjusted.	Switch off the helmet's communication system and reconnect it after a minute or two.

The telephone book is not displayed in the TFT display.

Possible cause	Rectification
The phone book was not transmitted to the vehicle.	Confirm transmission of the phone data (➠ 117) when pairing the mobile device.

Active route guidance is not displayed in the TFT display.

Possible cause	Rectification
Navigation from the BMW Motorrad Connected App was not transmitted.	The BMW Motorrad Connected App is opened on the connected mobile end device prior to departure.
The route guidance cannot be started.	Secure the mobile device's data connection and check the map data on the mobile end device.

SCREW CONNECTIONS

Front wheel	Value	Valid
Brake caliper on the telescopic forks		
M10 x 65	38 Nm	
Quick-release axle in the telescopic forks		
M20 x 1.5	50 Nm	
Clamping screws in axle holder		
M8 x 35	**Tightening sequence: Tighten screws six times in alternate sequence**	
	19 Nm	

Rear wheel	Value	Valid
Rear wheel to wheel flange		
M10 x 1.25 x 40	**Tightening sequence: tighten in diagonally opposite sequence**	
	60 Nm	

Mirror arm	Value	Valid
Mirror (locknut) to adapter		
M10 x 1.25	Left-hand thread, 22 Nm	
Adapter to clamping block		
M10 x 14 - 4.8	25 Nm	

Gearshift lever	Value	Valid
Peg to gearshift lever		
M6 x 20 micro-encapsulated	10 Nm	

Footbrake lever	Value	Valid
Peg to footbrake lever		
M6 x 20 micro-encapsulated	10 Nm	

Footrests	Value	Valid
Clamping block on footrest hinge		
M8 x 25	20 Nm	
Footrest on clamping block		
M6 x 20 / M6 x 12	10 Nm	

Handlebars	Value	Valid
Clamping block (handlebar clamp) to fork bridge		
M8 x 35	**Tightening sequence: in the forward direction of travel, tighten until seated**	
	19 Nm	
M8 x 30	**Tightening sequence: in the forward direction of travel, tighten until seated**	–with preparation for navigation system OE
	19 Nm	

FUEL

Recommended fuel grade	E5 E10 Premium unleaded (maximum 15 % ethanol, E15) 95 ROZ/RON 90 AKI
Alternative fuel grade	E5 E10 Regular unleaded (power- and consumption-related restrictions) (maximum 15 % ethanol, E15) 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 18 l
Reserve fuel	approx. 4 l
Fuel consumption	4.75 l/100 km
–with power reduction OE	approx. 4.88 l/100 km
CO2 emission	110 g/km, following world-wide harmonised motorcycle test cycle (WMTC)
–with power reduction OE	113 g/km, following world-wide harmonised motorcycle test cycle (WMTC)
Exhaust emissions standard	EU5

ENGINE OIL

Engine oil, capacity	max 4 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.
Engine oil, quantity for topping up	max 0.8 l, Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

ENGINE

Engine number location	Crankcase, bottom right, below starter motor
Engine type	A74B12M
Engine design	Air/liquid-cooled, two-cylinder four-stroke opposed-twin engine with two overlying, spur-gear-driven camshafts, a counterbalance shaft and variable intake camshaft control, BMW ShiftCam
Displacement	1254 cm^3
Cylinder bore	102.5 mm
Piston stroke	76 mm
Compression ratio	12.5 g/cm^3

Nominal capacity	100 kW, at engine speed: 7750 min^{-1}
–with power reduction OE	79 kW, at engine speed: 7750 min^{-1}
Torque	143 Nm, at engine speed: 6250 min^{-1}
–with power reduction OE	140 Nm, at engine speed: 5000 min^{-1}
Maximum engine speed	max 9000 min^{-1}
Idle speed	1050 min^{-1}, Engine at regular operating temperature

CLUTCH

Clutch type	Multi-plate oil-bath (anti-hopping)

TRANSMISSION

Type of transmission	Constant-mesh six-speed transmission with helical-cut gearing
Gearbox transmission ratios	1,650 (33:20), Primary transmission ratio 2,438 (39:16), 1st gear 1,714 (36:21), 2nd gear 1,296 (35:27), 3rd gear 1,059 (36:34), 4th gear 0,943 (33:35), 5th gear 0,848 (28:33), 6th gear 1,061 (35:33), Transmission output ratio

