BMW
MOTORRAD

RIDER'S MANUAL

R 18 Transcontinental

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 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 vehicle, please go to Chapter 2. All maintenance and servicing work on the vehicle 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.
ACC	Active Cruise Control (distance control).
ASC	Automatic Stability Control.
DWA	Anti-theft alarm.
EWS	Electronic immobiliser.
RDC	Tyre pressure monitoring.

EQUIPMENT

When you ordered your BMW Motorrad, you chose various items of custom equipment. This rider's manual describes optional equipment (OE) and selected optional accessories (OA) provided by BMW. 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 rider's manual 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 are guide values. 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 vehicle may differ from the information supplied in the rider's manual. At the time of production of the motorcycle, the rider's manual is the most up-to-date source. Owing to updates subsequent to the date of publication, differences between the printed rider's manual and the online version are possible.
Up-to-date information is available at **bmw-motorrad.com/service**.

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 General Operating Permits 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 registered keeper. There are also other ways to use data obtained from the vehicle to trace the rider or vehicle owner, for example using the ConnectedDrive 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
–Authorised BMW Motorrad Retailers
–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.

8 GENERAL INSTRUCTIONS

The registered keeper can also request an authorised BMW Motorrad Retailer or a specialist workshop to read out the data that is stored in the vehicle for a charge.
The vehicle data is read out using the legally prescribed 12 V 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 speed, wheel circumferential velocity, deceleration
– Environmental factors, 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 func-

tions. 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 itself. 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 an authorised BMW Motorrad Retailer or a specialist workshop. The legally stipulated 12 V 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.
Fault and event memories in the vehicle can be reset during servicing or repair work by an authorised BMW Motorrad Retailer or a 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.
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 devices

Depending on the equipment, mobile 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 device can then be output via the multimedia system. At the same time, specific information is transferred to the mobile 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 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 transceiver unit or using personally integrated mobile devices, for example smartphones. Online functions can be accessed through 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, manufacturer's website. 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

–with intelligent emergency call OE

Principle

The intelligent emergency call 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 operation of the intelligent emergency call and its functions, see the section entitled Operation (➠ 91).

Legal basis

Processing of personal data in conjunction with the intelligent emergency call 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 intelligent emergency call 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 satisfies the European directives for the protection of personal data.
The intelligent emergency call processes personal data only with the agreement of the registered keeper.
The intelligent emergency call 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 registered keeper.

SIM card

The intelligent emergency call operates via mobile communications 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 service provider to link the vehicle identification number 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, the system forwards the same information to the designated emergency call centre as is forwarded to the public emergency call centre by the legal emergency call eCall.

In addition, the intelligent emergency call 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.

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.

Regional restriction
A precondition for the operability of the intelligent emergency call function is that the national-market version has to include support for the region where the vehicle is currently in use.
More information about regional restrictions:
support.bmw-motorrad.com

BLUETOOTH®

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...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.
– shielding by metal objects or bodies.

CONNECTIVITY FUNCTIONS

Connectivity functions include media, telephony and navigation. Connectivity functions can be used when the instrument cluster is connected to a mobile device and a helmet (➠ 75). For more information

on the Connectivity functions go to:
bmw-motorrad.com/connectivity

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

BMW Motorrad Connected app

The BMW Motorrad Connected app enables the user to call up usage data and vehicle status information. For some functions such as navigation, for example, the app has to be installed on the mobile device and paired to the instrument cluster. The app is used to start route guidance and adjust the navigation.

On some mobile devices, e.g. those with the iOS operating system, the BMW Motorrad Connected app has to be opened prior to use.

GENERAL VIEWS

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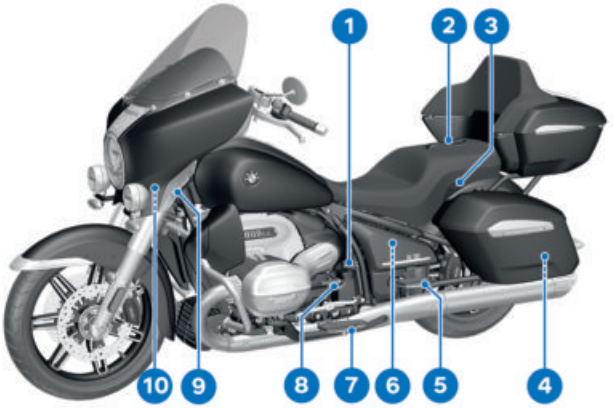
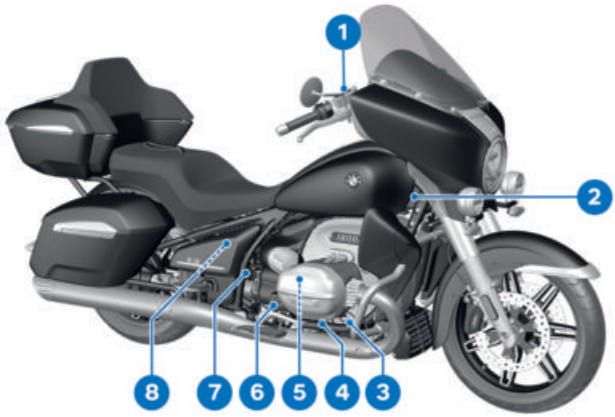
GENERAL VIEW, LEFT SIDE



1 Power socket (➠ 210)
2 Retaining strap
3 Passenger seat heating (➠ 115)
4 Toolkit (in the case) (➠ 181)
5 Passenger footboard
6 Diagnostic socket (behind the side trim panel) (➠ 207)
7 Rider's footboards
8 Reverser (➠ 112)
9 Slipstream deflector (➠ 116)
10 Type plate

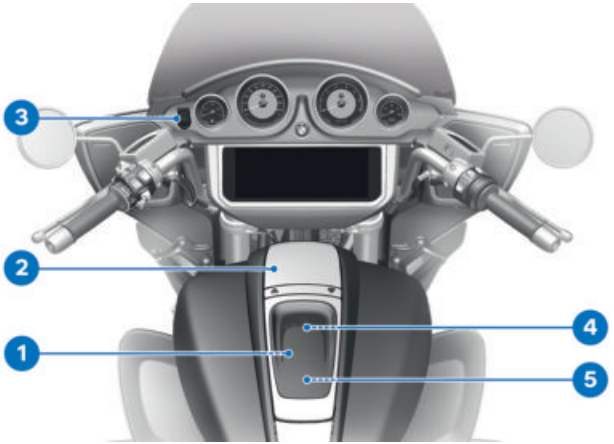
GENERAL VIEW, RIGHT SIDE



1 Brake-fluid reservoir, front (➠ 188)
2 Vehicle Identification Number
3 Engine oil level indicator (➠ 183)
4 Remote ground terminal (➠ 198)
5 Oil filler opening (under the cylinder head cover) (➠ 184)
6 Brake-fluid reservoir, rear (➠ 189)
7 Remote positive terminal (➠ 198)
8 Fuses (behind the side trim panel) (➠ 205)

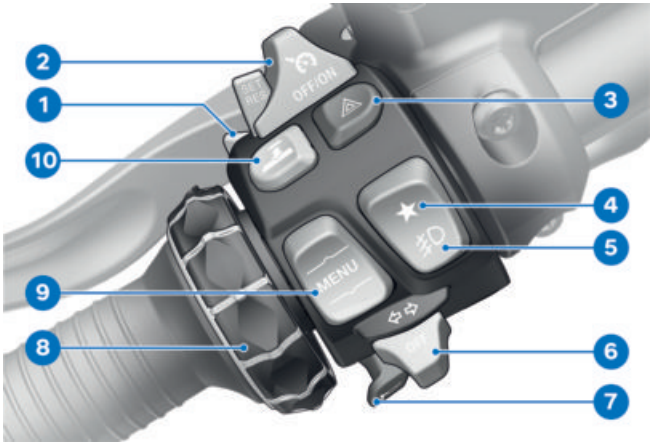
20 GENERAL VIEWS

OVERALL VIEW OF COCKPIT



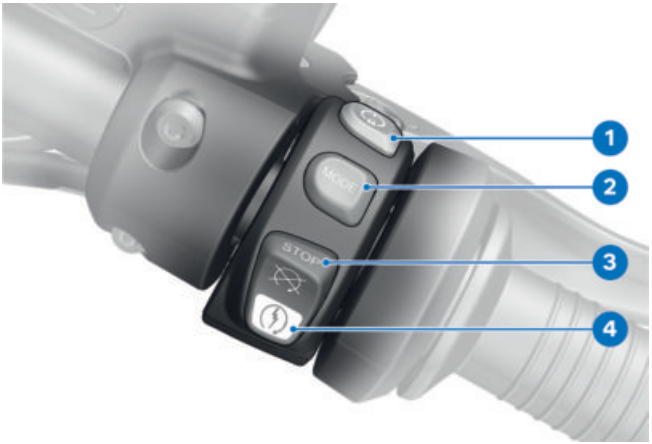
1 USB charging interface (in storage compartment) (➠ 118)
2 Fuel filler neck (➠ 155)
3 Power socket (➠ 210)
4 Payload table (on inside of the storage compartment flap)
5 Tyre pressures table (on inside of the storage compartment flap)

MULTIFUNCTION SWITCH, LEFT



1 High-beam headlight and headlight flasher (➠ 94)
2 Cruise control (➠ 102)
3 Hazard warning lights (➠ 96)
4 Favourites buttons (➠ 71)
5 Auxiliary headlights (➠ 95)
6 Turn indicators (➠ 96)
7 Horn
8 Multi-Controller (➠ 70)
9 MENU rocker button (➠ 71)
10 Distance control (Active Cruise Control ACC) (➠ 105)

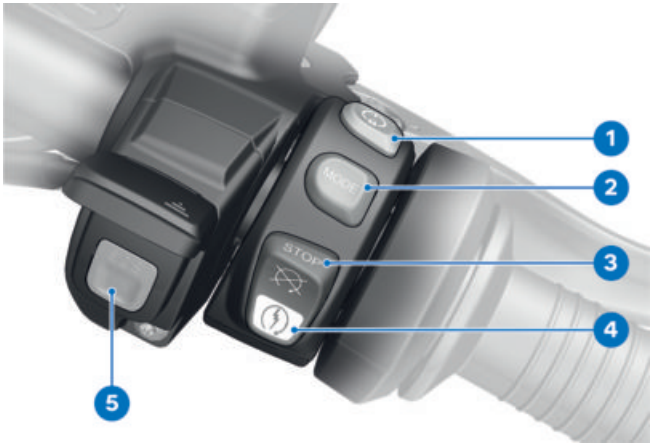
MULTIFUNCTION SWITCH, RIGHT



1 Ignition (➠ 87)
2 Riding mode (➠ 101)
3 Emergency-off switch (kill switch) (➠ 90)
4 Starter button (➠ 149)
Reverser (➠ 113)

MULTIFUNCTION SWITCH, RIGHT

–with intelligent emergency call[OE]



1 Ignition (➠ 87)
2 Riding mode (➠ 101)
3 Emergency-off switch (kill switch) (➠ 90)
4 Starter button (➠ 149)
Reverser (➠ 113)
5 SOS button
Intelligent emergency call (➠ 91)

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INSTRUMENT CLUSTER

1 Fuel gauge
2 Speedometer
3 Rev. counter
4 Power reserve indicator
(➠ 34)
5 Instrument cluster
(➠ 30)

STATUS INDICATORS

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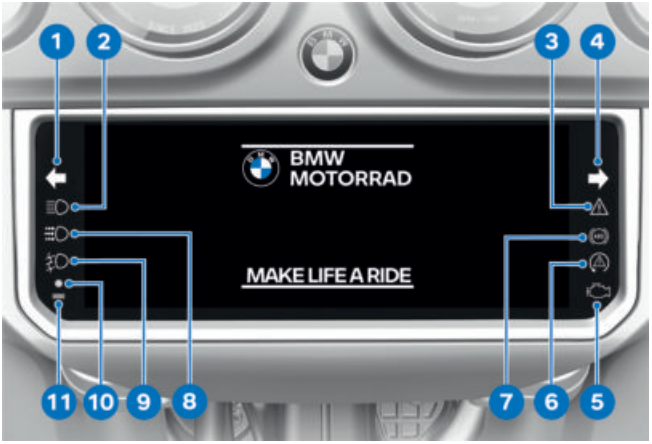
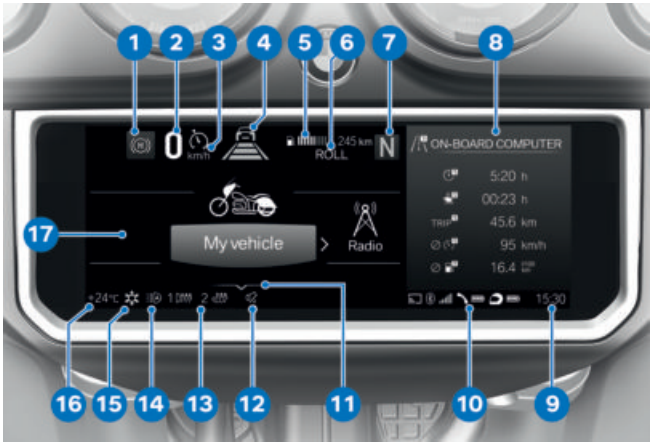
INDICATOR AND WARNING LIGHTS



1 Turn indicators, left (➠ 96)
2 High-beam headlight (➠ 94)
3 General warning light (➠ 34)
4 Turn indicators, right (➠ 96)
5 Warning light, drive malfunction (➠ 50)
6 ASC (➠ 59)
7 ABS (➠ 58)
8 Automatic daytime riding light (➠ 95)
9 Auxiliary headlights (➠ 95)
10 Indicator light DWA (➠ 98) Keyless Ride (➠ 86)
11 Photosensor (for adapting the brightness of the instrument lighting)

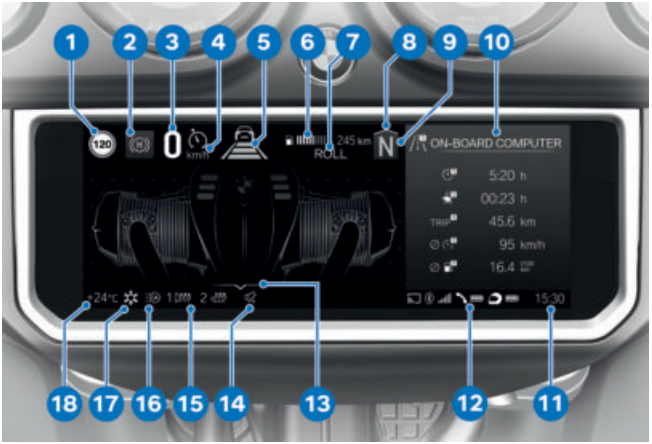
MENU VIEW



1 Hill Start Control (➠ 111)
2 Speedometer
3 Cruise control (➠ 102)
4 Distance control (Active Cruise Control ACC) (➠ 108)
5 Rider info. status line (➠ 73)
6 Riding mode (➠ 101)
7 Gear indicator
8 Splitscreen (➠ 77)
9 Clock (➠ 74)
10 Connection status (➠ 76)
11 Operating pointer
12 Muting (➠ 74)
13 Heating (➠ 113)
14 Automatic daytime riding light (➠ 95)
15 Outside temperature warning (➠ 44)
16 Ambient temperature
17 Menu section

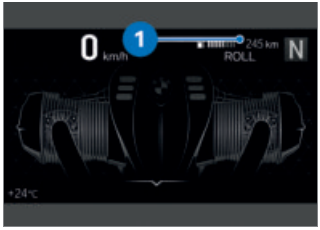
PURE RIDE VIEW

START SCREEN



1 Speed Limit Info (➠ 81)
2 Hill Start Control (➠ 111)
3 Speedometer
4 Cruise control (➠ 102)
5 Distance control (Active Cruise Control ACC) (➠ 108)
6 Rider info. status line (➠ 73)
7 Riding mode (➠ 101)
8 Recommendation to upshift (➠ 31)
9 Gear indicator
10 Splitscreen (➠ 77)
11 Clock (➠ 74)
12 Connection status (➠ 76)
13 Operating pointer
14 Muting (➠ 74)
15 Heating (➠ 113)
16 Automatic daytime riding light (➠ 95)
17 Outside temperature warning (➠ 44)
18 Ambient temperature

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.

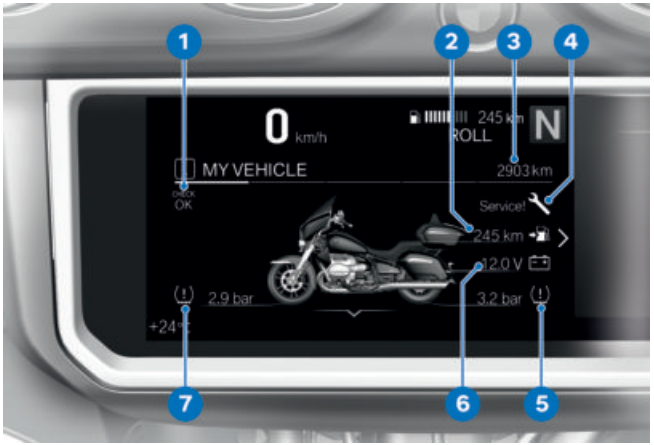
- When the vehicle is propped on its side stand the slight angle of inclination means that the sensor cannot register the fuel level correctly. This is the reason why the range is recalculated only when the side stand is in the retracted position.
- The range is shown together with a warning once the 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 Pure Ride view **1** or in status line **2** indicates the best time to upshift economically.

MY VEHICLE VIEW

START SCREEN



1 Check Control display Mode of presentation (➠ 34)
2 Range (➠ 31)
3 Odometer
4 Service display (➠ 65)
5 Tyre pressure, rear (➠ 52)
6 On-board voltage (➠ 200)
7 Tyre pressure, front (➠ 52)

On-board computer and trip computer

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

Service requirements

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

POWER RESERVE INDICATOR

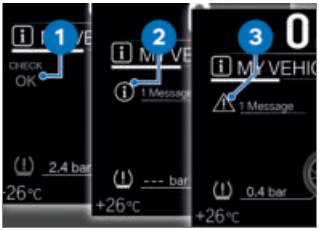
The power reserve indicator shows the percentage of total drive power that remains in reserve to be called up when needed.
The value depends on current speed, rate of acceleration and road gradient. The power reserve diminishes as more and more engine power is requested by rider or rider assistance systems, such as cruise control. The power reserve indicator helps the rider estimate acceleration capability or proceed with gear selection to the best possible effect, for example when riding on mountain roads.

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 instrument cluster. Depending on how urgent the warning is, the general warning light will either light up or flash yellow or red.

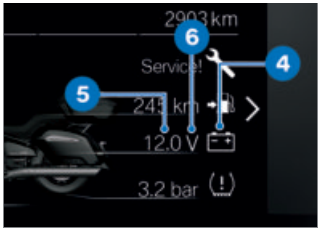
The status of the 'General' warning light matches the most urgent warning.
The possible warnings are listed on the next pages.



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



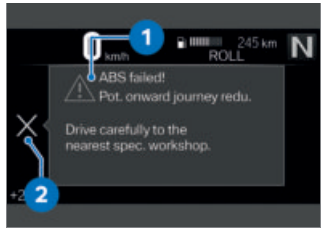
Values display

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 **5** with units **6**, texts can also be displayed.

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 are displayed instead of a numerical value.

To some extent, individual values can be processed only after the vehicle has covered a certain distance or has reached a certain speed. Dashes are displayed as placeholders for as long as a measured value cannot be displayed because the preconditions for measurement have still to be met. 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 symbol **2** is actively displayed, it can be acknowledged by tilting the Multi-Controller to the left.

– Check Control messages are attached dynamically to the pages as additional tabs in the My vehicle menu. The message can be called up again as long as the fault persists.

Warnings, overview

Indicator and warning lights	Display text	Meaning
	is displayed.	Outside temperature warning (➠ 44)
lights up yellow.	Remote key not in range.	Radio-operated key out of range (➠ 44)
lights up yellow.	Keyless Ride failure	Keyless Ride failed (➠ 45)
lights up yellow.	Remote key battery weak.	Replacing battery of radio-operated key (➠ 45)
	Vehicle voltage low.	Voltage of the vehicle electrical system too low (➠ 45)
lights up yellow.	Vehicle voltage critical!	Voltage of the vehicle electrical system critical (➠ 46)
flashes yellow.	Battery voltage critical!	Charging voltage critical (➠ 46)
lights up yellow. flashes yellow.	The faulty bulb is displayed. The faulty bulb is displayed.	Bulb faulty (➠ 47)
lights up yellow.	Light control failure!	Light control failed (➠ 48)

Indicator and warning lights	Display text	Meaning
	Alarm system batt. capacity weak.	Anti-theft alarm battery weak (➠ 48)
lights up yellow.	Alarm system battery empty.	Anti-theft alarm battery flat (➠ 49)
lights up yellow.	Alarm system failure	DWA failed (➠ 49)
lights up yellow.	Engine temp. high!	Engine temperature high (➠ 49)
lights up red.	Engine overheating!	Engine overheated (➠ 50)
shows.	Engine!	Drive malfunction (➠ 50)
flashes red. flashes.	Serious fault in the engine control!	Serious drive malfunction (➠ 50)
lights up yellow.	Fault in the engine control.	Engine in emergency-operation mode (➠ 51)
flashes red.	Serious fault in the engine control!	Serious fault in engine control (➠ 51)
lights up yellow. shows.	No communication with engine control.	Engine control failed (➠ 52)

Indicator and warning lights	Display text	Meaning
lights up yellow.	is displayed in yellow. Tyre pressure does not match setpoint	Tyre pressure close to limit of permitted tolerance (➠ 53)
flashes red.	is displayed in red. Tyre pressure does not match setpoint Tyre press. control. Loss of pressure.	Tyre pressure outside permitted tolerance (➠ 54)
	"---"	Transmission fault (➠ 55)
lights up yellow.	RDC sensor battery weak.	Battery for tyre pressure sensor weak (➠ 55)
lights up yellow.	"---"	Sensor faulty or system fault (➠ 56)
lights up yellow.	Tyre pressure check failure!	Tyre pressure monitoring (RDC) failed (➠ 56)
	Fall sensor faulty.	Malfunction, drop sensor (➠ 56)
	Cannot start engine.	Motorcycle dropped (➠ 56)

Indicator and warning lights	Display text	Meaning
lights up yellow.	Emergency call system restricted.	Emergency call function restricted (➠ 57)
lights up yellow.	Emergency call system error.	Emergency call function failed (➠ 57)
lights up yellow.	Side stand monitoring faulty.	Malfunction, side stand monitor (➠ 57)
flashes regularly.		ABS self-diagnosis not completed (➠ 58)
lights up yellow. shows.	Limited ABS availability!	ABS fault (➠ 58)
lights up yellow. shows.	ABS failure!	ABS failed (➠ 58)
lights up yellow.	ABS indicator light faulty!	ABS indicator and warning light failed (➠ 59)
quick-flashes.		ASC intervention (➠ 59)
slow-flashes.		ASC self-diagnosis not completed (➠ 59)

Indicator and warning lights	Display text	Meaning
lights up.	Off! Traction control deactivated.	ASC switched off (➠ 59)
lights up yellow. shows.	Traction control limited!	ASC restricted (➠ 60)
lights up yellow. lights up.	Traction control failure!	ASC fault (➠ 60)
lights up yellow.	Spring strut adjustment faulty!	Automatic load compensation failed (➠ 61)
	shows green.	Hill Start Control active (➠ 61)
	flashes yellow. HSC not available. Side stand extended.	Hill Start Control automatically deactivated (➠ 61)
	is displayed. HSC not available. Engine not running.	Hill Start Control cannot be activated (➠ 61)
lights up yellow.	Brake temp. high!	The temperature of the brakes is too high (➠ 62)

Indicator and warning lights	Display text	Meaning
lights up yellow.	Brake temp. critical!	Temperature of brake critical (➠ 62)
lights up yellow.	Cruise control has no function.	Cruise control failed (➠ 63)
lights up yellow.	ACC temporarily failed.	Distance control (Active Cruise Control ACC) temporarily failed (➠ 63)
lights up yellow.	Distance control failed.	Distance control (Active Cruise Control ACC) failed (➠ 63)
	Audio system too hot: Level 3	Temperature of audio system too high (➠ 64)
	Audio system voltage high!	Voltage of audio system too high (➠ 64)
lights up yellow.	Tank reserve level reached.	Fuel down to reserve (➠ 64)
flashes green. flashes green.		Hazard warning lights system is switched on (➠ 65)
	is displayed in white. Service due!	Service due (➠ 65)

Indicator and warning lights	Display text	Meaning
lights up yellow.	is displayed in yellow. `Service overdue!`	Service-due date has passed (➠ 65)

Ambient temperature

The ambient temperature is displayed in the status line of the instrument cluster.