REAR-WHEEL DRIVE	
Type of final drive	Shaft drive with bevel gears
Type of rear suspension	Cast aluminium single swinging arm featuring BMW Motorrad Paralever
Gear ratio of final drive	2.818 (31/11 teeth)
Rear axle differential oil	SAE 70W-80 / Hypoid Axle G3

FRAME	
Frame type	Tubular steel frame with supporting drive unit, steel pipe rear frames
Type plate location	Frame, front left at steering head
Position of the vehicle identification number	Frame, front right, on steering head

CHASSIS AND SUSPENSION	
Front wheel	
Type of front suspension	Upside-down telescopic fork
–with Dynamic ESA OE	Upside-down telescopic forks, 54 mm in diameter, adjustable rebound and compression stage
Spring travel, front	140 mm, at front wheel

Rear wheel	
Type of rear suspension	Cast aluminium single swinging arm featuring BMW Motorrad Paralever
Type of rear-wheel suspension	Central spring strut with coil spring, adjustable rebound-stage damping and spring pre-load
–with Dynamic ESA[OE]	ESA-2 with spring rate setting
Spring travel at rear wheel	140 mm

BRAKES

Front wheel	
Type of front brake	Hydraulically operated twin disc brake with 4-piston radial brake calipers and floating brake discs
Brake-pad material, front	Sintered metal
Rear wheel	
Type of rear brake	Hydraulically operated disc brake with 2-piston floating calliper and fixed disc
Brake-pad material, rear	Sintered metal

WHEELS AND TYRES

Recommended tyre combinations	An overview of currently approved tyres is available from your authorised BMW Motorrad retailer or on the Internet under **bmw-motorrad.com**.
Speed category, front/rear tyres	W, required at least: 270 km/h

Front wheel	
Front-wheel type	Aluminium cast wheel
Front-wheel rim size	3.5" x 17"
Tyre designation, front	120/70 - ZR 17
Load index, front tyre	min. 58
Permissible wheel load, front	max 180 kg
Permissible front-wheel imbalance	max 5 g
Rear wheel	
Rear-wheel type	Aluminium cast wheel
Rear wheel rim size	5.5" x 17"
Tyre designation, rear	180/55 - ZR 17
Load index, rear tyre	min. 73
Permissible wheel load, rear	max 325 kg
Permissible rear-wheel imbalance	max 45 g
Tyre pressures	
Tyre pressure, front	2.5 bar, with cold tyre; one-up and two-up riding
Tyre pressure, rear	2.9 bar, with cold tyre; one-up and two-up riding

ELECTRICAL SYSTEM	
Electrical rating of on-board sockets	max 5 A, total for all sockets
Fuse carrier 1	10 A, Slot 1: instrument cluster, alarm system (DWA), ignition lock, main relay, diagnostic socket 7.5 A, Slot 2: multifunction switch left, tyre pressure control (RDC), angular rate sensor

Fuse holder	50 A, Fuse 1: Voltage regulator
Battery	
Battery type	AGM battery (Absorbent Glass Mat)
–with M Lightweight battery[OE]	Lithium-ion battery
Battery rated voltage	12 V
–with M Lightweight battery[OE]	12 V
Battery rated capacity	12 Ah
–with M Lightweight battery[OE]	10 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8AI-10
Lighting	
Bulb for high-beam headlight	H7 12 V 55 W
Bulbs for the low-beam headlight	H7 12 V 55 W
Bulb for parking light	LED
Bulb for tail light/brake light	LED
Bulbs for turn indicators	RY10W / 12 V / 10 W
–with LED flashing turn indicator[OE]	LED

ANTI-THEFT ALARM

Activation time on arming	approx. 30 s
Alarm duration	approx. 26 s
Battery type	CR 123 A

DIMENSIONS	
Length of motorcycle	2165 mm, measured over number-plate carrier
Height of motorcycle	min 1300 mm, measured over mirrors, at DIN unladen weight
Width of motorcycle	880 mm, with mirrors 999 mm, with case
Height of rider's seat	820 mm, without rider at DIN unladen weight
–with rider's seat, low[OE]	760 mm, without rider at DIN unladen weight
–with Sport seat[OE]	840 mm, without rider at DIN unladen weight
Rider's inside-leg arc, heel to heel	1840 mm, without rider at unladen weight
–with rider's seat, low[OE]	1720 mm, without rider at unladen weight
–with Sport seat[OE]	1875 mm, without rider at unladen weight

WEIGHTS	
Vehicle kerb weight	239 kg, DIN unladen weight, ready for road, 90 % load of fuel, without optional extras
Permissible gross vehicle weight	460 kg
Maximum payload	221 kg

RIDING SPECIFICATIONS

Top speed	>200 km/h
–with touring cases[OA]	180 km/h
–with topcase[OA]	180 km/h

SERVICE

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REPORTING SAFETY-RELEVANT DEFECTS

–with Canada export[NV]

If you think that your motorcycle has a fault which may cause an accident, injury or death, you must inform the NHTSA (National Highway Traffic Safety Administration) immediately and BMW of North America, LLC.

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

You can contact the NHTSA by calling the Vehicle Safety hotline on 1–888–327–4236 (teletypewriter TTY for the hearing impaired: 1–800–424–9153) for free, by visiting the website at http:// www.safercar.gov or by writing to Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. Further information on vehicle safety is available at http:// www.safercar.gov.

Canadian customers who wish to report a safety-related defect to Transport Canada, Defect Investigations and Recalls can call the toll-free hotline 1–800–333–0510. You can also obtain other information about motor vehicle safety from http:// www.tc.gc.ca/ roadsafety.

BMW MOTORRAD SERVICE

BMW Motorrad has an extensive network of retailers in place to look after you and your motorcycle in more than 100 countries. Authorised BMW Motorrad retailers have the technical information and the technical know-how to carry out reliably all preventive maintenance and repair work on your BMW.
You can locate the nearest authorised BMW Motorrad retailer by visiting our website: **bmw-motorrad.com**

WARNING

Maintenance and repair work not in compliance with correct procedure
Risk of accident due to consequential damage
- BMW Motorrad recommends having work of this nature carried out on the vehicle 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 preventive maintenance and repair work carried out confirmed in the "Service" chapter in this manual.
Evidence of regular preventive maintenance is essential for generous treatment of claims submitted after the warranty period has expired.

Your authorised BMW Motorrad retailer can provide information on BMW Motorrad services and the work undertaken as part of each service.

BMW MOTORRAD SERVICE HISTORY

Entries
Maintenance work that has been carried out is entered in the proof of maintenance. The entries are like a Service Booklet and provide proof of regular maintenance.
When an entry is made in the electronic service booklet of the vehicle, service-relevant data is saved in the central IT

systems of BMW AG, Munich, Germany.
If there is a change in vehicle ownership, the data saved in the electronic service booklet can also be viewed by the new vehicle owner. A BMW Motorrad retailer or a specialist workshop can also view data that is stored in the electronic service booklet.

Objection
The vehicle owner can object to entries being made by the BMW Motorrad retailer or a specialist workshop in the electronic service booklet along with the corresponding storage of data in the vehicle and transfer of data to the vehicle manufacturer for the period of time that they are the vehicle owner. In this instance, no entry is made in the electronic service booklet of the vehicle.

BMW MOTORRAD MOBILITY SERVICES

As owner of a new BMW vehicle, 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

 Running-in check
500...1200 km

BMW MOTORRAD SERVICE

The BMW Motorrad 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 retailer 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 display is a service-due indicator that appears on the TFT display to remind 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:

MAINTENANCE SCHEDULE

	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		X[b]
5			X		X		X		X		X		
6			X		X		X		X		X		
7			X		X		X		X		X		
8				X			X			X			
9												X[c]	X[c]

1 BMW running-in check (including oil change)
2 BMW Motorrad Service, standard scope
3 Engine-oil change, with filter
4 Oil change in bevel gears rear
5 Check valve clearances
6 Replace all spark plugs
7 Replace air-filter element
8 Oil change in the telescopic forks
9 Change brake fluid, entire system

[a] annually or every 10000 km (whichever comes first)
[b] every 2 years or every 20000 km (whichever comes first)
[c] for the first time after one year, then every two years

MAINTENANCE CONFIRMATIONS

BMW Motorrad Service standard scope

The tasks included in the BMW_Motorrad Service standard scope are listed below. The actual scope of maintenance work applicable for your vehicle may vary.