When the vehicle is at a standstill, the heat of the electrical machine can falsify the ambient-temperature reading. If the heat of the electrical machine 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 limit value of 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 instrument cluster.

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 forming even when temperature is above approx. 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 out of range

lights up yellow.

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

Possible cause:

Communication between radio-operated key and propulsion-unit electronics is disrupted.

- Check the battery in the radio-operated key.
- Replace the battery of the radio-operated key. (➠ 88)
- Use the spare key to continue your journey.

- Battery of the radio-operated key is empty or loss of the radio-operated key. (➠ 88)
- Remain calm if the Check Control dialogue appears on the display while you are riding. You can continue your journey, 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 motor. Proceed as directly as possible to an authorised workshop, preferably an authorised BMW Motorrad retailer.

» Motor start with Keyless Ride can no longer be initiated.

» DWA can no longer be activated.

Replacing battery of radio-operated key

lights up yellow.

`Remote key battery weak. Function limited. Change battery.`

Possible cause:

- The integral battery in the radio-operated key has lost a significant proportion of its original capacity. There is no assurance of how long the radio-operated key can remain operational.
- Replace the battery of the radio-operated key. (➠ 88)

Voltage of the vehicle electrical system too low

`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.

`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. 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.

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

WARNING

Failure of the vehicle systems

Risk of accident

- Do not continue your journey.

Battery is not being charged. The on-board electronics will drain the battery.

Possible cause:
Alternator malfunction, battery faulty or fuse has blown.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Bulb 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!`

`Daytime riding light faulty!`

`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.`

flashes yellow.

–with adaptive head light[OE]

The faulty bulb is displayed:

`Active headlight faulty.`◁

WARNING

Vehicle overlooked in traffic due to failure of the lights on the vehicle
Safety risk
- Always replace a faulty bulb at the earliest possible opportunity. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Possible cause:

One or more bulbs faulty.

- Identify faulty bulb or bulbs by visual check.
- Have LED light sources replaced as complete units; consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

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.

The vehicle lighting has partially or completely failed.

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 is displayed 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.

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

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

lights up yellow.

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

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

Possible cause:

The DWA battery is discharged. It is not possible to trigger an alarm after disconnecting the vehicle battery. All other functions of the DWA are functional.

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

DWA failed
–with anti-theft alarm (DWA) OE

lights up yellow.

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.

Engine temperature high

lights up yellow.

Engine temp. high! Continue riding with restriction to allow cooling.

ATTENTION

Riding with overheated engine
Engine damage

- Compliance with the information set out below is essential.

Possible cause:

The temperature sensor has detected a high temperature in the motor.

- If possible, ride in the part-load range to cool down the motor.
- If the motor temperature is frequently too high, have the fault rectified as soon as pos-

sible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Engine overheated

lights up red.

`Engine overheating! Stop when it is safe to do so and switch off the engine.`

ATTENTION

Riding with overheated engine

Engine damage

- Compliance with the information set out below is essential.

Possible cause:

Engine is overheated.

- Carefully bring the vehicle to a stop, switch off the engine and wait until the engine has cooled down.
- If engine overheating is a frequent occurrence, have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Drive malfunction

shows.

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

Possible cause:

The motor control unit has diagnosed a fault that affects pollutant emissions and/or reduces power.

- 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 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 electronic control unit has diagnosed a fault. In exceptional cases, the engine stops and refuses to start. Otherwise, the engine runs in emergency operating mode.
- You can continue to ride, but bear in mind that the usual engine performance might not be available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

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 that can lead to serious consequential 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.

Engine control failed

lights up yellow.

shows.

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

Possible cause:

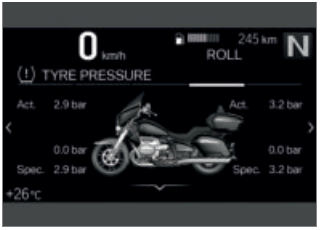
Communication with the engine control unit has failed.

- You can continue to ride. 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 showing 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-pressure readings in the instrument cluster are temperature-compensated and are always referenced 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" (➠ 174).

Tyre pressure close to limit of 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 tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details":

» Temperature compensation (➠ 174)

» Pressure adaptation (➠ 174)

» Find the correct tyre pressures in the following places:

–Back cover of the rider's manual

–Instrument cluster in the `TYRE PRESSURE` view

–Tyre pressures table

Tyre pressure outside 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 tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details":

» Temperature compensation (➠ 174)
» Pressure adaptation (➠ 174)
» Find the correct tyre pressures in the following places:

–Back cover of the rider's manual
–Instrument cluster in the `TYRE PRESSURE` view
–Tyre pressures table

- 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 (➠ 174).

	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.)	

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

Possible cause:

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

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

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 is displayed briefly only after the Pre-Ride-Check completes.

Possible cause:

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

- Consult 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:

Vehicle is fitted with wheels not equipped with RDC sensors.

- Retrofit a set of wheels equipped with RDC sensors.

Possible cause:

One or both RDC sensors have failed or a system fault has occurred.

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

Tyre pressure monitoring (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.

Malfunction, drop sensor

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

Possible cause:

The drop sensor is not available.

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

Motorcycle dropped

Cannot start engine. Stand motorcycle upright. Switch ignition on/off. Start the engine.

Possible cause:

The fall sensor has detected a fall and has cut out the motor.

- Hold the vehicle upright and check it for damage.
- Switch the ignition off and then on again or switch the

kill switch on and then off again.

Emergency call function restricted

–with intelligent emergency call OE

lights up yellow.

Emergency call system restricted. If this occurs again, have the vehicle checked by a specialist workshop.

Possible cause:

The emergency call cannot be made automatically or cannot be made via BMW.

- Observe the information on operating the intelligent emergency call from page (➠ 91) onwards.
- Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

Emergency call function failed

–with intelligent emergency call OE

lights up yellow.

Emergency call system error. Make an appointment at a specialist workshop.

Possible cause:

The control unit of the emergency call system has diagnosed a fault. The emergency call function has failed.

- Bear in mind that an emergency call cannot be made.
- Consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

Malfunction, side stand monitor

lights up yellow.

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

Possible cause:

Side-stand switch or wiring damaged
The motor will switch off when speed drops below the minimum threshold. You cannot resume your journey.
min. 5 km/h

- 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 vehicle has to reach a defined minimum speed with the engine running for the wheel sensors to be checked: min. 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.

shows.

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

Possible cause:

The ABS control unit has detected a fault. The ABS function is available, subject to restrictions.

- You can continue to ride. Bear in mind the more detailed information on certain situations that can lead to an ABS fault message (➠ 164).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

ABS failed

lights up yellow.

shows.

`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 certain situations that can lead to an ABS fault message (➠ 164).

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

ABS indicator and warning light failed

lights up yellow.

ABS indicator light faulty! Onward journey possible. Check by specialist workshop required.

Possible cause:

The ABS indicator and warning light has failed.

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

ASC intervention

quick-flashes.

Possible cause:

The ASC 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 intervention lasts. This affords the rider visual feedback on control intervention even after the critical situation has been dealt with.

- You can continue to ride. Ride carefully and think well ahead.

ASC self-diagnosis not completed

slow-flashes.

Possible cause:

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

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

ASC switched off

lights up.

Off!

Traction control deactivated.

Possible cause:

The rider has switched off the ASC system.

- Switch the ASC function on and off. (➠ 100)

ASC restricted

lights up yellow.

shows.

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

Possible cause:

The motor control unit has detected a ASC 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 function is restricted.
- You can continue to ride. Bear in mind the more detailed information on situations that can lead to a ASC fault (➠ 166).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

ASC fault

lights up yellow.

lights up.

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

Possible cause:

The motor control unit has detected a ASC fault.

- You can continue to ride. Bear in mind that the ASC function and other dynamic control system functions are not available. Bear in mind the more detailed information on situations that can lead to a ASC fault (➠ 166).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Automatic load compensation failed

lights up yellow.

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

Possible cause:

The control unit of the automatic load compensation function has detected a fault. Adjustment of the springs or disruption of the ride compensation function might be the cause. A lack of ride comfort might be perceptible, particularly if the road is in poor condition.

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

Hill Start Control active

–with Hill Start Control OE

shows green.

Possible cause:

Hill Start Control (➠ 175) has been activated by the rider.

- Switch off Hill Start Control.
- Operate Hill Start Control. (➠ 111)

Hill Start Control automatically deactivated

–with Hill Start Control OE

flashes yellow. `HSC not available. Engine not running.`

`HSC not available. Side stand extended.`

Possible cause:

Hill Start Control cannot be activated.

- Retract the side stand.

» Hill Start Control is operational only with the side stand retracted.

- Start the engine.

» Hill Start Control is operational only while the engine is running.

Hill Start Control cannot be activated

–with Hill Start Control OE

is displayed.

`HSC not available. Engine not running.`

Possible cause:

Hill Start Control cannot be activated.

- Retract the side stand.

» Hill Start Control is operational only with the side stand retracted.

- Start the engine.

» Hill Start Control is operational only while the engine is running.

The temperature of the brakes is too high

lights up yellow.

`Brake temp. high! Continue riding carefully to cool down. Avoid dynamic riding.`

DANGER

Riding with overheated brakes

Risk of accident due to failure of brakes

- Adapt your riding style accordingly.
- Avoid frequent braking by using the engine brake.

WARNING

Failure to observe service intervals

Risk of accident

- Observe the valid service intervals for brakes.

Possible cause:

The temperature of the brake is in a critical range.

- By adopting a moderate riding style you can continue to ride until the warning light goes out.

Temperature of brake critical

lights up yellow.

`Brake temp. critical! Continue riding carefully to cool down. Avoid dynamic riding.`

DANGER

Riding with overheated brakes

Risk of accident due to failure of brakes

- Adapt your riding style accordingly.
- Avoid frequent braking by using the engine brake.

WARNING

Failure to observe service intervals
Risk of accident
- Observe the valid service intervals for brakes.

Possible cause:

The temperature of the brake is in a critical range.
- By adopting a moderate riding style you can continue to ride until the warning light goes out.

Cruise control failed

lights up yellow.

`Cruise control has no function. Onward journey possible. Inspection at workshop required.`

Possible cause:

The control unit has detected a fault.
- Bear in mind that the cruise control function is not available.
- You can continue to ride. Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Distance control (Active Cruise Control ACC) temporarily failed
–with Active Cruise Control OE

lights up yellow.

`ACC temporarily failed. Check front radar sensor for damage.`

Possible cause:

The function of the front radar sensor is impaired.
- Bear in mind that the distance control function (ACC) is temporarily not available. Adaptive cruise control is still available.
- You can continue to ride. Check the front radar sensor. Remove dirt or objects obstructing the radar sensor.
- Comply with the care and cleaning instructions (➠ 216).

Distance control (Active Cruise Control ACC) failed
–with Active Cruise Control OE

lights up yellow.

`Distance control failed. Have it checked by a specialist workshop.`

Possible cause:

The control unit has detected a fault.

- Bear in mind that the distance control function (ACC) is not available. Adaptive cruise control is still available.
- You can continue to ride. Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Temperature of audio system too high

Audio system too hot: Level 3 Audio system has been switched off.

The temperature of the control unit for the audio system is too high. The audio system is powered down.

Possible cause:

The audio system control unit has diagnosed an excessively high temperature.

- Protect the motorcycle from the direct rays of the sun.
- If the fault persists, have it rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Voltage of audio system too high

Audio system voltage high! Audio system has been muted.

Possible cause:

The audio system control unit has diagnosed an excessively high voltage.

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

Fuel down to reserve

lights up yellow.

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.

Fuel reserve
approx. 4 l

- Refuel. (➠ 155)

Hazard warning lights system is switched on

flashes green.

flashes green.

Possible cause:

The driver has switched on the hazard warning lights system.

- Hazard warning lights. (➠ 96)

Service display

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 either distance covered or time expired.

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

» The vehicle remains operationally reliable and roadworthy.

» The vehicle retains its value.

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 an authorised BMW Motorrad retailer.

» The vehicle remains operationally reliable and roadworthy.

» The vehicle retains its value.

INSTRUMENT CLUSTER

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WARNINGS

WARNING

Operation of a smartphone while riding the vehicle

Risk of accident

- Always comply with the road traffic regulations in force where you are riding.
- Do not use a smartphone while riding. This applies with the exception of applications without operation, such as hands-free telephony.

WARNING

Distraction from the road and loss of control

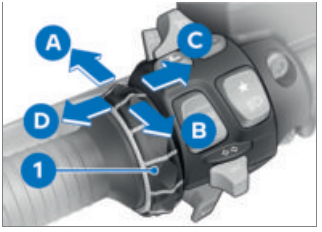
Operating the integrated information system and communication devices while driving results in a risk of accident

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

When performing functions that can only be operated when the vehicle is stationary, an operational feedback message appears in the instrument cluster.

CONTROLS

Multi-Controller



1 Multi-Controller

A Move the cursor up in lists
Increase volume

B Move the cursor down in lists
Reducing volume

C Activate function in accordance with feedback
Confirm selection/setting
Scrolling through menu screens

D Activate function in accordance with feedback or go back
Return to Menu view after making settings
Change up one level in the hierarchy
Scrolling through menu screens

MENU rocker button

Short-press the top section of MENU rocker button 1:
–In Menu view: change up one level.
–In Pure Ride view: change the display for rider info. status line.

Long-press the top section of MENU rocker button 1:
–In Menu view: open the Pure Ride view.

Short-press the bottom section of MENU rocker button 1:
–Change down a level.
–Confirm selection/setting.

Long-press the bottom section of MENU rocker button 1:
–Change back to the last menu after a previous menu change effected by long-pressing the top section of the rocker button.

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

Favourites buttons

- Navigate to `Settings`, `System settings`, `Favourite button`, `Star`.
- Select the desired function or `Not assigned`.

» The function you have selected will be called up whenever you press button **1**.

MY VEHICLE

On-board computer and trip computer

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

Call up the on-board computer

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

» Alternatively, the on-board computer can also be shown on the splitscreen.

- Switch on splitscreen view and select display. (➠ 77)

Reset the on-board computer

- Call up the on-board computer. (➠ 72)
- Press down the MENU rocker button.
- Select Reset all values or Reset individual values and confirm.

The following values can be reset:

Journey

Break

Current

Consump.

Speed

Call up the trip computer

- Call up the on-board computer. (➠ 72)
- Scroll to the right until the TRIP COMPUTER menu screen is displayed.

» Alternatively, the trip computer can also be shown on the splitscreen.

- Switch on splitscreen view and select display. (➠ 77)

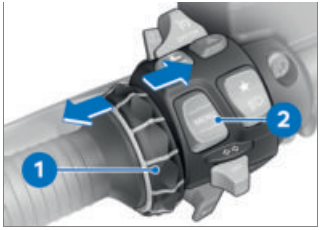
Reset the trip computer

- Call up the trip computer. (➠ 72)
- Press down the MENU rocker button.
- Select Autom. reset or Reset all values and confirm.

» If Autom. reset is selected, the trip computer is automatically reset when a minimum of six hours have passed and the date has changed since the ignition was switched off.

OPERATION

Calling up menu



- Display the Pure Ride view. (➠ 73)
- Short-press the bottom section of button **2**.

The following menus can be called up:

–My vehicle
–Radio
–Navigation
–Media
–Telephone
–Settings

- 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**.

Display Pure Ride view

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

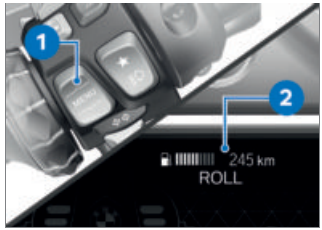
Changing display for rider info. status line

- Display the Pure Ride view. (➠ 73)

» The instrument cluster shows all the information necessary for riding on public roads from the on-board computer (e.g. Current distance 1) and the trip computer (e.g. Current distance 2). The information can be displayed in the top status line.

» Information from the tyre pressure monitoring can also be displayed.

- Select the content of the top status line. (➠ 74)



- 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◁

Fuel tank level

Range

Select the content of the top status line

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

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

SETTINGS

Adjusting volume

- Connect the rider's and passenger's helmets. (➠ 77)
- Increase volume: Turn Multi-Controller up.
- Reduce volume: Turn Multi-Controller down.
- Mute: Turn Multi-Controller all the way down.

» Muting pauses media playback.

Changing system settings

- Switch on the ignition. (➠ 87)
- Navigate to Settings, System settings.

» You can change the following system settings here:

–Date and time
–Units
–Language

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.

» If the display of the instrument cluster is faulty, consult the troubleshooting chart in the section entitled “Technical data”. (➠ 223)

Reset all settings

- Call up the Settings menu.
- Select Reset all and confirm.

The settings in the following menus are reset to their default factory settings:

–Vehicle settings
–System settings
–Connections
–Display
–Information

» The pairing of the vehicle to the current BMW Motorrad Connected-Ride account is reset.

BLUETOOTH

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 the iOS operating system, the BMW Motorrad Connected app has to be opened prior to use.

During the pairing process, the instrument cluster 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
–Other Bluetooth-compatible devices that are not to be paired (e.g. mobile phones and navigation systems) must be OFF.

Please consult the operating instructions for your communication system.

Pairing

- Navigate to `Settings`, `Connections`.

» 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

- Perform pairing. (➠ 76)
- 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.

If the fuel tank is between the mobile device and the instrument cluster, the Bluetooth connection may be restricted. BMW Motorrad recommends keeping the mobile device above the fuel tank (e.g. carried in a jacket pocket).

- 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". (➠ 222)

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

» Telephone data (➠ 82)

» If the phonebook is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (➠ 224)

» If the Bluetooth connection does not work as expected, consult the troubleshooting chart in the section entitled "Technical data". (➠ 223)

Connect rider's and passenger's helmet

- Perform pairing. (➠ 76)
- 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". (➠ 222)

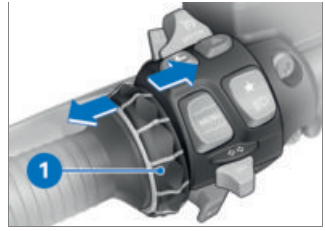
» If the Bluetooth connection does not work as expected, consult the troubleshooting chart in the section entitled "Technical data". (➠ 223)

Delete connections

- Navigate to `Settings`, `Connections`.
- Select `Delete connections`.
- To delete an individual connection, select the connection and confirm.
- To delete all connections, select `Delete all connections` and confirm.

SPLITSCREEN

Switching on splitscreen view and selecting display



- Display the Pure Ride view. (➠ 73)
- Repeatedly short-push Multi-Controller **1** to the right or left until the display you want appears.
- Alternatively: Long push Multi-Controller **1** to the right to return to the display last selected in splitscreen view.

The following displays can be selected:

–`ON-BOARD COMPUTER`
–`TRIP COMPUTER`
–`Navigation`

–MEDIA

MEDIA or RADIO can be displayed, depending on the selected audio source.

» The display you select is retained in memory, even after the ignition is switched off.

Switching off splitscreen

- Display the Pure Ride view. (➠ 73)
- Repeatedly push Multi-Controller **1** to the left until the splitscreen view is switched off.
- Alternatively: Long-push Multi-Controller **1** to the left.

NAVIGATION

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 the iOS operating system, the BMW Motorrad Connected app has to be opened prior to use.

WiFi connection

A Wi-Fi connection is used to transmit the map view from a mobile phone to the instrument cluster. Wi-Fi has to be activated on the mobile phone in order for the full scope of this functionality to be used. For more information on activating WiFi see the operating instructions for the mobile phone.

Depending on the specifics of the local situation, for example in the presence of numerous wifi networks, temporary restrictions and loss of connection are possible.

Show the map view

- Connect a mobile device. (➠ 76)
- Call up the BMW Motorrad Connected app.
- Call up the Navigation menu.

If the NAVIGATION view is selected in the split-screen and the NAVIGATION menu is called up, the split-screen view is automatically exited and the navigation display is shown on the whole instrument cluster.

Enter the destination address

- Connect a mobile device. (➠ 76)
- Call up the BMW Motorrad Connected app and start the route guidance.
- Call up the Navigation menu.

» Active route guidance is displayed.

– If WiFi is not activated on the mobile device, route guidance is displayed as arrow navigation.

» If active route guidance is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (➠ 224)

Select destination from recent destinations

- Navigate to Navigation, Recent destinations.
- Select and confirm destination.
- Select Start route guidance.

Select destination from favourites

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

Enter special destinations

- Special destinations, such as points of interest, can be displayed on the map.
- Navigate to Navigation, POIs.

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.

Set route criteria

- Navigate to Navigation, Route criteria.

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.

View the route information

- Navigate to Navigation, Settings and select Route info.

You can choose between the following options:

–Dest.
–Waypoint

- Select the desired option.

» Countdown distance and time are displayed.

Edit route guidance

- Navigate to Navigation, New destination.

You can choose from the following destinations:

–Recent destinations
–Favourites
–POIs

- Select a destination from one of the three destination categories.
- Select Change route guidance in the destination entry.
- Select Add as waypoint to add the selected destination as a waypoint.
- Select Start guidance to overwrite the current destination.

End route guidance

- In menu Navigation, tilt the Multi-Controller to the left.
- Alternatively, in menu Active route guidance, select and confirm Option End route guidance.

Switching spoken instructions on or off

- Connect the rider's and passenger's helmets. (➠ 77)
- Navigation instructions can be read out. For this purpose, Spoken instruction must be switched on.
- Navigate to Navigation, Active route guidance.
- Switch Spoken instruction on or off.

Repeat last spoken instruction

- Navigate to Navigation, Active route guidance.
- Select Current instruction and confirm.

Switch Speed Limit Info on or off

Requirement

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

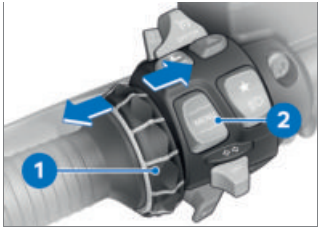
- `Speed Limit Info` shows the maximum speed permitted at the time, if this information is made available by the publisher of the map material in the navigation system.
- Navigate to `Settings`, `Display`.
- Switch `Speed Limit Info` on or off.

MEDIA

Precondition

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

Controlling music playback



- Call up the `Media` menu.

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

- Adjust volume. (➠ 74)
- To select the next track in the player: Short-tilt Multi-Controller **1** to the right.
- To select the preceding track or start of current track: Short-tilt Multi-Controller **1** to the left.
- Call up context menu: Press bottom section of button **2**.

Depending on the mobile end device, the scope of Connectivity functions might 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`.

In the `Audio settings` submenu you can change the following settings:

–Switch `Shuffle` on or off.

–Select `Repeat`: `Off`, `One` (current track) or `All`.

–Select `Output device`.

–Select `Sound profile`.

–Set up Equaliser.

» If the playlist is not shown in the instrument cluster, consult the troubleshooting chart in the section entitled “Technical data”. (➠ 224)

TELEPHONE

Precondition

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

Telephone calls

- Call up the Telephone menu.

When a call is received, a pop-up window opens.

- 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 (➠ 75) 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

SOFTWARE VERSION

- Navigate to Settings, Information, Software version.

LICENCE INFORMATION

- Navigate to Settings, Information, Licences.

OPERATION

05

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IGNITION

Radio-operated key

The indicator 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.

The motorcycle is supplied with one radio-operated key and one spare key. If a key is lost or mislaid, consult the information on the electronic immobiliser (EWS) (➠ 90).

The vehicle cannot be started while the radio-operated key is out of range. If the radio-operated key remains out of range the ignition is switched off after about 90 seconds to protect the battery.

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

Locking the steering lock

Requirement

The handlebars are turned towards 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.

Unlocking steering lock

Requirement

Steering lock is engaged. Radio-operated key is within range.

- Press button **1**.

» The steering lock disengages with an audible click.

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

- There are **two** ways of activating the ignition.

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

» Side lights and all function circuits are switched on.
» Daytime riding light is switched on.
» Pre-Ride-Check and self-diagnoses are performed. (➠ 150)

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

» The steering lock disengages.
» Side lights and all function circuits switched on.
» Daytime riding light is switched on.
» Pre-Ride-Check and self-diagnoses are performed. (➠ 150)

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

- There are **two** ways of deactivating the ignition.

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

» Light is switched off.
» Handlebars (steering lock) are not locked.

Version 2:
- Turn the handlebars all the way to the left.
- Press and hold down button **1**.

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

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

- If a key is lost or mislaid, consult the notes on the electronic immobiliser (EWS) (➠ 90).
- If you happen to lose or mislay the radio-operated key while on a journey, you can start the vehicle with the spare key.
- If the battery of the radio-operated key is empty, the vehicle can be started by simply inserting the folded radio-operated key into the ring aerial under the seat.
- Remove the seat. (➠ 122)
- Insert the spare key or folded-in radio-operated key with the empty battery **1** into ring aerial **2**.

The spare key or the closed radio-operated key with the empty battery **must be inserted into** the opening in the ring aerial.

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

» Pre-Ride-Check is performed.
– Key has been recognised.
– Engine can be started.
- Install the seat. (➠ 123)
- Start the engine. (➠ 149)

Replacing battery of radio-operated key
Requirement

The radio-operated key does not react because the battery is weak.

`Remote key battery weak. Function limited. 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
CR 2032

- Install battery cover **2**.

» Indicator light in the instrument cluster flashes.

» The radio-operated key is again ready for use.

Electronic immobiliser (EWS)

The on-board electronics access the data saved in the ignition key via a ring aerial. The engine control unit will not permit the engine to be started unless the key is identified as "authorised".

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. The warning with the key symbol appears in the multifunction display.
Always keep other vehicle keys separate from the vehicle key used to start the engine.

If you lose a 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 electrical machine cannot be started by a barred key, but a key that has been barred can subsequently be reactivated.
You can obtain spare keys only through an authorised BMW Motorrad retailer. The 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.

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)

You cannot start the engine unless the kill switch is in the run position.

INTELLIGENT EMERGENCY CALL

–with intelligent emergency call OE

Emergency call via BMW

Press the SOS button in an emergency only.
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.
During an emergency call, the location of the vehicle, the choice of language and, if applicable, accident-related data are transmitted to BMW (➠ 11). Under unfavourable conditions, data transfer can be restricted or delayed. This can lead to delayed processing of the emergency call.
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.

Language for emergency call

Each vehicle has an assigned language; this language depends on the market to which the vehicle was originally destined. The BMW Call Center answers in this language.

The language for the emergency call can be changed only by the authorised BMW Motorrad retailer.
The language assigned to the vehicle varies from the selectable language the driver can choose as the display language in the multifunction display.

Manual emergency call
Requirement
An emergency 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 that time, it is possible to cancel the emergency call.
- To cancel an emergency call: Press SOS button **2** and hold it down for two seconds or switch the ignition off.
- 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 light fall or a crash was detected.

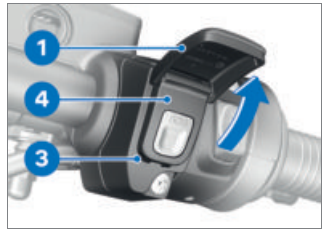
» An acoustic signal is sounded.

» The time until transmission of the emergency call is displayed. During that time, it is possible to cancel the emergency call.

- To cancel an emergency call: Press the SOS button and hold it down for two seconds, or switch the ignition off.
- 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.

LIGHTING

Side light

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

The side lights place a strain on the battery. Switch on the ignition for a limited time only.

Low-beam headlight

- Switch on the ignition. (➠ 87)
- Start the engine. (➠ 149)

- Alternatively: With the ignition switched on, pull switch **1**.

» The low-beam headlight is switched on.

High-beam headlight and headlight flasher

- Switch on the ignition. (➠ 87)

- 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. (➠ 87)

- 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. (➠ 87)

- 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

Requirement

The low-beam headlight is switched on.

The auxiliary headlights are approved as fog lights and can be used only in poor weather conditions. Always comply with the road traffic regulations in force in the country in which the vehicle is used.

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

Automatic daytime riding light

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.

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 riding light makes the vehicle more visible to oncoming traffic. This improves daytime visibility.

The changeover between daytime riding light and low-beam headlight including front side lights is automatic.

- Switch on the ignition. (➠ 87)
- Navigate to `Settings`, `Vehicle settings` and select `Lights`.
- Switch `Auto. daytime light` on or off.

is displayed.

» If the ambient brightness decreases below a certain value (e.g. in a tunnel) while the daytime riding light function is active, the low-beam headlight is automatically switched on. When sufficient ambient brightness is detected, the daytime riding light is switched back on.

lights up.

Hazard warning lights

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

- Switch on the ignition. (➠ 87)

- Press button **1** to switch on the hazard warning lights system.

» Ignition can be switched off.

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

Turn indicators

- Switch on the ignition. (➠ 87)
- Navigate to `Settings`, `Vehicle settings` and select `Lights`.

- Switch `Comfort turn indicator` on or off.

- Push button **1** to the left or right, as appropriate, to switch on the turn indicators.

» If the comfort turn indicators function is switched on, the turn indicators are cancelled automatically when the speed-dependent distance is covered.

- Alternatively: Press button **1** to cancel the turn indicators.

ANTI-THEFT ALARM (DWA)

–with anti-theft alarm (DWA) OE

Automatic activation

- Switch on the ignition. (➠ 87)
- Customise the anti-theft alarm settings. (➠ 99)
- Switch off the ignition. (➠ 87)

» If `Arm automatically` the DWA anti-theft alarm is activated, the alarm system is armed automatically when you switch the ignition off.

» Activation takes approximately 30 seconds to complete.

» Turn indicators flash twice.

» Confirmation tone sounds twice (if activated).

» Anti-theft alarm (DWA) is active.

Activation with radio-operated key

- Switch off the ignition. (➠ 87)

- Press button **1** on the radio-operated key once.

» Activation takes approximately 30 seconds to complete.

» Turn indicators flash twice.

» Confirmation tone sounds twice (if activated).

» Anti-theft alarm is active.

–with central locking system OE

- 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 activated).
» Anti-theft alarm is active.◁

Activating transport mode

- If the motorcycle is transported by train or trailer, strong movements can trigger an alarm. To deactivate the tilt sensor, press key **1** of the radio-operated key once again during the activation phase.
- Alternatively, the tilt sensor can be deactivated in the menu `Settings`, `Vehicle settings`, `Alarm system` (➠ 99).

» Turn indicators flash three times.
» Confirmation tone sounds three times (if activated).
» Tilt sensor is deactivated.

Alarm signal

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

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

An alarm lasts for approximately 30 seconds. While an alarm is in progress an alarm tone sounds and the turn indicators flash. The type of alarm tone can be adjusted in menu `Settings`, `Vehicle settings`, `Alarm system` (➠ 99).

You can cancel an alarm at any time by pressing button **1** on the radio-operated key; this does not deactivate the DWA.

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 alarm system LED in the instrument cluster then signals the reason for the alarm for one minute.

Light signals issued by the indicator light:

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

Deactivation

If the alarm function is deactivated by the radio-operated key and the ignition is not subsequently switched on, the alarm function is automatically reactivated after approx. 30 seconds if `Arm automatically` is switched on.

- Switch on the ignition. (➠ 87)

- Alternatively, press key **1** of the radio-operated key once.

» Turn indicators flash once.
» Confirmation tone sounds once (if activated).
» DWA is switched off.

Customise the anti-theft alarm settings

- Switch on the ignition. (➠ 87)
- Navigate to `Settings`, `Vehicle settings`, `Alarm system`.

» The following settings are available:

–Adapting Warning signal
–Switch Tilt sensor on or off
–Switch Arming tone on or off
–Switch Arm automatically on or off
» Possibilities for adjustment (➠ 100)

Possibilities for adjustment

Warning signal: Set the rising and falling or intermittent alarm tone.

Tilt sensor: Deactivate the tilt sensor to activate the transport mode. The inclination of the vehicle is no longer monitored in transport mode.

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.

AUTOMATIC STABILITY CONTROL (ASC)

Switching ASC function off and on

- Switch on the ignition. (➠ 87)
- Navigate to Settings, Assist and select ASC.
- Deactivate ASC to switch off Automatic Stability Control (ASC) temporarily until the next time the ignition is switched on.

shows.

- Activate ASC to switch on Automatic Stability Control (ASC). Alternatively: Switch ignition off and on again.

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

- For more information on Automatic Stability Control (ASC) see the section entitled "Engineering details" (➠ 166).

RIDING MODE

Using riding modes

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

– RAIN: Riding on rain-wet roads.
– ROLL: Riding on dry roads.
– ROCK: Dynamic riding on dry roads.

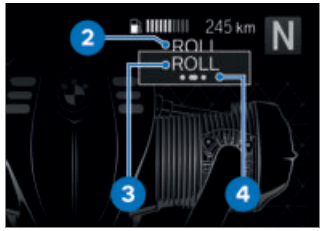
The optimum interplay of engine characteristic, ASC control and engine drag torque control is provided for each of these scenarios.

For more information on the riding modes, see the section entitled "Engineering details" (➠ 167).

Setting riding mode

- Switch on the ignition. (➠ 87)

- 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 is displayed.

» With the motorcycle at a standstill, the selected riding mode is activated after approximately two 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.

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

CRUISE CONTROL

Switching on cruise control

Requirement

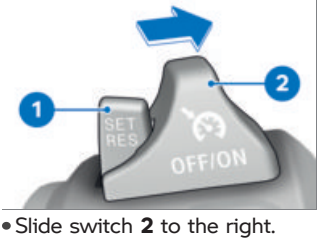
ASC is switched on and ABS is active.

WARNING

Use of cruise control in unsuitable road conditions

Risk of falling

- Do not use cruise control when road conditions are unsuitable, for example in snow, ice, heavy rain, off-road or on slippery surfaces.
- Do not use cruise control on very twisty stretches of road.



- Slide switch **2** to the right.

» Button **1** is enabled for operation.

Setting road speed

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

Cruise control can also actuate the brake.

Adjustment range for adaptive cruise control (gear-dependent)
30...180 km/h

shows.

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

Accelerating

Depending on the speed unit set in the instrument cluster, the speed is increased or reduced in km/h or mph.

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

» Speed is increased by approx. 1 km/h or 1 mph, as applicable, each time you push the button.

- Push button **1** forward and hold it in this position.

» Speed is increased in steps of 10 km/h or 5 mph, as applicable.

» The current speed is maintained and saved if button **1** is not pushed again.

Decelerating

Depending on the speed unit set in the instrument cluster, the speed is increased or reduced in km/h or mph.

- Short-push button **1** back.

» Speed is reduced by 1 km/h or 1 mph, as applicable, each time you push the button.

- Push button **1** back and hold it in this position.

» Speed is reduced in steps of 10 km/h or 5 mph, as applicable.

» The current speed is maintained and saved if button **1** is not pushed again.

Deactivating cruise control

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

Cruise control is deactivated if the clutch is pulled for longer than 1.5 seconds.

» A message appears on the display.

Automatic deactivation

Adaptive cruise control is deactivated automatically in the following situations:

– When engine speed drops below the minimum threshold (to prevent stalling).
– After several seconds when the vehicle is ridden at maximum engine speed.
– During ABS or ASC interventions
– If uncomfortable vehicle vibrations occur.
– If a system fault occurs.

If adaptive cruise control experiences automatic deactivation, a message to this effect is displayed.

Resuming former cruising speed

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

Opening the throttle overrides cruise control briefly, without deactivating it. When the throttle twistgrip is released, speed drops back to the setting saved beforehand. If you want to reduce speed further you have to deactivate cruise control, for example by applying the brakes.

shows.

Switching off cruise control

- Slide switch **2** to the left.

» The system is deactivated.

disappears.

» Button **1** is disabled.

Configure the character of cruise control

- Switch on the ignition. (➠ 87)
- Navigate to `Settings`, `Assist` and select `Cruise control`.

- Select ACC characteristics.
- Select the desired setting.

» The following settings for acceleration and deceleration are possible:

– Comfortable: Balanced acceleration and deceleration of the vehicle.
– Dynamic: More sharply pronounced acceleration and deceleration of the vehicle for a more dynamic style of riding.

DISTANCE CONTROL (ACTIVE CRUISE CONTROL ACC)

– with Active Cruise Control OE

Safety information

WARNING

ACC does not relieve the motorcyclist of their responsibility to ride safely
Risk of accident due to misjudgement by the system

- ACC is a rider assistance system and not a safety system. The responsibility for correctly gauging visibility conditions and the traffic situation and intervening accordingly resides with you.

WARNING

ACC cannot react to all objects and traffic situations
Risk of accident

- ACC reacts only to the vehicle travelling ahead of you. This means that for example pedestrians, animals and oncoming vehicles are not detected. Cyclists cannot be reliably detected.
- A vehicle cutting into your lane ahead of you cannot be used as a control-intervention object until after a plausibility check in the radar. Consequently, a late and sharp application of the brakes can occur or the brakes might not be applied.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

WARNING

ACC is not functional in certain situations

Risk of accident due to non-application of the brakes and prompt to assume control

- The radar requires a clear viewing panel for object detection to work well. Object detection is restricted in heavy rain, fog or snow and also if the radar sensors are dirty or obstructed.
- Object detection can be disrupted by environmental influences such as strong reflections and electromagnetic disturbances.
- If the vehicle is involved in an accident or experiences an impact with an object or is dropped, the installed position of the radar sensor has to be checked.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

WARNING

ACC cannot detect all objects and traffic situations or interpret them correctly

Risk of accident

- ACC might not be able to detect certain objects or complex traffic situations correctly, with the result that it does not issue a warning or slow the vehicle appropriately, or that it issues an incorrect warning and initiates inappropriate slowing of the vehicle. You have to apply the brakes yourself, for example when you come on the scene of an accident or approach a vehicle stopped at traffic lights or in congestion.
- Object detection can be restricted, for example in intersecting traffic, on twisting or hilly roads and when you ride offset from the vehicle ahead in your lane or if you weave from side to side in the lane.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

WARNING

ACC cannot compensate for excessive speed differences
Risk of accident
- ACC cannot perform emergency braking. Retardation and the rate at which retardation increases are limited.
- High speed differences, for example when you come up fast behind a truck or when another vehicle cuts into your lane ahead of you, cannot be compensated for by the system.
- When the adjustment range of ACC is exceeded, object detection might be delayed on account of the high speed. Consequently, increased rider caution is required in these circumstances.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

WARNING

ACC can lose sight of an object detected beforehand
Risk of accident
- When ACC incorrectly deselects a detected object, the motorcycle accelerates back up to the road speed set beforehand. This can be the case in bends, for example.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

WARNING

ACC cannot slow the vehicle sufficiently when the vehicle corners at high speed
Risk of accident
- The cornering regulator reduces road speed when distance control is active and the bank angle is excessive. If a vehicle is detected ahead, retardation of the vehicle is built up more slowly while the motorcycle is banked.
- Ride at a correspondingly lower speed.

ATTENTION

ACC might incorrectly detect certain objects and traffic situations

Risk of injury due to unexpected brake intervention

- ACC might issue an unjustified warning and brake without justification in reaction to certain objects and complex traffic situations. For example a narrowed traffic lane (roadworks) or objects in the air (e.g. a bouncing ball or a plastic bag) can lead to a warning being issued or the brakes being applied by ACC.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

When riding in other countries, always comply with the country-specific regulations on the operation of radar sensors. If the radar sensor does not have the licence required by a particular country's laws, the radar sensor has to be disconnected. It is best to consult an authorised BMW Motorrad retailer.

Toggling between cruise control and ACC

- Comply with the safety instructions (➠ 105).
- Switch on the ignition. (➠ 87)

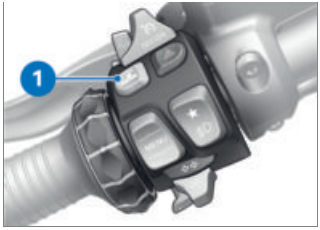
WARNING

Reduced assistance after changeover to cruise control

Risk of accident

- By contrast with ACC, cruise control does not react to traffic ahead. Instead, it matches the vehicle's road speed to the setting selected by the rider.
- Keep the traffic conditions under observation at all times and intervene actively whenever the situation requires.

- Navigate to `Settings`, `Assist`, select `Cruise control`.
- Activate or deactivate `ACC`.



- Alternatively, long-press button **1**.

» This toggles between cruise control and ACC.

- Bear in mind the information on automatic deactivation (➠ 104).
- For more information on distance control with Active Cruise Control (ACC) see the section entitled "Engineering details" (➠ 169).

Operating ACC

Requirement

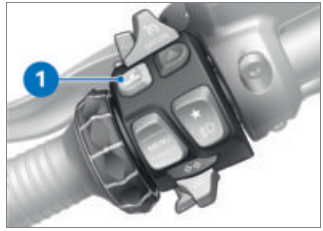
ACC is activated.

- Comply with the safety instructions (➠ 105).
- Switch on cruise control. (➠ 102)

is greyed.

- Set the road speed. (➠ 102)

At speeds above its adjustment range 30...160 km/h, the system regulates to the maximum speed of 160 km/h.



- To switch on: Short-press button **1**.

» ACC is switched on.

» The approach distance you set appears briefly on the display.

- To switch off: Toggle to cruise control or switch off cruise control.
- Bear in mind the information on automatic deactivation (➠ 104).
- For more information on distance control with Active Cruise Control (ACC) see the section entitled "Engineering details" (➠ 169).

Status indicators showing in the instrument cluster

When ACC is in operation, the following symbols can appear in the instrument cluster:

Indicator lights

» No object detected:

shows green.

» Object detected:

shows green.

» Rider overrides by twisting the throttle grip to open the throttle:

shows green.

Warning lights

» ACC switched off for system-related reason:

is displayed in red.

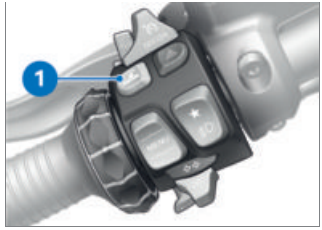
» A hazardous situation has been detected and cannot be averted.

flashes red.

If a warning light shows in the instrument cluster:

- Intervene actively to avert potential danger.

Setting approach distance



- Short-press button **1**.

» The approach distance you set appears briefly on the display.

WARNING

Selected approach distance is too short for the riding situation

Risk of accident

- Adapt your approach distance to suit traffic and weather conditions.
- Comply with the safety distance required by law.

- Repeatedly short-press button **1** until the approach distance you want is set.

» The following settings are available:

Short approach distance

Medium approach distance

Long approach distance

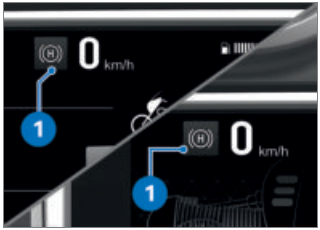
» When the ACC detects a vehicle travelling in front, a depiction of a car appears in the symbol shown here to alert the rider.
» The approach-distance setting is retained in memory, even after the ignition is switched off.

HILL START CONTROL (HSC)

–with Hill Start Control OE

Activating and deactivating Hill Start Control

- Switch on the ignition. (➠ 87)
- Navigate to `Settings`, `Assist` and activate or deactivate `Hill Start Control`.



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

Operating Hill Start Control Requirement

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

ATTENTION

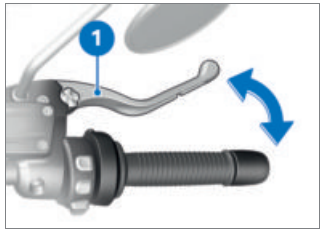
Non-availability of Hill Start Control

Risk of accident

- Apply the brakes manually to hold the vehicle.

Hill Start Control is purely a comfort system that facilitates hill starts and consequently, is not to be confused with a parking brake.

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



- 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.

On pullaway or when the reverser is activated, Hill Start Control is automatically deactivated.

disappears as soon as the brake is fully released.

» Hill Start Control is deactivated.
- See the "Engineering details" section for more information on Hill Start Control (➠ 175).