–Performing vehicle test with BMW Motorrad diagnosis system
–Visual inspection of clutch system
–Visual inspection of the brake lines, brake hoses and connections
–Checking front brake pads and brake discs for wear
–Checking brake-fluid level, front wheel brake
–Checking rear brake pads and brake disc for wear
–Checking brake-fluid level, rear wheel brake
–Checking steering-head bearing
–Checking coolant level
–Check the side stand's ease of movement
–Checking tyre pressure and tread depth
–Check lighting and signalling system
–Function test, engine start suppression
–Final inspection and check for road safety
–Setting service-due date and countdown distance with BMW Motorrad diagnosis system
–Checking battery state of charge
–Confirming BMW Motorrad service in on-board literature

BMW pre-delivery check
carried out

on_____

Stamp, signature

BMW Running-in Check
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad service
carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Oil change, engine, with filter	☐	☐
Oil change in rear bevel gears	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

SERVICE CONFIRMATIONS

The table is intended as a record of maintenance and repair work, the installation of optional accessories and, if appropriate, technical campaign work.

Work performed	odometer reading	Date

Work performed	odometer reading	Date

DECLARATION OF CONFORMITY 269
CERTIFICATE FOR ELECTRONIC IMMOBILISER 274
CERTIFICATE FOR KEYLESS RIDE 277
CERTIFICATE FOR TYRE PRESSURE CONTROL (RDC) 281
CERTIFICATE FOR TFT INSTRUMENT CLUSTER 282

DECLARATION OF CONFORMITY

Simplified EU Declaration of Conformity under RED (2014/53/EU).

CE

Vehicular immobilizer system transceiver EWS4
Technical information
Frequency band: 134 kHz
Transponder: TMS37145 / TypeDST80, TMS3705 Transponder Base Station IC
Output Power: 50 dBµV/m

Manufacturer
BECOM Electronics GmbH
Technikerstraße 1, A-7442 Hochstraß, Austria

Hereby, BECOM Electronics GmbH declares that the vehicular immobilizer system transceiver EWS4 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Keyless Ride HUF5750
Technical information
Frequency band: 434,42 MHz
Transmission Power: 10 mW

Manufacturer
Huf Hülsbeck & Fürst GmbH & Co. KG
Steeger Str. 17, 42551 Velbert, Germany

Hereby, Huf Hülsbeck & Fürst GmbH & Co. KG declares that the radio equipment type HUF5750 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Keyless Ride HUF8465
Technical information
Frequency band: 134,45 kHz
Output Power: 42 dBµV/m

Manufacturer
Huf Hülsbeck & Fürst GmbH & Co. KG
Steeger Str. 17, 42551 Velbert, Germany

Hereby, Huf Hülsbeck & Fürst GmbH & Co. KG declares that the radio equipment type HUF8465 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Anti-theft alarm (DWA) TXBMWMR
Technical information
Frequency band: 433.05 MHz - 434.79 MHz
Output power: 10 mW e.r.p.

Manufacturer
Meta System S.p.A.
Via Galimberti 5, 42124 Reggio Emilia, Italy

Hereby, Meta System S.p.A. declares that the radio equipment type TXBMWMR is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Tyre pressure control (RDC) BC5A4
Technical information
Frequency band: 433.895 - 433.945 MHz
Output Power: <10 mW e.r.p.

Manufacturer
Schrader Electronics Ltd.
Technology Park, N. Ireland
BT41 1QS Antrim, United Kingdom

Hereby, Schrader Electronics Ltd. declares that the radio equipment type BC5A4 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Wireless charging device WCA Motorrad-Ladestaufach
Technical information
Frequency band: 110 kHz - 115 kHz
Output power: < 6 W

Manufacturer
Bury Sp. z o.o.
ul. Wojska Polskiego 4, 39-300 Mielec, Poland

Hereby, Bury Sp. z o.o. declares that the radio equipment type WCA Motorrad-Ladestaufach is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

TFT instrument cluster ICC6.5in
Technical information
BT operating frq. Range: 2402 MHz - 2480 MHz
BT version: 4.2 (no BTLE)
BT output power: < 4 dBm
WLAN operating frq. Range: 2412 MHz – 2462 MHz
WLAN standards: IEEE 802.11 b/g/n
WLAN output power: < 20 dBm