REVERSER

General information

The following prerequisites must have been met to be able to use the reverser:
–Motorcycle at standstill.
–Engine running.
–Brake applied.
–Transmission in idle.
–Side stand has been retracted.
–Clutch is not disengaged.

Reverse without passenger.
On uphill/downhill gradients the reverser cannot guarantee the vehicle is held, as would be the case if a gear were engaged.
The reverser cannot be used on gradients steeper than max. 12 %.

Activating reverser

- Turn selector lever **1** to the **R** position.
» Gear indicator **2** switches from N to R.
» You can use the reverser as soon as the "R" indicator stops flashing.

Using the reverser

- Release the brake.
- Press and hold starter button **1** to reverse.

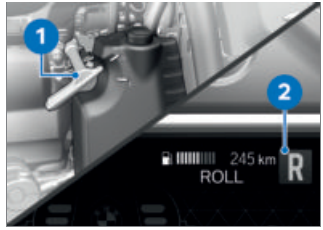
Automatic termination

Reversing is cancelled automatically:

–On excessive uphill/downhill gradients
–In the event of obstructions
–If the reversing motor has overheated
–If the side stand has been extended
–If the brake is operated

If reversing is cancelled, the "R" in the display flashes.

Deactivating reverser



- Turn selector lever **1** to the **F** position.

Depending on the gradient of the roadway, tensions can build up in the drivetrain. The selector lever might be difficult to move.

- To relieve strain in the drivetrain, apply the front brake and compress the front suspension by pushing forward on the handlebars.
- Turn selector lever **1** to the **F** position.

» Gear indicator **2** switches from R to N.

HEATING

Operating heated handlebar grips

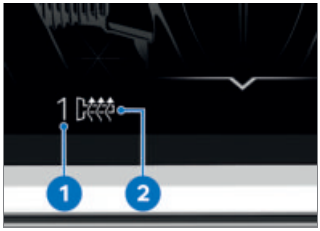
The heating in the heated handlebar grips can be activated only when the engine is running.

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. (➠ 149)
- Navigate to `Settings`, `Heating` and select `Grip heating`.

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

- Select the desired heating stage.



Selected heating stage **1** and heated-grip symbol **2** are displayed.

Operate the rider's seat heating

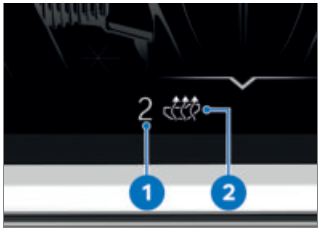
Seat heating can be activated only when the engine is running.

- Start the engine. (➠ 149)
- Navigate to `Settings`, `Heating` and select `Seat heating`.

The rider's seat has five-stage heating. Stage five is for heating the seat quickly: it is advisable to switch back to a lower

stage as soon as the seat is warm.

- Select the desired heating stage.

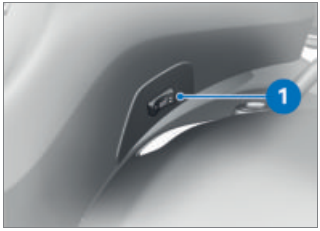


Selected heating stage **1** and seat-heating symbol **2** are displayed.

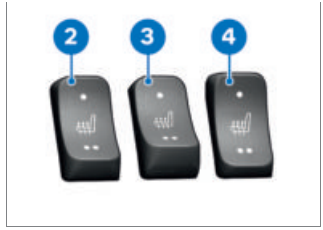
Operating passenger-seat heating

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

- Start the engine. (➠ 149)

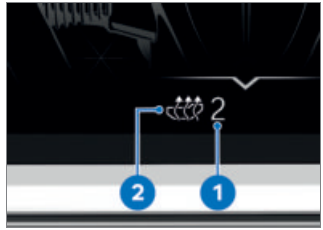


- Set switch **1** to the desired heating stage.



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

- **2** Switch centred: Heating off.
- **3** Switch pressed at one dot: low heating power.
- **4** Switch pressed at two dots: high heating power.



Selected heating stage **1** and seat-heating symbol **2** are displayed.

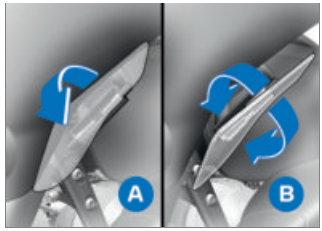
SLIPSTREAM DEFLECTOR

1 Slipstream deflector

WARNING

Adjusting the slipstream deflector while riding.
Risk of accident
- Adjust the slipstream deflector when the motorcycle is at a standstill.

Opening or closing the slipstream deflectors influences the extent to which cooling air from the slipstream is directed toward or away from the rider.



A Slipstream deflectors closed: High level of protection against wind and weather, highest level of riding comfort.

B Slipstream deflectors closed: Increased flow of air from slipstream directed toward the rider, increased cooling effect when outside temperatures are high.

When the slipstream deflectors are open and at high speeds, turbulence may occur in the area of the helmet, which has a negative effect on driving comfort.
BMW Motorrad recommends closing the slipstream deflectors before riding at high speeds.

STORAGE COMPARTMENT

Opening and closing storage compartment

ATTENTION

High temperatures in the storage compartments, particularly in summer

Damage to objects stowed away, particularly electronic devices, such as mobile phones

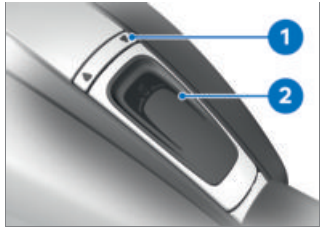
- In summer, do not place heat-sensitive items in the storage compartment.
- Ask the manufacturer about possible usage restrictions and comply with the information provided.

ATTENTION

Vibrations when vehicle is moving

Damage to mobile phones carried on the vehicle

- Make sure that the mobile phone carried on the vehicle is suitable for use on the vehicle. Ask the manufacturer about related usage restrictions and comply with the information provided.



- Open storage compartment flap **2** by pressing arrow button **1**.
- To close: Firmly press storage compartment lid **2** into the lock.

The storage compartment cannot be locked.

Ventilation

To ensure adequate circulation of air, a fan is switched on if the temperature in the storage compartment rises above 30 °C. The fan switches off again as soon as the temperature inside the storage compartment is less than 25 °C.

Charging smartphone

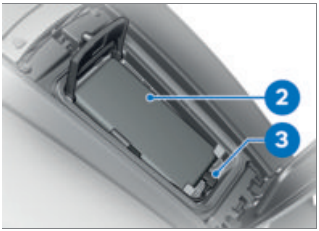
Requirement

Ignition on.

- Open the storage compartment.

- Flip holder **1** up.

» The holder remains in the raised position.



- Connect smartphone **2** to charging cable **3** any lay it, display up, in the storage compartment.

BMW Motorrad recommends using the BMW Motorrad USB cable for charging smartphones in the storage compartment. Commercially available charging cables may not have enough space in the storage compartment and may be damaged.

- Flip holder **1** down.
- Close the storage compartment.

» The smartphone is secured.

Notes on use

The storage compartment is suitable for smartphones up to max. 162 mm x 78 mm x 8.8 mm in size. For small mobile phones that might not be held securely by the holder, BMW Motorrad recommends using the BMW Motorrad smartphone pouch.

Charge current

This is a 5 V USB-C charging interface that provides a maximum charge current of 1.5 A (maximum charging power 7.5 W).

Automatic shutdown

The USB-C charging interface is shut down automatically under the following circumstances:

–If battery charge state is too low, to maintain the vehicle's start capability.
–If the maximum load capacity as stated in the technical data is exceeded.
–During the starting operation.

CENTRAL LOCKING SYSTEM

–with central locking system OE

Locking

- Switch off the ignition (➠ 87).

» Cases and topcase are locked automatically.

- Alternatively: With the ignition switched off, press the button **1** on the radio-operated key.

» Cases and topcase are locked.

Unlocking

- Switch on the ignition (➠ 87).

» Cases and topcase are unlocked automatically.

- Alternatively: With the ignition switched off, press the button **1**.

» Cases and topcase are unlocked.

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

Emergency unlocking

To manually open cases and topcase if it is no longer possible to unlock the central locking system:

- Open the case. (➠ 119)
- Open the topcase. (➠ 121)

CASES

Opening cases

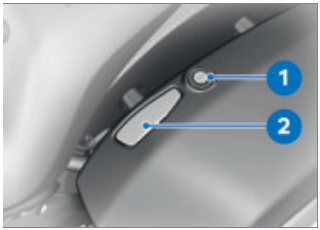
–with central locking system OE

- If necessary, unlock the central locking system.◁

- Turn the vehicle key in the case lock to the dot position and remove the key from the lock.

–with central locking system OE

- If applicable, first turn the vehicle key to the **LOCK** position and then turn it to the position corresponding to the dot.◁

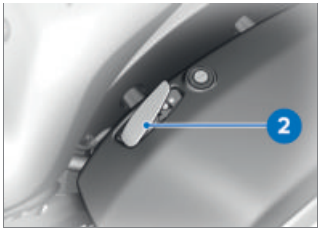


- Press lock barrel **1** down.

» Release lever **2** pops up.

- Pull release lever **2** all the way up and open the case lid.

Closing cases



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

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

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

Maximum payload and maximum speed

Note the maximum payload and the maximum permissible speed.

The values for the combination described here are as follows:

Maximum speed for riding with a loaded case
max. 160 km/h
Payload per case
max. 10 kg

TOPCASE

Opening topcase

–with central locking system OE

- If necessary, unlock the central locking system.◁

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

–with central locking system OE

- If applicable, first turn the vehicle key to the **LOCK** position and then turn it to the position corresponding to the dot.◁

- Press lock barrel **1** down.

» Release lever **2** pops up.

- Pull release lever **2** all the way up and open the lid of the topcase.

Closing topcase

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

The topcase can also be closed when the lock is in the **LOCK** position. Make sure that the vehicle key is not left inside the topcase.

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

Maximum payload and maximum speed

Note the maximum payload and the maximum permissible speed.
The values for the combination described here are as follows:

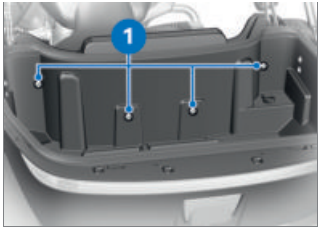
Maximum speed for riding with a loaded topcase
max. 160 km/h

Payload of topcase
max. 10 kg

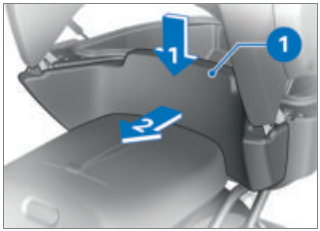
SEAT

Removing seat

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Open the topcase. (➠ 121)



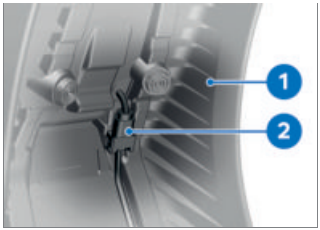
- Remove screws **1**, using the appropriate tool from the on-board toolkit.



- Work backrest **1** down to unhook it and remove.
- Close the topcase. (➠ 121)

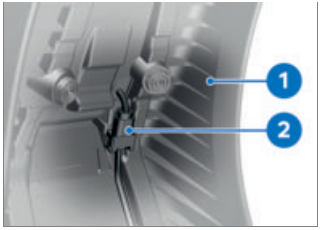
- Using the tool from the on-board toolkit, remove screw **1**.

- Ease seat **1** in the direction indicated by the arrow to remove, while carefully disengaging grab strap **2**.

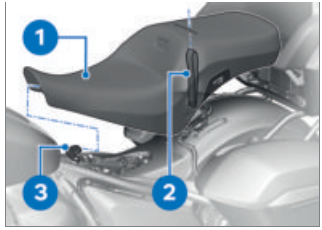


- Disconnect plug connection **2** and remove seat **1**.

Installing seat

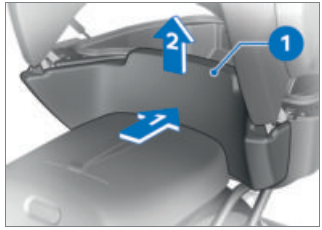


- Hold seat **1** in position and connect plug connection **2**.

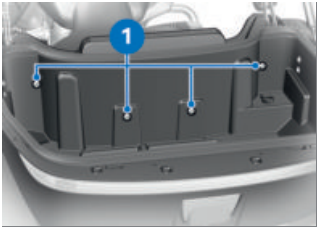


- Work grab strap **2** into seat **1**.
- Insert seat **1** into mount **3**.

- Using the tool from the onboard toolkit, install screw **1**.
- Open the topcase. (➠ 121)



- Hold backrest **1** in position and lift it up to engage the hooks.



- Install screws **1**, using the appropriate tool from the onboard toolkit.
- Close the topcase. (➠ 121)

AUDIO SYSTEM

06

RADIO 128
AUDIO SETTINGS 130
PLAYER 132
SATELLITE RADIO 132
HD RADIO RECEPTION 134
IN-HELMET AUDIO PLAYBACK 135

RADIO

Starting

- Switch on the ignition. (➠ 87)

The radio menu becomes available shortly after the ignition is switched on.

Switch the radio on and off

- Call up the Radio menu and switch Radio on or off.

» When the radio is switched off, Radio off appears in the bottom status line.

Selecting source

–without Canada export NV

- Call up the Source menu. Select Favourites, AM, FM or DAB (might not be available, depending on country).◁

–with Canada export NV

- Select the Source menu. Select Favourites, AM, FM or SiriusXM. For the AM and FM wavebands you have the option of selecting HD Radio (might not be available, depending on country).◁

Selecting station

–without Canada export NV

- Select the source. (➠ 128)
- Select the FM stations menu.

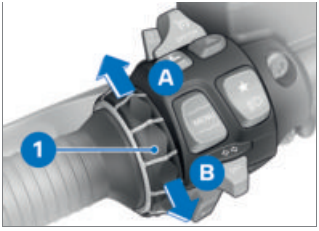
There is a channel menu for each selectable source.◁

–with Canada export NV

- Select the source. (➠ 128)
- Select the FM stations menu.

There is a channel menu for each selectable source.

For HD Radio stations, the subprograms can be selected via the channel list.◁



- Turn Multi-Controller **1** in direction **A** or **B** to browse through the stations.
- Push the Multi-Controller to the right to select the station you want.

Selecting frequency

–without Canada export NV

- Call up the Source menu and select AM or FM.
- In the AM options or FM options menu, go to Search selection and

select the Frequency setting.
- Switch to the player.◁

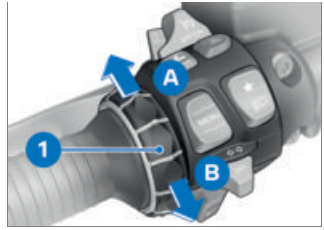
–with Canada export NV
- Call up the Source menu and select AM or FM.
- In the AM options or FM options menu, go to Search selection and select the Frequency setting.
- Switch to the player.

For HD Radio stations, the subprograms within a frequency range can be selected.◁

- Push Multi-Controller **1** to the left or right to select the frequency you want in the waveband.

Saving channel
- Select a station or frequency from the frequency band.
- Press the MENU rocker button downwards.
- Select Add to Favourites.

» The station selected beforehand appears in the favourites list.



- Turn Multi-Controller **1** in direction **A** or **B** to select the memory slot of your choice.

» The current assignment of this memory slot appears on the display.

» If a station has already been assigned to the memory slot you select, a message to this effect appears on the display. Your choices are as follows:
- Select Cancel if you do not want to save the station you selected.
- Select Save to overwrite the contents of the memory slot.

» The list of channels is reopened.

Favourites list

Selected stations or frequencies can be saved as favourites. Up to 20 favourites can be saved.

There are two ways of adding favourites to the list:

Variant 1

- Select the station. (➠ 128)
- Select `Add to Favourites`.

» The station selected beforehand appears in the favourites list.

- Push the Multi-Controller to the right.

» The station you selected has been saved as a favourite.

Variant 2

- Select the station. (➠ 128)
- Push the Multi-Controller to the right again.

» The favourites list opens.

- Push the Multi-Controller to the right again.

» The station you selected has been saved as a favourite.

» The view automatically returns to the stations list.

Delete the favourites list

Requirement

A favourites list with at least one entry exists.

- Select `Delete Favourites list` at the bottom of the favourites list.

» A dialogue opens.

- Confirm deletion.

» The favourites list is deleted.

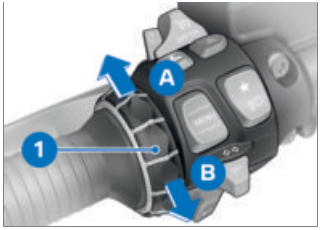
AUDIO SETTINGS

Speakers and Bluetooth

Audio playback is via the onboard speakers, a Bluetooth-paired output device, or the speakers in the helmet. If the Bluetooth function is not available in a particular country, only audio playback via the speakers is available.

When a BMW Motorrad communication system with Bluetooth standard 2.0 or higher is paired, the Multi-Controller can be used to control volume (➠ 135). If devices that do not support Bluetooth standard 2.0 or higher are paired, the Multi-Controller cannot be used to control volume.

Adjusting volume



- Turn Multi-Controller **1** in direction **A** to increase volume.
- Turn Multi-Controller **1** in direction **B** to reduce volume.

Select the output device

- Navigate to `Media`, `Audio settings` and select `Output device`.

» The following settings are available:

–`Loudspeakers`: Speakers selected for audio playback.
–`Helmet`: Helmet or other Bluetooth-enabled output device selected for audio playback.

» The default setting is `Loudspeakers`.

Select the sound profile

- Navigate to `Radio`, `Audio settings` and select `Sound profile`.

» The following settings are available:

–`Bass-Boost`
–`Treble-Boost`
–`Voice`
–`Studio`
–`Balanced`

» The default setting is `Bass-Boost`. All sound profiles have an effect only when `Loudspeakers` is selected.

» For an optimum sound experience without in-helmet playback, select the `Studio` sound profile. All other sound profiles are optimised for in-helmet playback.

Adjusting sound settings

- Navigate to `Radio`, `Audio settings` and select `Equaliser`.

» The following settings are available:

–`Treble`: Reduce (-1…-5) or increase (+1…+5) treble
–`Bass`: Reduce (-1…-5) or increase (+1…+5) bass
–`Fader`: Fade from front (1…) to rear (…11).
–`Volume equalisation`: Switch off speed-dependent volume boost (1) or select a boost level (2…4).

- Select the menu item you want, select the setting of your choice and exit the menu.

» The sound settings have an effect only when `Loud-`

speakers is selected as the output device.

Volume and speed

The audio system can automatically adapt the volume to the speed of the motorcycle. The rate at which the volume increases in relation to vehicle speed can be set in four stages. Level 4 corresponds to the biggest boost. Selecting level 1 switches speed-dependent volume boost off.
Automatic speed-dependent volume adjustment works only when Loudspeakers is selected as the output device.

PLAYER

Status indicators on the display

–without Canada export NV

The following information (country-specific) is shown in the instrument cluster:
–Selected source (➠ 128).
–Station (➠ 133).
–Frequency
–Artist
–Track
–Waveband

–with Canada export NV

The following information (country-specific) is shown in the instrument cluster:
–Selected source (➠ 128).
–Station (➠ 133).
–Frequency
–Artist
–Track
–Waveband

Change the station or frequency

Requirement

Selecting a frequency is possible only in the AM or FM waveband and Frequency only when the appropriate item has been selected in the options.

- Select the source. (➠ 128)
- Push the Multi-Controller to the right to left select the station or the frequency you want.

In order to change the frequency, go to menu AM options or FM options and select menu item Frequency.

SATELLITE RADIO

–with Canada export NV

Availability

The functions for reception of satellite radio described in this section are available only in countries in which reception of SiriusXM is possible.

Subscribing to channel

You have to subscribe to a channel in order to listen to it. Subscribing to a channel can result in costs that are not borne by BMW Motorrad.
For information on the available channels go to **siriusxm.com**.

Activation of channels

To activate a channel, call 1-888-539-7474. The Radio ID is also required.

Calling up information

Navigate to Radio, SiriusXM information to view the following list entry:
Radio ID: XXXXXXXXXXX
For support, please contact SiriusXM Customer Care at: 1-888-539-7474

Signal strength

If the signal is not strong enough, SiriusXM No signal. appears on the display.

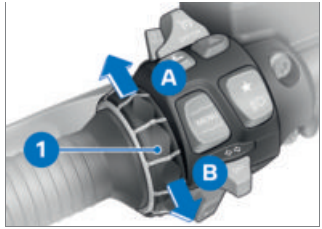
Selecting category and channel

- To change the category, call up the SiriusXM stations menu and select Category.

» The choices at your disposal are as follows:

– All categories: Shows all subscribed channels.
– Category: Shows a category, e.g. Rock.
– Stations not inc.: Shows all not subscribed channels.

- Select the channel of your choice.

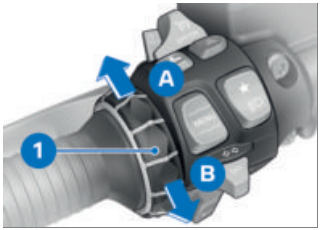


- Turn Multi-Controller **1** in direction **A** or **B** to select the channel of your choice from the selected category.

Saving channel

- Select the category and channel. (➠ 133)
- Push the Multi-Controller to the right to select a channel.
- Push Multi-Controller to the right again and select Add to Favourites.

» The favourites list is opened.



- Turn Multi-Controller **1** in direction **A** or **B** to select the memory slot of your choice.

» The current assignment of this memory slot appears on the display.

» If a station has already been assigned to the memory slot you select, a message to this effect appears on the display. Your choices are as follows:

- Select `Cancel` if you do not want to save the station you selected.
- Select `Save` to overwrite the contents of the memory slot.

» The favourites list closes automatically and the display returns to the preceding view.

Calling up channel saved in memory

Requirement

The selected `Source` has to be `Favourites`.

- Select `Favourites`.

» The favourites list appears on the display.

- Push the Multi-Controller to the right to select the channel you want.

System messages

Under appropriate circumstances, the following messages appear on the display:

`SiriusXM Subscription updated.`
Updating subscription.

`SiriusXM Channel not subscribed.`
No subscription to this channel.

`SiriusXM No signal.`
`SiriusXM` service interrupted because of a poor signal.

HD RADIO RECEPTION

–with Canada export NV

The signal strength of HD Radio stations can vary from place to place. If the digital signal is not strong enough, the system automatically switches to reception of the analog

signal. A short interruption in reception might occur as the changeover takes place. If AM is selected as the source, audio quality might be perceptibly poorer after this changeover. As soon as the digital signal is available again, reception automatically returns to the HD Radio station.

IN-HELMET AUDIO PLAYBACK

Rider's helmet paired

If a rider's helmet is paired with a BMW Motorrad communication system with Bluetooth standard 2.0:

– The volume of playback via the in-helmet speakers can be adjusted directly using the Multi-Controller **1**.
– Any change in helmet volume is shown on the display.

The volume for helmet 2 cannot be controlled using the Multi-Controller.

ADJUSTMENT

07

MIRRORS 138
HEADLIGHT 138
CLUTCH 139
BRAKES 140
SHIFT ROCKER 141

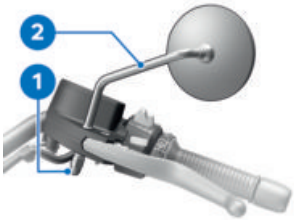
MIRRORS

Adjusting mirrors

- Turn the mirror to the appropriate position.

If the mirror's range of adjustment is not enough to permit correct alignment, the position of the mirror arm has to be changed accordingly.

Adjusting mirror arm



- Use the tool from the onboard toolkit to slacken nut **1**.
- Turn mirror arm **2** to the appropriate position.
- Tighten nut **1**, while holding mirror arm **2** to ensure that it does not move out of position.

	Mirror to handlebar fitting
M8	
12 Nm	

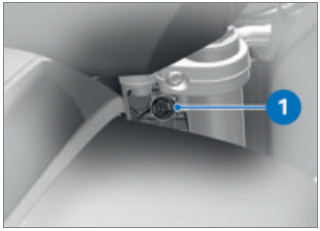
HEADLIGHT

Headlight beam throw and spring preload

Thanks to automatic load compensation, the headlight range remains constant regardless of the load state.
This might not suffice if the motorcycle is very heavily loaded, however, in which case headlight beam throw has to be adjusted to suit the weight carried by the vehicle.

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

Adjusting headlight beam throw



If automatic load compensation is not sufficient to prevent oncoming traffic from being dazzled when the motorcycle is heavily loaded:

- Adjust headlight beam throw by turning adjusting screw **1**.

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.

CLUTCH

Adjusting clutch lever

WARNING

Relocated clutch-fluid reservoir

Air in the clutch system

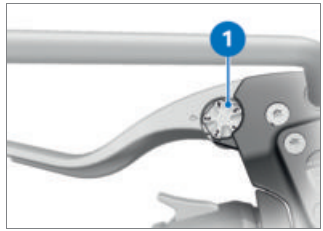
- Do not turn the handlebars or the handlebar fitting on the handlebar.

WARNING

Adjusting the clutch lever while riding

Risk of accident

- Adjust the clutch lever only when the motorcycle is at a standstill.



- Applying light pressure from behind, turn adjuster knob **1** to the desired position.

The adjusting screw can be turned more easily if

the clutch lever is pushed forward.

» Adjustment options:
– From position 1: Narrowest span between handlebar grip and clutch lever
– To position 5: Widest span between handlebar grip and clutch lever

BRAKES

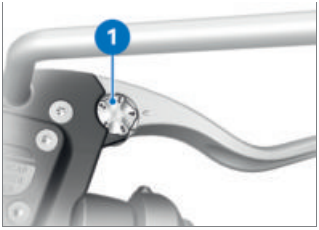
Adjusting handbrake lever

WARNING

Relocated brake fluid tank
Air in the brake system
- Do not turn the handlebars or the handlebar fitting on the handlebar.

WARNING

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



- Applying light pressure from behind, turn adjuster knob **1** to the desired position.

The adjusting screw is easier to turn when the handbrake lever is pushed forward.

» Adjustment options:
– From position 1: Narrowest span between handlebar grip and handbrake lever
– To position 5: Widest span between handlebar grip and handbrake lever

SHIFT ROCKER

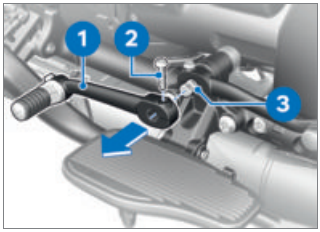
Adjusting shift rocker

ATTENTION

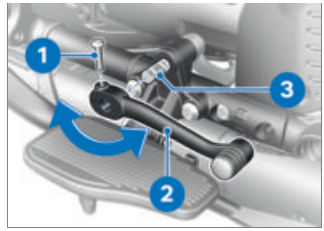
Unintentional operation of the gearshift lever

Damage to the gearbox

- Check that the gearshift lever is in the correct position.
- Make sure that the gearshift lever is under no load except when gearshifting is in progress.



- Remove screw **2**.
- Disengage front gearshift lever **1** from gearshift shaft **3**.

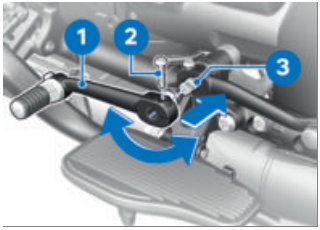


- Remove screw **1**.
- Disengage rear gearshift lever **2** from gearshift shaft **3**.
- Hold rear gearshift lever **2** in the desired position relative to the gearshift shaft and push it on to gearshift shaft **3**.
- Check the freedom of movement of the rear gearshift lever.

If the gearshift lever touches the exhaust cover when operated:

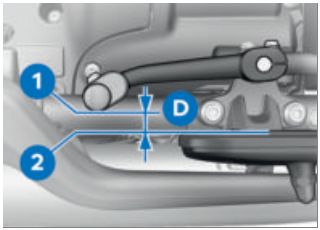
- Correct the setting of the rear gearshift lever.
- Install screw **1**.

Gearshift lever to selector shaft
M6 x 25
8 Nm



- Hold front gearshift lever **1** in the desired position relative to the gearshift shaft and push it on to gearshift shaft **3**.
- Install screw **2**.

	Gearshift lever to selector shaft
M6 x 25	
8 Nm	



- Note minimum distance **D** between bottom edge of peg **1** and top edge of footrest **2** of min. 25 mm.
- Adjust the peg. (➠ 142)

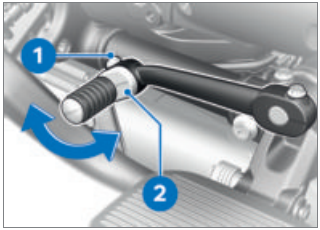
Adjusting peg

ATTENTION

Unintentional operation of the gearshift lever

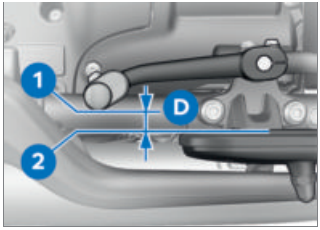
Damage to the gearbox

- Check that the gearshift lever is in the correct position.
- Make sure that the gearshift lever is under no load except when gearshifting is in progress.



- Slacken screw **1**.
- Turn peg **2** to the desired position.
- Tighten screw **1**.

	Eccentric foot plate to gearshift lever
M6 x 25	
8 Nm	



- Note minimum distance **D** between bottom edge of peg **1** and top edge of footrest **2** of min. 25 mm.

RIDING

08

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SAFETY INFORMATION

Rider's equipment

Do not ride without the correct clothing! Always wear
–Helmet
–Suit
–Gloves
–Boots

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

WARNING

Loose textiles, items of luggage or straps snagged by open rotating parts of the vehicle (wheels, drive shaft)
Risk of accident
- Make sure that loosely worn or carried textiles cannot be snagged by openly rotating parts of the vehicle.
- Keep all items of luggage and straps well clear of openly rotating parts of the vehicle.

Load

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.

- Adjust tyre pressures to suit total weight.
- Make sure that the weight is uniformly distributed between right and left.
- Pack heavy items at the bottom and toward the inboard side.
- Note the maximum permissible payload and maximum permissible speed, see also the section entitled "Operation" (➠ 120).

Speed

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

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

Maximum permissible speed with winter tyres

DANGER

Top speed of the motorcycle higher than the permissible tyre maximum speed
Risk of accident due to tyre damage at high speed
- Do not exceed the maximum speed for which the tyres are rated.

Always bear the maximum permissible speed of the tyres in mind when riding a motorcycle fitted with winter tyres.
Affix a label stating the maximum permissible speed to the instrument panel in the rider's field of vision.

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 fluids 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 burning
- Always wear helmet, suit, gloves and boots.
- While riding and when you park the vehicle, make sure that no-one and no objects come into contact with the hot engine and exhaust system.

Catalytic converter

If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.
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 (➠ 185).
–Check operation of the lights and signalling equipment.
–Check operation of the clutch (➠ 190).
–Check the tyre tread depth (➠ 191).
–Check the tyre pressures (➠ 190).
–Check security of cases and luggage.

Every 3rd refuelling stop

–Check the engine oil level (➠ 183).
–Check the brake pad thickness, front brakes (➠ 186).
–Check the brake pad thickness, rear brakes (➠ 187).
–Check the brake-fluid level, front brakes (➠ 188).
–Check the brake-fluid level, rear brakes (➠ 189).

STARTING

Starting engine

- Switch on the ignition. (➠ 87)

» Pre-Ride-Check and self-diagnoses are performed. (➠ 150)

- 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.

To ensure rapid operational readiness of the catalytic converter, idle speed is increased for a short time after engine start.

To ensure starting capability at high engine temperatures, idle speed after engine start is increased for a brief period.

- Press 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.
» Consult the troubleshooting chart below if the engine refuses to start. (➠ 222)

Pre-Ride-Check and self-diagnosis

The instrument cluster runs a test of the instruments and the indicator and warning lights when the ignition is switched on. During the Pre-Ride-Check, all indicator and warning lights show temporarily.

» Self-diagnosis checks the functional readiness of the BMW Motorrad ABS and the BMW Motorrad ASC/DTC.
ABS flashes.
slow-flashes.
» The indicator and warning lights go out when a speed of 5 km/h is reached.
» Self-diagnosis has completed.

If an error message appears when self-diagnosis completes:
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

RUNNING IN

Engine

- Until the 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.
- Bear in mind the load condition when running in.

Load condition for running in
No full load (Odometer reading max. 1000 km)

- Comply with the running-in speeds.

Running-in speed
max. 4000 min^{-1} (Odometer reading max. 1000 km)

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

Running-in check
500...1200 km

Brake pads

New brake pads have to be run in before they can achieve their optimum frictional force. 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. Only once the surface has been roughened can the tyres achieve maximum grip.

WARNING

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

Risk of accident

- Ride carefully and avoid extremely sharp inclines.

BRAKES

How can stopping distance be minimised?

Each time the brakes are applied, a load distribution shift takes place with the load shifting forward from the rear to the front wheel. The sharper the motorcycle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking. To optimise stopping distance, apply the front brakes rapidly and keep on increasing the

force you apply to the brake lever. This makes the best possible use of the dynamic increase in load at the front wheel. Remember to pull the clutch at the same time. In the 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.
The BMW Motorrad full integral ABS prevents the front wheel from locking up.

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.

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.

DANGER

Riding with overheated brakes

Risk of accident due to failure of brakes

- Adapt your riding style accordingly.
- Avoid frequent braking by using the engine brake.

WARNING

Failure to observe service intervals

Risk of accident

- Observe the valid service intervals for brakes.

Wet and dirty brakes

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.

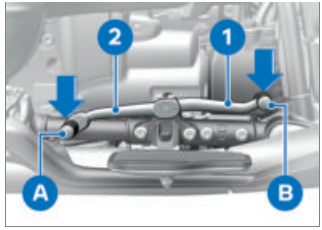
Wetness and dirt on the brake discs and the brake pads diminish braking efficiency. Delayed braking action or poor braking efficiency must be reckoned with in the following situations:

– 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 dirt-covered surfaces or off-road.

SHIFTING WITH SHIFT ROCKER

Operating shift rocker

With footboards installed, gearshifts are performed by means of a shift rocker.



- Downshift: Press gearshift lever **2** down at position **A**.

- Upshift: Press gearshift lever **1** down at position **B**.

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.
- If the camber of the roadway permits, turn the handlebars all the way to the left.
- On a gradient, the motorcycle should always face uphill; select 1st gear.

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	Super unleaded (max. 15% ethanol, E15) 95 ROZ/RON 90 AKI
	Alternative fuel grade
E5 E10	Regular, unleaded (max. 15% ethanol, E15) 91 ROZ/RON 87 AKI

» Look for these symbols on the inside of the fuel tank flap and on the forecourt fuel pump:

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.

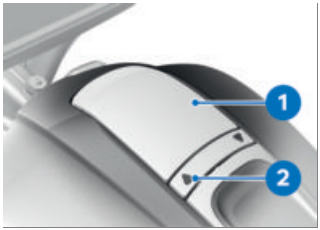
ATTENTION

Component damage
Component damage caused by overfilled fuel tank
- Overfilling the fuel tank will cause excess fuel to penetrate the carbon canister and cause component damage.
- Fill the fuel tank up to the lower edge of the filler neck only.

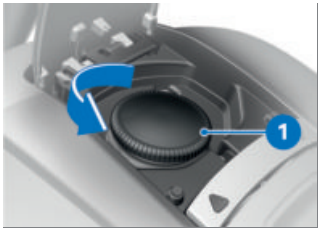
ATTENTION

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 stand.



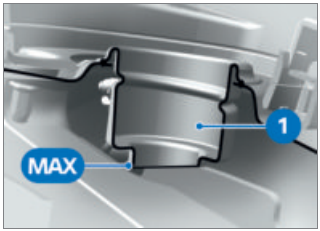
- Open filler cap flap **1** by pressing arrow button **2**.



- Turn filler cap of fuel tank **1** counter-clockwise and remove.

–with lockable fuel filler cap OE

- Swivel protective cap **1** aside.
- Use the vehicle key to unlock filler cap of fuel tank **2** by turning it counter-clockwise.
- Turn filler cap of fuel tank **2** counter-clockwise and remove.◁



- Refuel with fuel of the grade stated; do not fill the tank past the bottom edge of filler neck **1**.

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. 24 l
Fuel reserve
approx. 4 l

- Set the filler cap of the fuel tank in position and turn it clockwise to close.

–with lockable fuel filler cap OE

- Use the vehicle key to lock the filler cap of the fuel tank by turning it clockwise.
- Remove the vehicle key and pivot the protective cap closed over the fuel tank lock. ◁

- Press down firmly on filler cap flap **1** to close.

The filler cap flap cannot be locked.

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.

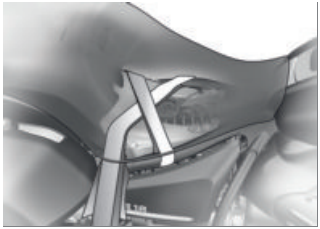
- Push the motorcycle onto the transportation flat and hold it in position: do not place it on the side stand.

- Have a helper hold the motorcycle to make sure that it cannot topple.

ATTENTION

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

- Run the strap over the steering head and tighten it down.



- Remove the seat. (➠ 122)
- Cross the straps at the rear, secure them to the frame and tighten.
- Uniformly tighten all the straps.

» The vehicle's springs are compressed.

- Install the seat. (➠ 123)

ENGINEERING DETAILS

09

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GENERAL NOTES

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

GENERAL DRIVE FUNCTIONS

Gearshift speed control

When the clutch is disengaged and the throttle grip closed while the vehicle is on the move, engine speed does not immediately drop to idle speed. Gearshift speed control keeps engine speed above idle speed for several seconds, reducing the rpm difference between engine and transmission when the clutch re-engages. The tilting moment accompanying the gear shift is reduced and the shifting comfort experienced by the rider is increased.
Gearshift speed control is active in RAIN and ROLL riding modes.

Maximum rpm limitation at standstill

To prevent unwanted forward crawl away from a standstill, under the following conditions engine speed is limited to a maximum of 3600 rpm:

–Gear engaged.
–Clutch lever pulled.
–Vehicle speed <3 km/h.

Speed increase when vehicle rolling forward in neutral

If the transmission is shifted into neutral when the vehicle is travelling at a speed in excess of min. 30 km/h, engine speed does not immediately drop to idle speed. Engine speed remains elevated above idle for a smoother rpm match when the transmission is shifted into first gear. This reduces the load on the rear-wheel drive when the gearshift takes place and increases the shifting comfort experienced by the rider.

ANTILOCK BRAKE SYSTEM (ABS)

Fully integral brakes

Your motorcycle has fully integral brakes. With this system, when either brake lever (handbrake or footbrake lever) is actuated both the front and the rear brakes are applied.
The BMW Motorrad fully integral ABS system adapts braking-force distribution between front and rear brakes to suit the load on the motorcycle

whenever braking requires ABS intervention.

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 stopping distance.

If the rider increases the brake pressure to the extent that the brake 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?

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

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

If 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, it is possible that the BMW Motorrad fully integral 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 BMW Motorrad ABS?

Within the limits imposed by physics, the BMW Motorrad ABS ensures directional stability on any surface.

At speeds above min. 4 km/h, within the limits imposed by physics the BMW Motorrad ABS can ensure directional stability on any surface. Limitations inherent to the design principle mean that at lower speeds the BMW Motorrad ABS cannot provide optimum assistance on all surfaces.

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 lead to a fault message being issued:
– Heating up with the motorcycle on an auxiliary stand, in neutral 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.

How important is regular maintenance?

WARNING

Brake system not regularly serviced
Risk of accident
- In order to ensure that the BMW Motorrad ABS is always maintained in optimum condition, it is essential for you to comply strictly with the specified inspection intervals.

Safety reserves
The potentially shorter braking distances which BMW Motorrad fully integral ABS permits must not be used as an excuse for careless riding. The system 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.

AUTOMATIC STABILITY CONTROL (ASC)

How does ASC work?

The BMW Motorrad ASC system compares the wheel circumferential velocity of front wheel and rear wheel. The differential is used to compute slip as a measure of the reserves of stability available at the rear wheel. If slip exceeds a certain limit, the engine management system intervenes and adapts engine torque accordingly.

WARNING

Risky riding
Risk of accident despite ASC
- Invariably, the rider bears responsibility for assessing road and traffic conditions and adopting his or her style of riding accordingly.
- Do not take risks that would negate the additional safety offered by this system.

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 lag in acceleration out of very tight bends. Even in out-of-the-ordinary riding situations, e.g. high speeds, bad loading or overloading, BMW Motorrad ASC can influence engine torque.

The speeds of the front and rear wheels are compared as one means of detecting the rear wheel's incipient tendency to spin or slip sideways. If the system registers implausible values for a lengthy period the ASC function is deactivated for safety reasons and an ASC fault

message is issued. Self-diagnosis has to complete before fault messages can be issued. The BMW Motorrad ASC can switch off 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) with ASC deactivated
–Rear wheel rotating with the vehicle held stationary by application of the front brake (burn-out)
–Warming up with the motorcycle on an auxiliary stand, in neutral or with a gear engaged

Accelerating the motorcycle to a speed in excess of min. 5 km/h after switching the ignition off and then on again reactivates the ASC.

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

Slippery surface
On very loose surfaces (for example sand or snow), the ASC's attempts to control propulsive power might reduce drive to the extent that the rear wheel no longer turns. Under these circumstances, BMW Motorrad recommends temporarily switching off ASC. Bear in mind that the rear wheel will spin on the loose surface and close the throttle in good time before you reach a firm surface.
Then reactivate ASC.

RIDING MODE

Selection
To adjust the motorcycle to the road condition and the desired driving experience, the following riding modes can be selected:
–RAIN
–ROLL
–ROCK

There are matched settings for the ASC, dynamic engine brake control and engine characteristic for each riding mode. In the ROCK riding mode, the engine has very spirited idling

that makes a clear statement about the potency of the boxer engine even when the vehicle is just ticking over at a standstill. The direct throttle response ensures unfiltered power output and renders the engine's dynamism impressively perceptible.

Throttle response
–RAIN: gentle throttle response.
–ROLL: optimum throttle response.
–ROCK: direct throttle response.

Automatic Stability Control (ASC)
–RAIN: Maximum stability on wet roads. Acceleration on dry roads might be reduced.
–ROLL: High performance on dry roads. If road conditions are poor, optimum stability cannot be ensured.
–ROCK: Maximum performance. On a poor road surface or with unsuitable tyres, stability might be impaired.

Effect of dynamic engine brake control
–RAIN and ROLL: Maximum stability
–ROCK: Compared to RAIN and ROLL riding modes, reduced intervention

Mode changes
The riding mode can be selected 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 adaptive 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 ENGINE BRAKE CONTROL

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 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 BMW Motorrad ASC, dynamic engine brake control compares the wheel circumferential velocities of the front and rear wheels. Dynamic engine brake control uses this differential to compute slip as a measure of the reserve of stability available at the rear wheel.

If slip overshoots the applicable limit value, the throttle valves are opened very slightly to increase engine torque. Slip is reduced and the vehicle is stabilised.

DISTANCE CONTROL (ACTIVE CRUISE CONTROL ACC)

What is ACC?

– with Active Cruise Control OE

BMW Motorrad ACC is a cruise control system with approach distance control. The function enables the rider to set a preferred speed and a preferred approach distance from the vehicle directly ahead in the same lane. Cruising speed remains constant as long as the distance to the vehicle directly ahead is not shorter than the approach distance pre-selected by the rider. As soon as the approach distance is less than this preset, speed is reduced until the distance between the two vehicles again matches the rider's preferred setting.

Responsibility remains with the rider, who can intervene at any time and override the ACC. The ACC function has two characteristics: `Comfortable` and `Dynamic`. They affect acceleration and deceleration while control is actively intervening.

How does ACC work?
–with Active Cruise Control OE

The front-mounted radar sensor detects vehicles travelling ahead. At the same time, the radar sensor analyses yaw rate and vehicle speed to calculate what is referred to as the prospective ride path, in other words the corridor along which the motorcycle will proceed over the next approx. 100 m approximately. If one of the detected objects is in this prospective ride path the system reacts accordingly, adapting speed so that the rider's preset approach distance from the object travelling ahead is maintained.

Control functions of ACC
–with Active Cruise Control OE

ACC is divided into five control functions, as follows:
–**Cruise control**: Cruising speed is adapted to the setting chosen by the rider.
–**Distance control**: The vehicle cruises at the speed chosen by the rider, but speed is varied to maintain the selected approach distance to be maintained behind the vehicle in front.
–**Cornering control**: When the vehicle corners speed is reduced if necessary and the system attempts to achieve a comfortable bank angle (e.g. 20°). As bank angle increases, moreover, braking and acceleration dynamism is limited so that no sudden braking or acceleration takes the rider unawares. Cornering control prevents, for example, unexpected acceleration on object loss by the radar and when the rider's selected speed setting is inappropriately high. Object loss can occur when the vehicle head is only partly registered by the radar as a bend is negotiated.
–**Passing assistant**: When a vehicle is present ahead, the

rider can activate the passing assistant by switching on the indicators on the side appropriate for a passing manoeuvre. This causes the vehicle to pick up speed, accelerating into a fluid passing manoeuvre. If a passing manoeuvre does not take place the distance behind the vehicle ahead is closed up to some extent for a brief time.

– **Passing prevention**: The ACC function prevents a vehicle for which no passing manoeuvre has been signalled from being overtaken. This would apply, for example, to a vehicle that is on the left in right-hand traffic or a vehicle on the right in left-hand traffic. When a vehicle presence is detected in these circumstances the system settles accordingly to the appropriate distance behind. Briefly opening the throttle or indicating for a passing manoeuvre on the opposite side suppresses passing prevention.