Manufacturer
Robert Bosch Car Multimedia GmbH
Robert Bosch Str. 200, 31139 Hildesheim, Germany

Hereby, Robert Bosch Car Multimedia GmbH declares that the radio equipment type ICC6.5in is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

TFT instrument cluster ICC10in
Technical information
The ICC10in can operate in one of two operating modes:
1. Normal mode, with Bluetooth and WLAN on, and
2. Radio off mode (only available during vehicle manufacturing).
BT operating frq. Range: 2402 MHz - 2480 MHz
BT version: 4.2 (no BTLE)
BT output power: < +4 dBm (internal antenna)
WLAN operating frq. Range: 2402 MHz - 2472 MHz
WLAN standards: IEEE 802.11 b/g/n
WLAN output power: <+14 dBm (internal antenna)

Manufacturer
Robert Bosch GmbH
Robert-Bosch-Platz 1, 70839 Gerlingen, Germany

Hereby, Robert Bosch GmbH declares that the radio equipment type ICC10in is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

bmw-motorrad.com/certification

Intelligent emergency call TPM E-CALL EU
Technical information
Antenna internal:
Frequency band: 880 MHz - 915 MHz
Radiated Power [TRP]: < 22 dBm
Not acessable by user:
Frequency band: 1710 MHz - 1785 MHz
Radiated Power [TRP]: < 26 dBm
Frequency band: 1920 MHz - 1980 MHz
Radiated Power [TRP]: < 22 dBm
Frequency band: 880 MHz - 915 MHz
Radiated Power [TRP]: < 23 dBm

Manufacturer
Robert Bosch Car Multimedia GmbH
Robert Bosch Str. 200, 31139 Hildesheim, Germany

Hereby, Robert Bosch Car Multimedia GmbH declares that the radio equipment type TPM E-CALL EU is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Mid Range Radar MRRe14FCR
Technical information
Frequenzy band: 76 - 77 GHz
Nominal radiated power: e.i.r.p. (peak detector): 32 dBm
Nominal radiated power:e.i.r.p. (RMS detector): 27 dBm

Manufacturer
Robert Bosch GmbH
Robert-Bosch-Platz 1, 70839 Gerlingen, Germany

Hereby, Robert Bosch GmbH declares that the radio equipment type MRRe14FCR is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
bmw-motorrad.com/certification

Audio system MCR001
Manufacturer
ALPS ALPINE CO., LTD.

Hereby, ALPS ALPINE CO., LTD. declares that the radio equipment type MCR001 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following in-

ternet address:
bmw-motorrad.com/certification

Declaration of Conformity

Radio equipment electronic immobiliser (EWS4)

For all countries without EU

Technical information
Frequency Band: 134 kHz
(Transponder: TMS37145 / Type DST80, TMS3705 Transponder Base Station IC)
Output Power: 50 dBµV/m

Manufacturer and Address
Manufacturer:
BECOM Electronics GmbH
Address: Technikerstraße 1, A-7442 Hochstraß

Argentina

RAMATEL
H-25246

Australia/New Zealand

R-NZ

Brunei

AITI
TA No: DTA-007061

United Arab Emirates

TRA
REGISTERED No:
ER89926/20

DEALER No:
DA96133I20

Philippiens

NTC
Type Approved
No.: ESD-RCE-2023298

South Africa

TA-2020/6131
ICASA
APPROVED

India

ETA-SD-20200905860

Belarus

TP BY

Indonesia

72790/SDPPI/2021
13349

Dilarang melakukan perubahan Spesifikasi yang dapat Menimbulkan gangguan fisik dan/atau elektromagnetik terhadap lingkungan sekitarnya

Paraquay

CONATEL

NR: 2020-11-I-0834

Singapore

Complies with
IMDA Standards
N3504-20

Taiwan

低功　電波　射性電機管　辦法
第十二條　經型式認證合格之低功率射頻電 機，非經許可，公司、商號或使用者均不得擅 自變更頻率、加大功率或變更原設計之特性及 功能。第十四條　低功率射頻電機之使用不 得影響飛航安全及干擾合法通信；經發現有干 擾現象時，應立即停用，並改善至無干擾時方 得繼續使用。 前項合法通信，指依電信法規定作業之無線電 通信。