Speed range of ACC

The ACC function can be activated in the following speed ranges:

– 30...160 km/h
– If ACC is activated in the 160...250 km/h speed range, the maximum speed of 160 km/h is selected.

Limits of ACC

– with Active Cruise Control OE

ACC is subject to the system limits described below:

– **Detected objects**: The radar sensor's object detection capability is restricted to the vehicle directly ahead in the lane.
– **Radar range**: The radar has a maximum viewing range of approx. 120 m. At high speeds and with the vehicle experiencing dynamic movement on account of rider manoeuvres such as lane changes for example, object detection can be subject to restrictions.
– **Adjacent-lane interference and loss of object**: In isolated cases, weaving from side to side in the lane, riding twisty sections of road or riding offset from the vehicle ahead in your lane can cause the sys-

tem to assign vehicles detected ahead to the wrong lane. If this happens approach distance control is applied to the wrong vehicle and this can lead to unexpected braking or acceleration. The system limits imposed on acceleration and deceleration, however, keep handling controllable for the rider at all times.

– **Limitation of riding dynamic**: The ACC-controlled acceleration and deceleration of the motorcycle are limited. The rates of acceleration and deceleration are also limited. Consequently, abrupt, sharp acceleration or deceleration cannot occur. This limitation becomes more acute as the motorcycle's bank angle increases. On very steep climbs and with the motorcycle heavily loaded, it is possible that maximum acceleration might not be achievable in ACC operation.
– **Environmental influences**: Environmental influences can diminish the viewing range of the radar sensor. In some cases, heavy rain, snow and thick fog can severely restrict the radar's viewing range.
– **Disruptive reflections**: Strong reflections at tunnel entrances for example or where crash barriers are high can hinder object detection.

Influence on the performance of ACC

– with Active Cruise Control OE

The rider can assist the performance of ACC by:

– Adopting a smooth style of riding.
– Staying as close as possible to the middle of lane behind the vehicle in front.
– When overtaking, making clear lane changes to the passing lane to help the system deselect the vehicle directly ahead in the original lane.
– Returning to the original lane as quickly as possible behind the next vehicle ahead, to allow the system time to select the reference object head.

AUTOMATIC LOAD COMPENSATION

Riding position equaliser

Automatic load compensation automatically adapts the spring setting to the load carried by the vehicle.

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.
Automatic load compensation calibrates itself at regular intervals to ensure that the system functions correctly.

DYNAMIC BRAKE CONTROL

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 min. 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 hazard 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 accelerated to a defined minimum speed of min. 30 km/h for the first time. 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 min. 15 min after the vehicle comes to a stop.
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 distinguishes between three tyre pressure ranges matched to the vehicle:
– 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-pressure readings in the multifunction display are temperature-compensated and are always referenced to a tyre-air temperature of 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 display.

Pressure adaptation

Compare the RDC value on the 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 dif-

ference between the RDC reading and the value in the table.

Example
According to the operating instructions, the tyre pressure should be:
2.5 bar
The instrument cluster shows the following value:
2.3 bar
So pressure is low by:
0.2 bar
The gauge on the air line shows:
2.4 bar
You must now increase tyre pressure until the value is:
2.6 bar

HILL START CONTROL (HSC)

–with Hill Start Control[OE]

Hill Start Control function

Hill Start Control is a ride-off assistant that operates on the fully integral ABS system to prevent the vehicle from rolling back on a gradient, without the rider having to keep pressure applied to the brake lever. When Hill Start Control is activated, pressure is built up in the rear brake system to keep the machine at a standstill on a gradient. The 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.

–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 vehicle starts to roll while Hill Start Control is active, brake pressure is increased.

–If the rear wheel slips, the brake is released again after approx. 1 m. This prevents the vehicle slipping with a locked rear wheel, for example.

Brake release when engine is stopped or after time-out

Hill Start Control is deactivated if the rider stops the engine by hitting the emergency-off switch (kill switch) or when the side stand is extended, or after time-out (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 full integral ABS brake system limits the speed of movement to approx. 1...2 km/h.
– The rider must brake the motorcycle manually.
– After two minutes at a speed of approx. 1...2 km/h, or when the brake is actuated, cruise control is completely deactivated.

The holding pressure is released immediately without a brake warning jolt as soon as the ignition is switched off.

ADAPTIVE HEADLIGHT

– with Headlight Pro OE

How does the adaptive cornering headlight work?

The low-beam unit installed as standard in the headlight consists of two reflectors that produce a low beam from an LED light source. Ride height sensors on front and rear suspension supply data for permanent beam throw adjustment. While the motorcycle is moving straight ahead, pitch compensation keeps the throw of the headlight beam constantly in the optimum, preset range, regardless of ride and load state. With the Adaptive headlight function, the low-beam unit is additionally rotated about an axis to a degree that varies with the bank angle, compensating for the vehicle's angle of lean. The angle of rotation is 70° (±35°). Along with pitch compensation, therefore, the throw of the low-beam headlight also compensates for the rider's chosen bank angle through corners. The two movements are superimposed, so as the motorcycle is steered through a bend the headlight beam is directed into

the bend for better illumination of the road ahead. The results are considerably better illumination of the road ahead when the vehicle corners, and a huge increase in active riding safety.

MAINTENANCE

10

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GENERAL NOTES

The Maintenance chapter describes straightforward procedures for checking and replacing certain wear parts.
Special tightening torques are listed as applicable. The tightening torques for the threaded fasteners on your vehicle are listed in the section entitled "Technical data".

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

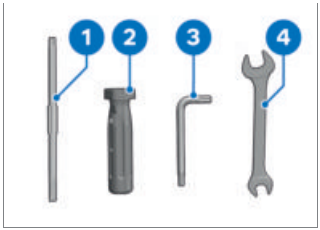
Microencapsulated screws

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.
Regardless of whether the procedure involves removal or installation, the threaded bore always has to be cleaned. 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. 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!

Non-reusable cable ties

Non-reusable cable ties are used at some points to secure cables and lines. To prevent damage to cables and lines when these items are being removed, it is essential to use a suitable tool, for example diagonal cutting pliers, for their removal.
Cables and lines detached beforehand by the removal of non-reusable cable ties have to be re-secured with new non-reusable cable ties.
Use cable-tie clippers to clip off the excess length of the cable ties.

TOOLKIT



1 Reversible screwdriver blade
Plain-tip blade and Torx T25
–Replace the fuses. (➠ 205)
–Topping up the engine oil. (➠ 184)

2 Screwdriver handle
–Topping up the engine oil. (➠ 184)
–Use with screwdriver insert

3 Torx wrench, T30
–Topping up the engine oil. (➠ 184)
–Remove the seat. (➠ 122)

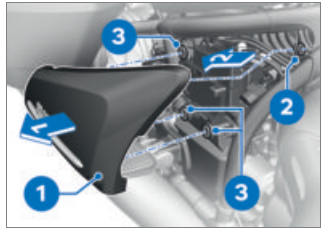
4 Open-ended spanner
Width across flats 10/13 mm
–Adjust the mirror arm. (➠ 138)

SIDE PANEL

Removing side trim panel

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

The procedure described here for the right side panel applies by analogy to the left side as well.

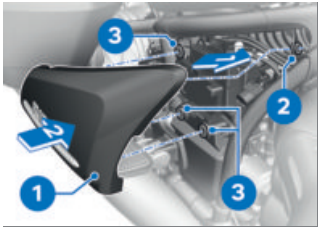


- First disengage side trim panel **1** from grommets **3**, then ease it in the direction indicated by the arrow to disengage it from grommet **2** and remove.

Installing side trim panel

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

The procedure described here for the right side panel applies by analogy to the left side as well.



- First ease side trim panel **1** in the direction indicated by the arrow to engage it in grommet **2**, then align it with grommets **3** and press it into engagement.

FRONT-WHEEL STAND

Installing front-wheel stand

ATTENTION

Use of the front wheel stand without accompanying use of auxiliary stand
Risk of damage to parts if vehicle topples
- Place the motorcycle on an auxiliary stand before lifting the front wheel with the front-wheel stand.

- Make sure the motorcycle is standing firmly.
- Place the motorcycle on an auxiliary stand.
- Install the rear-wheel stand. (➠ 182)
- See the instructions issued with the front-wheel stand for details of the correct procedure for installation.
- Your authorised BMW Motorrad retailer will be happy to assist you in selecting a suitable assembly stand.

REAR-WHEEL STAND

Install the rear-wheel stand

- The description of how to fit the rear-wheel stand correctly will be found in the instructions for the stand.
- Your authorised BMW Motorrad retailer will be happy to assist you in selecting a suitable assembly stand.

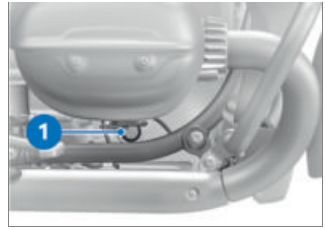
ENGINE OIL

Checking engine oil level

ATTENTION

Misinterpretation of oil level reading, because oil level is temperature-dependent (the higher the temperature, the higher the oil level)
Engine damage due to incorrect oil filling
- Check the oil level only after a lengthy ride or when the engine is at operating temperature.

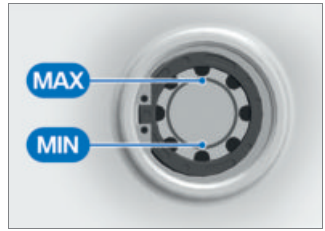
- Switch off the engine when it is at operating temperature.
- Wait at least five minutes for the oil to drain into the oil pan.
- Make sure the ground is level and firm and hold the motorcycle upright.



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 sight glass **1**.



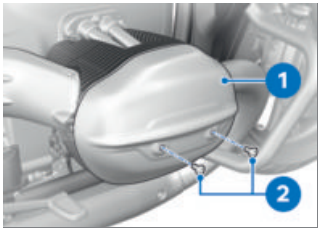
Engine oil, specified level
Between **MIN** and **MAX** mark

If the oil level is below the **MIN** mark:
- Topping up the engine oil. (➠ 184)

If the oil level is above the **MAX** mark:
- Have the oil level corrected by a specialist workshop, preferably an authorised BMW Motorrad retailer.

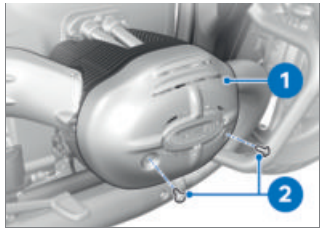
To avoid unnecessary environmental impact, BMW Motorrad recommends checking the engine oil after riding min. 50 km.

Topping up engine oil
- Make sure the ground is level and firm and place the motorcycle on its stand.

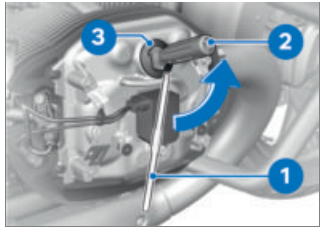


- Remove screws **2** with the tool from the on-board toolkit and remove cover **1**.

–with Option 719 design package Aero OE



- Remove screws **2** with the tool from the on-board toolkit and remove cover **1**.◁



- Wipe the area around the oil filler opening clean.
- Insert cross-head end of reversible screwdriver insert **1** into screwdriver handle **2** (on-board toolkit).
- Engage the tool in cap **3** and turn the cap counter-clockwise.
- Remove cap **3** of the oil filler opening.

ATTENTION

Use of insufficient engine oil or too much engine oil

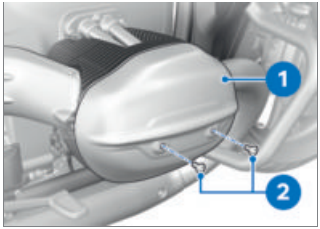
Engine damage due to incorrect oil filling

- Always make sure that the engine oil level is correct.

- Slowly and gradually top up the engine oil to the specified level.

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

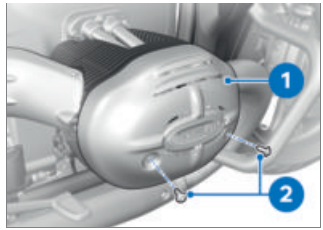
- Check the engine oil level. (➠ 183)
- Install cap **3**.



- Hold cover **1** in position and install screws **2**.

Ignition coil cover to bracket
M6 x 16
8 Nm

–with Option 719 design package Aero[OE]



- Hold cover **1** in position and install screws **2**.

Ignition coil cover to bracket
M6 x 16
8 Nm◁

BRAKE SYSTEM

Check operation of the brakes

- Pull the handbrake lever.
» There is a clearly perceptible pressure point.
- Press the footbrake lever.
» There is a clearly perceptible pressure point.

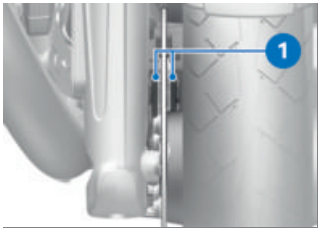
If pressure points are not clearly perceptible:

ATTENTION

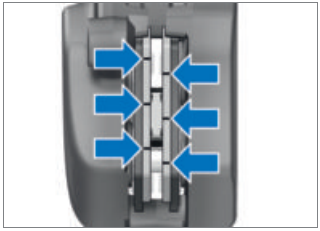
Work on brake system not in compliance with correct procedure
Risk to operational reliability of the brake system
- Have all work on the brake system undertaken by trained and qualified specialists.

- Have the brakes checked by a specialist workshop, preferably an authorised BMW Motorrad retailer.

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
min. 1 mm (Friction pad only, without backing plate. The wear indicators (grooves) must be clearly visible.)	

If the wear indicating marks are no longer visible:

WARNING

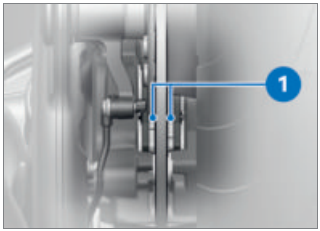
Brake-pad thickness less than permissible minimum
Diminished braking effect, damage to the brakes
- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.

- Have the brake pads replaced by a specialist workshop,

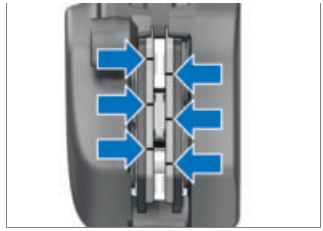
preferably an authorised BMW Motorrad retailer.

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 below, between rear wheel and rear suspension toward brake pads **1**.



Brake-pad wear limit, rear
min. 1 mm (Friction pad only, without backing plate. The wear indicators (grooves) must be clearly visible.)

If the wear indicating marks are no longer visible:

WARNING

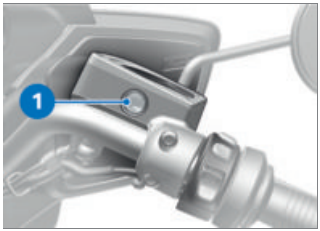
Brake-pad thickness less than permissible minimum
Diminished braking effect, damage to the brakes

- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.

- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Checking brake-fluid level, front brakes

- 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 sight glass **1**.

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

Brake fluid level, front
Brake fluid, DOT4

Brake fluid level, front
The brake fluid level may not drop below the **MIN** mark. (Brake-fluid reservoir horizontal.)

If the brake fluid level drops below the permitted level:

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

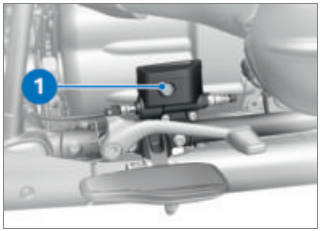
- Cease operation of the vehicle immediately and do not ride it until the fault has been rectified.
- Check the brake-fluid levels at regular intervals.
- Always make sure that the lid of the brake fluid reservoir and the area around the lid are cleaned before opening.
- Make sure that only fresh brake fluid from a sealed container is used.

- Have the fault rectified as quickly as possible by a specialist workshop, preferably an

authorised BMW Motorrad retailer.

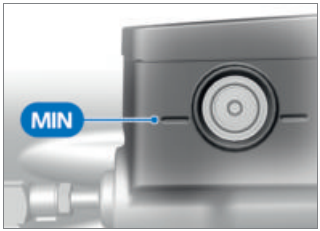
Checking brake-fluid level, rear brakes

- Make sure the ground is level and firm and hold the motorcycle upright.



- Check the brake fluid level in brake fluid reservoir **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)

If the brake fluid level drops below the permitted level:

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.

- Have the fault rectified as quickly as possible by a specialist workshop, preferably an

authorised BMW Motorrad retailer.

CLUTCH

Checking operation of the clutch

- Pull the clutch lever.

» There is a clearly perceptible pressure point.

If the pressure point is not clearly perceptible:

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

TYRES

Checking tyre pressures

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 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
2.9 bar (with cold tyre; one-up and two-up riding)

Tyre pressure, rear
3.2 bar (with cold tyre; one-up and two-up mode)

If tyre pressure is too low:

- Correct tyre pressure.

Check the 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.

Each tyre has wear indicators integrated into the main tread grooves. The tyre has reached its wear limit when the tread has worn down to the level of the wear indicators. 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.

WHEEL RIMS

Checking rims

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Visually inspect the rims for damage.
- Have damaged rims checked and, if necessary, replaced by a specialist workshop, preferably an authorised BMW Motorrad retailer.

WHEELS

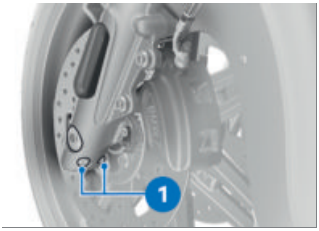
Effect of wheel size on chassis and suspension control systems

Wheel size is very important as a parameter for the running-gear control systems such as ABS, for example. In particular, the diameter and the width of a vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects on the performance of the control systems.
The sensor rings are essential for correct road-speed calculation, and they too must match the motorcycle's control sys-

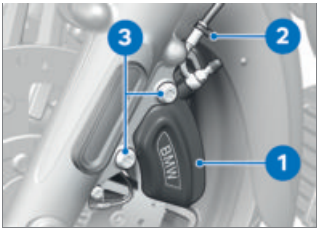
tems and consequently cannot be changed.
If you decide that you would like to fit non-standard wheels to your motorcycle, it is very important to consult a specialist workshop beforehand, preferably an authorised BMW Motorrad retailer. In these cases, the data programmed into the control units has to be changed to suit the new wheel sizes.

Removing front wheel

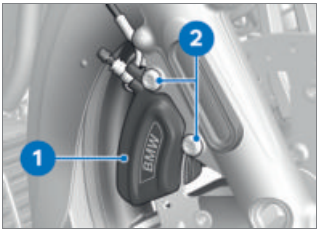
- Place the motorcycle on an auxiliary stand.
- Install the rear-wheel stand. (➠ 182)



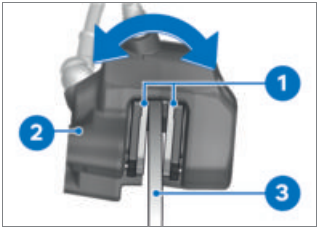
- Slacken clamping screws on left **1** and right **2**.
- Lift the front of the motorcycle until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Install the front-wheel stand. (➠ 182)



- Remove cable tie **2**.
- Remove screws **3**.
- Loosen left brake caliper **1**.



- Remove screws **2**.
- Loosen right brake caliper **1**.



- Force brake pads **1** slightly apart by rocking brake caliper **2** back and forth against brake disc **3**.

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.

ATTENTION

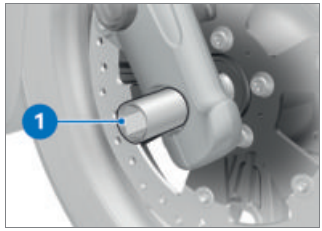
Use of hard or sharp-edged objects in proximity to component

Component damage

- Take care not to scratch components; cover or mask as necessary.

- Mask off the parts of the wheel rim that could be scratched in the process of removing the brake calipers.
- Carefully pull the brake calipers back and out until clear of the brake discs.

- Slacken screw **1** but **do not remove it**.
- Press quick-release axle with screw **1** slightly toward the inside, so as to be better able to grip it on the right-hand side.
- Remove screw **1**.



- Withdraw quick-release axle **1**, support the front wheel when doing this.

ATTENTION

Removal of front wheel not in compliance with correct procedure
Damage to wheel speed sensor
- Note the wheel-speed sensor when rolling out the front wheel.

- 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 in control attempts made by the ABS and ASC
- See the information on the effect of wheel size on the ABS and ASC 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
Unirex N3

- Insert spacer bushing **1**, turned with the collar facing out, into the wheel hub on the left-hand side.

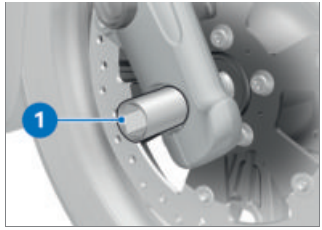
ATTENTION

Front wheel installed wrong way round
Risk of accident
- Note direction-of-rotation arrows on tyre or rim.

ATTENTION

Installation of front wheel not in compliance with correct procedure
Damage to wheel speed sensor
- Note the wheel-speed sensor when rolling in the front wheel.

- Roll the front wheel into position between the forks of the front suspension.



- Lubricate quick-release axle **1**.

Lubricant
Unirex N3

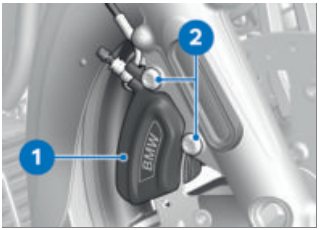
WARNING

Improper installation of the quick-release axle
Loosening of the front wheel
- After securing the brake calipers and relieving the front forks, tighten the quick-release axle and the axle clamping to the specified tightening torque.

- Lift the front wheel and insert quick-release axle **1**.
- Remove front-wheel stand and firmly compress front forks several times. Do not operate the brake in this process.
- Install the front-wheel stand. (➠ 182)

- Install screw **1**. In this process, counter-hold the quick-release axle on the right side.

	Bolt on quick-release axle
M20 x 1.5 - 8.8	
50 Nm	



- Hold right brake caliper **1** in position and install screws **2**.

	Brake calliper to telescopic fork
M10 x 40 - 10.9	
56 Nm	

- Hold left brake caliper **1** in position and install screws **3**.

	Brake calliper to telescopic fork
M10 x 40 - 10.9	
56 Nm	

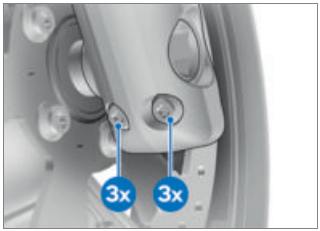
- Secure cable ties **2**.

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.
- Remove the adhesive tape from the wheel rim.
- Remove the front-wheel stand.

- Tighten clamping screws on left **1** and right **2** to the specified torque.