Malaysia

MCMC

RFCL/47A/0920/S(20-3358)

Israel

מספר אישור אלחוטי של משרד התקשורת הוא 51-74908
אסור להחליף את האנטנה המקורית של המכשיר ולא
לעשות בו כל שינוי טכני אחר

United States (USA)

Contains FCC ID:
ODE-MREWS5012
FCC § 15.19 Labelling requirements
This device complies with part 15 of the FCC Rules and Industry Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

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

FCC § 15.21 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Requirements

To comply with FCC RF exposure compliance requirements, the device must be installed to provide a separation distance of at least 20 cm from all persons.

Serbia

P1620118300

Canada

Contains IC:
10430A-MREWS5012
This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause 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.

Vietnam

A1109091120AF04A3

Certifications

BMW Keyless Ride ID Device

USA, Canada:

Product name: BMW Keyless Ride ID
Device FCC ID: YGOHUF5750
IC: 4008C-HUF5750

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Argentina:

CNC COMISIÓN NACIONAL DE COMUNICACIONES

H-17115

Declaration Of Conformity

We declare under our responsibility that the product

BMW Keyless Ride ID Device (Model: HUF5750)

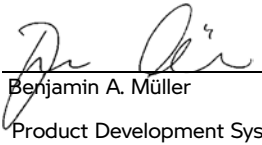
camplies with the appropriate essential requirements of the article 3 of the R&TIE and the other relevant provisions, when used for its intended purpose. Applied Standards:

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 with 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

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.

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.

FCC ID: MRXBC5A4
IC: 2546A-BC5A4

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.

Declaration of Conformity

Radio equipment TFT instrument cluster

For all Countries without EU

Technical information
BT operating frq. Range:
2402 – 2480 MHz
BT version: 4.2 (no BTLE)
BT output power: < 4 dBm
WLAN operating frq. Range:
2412 – 2462 MHz
WLAN standards:
IEEE 802.11 b/g/n
WLAN output power: < 20 dBm

Manufacturer and Address
Manufacturer:
Robert Bosch Car Multimedia GmbH
Address: Robert Bosch Str. 200, 31139 Hildesheim, Germany

Turkey
Robert Bosch Car Multimedia GmbH, ICC6.5in tipi telsiz sisteminin 2014/53/EU nolu yönetmeliğe uygun olduğunu beyan eder. AB Uygunluk Beyanı'nın tam metni, aşağıdaki internet adresinden görülebilir: http://cert.bosch-carmultimedia.net

Argentina

RAMATEL

C-24711

Brazil
Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canada
This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Korea

적합성평가에 관한 고시
R-CMM-RBR-ICC65IN
상호 : Robert Bosch Car Multimedia GmbH모델명 : ICC6.5in
기자재명칭 : 특정소출력 무선기기
(무선데이터통신시스템용 무선기기)
제조자 및 제조국가 : Robert Bosch Car Multimedia GmbH / 포르투갈
제조년월 : 제조년월로 표기
이 기기는 업무용 환경에서 사용할 목적으로적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

Mexico

La operación de este equipo está sujeta a las siguientes dos condiciones:
(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Taiwan, Republic of

根據 NCC 低功率電波輻射性電機管理辦法 規定: 第十二條
經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，
指依電信法規定作業之無線電通信。
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Thailand

เครื่องโทรคมนาคมและอุปกรณ์ นี้
มีความสอดคล้องตามข้อกำหนดของ กทช.
(This telecommunication equipments is in compliance with NTC requirements)

United States (USA)

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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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	E5 E10 Premium unleaded (maximum 15 % ethanol, E15) 95 ROZ/RON 90 AKI
Alternative fuel grade	E5 E10 Regular unleaded (power- and consumption-related restrictions) (maximum 15 % ethanol, E15) 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 18 l
Reserve fuel	approx. 4 l
Tyre pressures	
Tyre pressure, front	2.5 bar, with cold tyre; one-up and two-up riding
Tyre pressure, rear	2.9 bar, with cold tyre; one-up and two-up riding

For further information on all aspects of your vehicle, visit: **bmw-motorrad.com**

Order No.: 01 40 7 106 511
03.2021, 5th edition, 01