	Clamping screws in axle holder
Tightening sequence: Tighten screws six times in alternate sequence	
M8 x 35 - 8.8	
19 Nm	

- Extend the side stand.
- Remove the rear-wheel stand.
- Place the motorcycle on its side stand.

Removing/installing rear wheel

Removing and installing the rear wheel are tasks that require special tools and equipment, such as a vehicle lift. Consequently, when a wheel change is necessary consult a specialist workshop, preferably an authorised BMW Motorrad retailer.

LIGHTING

Replacing LED light sources

WARNING

Vehicle overlooked in traffic due to failure of the lights on the vehicle

Safety risk

- Always replace a faulty bulb at the earliest possible opportunity. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

All light sources of the vehicle are LED light sources. The service life of the LED light sources is longer than the presumed vehicle service life. If an LED light source is faulty contact a specialist workshop,

preferably an authorised BMW Motorrad retailer.

JUMP-STARTING

CAUTION

Touching live parts of the ignition system when the engine is running
Electric shock
- Do not touch parts of the ignition system when the engine is running.

ATTENTION

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

ATTENTION

Contact between crocodile clips of jump leads and vehicle
Risk of short-circuit
- Use jump leads fitted with fully insulated crocodile clips at both ends.

ATTENTION

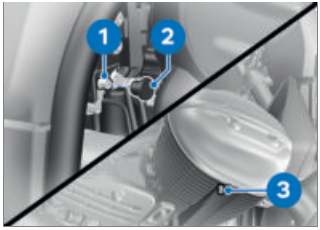
Contact between remote positive terminal and vehicle
Short-circuit hazard
- Remove the protective cap only to permit use of the remote positive terminal and re-install the protective cap after use.

ATTENTION

Jump-starting with a voltage greater than 12 V
Damage to the on-board electronics
- Make sure that the battery of the donor vehicle has a voltage rating of 12 V.

- When jump-starting the engine, do not disconnect the battery from the on-board electrical system.

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



- Remove protective cap **2**.
- Begin by connecting one end of the red jump lead to remote positive terminal **1** and the other end to the positive terminal of the donor battery.
- Connect one end of the black jump lead to the remote ground terminal **3** and the other end to the negative terminal of the donor 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.

Do not use proprietary start-assist sprays or other products to start the engine.

- Allow both engines to run for a few minutes before disconnecting the jump leads.
- Disconnect the jump lead from remote ground terminal **3** first, then disconnect the second jump lead from remote positive terminal **1**.
- Install protective cap **2**.
- Install the side panel. (➠ 181)

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.
–Follow the loading instructions on the following pages.
–Do not turn the battery upside down.

Battery type
AGM

BMW Motorrad has developed a float charger specially designed for com-

patibility with the electronics of your motorcycle. Using this charger, the battery can be kept charged during long periods of disuse, without having to be disconnected from the vehicle's on-board systems. For more information, consult an authorised BMW Motorrad retailer.

Recharging connected battery

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.

- Disconnect devices plugged into the socket.
- Comply with the operating instructions of the charger.
- Charge the battery connected to the vehicle's on-board electrical system via the socket.

The motorcycle's on-board electronics know when the battery is fully charged. The on-board socket is switched off when this happens.

If you are unable to charge the battery through the on-board socket, you may be using a charger that is not compatible with your motorcycle's electronics. If this happens, charge the battery directly at the terminals of the battery that is disconnected from the vehicle.

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

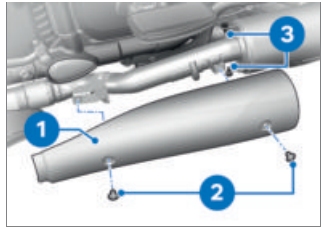
Charging the battery that is connected to the vehicle via the battery terminals
Damage to the on-board electronics
- Disconnect the battery at the battery terminals before charging.

- Charge the disconnected battery directly at the terminals.

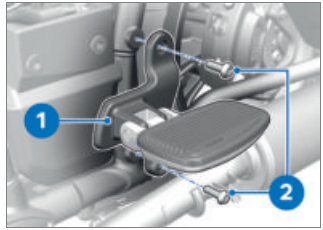
Recharging disconnected battery
- Charge the battery using a suitable charger.
- Comply with the operating instructions of the charger.
- Once the battery is fully charged, disconnect the charger's terminal clips from the battery terminals.

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.

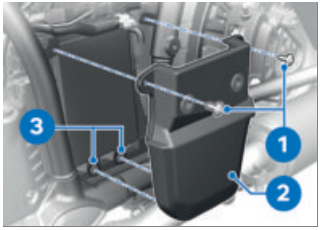
Removing battery
–with anti-theft alarm (DWA) OE
- If applicable, switch off the anti-theft alarm.◁
- Switch off the ignition. (➠ 87)
- Remove the side panel. (➠ 181)



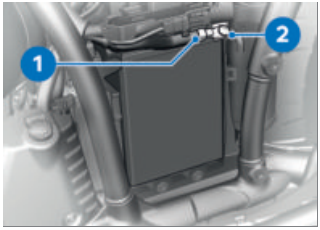
- Remove screws **2**.
- Remove silencer cover **1**, noting rubber buffers **3**.



- Remove screws **2**.
- Remove passenger footboard **1**.



- Remove screws **1**.
- Disengage battery cover **2** from grommets **3** and remove.



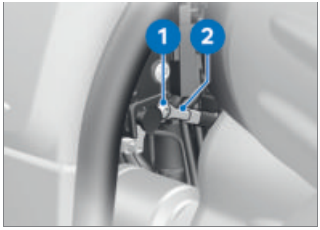
ATTENTION

Battery not disconnected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.

- Remove negative battery cable **1** with screw **2**.

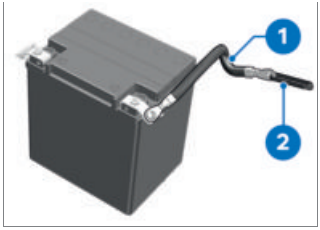


- On the right side of the vehicle, remove adapter cable for remote positive terminal **2** with screw **1**.

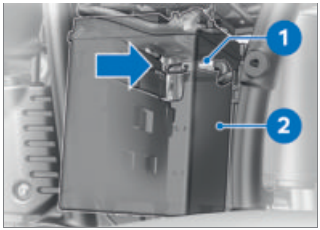
- Remove battery **2** completely, noting adapter cable for remote positive terminal **1**.

Installing battery

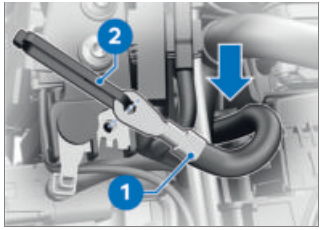
If the vehicle has been disconnected from the battery for a significant time, the current date will have to be reset to guarantee correct operation of the service display.



- To facilitate installation, secure cable tie **2** to adapter cable for remote positive terminal **1**.



- Slide battery **2** into position, adapter cable for remote positive terminal **1** first.
- Route adapter cable for remote positive terminal **1** as close as possible to the opening **(arrow)**.



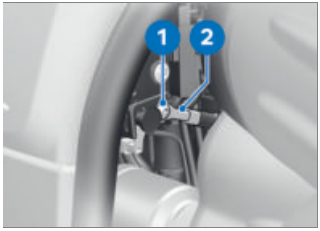
- On the right side of the vehicle, grip adapter cable for remote positive terminal **1** at the opening **(arrow)** by cable tie **2** and work it into position.
- Remove cable tie **2**.

- Push the battery all the way in, noting the routing of adapter cable for remote positive terminal **1**.

–Adapter cable for remote positive terminal **1** must be seated in recess **2** between the battery and the battery holder.

–Do not trap adapter cable for remote positive terminal **1**

between the battery and the battery holder.



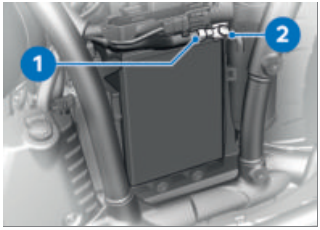
ATTENTION

Battery not connected in accordance with correct procedure

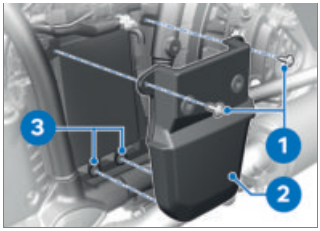
Risk of short-circuit

- Always proceed in compliance with specified installation sequence.

- Install adapter cable for remote positive terminal **2** with screw **1**.

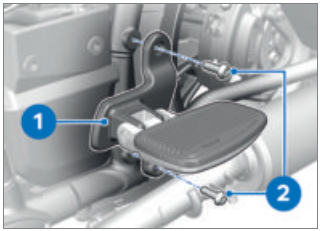


- Install negative battery cable **1** with screw **2**.



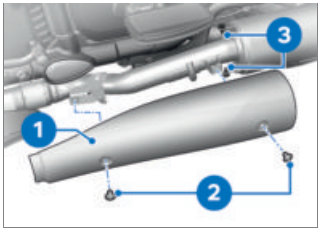
- Clean the threads for screws **1**.
- Seat battery cover **2** in grommets **3**.
- Install screws **1**.

Support for side cover to frame
M5 x 14
Thread-locking compound: micro-encapsulated
2 Nm



- Hold passenger footboard **1** in position.
- Install screws **2**.

Passenger footrest bracket to frame
M8 x 25 -10.9
28 Nm



- Hold silencer cover **1** in position, noting rubber buffers **3**.
- Install screws **2**.

Silencer cover to silencer
M5 x 10
5 Nm

- Install the side panel. (➠ 181)

–with anti-theft alarm (DWA) OE
- If applicable, switch on the anti-theft alarm.◁

- Set the date and time.
- Change the system settings. (➠ 74)

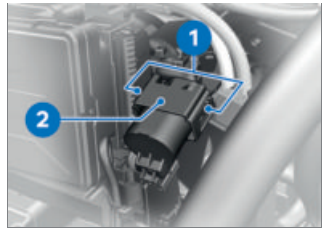
FUSES

Replacing fuses

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.

- Switch off the ignition. (➠ 87)
- Make sure the ground is level and firm and place the motorcycle on its stand.
- Remove the side panel. (➠ 181)



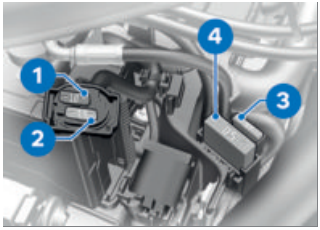
- Press locks **1** on both sides.
- Remove fuse box **2**.

If fuse defects recur frequently have the electric circuits checked by a specialist workshop, preferably an au-

thorised BMW Motorrad retailer.

- Consult the fuse assignment diagram below and replace the defective fuse.
- Insert fuse box **2**. Make sure that locks **1** engage on both sides.
- Install the side panel. (➠ 181)

Fuse assignment



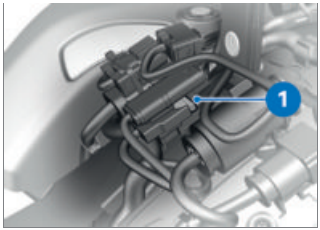
1 10 A
Instrument cluster
Anti-theft alarm
Ignition switch
Diagnostic socket
Isolating relay

2 7.5 A
Multifunction switch, left
Round instrument
Sensor box

3 15 A
Optional accessories
Radio
Topcase lighting

4 50 A
Main fuse

Fuse for audio amplifier



1 20 A
Fuse for audio amplifier

Have the fuse replaced by a specialist workshop, preferably by an authorised BMW Motorrad retailer.

DIAGNOSTIC CONNECTOR

Disengaging diagnostic socket

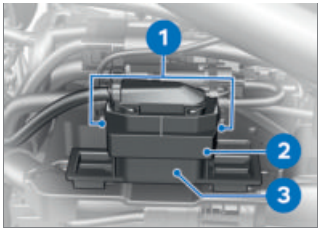
CAUTION

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 side panel. (➠ 181)

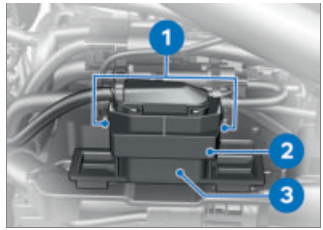


- Press locks **1**.
- Disengage diagnostic socket **2** from holder **3**.

» 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 **3**.

» The locks **1** engage.

- Install the side panel. (➠ 181)

ACCESSORIES

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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

Notes on use of power sockets:

Automatic shutdown
The power sockets are shut down automatically under the following circumstances:
- If the battery voltage is too low to maintain the vehicle's starting capability
- If the maximum load capacity as stated in the technical data is exceeded
- During the starting operation

Connection of electrical devices

You can start using electrical devices connected to the motorcycle's sockets only when the ignition is switched on. The power supply to the sockets is switched off 60 seconds after the ignition is switched off, in order to prevent overloading of the on-board electrics.

Cable routing

Note the following with regard to the routing of cables from sockets to items of electrical equipment:

- Make sure that cables do not impede the rider.
- Make sure that cables do not restrict the steering angle or obstruct handling.
- Make sure that cables cannot be trapped.

AVAILABLE OPTIONAL ACCESSORIES

Your authorised BMW Motorrad retailer can offer expert advice on the choice of genuine BMW parts, accessories and other products. You can examine all the optional accessories from BMW Motorrad by visiting: **bmw-motorrad.com**.

CARE

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CARE PRODUCTS

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.

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.

WASHING THE VEHICLE

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

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.

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 or if it is ridden on salted roads.

ATTENTION

Effect of road salt intensified by warm water
Corrosion
- Use only cold water to remove road salt deposits.

To remove road salt deposits, clean the vehicle and mounted parts, as applicable, 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.

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.

Clean the plastic parts with water and BMW plastic care product. This includes in particular:
–Windscreen and slipstream deflectors
–Headlight lens made of plastic
–Glass cover of the instrument cluster
–Black, unpainted parts

Soften stubborn dirt and insects by covering the affected areas with a wet cloth.

Instrument cluster

Clean the instrument cluster 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 Care Products range. This is particularly important to counter the effects of salt. Use BMW Motorrad high-gloss polish for additional treatment.

Radiator

Clean the radiator at regular intervals to prevent overheating of the engine due to inadequate cooling.
Use a garden hose with low water pressure, for example, for this purpose.

ATTENTION

Bending of radiator fins

Damage to radiator fins

- Take care not to bend the radiator fins when cleaning.

Rubber

ATTENTION

Application of silicone sprays to rubber seals

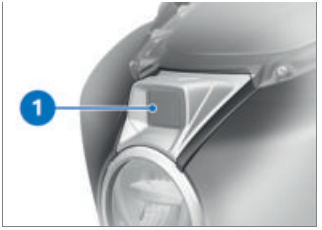
Damage to the rubber seals

- Do not use silicone sprays or care products that contain silicon.

Treat rubber components with water or BMW rubber-care products.

Radar sensor

–with Active Cruise Control[OE]



Clean radar sensor **1** with a cloth moistened with a proprietary glass cleaner.

CARE OF PAINTWORK

ATTENTION

Damage to paintwork due to metal polish
Risk of damage
- Do not treat painted surfaces and chrome-painted surfaces with metal polish.

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 vehicle 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.

PAINT 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.

Do not use chrome polish to preserve chrome paints. Use only the agents recommended by BMW Motorrad.

LAYING UP 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.

- Clean the motorcycle.
- Remove the battery. (➠ 201)
- Spray the brake and clutch lever pivots and the side stand pivot mounts 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.

RESTORING MOTORCYCLE TO USE

- Remove the protective wax coating.
- Clean the motorcycle.
- Install the battery. (➠ 202)
- Note the checklist (➠ 149).

TECHNICAL DATA

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TROUBLESHOOTING CHART

The engine does not start.

Possible cause	Rectification
Side stand is extended and gear is engaged.	Retract the side stand.
Clutch lever not pulled.	In neutral or if a gear is engaged, pull the clutch lever.
Fuel tank is empty.	Fuel grade. (➠ 154)
Battery is flat.	Recharge the battery connected to the vehicle. (➠ 200)
Starter motor overheating protection has tripped. The starter motor can be operated for a limited time only.	Allow the starter motor to cool down for approximately 1 minute before trying 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 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.
Bluetooth connection interrupted.	The temperature of the instrument cluster is too high. Bluetooth is deactivated. The brightness of the instrument cluster is reduced. Keep direct sunlight off the instrument cluster. Interrupt your journey until the components have cooled down.
The volume in the helmet cannot be adjusted.	Switch off the helmet's communication system and reconnect it after a minute or two.
In-helmet volume is too low.	Set the mobile device's volume for media and calls to maximum.

Instrument cluster is faulty.

Possible cause	Rectification
The brightness of the instrument cluster is reduced.	The temperature of the instrument cluster is too high. The brightness of the instrument cluster is reduced. Keep direct sunlight off the instrument cluster. Interrupt your journey until the components have cooled down.

Phonebook is not displayed in the instrument cluster.

Possible cause	Rectification
The phonebook was not transmitted to the vehicle.	Confirm transmission of the phone data (➠ 82) when pairing the mobile device.
Not all contacts are shown.	The number of phonebook entries that can be saved in the instrument cluster is limited. Reduce the number of phonebook entries on the mobile device.

Active route guidance is not displayed in the instrument cluster.

Possible cause	Rectification
Navigation from the BMW Motorrad Connected app was not transmitted.	Call up the BMW Motorrad Connected app on the paired mobile device prior to departure.
The route guidance cannot be started.	Make sure that the mobile device has a data connection and check the map data on the mobile device.

The playlist is not displayed in the instrument cluster.

Possible cause	Rectification
Too many tracks in the playlist on the mobile device.	Reduce the number of tracks in the playlist on the mobile device.

THREADED FASTENERS

Front wheel	Value	Valid
Brake calliper to telescopic fork		
M10 x 40 - 10.9	56 Nm	
Clamping screws in axle holder		
M8 x 35 - 8.8	**Tightening sequence: Tighten screws six times in alternate sequence**	
	19 Nm	
Bolt on quick-release axle		
M20 x 1.5 - 8.8	50 Nm	

Frame	Value	Valid
Passenger footrest bracket to frame		
M8 x 25 -10.9	28 Nm	

Exhaust system	Value	Valid
Silencer cover to silencer		
M5 x 10	5 Nm	

Engine	Value	Valid
Ignition coil cover to bracket		
M6 x 16	8 Nm	

Mirror arm	Value	Valid
Mirror to handlebar fitting		
M8	12 Nm	

FUEL

Recommended fuel grade	E5 E10 Super unleaded (max. 15% ethanol, E15) 95 ROZ/RON 90 AKI
Alternative fuel grade	E5 E10 Regular, unleaded (max. 15% ethanol, E15) 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 24 l
Fuel reserve	approx. 4 l
Fuel consumption	5.8 l/100 km, in accordance with WMTC
CO2 emission	134 g/km, in accordance with WMTC
Exhaust emissions standard	EU 5
–with Canada export[NV]	TIER 2, measured to FTP75

ENGINE OIL

Engine oil, capacity	4.0 l, with filter change
Engine-oil specification	SAE 15W-50, API SJ / JASO MA2, BMW Motorrad recommends BMW Motorrad ADVANTEC Pro.
Engine oil, quantity for topping up	max. 0.5 l, Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

ENGINE	
Engine number location	Crankcase bottom section, left
Engine type	A70B18A
Engine design	Air-cooled/oil-cooled 2-cylinder 4-cycle opposed-twin engine with two chain-driven camshafts located above the crankshaft
Displacement	1802 cm^3
Compression ratio	9.6:1
Nominal capacity	67 kW, at engine speed: 4750 min^{-1}
–with power reduction to 35 kW^{OE}	35 kW, at engine speed: 4250 min^{-1}
Torque	163 Nm, at rpm: 3000 min^{-1}
–with power reduction to 35 kW^{OE}	155 Nm, at rpm: 2000 min^{-1}
Maximum engine speed	max. 5750 min^{-1}
Idle speed	$950^{\pm 50}$ min^{-1}, Engine at regular operating temperature

CLUTCH	
Clutch type	Single-plate dry clutch

TRANSMISSION	
Type of transmission	Claw-switched 6-gear transmission with separate transmission housing

FINAL DRIVE	
Gear ratio of the final drive	3.091 (34:11)
Rear axle differential oil	FUCHS Titan EG 4218 SAE 70W-80

FRAME	
Type plate location	Frame steering head, middle
Position of the vehicle identification number	Front frame under steering head

CHASSIS AND SUSPENSION	
Front wheel	
Type of front suspension	Telescopic forks
Spring travel, front	120 mm, at front wheel
Rear wheel	
Type of rear suspension	Steel double armed swinging arm
Spring travel at rear wheel	120 mm, at rear wheel

BRAKES	
Front wheel	
Type of front brake	Twin disc brake, diameter 300 mm, 4-piston fixed caliper
Brake-pad material, front	Sintered metal
Brake disc thickness, front	5 mm, When new min. 4.5 mm, Wear limit

Rear wheel	
Type of rear brake	Single-disc brake, diameter 300 mm, 4-piston fixed caliper
Brake-pad material, rear	Sintered metal
Brake disc thickness, rear	7 mm, When new min. 6.5 mm, Wear limit

WHEELS AND TYRES	
Speed category, front/rear tyres	H, required at least: 210 km/h
Front wheel	
Front-wheel rim size	3.5" x 19"
Tyre designation, front	120/70 R 19
Load index, front tyre	min. 54
Rear wheel	
Rear wheel rim size	5.0" x 16"
Tyre designation, rear	180/65 B16
Load index, rear tyre	min. 73
Tyre pressures	
Tyre pressure, front	2.9 bar, with cold tyre; one-up and two-up riding
Tyre pressure, rear	3.2 bar, with cold tyre; one-up and two-up mode

ELECTRICAL SYSTEM	
Electrical rating of on-board socket	max. 5 A, Total for all sockets
Fuses	
Main fuse	50 A, Main fuse
Fuse 1	10 A, Anti-theft alarm system, instrument cluster, OBD connector, isolating relay, ignition switch
Fuse 2	7.5 A, Sensor box, radar, round instrument, left multifunction switch, charging storage compartment
Fuse 3	15 A, Optional accessories, radio, topcase lighting
Fuse 4	20 A, Booster
Battery	
Battery type	AGM
Battery rated voltage	12 V
Battery rated capacity	26 Ah
Battery type (For Keyless Ride radio-operated key)	CR 2032
Range of the remote control	10 m
Spark plugs	
Spark plugs, manufacturer and designation	NGK MAR8AI-10DS
Lighting	
All light sources	LED

DIMENSIONS	
Length of motorcycle	2640 mm, over topcase
Height of motorcycle	1500 mm, over windscreen, at DIN vehicle kerb weight
Width of motorcycle	1040 mm, with mirrors
Height of rider's seat	$740^{\pm 5}$ mm, without rider, at DIN vehicle kerb weight
–with comfort seat, high OE	$760^{\pm 5}$ mm, without rider, at DIN vehicle kerb weight
–with seat, low OE	$720^{\pm 5}$ mm, without rider, at DIN vehicle kerb weight
Rider's inside-leg arc, heel to heel	$1710^{\pm 10}$ mm, without rider, at DIN vehicle kerb weight
–with comfort seat, high OE	$1740^{\pm 10}$ mm, without rider, at DIN vehicle kerb weight
–with seat, low OE	$1700^{\pm 10}$ mm, without rider, at DIN vehicle kerb weight

WEIGHTS	
Vehicle kerb weight	433 kg, DIN vehicle kerb weight, ready for road, 90 % load of fuel, without optional extras (OE)
Permissible gross vehicle weight	630 kg
Maximum payload	203 kg
Payload per case	max. 10 kg
Payload of topcase	max. 10 kg

PERFORMANCE FIGURES	
Top speed	180 km/h
–with power reduction to 35 kW[OE]	144 km/h
Maximum speed for riding with a loaded case	max. 160 km/h
Maximum speed for riding with a loaded topcase	max. 160 km/h

RADIO	
Wavebands	FM, AM and DAB, depending on the country
–with Canada export[NV]	FM, AM, HD Radio™ receiver and SDARS
Wavebands	
FM	87.5...108.0 MHz
–with Canada export[NV]	87.75...107.9 MHz
AM	531...1602 kHz
–with Canada export[NV]	530...1710 kHz

SPEAKERS (VEHICLE-DEPENDENT)	
Impedance, cockpit speakers	4 Ω
Impedance, case speakers	
–with audio system Marshall Gold Series Stage 1[OE] or –with audio system Marshall Gold Series Stage 2[OE]	2 Ω, per case
Impedance, topcase speakers	
–with audio system Marshall Gold Series Stage 2[OE]	4 Ω

Output power, cockpit speakers	25 W, RMS, per speaker unit
Output power, case speakers	
–with audio system Marshall Gold Series Stage 1 OE or –with audio system Marshall Gold Series Stage 2 OE	90 W, RMS, per speaker unit
Output power, topcase speakers	
–with audio system Marshall Gold Series Stage 2 OE	25 W, RMS, per speaker unit
Frequency range	0.02...20 kHz

SERVICE

14

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REPORTING SAFETY-RELEVANT DEFECTS

–with Canada export[NV]

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the NHTSA (National Highway Traffic Safety Administration) in addition to notifying the 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 it may order 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) toll-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 obtain further information about motor vehicle safety from http://www.tc.gc.ca/roadsafety.

RECYCLING

Disposal of an EOL vehicle

BMW Motorrad recommends disposing of a vehicle that has reached the end of its useful life by taking it to a manufacturer-designated receiving centre for EOL vehicles.
In general, the laws of the country in question apply for receiving and recycling of EOL vehicles. Information about recycling and sustainability can be viewed on the country-specific websites of the manufacturer. Additional information can be obtained on request from your authorised BMW Motorrad retailer or another qualified service partner, or from a specialist workshop.

Disposal of the rider's manual

–with France export[NV]

Dispose of this rider's manual by depositing it in the container provided for the purpose.

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 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.

You can inquire about the content of BMW Motorrad services at your authorised BMW Motorrad retailer.

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 accessible through BMW.
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. An authorised 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 authorised 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 the owner of a new BMW motorcycle, in the event of a breakdown you can benefit from the protection afforded by the various BMW Motorrad mobility services (e.g. BMW Mobile Service, breakdown service, vehicle recovery service).
Your authorised
BMW Motorrad retailer
will be happy provide information about the mobility services available to you.

MAINTENANCE WORK

BMW pre-delivery check

Your authorised
BMW Motorrad retailer
conducts the BMW pre-delivery check before handing over the vehicle to you.

BMW Running-in check

The BMW running-in check has to be performed when the vehicle has covered between 500 km and 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.

242 SERVICE

The service-due indicator in the display reminds you about one month or 1000 km in advance when the time for a service is approaching.

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. The tasks listed are due either when the vehicle has covered the stated distances, or periodically at the stated times.

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	x	x	x	x	x	x	x	x	x	x[a]	
3		x	x	x	x	x	x	x	x	x	x	x[a]	
4		x	x	x	x	x	x	x	x	x	x		
5		x	x	x	x	x	x	x	x	x	x		
6			x		x		x		x		x		
7			x		x		x		x		x		x[b]
8					x				x			x[c]	x[e]
9												x[d]	x[d]

1 BMW Motorrad running-in check (including oil change and oil filter change)

2 BMW Motorrad Service, standard scope

3 Engine-oil change, with filter

4 Replace air-filter element

5 Check valve clearances

6 Replace all spark plugs

7 Oil change in bevel gears rear

8 Change transmission oil

9 Change brake fluid, entire system

[a] annually or every 10000 km (whichever comes first)

[b] every two years or every 20000 km (whichever comes first)

[c] for the first time after one year, then every two years or 40000 km (whichever comes first)

[d] for the first time after one year, then every two years

BMW MOTORRAD RUNNING-IN CHECK

BMW Motorrad running-in check

The tasks included in the BMW Motorrad running-in check are listed below. The actual scope of work applicable for your vehicle may vary.

–Performing vehicle test with BMW Motorrad diagnostic system
–Setting the service date and service for remaining distance with BMW Motorrad diagnosis system
–Engine-oil change, with filter
–Changing oil in bevel gears
–Checking brake-fluid level, front brakes
–Checking brake-fluid level, rear brakes
–Check the tyre pressures and tread depth
–Check the lights and signalling equipment
–Recharging battery
–Function test, engine start suppression
–Final inspection and check of roadworthiness
–Confirming BMW Motorrad service in on-board literature

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 diagnostic system
–Visual inspection of clutch system
–Checking steering-head bearing
–Lubricating splines of input shaft at bevel gears
–Visual inspection of the brake lines, brake hoses and connections
–Check the front brake pads and brake discs for wear
–Check the brake-fluid level, front wheel brake
–Check the rear brake pads and brake disc for wear
–Check the brake-fluid level, rear wheel brake
–Draining the condensate hose
–Check the tyre pressures and tread depth
–Check the side stand's ease of movement
–Checking lighting and signalling system
–Function test, engine start suppression
–Checking battery state of charge
–Final inspection and check of roadworthiness
–Performing vehicle test with BMW Motorrad diagnostic system
–Setting service-due date and countdown distance with BMW Motorrad diagnostic system
–Confirm the BMW Motorrad service in the on-board literature

BMW Motorrad pre-delivery check

carried out

on_____

Stamp, signature

BMW Motorrad 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	☐	☐
Engine oil change with filter	☐	☐
Replacing the air filter element	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

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	☐	☐
Engine oil change with filter	☐	☐
Replacing the air filter element	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

Notes

Stamp, signature

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carried out

on_____
odometer reading_____

Next service
at the latest
on_____
or, when reached earlier
odometer reading_____

Work performed

	Yes	No
BMW Motorrad service	☐	☐
Engine oil change with filter	☐	☐
Replacing the air filter element	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

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Replace rear brake fluid	☐	☐

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odometer reading_____

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at the latest
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Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

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carried out

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at the latest
on_____
or, when reached earlier
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Engine oil change with filter	☐	☐
Replacing the air filter element	☐	☐
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Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

Notes

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Next service
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or, when reached earlier
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Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

Notes

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odometer reading_____

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or, when reached earlier
odometer reading_____

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BMW Motorrad service	☐	☐
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Replacing the air filter element	☐	☐
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Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

Notes

Stamp, signature

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carried out

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odometer reading_____

Next service
at the latest
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or, when reached earlier
odometer reading_____

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	Yes	No
BMW Motorrad service	☐	☐
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Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

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	☐	☐
Engine oil change with filter	☐	☐
Replacing the air filter element	☐	☐
Checking valve clearance	☐	☐
Renewing all spark plugs	☐	☐
Oil change in rear angular gearbox	☐	☐
Change gearbox oil	☐	☐
Changing the front brake fluid	☐	☐
Replace rear brake fluid	☐	☐

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 261
BATTERY DIRECTIVE 264
MID RANGE RADAR 266
RADIO EQUIPMENT TFT INSTRUMENT CLUSTER 269
RADIO EQUIPMENT ELECTRONIC IMMOBILISER 271
KEYLESS RIDE SYSTEM MAIN UNIT 273
KEYLESS RIDE SYSTEM ACTIVE KEY 274
RADIO EQUIPMENT TYRE PRESSURE CONTROL (RDC) 274
CERTIFICATION TIRE PRESSURE CONTROL 275
RADIO EQUIPMENT AUDIO SYSTEM 276
RADIO EQUIPMENT INTELLIGENT EMERGENCY CALL 276

DECLARATION OF CONFORMITY

Manufacturer

Bayerische Motoren Werke Aktiengesellschaft
Petuelring 130, 80809 Munich, Germany

Simplified EU Declaration of Conformity according to EU RED (2014/53/EU).

CE

Simplified UK Declaration of Conformity according to Radio Equipment Regulations 2017 of the United Kingdom.

UK CA

Hereby, BMW AG declares that the radio equipment components listed below are in compliance with Directive 2014/53/EU and with Radio Equipment Regulations 2017 of the United Kingdom. The full text of the EU/UK declarations of conformity are available at the following internet address: **bmw-motorrad.com/certification**

Technical information

Radio equipment	Component	Frequency band	Output/ Transmission Power
EWS4	EWS	134 kHz	50 dBµV/m
HUF5794	Keyless Ride	433.92 MHz	10 mW
HUF8485	Keyless Ride	134.45 kHz	42 dBµV/m
ZB001	Keyless Ride	134.5 kHz	allowed 66 dBµA/ m @ 10m

Radio equipment	Component	Frequency band	Output/ Transmission Power
ZB002	Keyless Ride	433.92 MHz	max. 10 dBm e.r.p
TXBMW-MR	DWA 8	433.05 MHz - 434.79 MHz	18.8 dBm
RDC3	RDC	433.92 MHz	< 13 mW
Wus Moto gen 3	RDC	433.05 MHz - 434.79 MHz	< 10 mW e.r.p.
MC24-MA4	RDC		
WCA Motor-rad-Lade-staufach	Charging compart-ment	110 kHz - 115 kHz	< 6 W
ICC6.5in	Instru-ment Cluster	Bluetooth: 2402 MHz - 2480 MHz WLAN: 2412 MHz - 2462 MHz	Bluetooth: < 4 dBm WLAN: < 20 dBm
ICC65V2	Instru-ment Cluster	Bluetooth: 2400 MHz - 2480 MHz WLAN: 2400 MHz - 2480 MHz	Bluetooth: < 10 mW WLAN: < 100 mW
ICC10in	Instru-ment Cluster	Bluetooth: 2402 MHz - 2480 MHz WLAN: 2402 MHz - 2472 MHz	Bluetooth: < 4 dBm WLAN: < 14 dBm
MRRe14-FCR	ACC	76 - 77 GHz	Peak max. 32 dBm Nom max. 27 dBm

Radio equipment	Component	Frequency band	Output/ Transmission Power
ARS513	Front radar	77 GHz	Peak max. 30 dBm
SRR521	Rear radar	77 GHz	Peak max. 30 dBm
TL1P22	Intelligent emergency call	832 MHz - 862 MHz 880 MHz - 915 MHz 1710 MHz - 1785 MHz 1920 MHz - 1980 MHz 2500 MHz - 2570 MHz 2570 MHz - 2620 MHz GNSS: 1559 MHz - 1610 MHz	23 dBm 33 dBm 30 dBm 24 dBm 23 dBm 23 dBm
TL1M-23NE	Intelligent emergency call	703 MHz - 748 MHz 832 MHz - 862 MHz 880 MHz - 915 MHz 1710 MHz - 1785 MHz 1920 MHz - 1980 MHz 2300 MHz - 2400 MHz 2500 MHz - 2570 MHz 2570 MHz - 2620 MHz GNSS: 1559 MHz - 1610 MHz	23 dBm 23 dBm 33 dBm 30 dBm 24 dBm 23 dBm 23 dBm 23 dBm
MCR001	Audio system		
ZB005	Keyless Ride Main Unit	134.5 kHz 433.92 MHz	< 66 dBµA/m
ZB006	Keyless Ride Active Key	134.5 kHz 433.92 MHz	< 10 mW e.r.p.
LIN2BTLE Gateway	Instrument Cluster	2400 MHz - 2483.5 MHz	< 3 dBm

BATTERY DIRECTIVE

Batteries are generally subject to the battery directive 2023/1542/EU. Consumer information on the batteries can be found in the relevant sections of this manual.
Batteries are integrated in the following components:

Technical information

Compo-nent	Type	Contact
RDC sensor	17109	LID TECHNOLOGIES, 3 rue Giotto, 31520 Ramonville, Saint Agne, France E-mail: contact@lid.tech **www.lid.tech**
KLR Key	HUF5794	Huf Hülsbeck & Fürst GmbH & Co. KG, Steeger Str.17, 42551 Velbert, Germany E-mail: info@huf-group.com **www.huf-group.com**
KLR Key	ZB002	ZADI S.p.A., Via Carlo Marx 138, 41012 Carpi (MO), Italy E-mail: info@zadi.com **www.zadi.com**
KLR Key	ZB006	ZADI S.p.A., Via Carlo Marx, 138 41012 Carpi (MO), Italy E-mail: info@zadi.com **www.zadi.com**
DWA8 ECU	DWA8	Meta System S.p.A, Via Tancredi Galimberti 5, 42124 Reggio Emilia, Italy **www.metasystemcorporation.com**
DWA8 RC	TXBMW-MR	Meta System S.p.A, Via Tancredi Galimberti 5, 42124 Reggio Emilia, Italy **www.metasystemcorporation.com**

Compo-nent	Type	Contact
DWA9	DWA9	Bury Sp. z o.o., ul. Wojska Polskiego 4, 39-300 Mielec, Poland E-mail: info@bury.com **www.bury.com**

MID RANGE RADAR

For all countries without EU

Model name: MRRe14FCR
Manufacturer

Robert Bosch GmbH
Robert-Bosch-Platz 1, 70839 Gerlingen, Germany

Technical information

Frequency 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

Country

Argentina

CNC COMISIÓN NACIONAL DE COMUNICACIONES

COMISIÓN NACIONAL DE COMUNICACIONES
C-20030

Australia

Canada

NOTICE:
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference.
(2) this device must accept any interference, including interference that may cause undesired operation of the device.
Radiofrequency radiation exposure Information: This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.
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;
(2) l'utilisateur de l'appareil doit acceptor tout brouillage

radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Informations sur l'exposition aux radiofréquences: Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Ce transmetteur ne doit pas etre place au meme endroit ou utilise simultanement avec un autre transmetteur ou antenne.

Hong Kong

HKCA 1035: automotive radar: radio equipment exempted from licensing!

Indonesia

72726/SDPPI/2021
13349

Israel

10 . תנאים מיוחדים והערות המשרד: Mid-range Radar Sensor לפני השיווק ידאג היבואן שעל אריזה חיצונית של המוצר יודבק מדבקה, בה יהיה רשום כי: א. השימוש במכשיר הינו על בסיס "משני" ופטור מרשיון הפעלה אלחוטי. כלומר - לא מוגן מהפרעות וללא הפרעה למערכות אחרות הפועלות כדין. ב. רק "בפעולת בזק" לשימוש עצמי של הלקוח בלבד, הציוד פטור מרשיון הפעלה אלחוטי. מתן "שרות בזק" לצד ג' מחייב רשיון מיוחד ממשרד התקשורת. ג. אסור להחליף את האנטנה המקורית של המכשיר ולא לעשות בו כל שינוי טכני אחר.

Jordan

TRC No. TRC/LPD/2017/254

Malaysia

CIDF 15000490

Mexico

IFETEL: RCPBOMR17-0598

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.

Morocco
AGREE PAR L'ANRT MAROC
Numéro d'agrément :
MR 13900 ANRT 2017

Paraguay

2017-06-I-0000162

Philippines

Type Approved
No. ESD-1716172C

Serbia

И00517

Singapore
Complies with
IMDA Standards
DB03227
Complies with
IMDA Standards
DB105658

South Africa

TA-2017/2013
APPROVED

Sultanate of Oman
OMAN TRA
TA-R/4353/17
D080134

Taiwan

CCAF22LP1960T0
注意!
依據低功率電波輻射性電機管理辦法
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

電信規定作業之無線電 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。

RADIO EQUIPMENT TFT INSTRUMENT CLUSTER

For all Countries without EU

Model name: ICC10in
Manufacturer

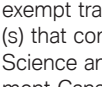
Robert Bosch GmbH
Robert-Bosch-Platz 1, 70839 Gerlingen, Germany

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 - 2480 MHz
BT version: 4.2 (no BTLE)
BT output power:
< +4 dBm (internal antenna)
WLAN operating frq. Range:
2402 - 2472 MHz
WLAN standards:
IEEE 802.11 b/g/n
WLAN output power:
< +14 dBm (internal antenna)

Country

Argentina



C-25636

Canada

This device contains licence-exempt transmitter(s)/ receiver-(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
Radiofrequency radiation exposure Information: This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 centimeters between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
Informations sur l'exposition aux radiofréquences: Cet équipement est conforme aux limites d'exposition aux radiations fixées par le Canada pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 centimètres entre le radiateur et votre corps. Cet émetteur ne doit pas être colocalisée ou opérant en conjonction avec autre antenne ou émetteur.

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.

IFETEL

Serbia

И011 20

Taiwan

取得審驗證明之低功率射頻器材， 非經核准，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。低功率射 頻器材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。前述合法通信， 指依電信管理法規定作業之無線電 通信。低功率射頻器材須忍受合法

通信或工業、科學及醫療用電波輻 射性電機設備之干擾。

RADIO EQUIPMENT ELECTRONIC IMMOBILISER

For all countries without EU

Model name: EWS 4
Manufacturer
BECOM Electronics GmbH
Technikerstraße 1, A-7442 Hochstraß, Austria

Technical information

Frequency Band: 134 kHz
Transponder: TMS37145/Type DST80, TMS3705 Transponder Base Station IC
Output Power: 50 dBµV/m

Country

Argentina

H-25246

Australia/New Zealand

R-NZ

Brunei

TA No: DTA-007061

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.

India

ETA-SD-20200905860

Israel

מספר אישור אלחוטי של משרד התקשורת הוא
74908-51
אסור להחליף את האנטנה המקורית של המכשיר ולא לעשות בו כל שינוי טכני אחר

Malaysia

RFCL/47A/0920/S(20-3358)

Indonesia

78578/SDPPI/2023
2651
Dilarang melakukan perubahan Spesifikasi yang dapat Menimbulkan gangguan fisik dan/atau elektromagnetik terhadap lingkungan sekitarnya

Paraguay

NR: 2020-11-I-0834

Philippines

Type Approved
No.: ESD-RCE-2023298

Serbia

P1620118300

Singapore

Complies with
IMDA Standards
N3504-20

South Africa

TA-2020/6131
APPROVED

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。

Vietnam

ICT

A1109091120AF04A3

KEYLESS RIDE SYSTEM MAIN UNIT

For all countries without EU

Model name: ZB001
Manufacturer
ZADI S.p.A.
Via Carlo Marx 138, 41012 Carpi (MO), Italy

Technical Information
Nominal voltage:
13,5 V
Operating voltage:
6,7 - 16 V
Operating temperature:
-20 °C - +60 °C
Operating frequency:
134,2 kHz
RF power:
< 100 dBµA/m
IP grade:
IP5K6K

Country

Indonesia

97734/SDPPI/2024
13349

KEYLESS RIDE SYSTEM ACTIVE KEY

For all countries without EU

Model name: ZB002
Manufacturer
ZADI S.p.A.
Via Carlo Marx 138, 41012 Carpi (MO), Italy

Technical Information
Battery type
CR2032
Nominal voltage:
3 V
Operating voltage:
2,5 - 3,16 V
Operating temperature:
-20 °C - +60 °C
Operating frequency:
433,92 MHz
RF power:
< 10 mW e.r.p.
IP grade:
IP5K7

Country

Indonesia

97735/SDPPI/2024

13349

RADIO EQUIPMENT TYRE PRESSURE CONTROL (RDC)

For all countries without EU

Model name:
Wus moto gen 3
Manufacturer
LDL Technology S.A.S.
Parc Technologique du Canal, 3 rue Giotto, 31520 Ramonville, France

Technical information

Frequency band: 433,92 MHz
Maximum effective radiated power: 16,75 dBm

Country

Argentina

CNC COMISIÓN NACIONAL DE COMUNICACIONES

H-23422

Australia

Malaysia

RBEF/29A/0919/S(19-3776)

Mexico

IFETEL: IFT/223/UCS/DG-AUSE/2418/2019

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément :
MR 20577 ANRT 2019
Date d'agrément :
26/07/2019

Singapore

Complies with
IMDA Standards
N3305-19

South Africa

TA-2019/1178
APPROVED

Taiwan

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。

CERTIFICATION
TIRE PRESSURE CONTROL
TPC

Canada

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.

RADIO EQUIPMENT AUDIO SYSTEM

Model name: MCR001

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.
FCC CAUTION
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Cet appareil est conforme à la partie 15 des règles FCC. Son fonctionnement est soumis aux deux conditions suivantes :
(1) Cet appareil ne doit pas causer d'interférences nuisibles, et
(2) cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.
ATTENTION FCC
Les changements ou modifications non expressément approuvés par la partie responsable de la conformité peuvent annuler le droit de l'utilisateur à faire fonctionner l'équipement.

RADIO EQUIPMENT INTELLIGENT EMERGENCY CALL

For all countries without EU

Model name: TL1P22
Manufacturer
LG ELECTRONICS INC.
10, Magokjungang 10-ro, Gangseo-gu Seoul, Republic of Korea

Country

Canada

IC: 2703H-TM04ANNABM1
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 3.5 cm between the radiator & your body. 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.
The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.
Avis d'Industrie Canada sur l'exposition aux rayonnements
Cet appareil est conforme aux limites d'exposition aux rayonnements d'Industrie Canada pour un environment non contrôlé. Il doit être installé de façon à garder une distance minimale de 3.5 centimétres entre la source de rayonnements et votre corps.
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.

Le fabricant n'est pas responsable des interférences radioélectriques causées par des modifications non autorisées apportées à cet appareil. de telles modifications pourrait annuler l'autorisation accordée à l'utilisateur de faire fonctionner l'appareil.

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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.

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Original rider's manual, printed in Germany.

Important data for refuelling:

Fuel	
Recommended fuel grade	E5 Super unleaded (max. 15% ethanol, E15) E10 95 ROZ/RON 90 AKI
Alternative fuel grade	E5 Regular, unleaded (max. 15% ethanol, E15) E10 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 24 l
Fuel reserve	approx. 4 l
Tyre pressures	
Tyre pressure, front	2.9 bar, with cold tyre; one-up and two-up riding
Tyre pressure, rear	3.2 bar, with cold tyre; one-up and two-up mode

For further information on all aspects of your vehicle, visit: **bmw-motorrad.com**

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04.2024, 5th edition, 01