BMW
MOTORRAD

RIDER'S MANUAL (US MODEL)

R 1250 RT



MAKE LIFE A RIDE

Vehicle data

Model

Vehicle identification number

Color number

First registration

License plate

Retailer data

Contact in Service

Ms./Mr.

Phone number

Retailer's address/Phone (company stamp)

YOUR BMW.

We are pleased that you have chosen a BMW Motorrad vehicle and welcome you to the family of BMW riders. Familiarize yourself with your new vehicle so that you can ride safely and confidently in all traffic situations.

About these operating instructions

Read these operating instructions before starting your new BMW. It contains important notes about operating the vehicle that will enable you to make full use of the technical assets of your BMW.

You will also obtain preventive maintenance and care instructions, which are beneficial to operating and road safety and help retain the value of your vehicle as much as possible.

If you should decide to sell your BMW one day, please remember to hand over these operating instructions as well. They are an important part of your vehicle.

We wish you many miles of safe and enjoyable riding with your BMW

BMW Motorrad.

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GENERAL INSTRUCTIONS

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4 GENERAL INSTRUCTIONS

QUICK & EASY REFERENCE

This rider's manual has been designed to provide quick and efficient orientation. The quickest way for you to find information on specific topics is to consult the comprehensive index at the end of the rider's manual. If you would like to start with a quick overview of your vehicle, this information has been provided in chapter 2. All preventive maintenance and repair procedures carried out on your motorcycle will be documented in the chapter "Service". Documentation of the maintenance work performed is a prerequisite for generous treatment of claims.

ABBREVIATIONS AND SYMBOLS

CAUTION Hazard with low risk. Failure to avoid this hazard can result in minor or moderate injury.

WARNING Hazard with moderate risk. Failure to avoid this hazard can result in death or serious injury.

DANGER Hazard with high risk. Failure to avoid this hazard results in death or serious injury.

ATTENTION Special instructions and precautionary measures. Non-compliance can cause damage to the vehicle or accessories and warranty claims may be denied as a result.

Special information on operating and inspecting your motorcycle as well as maintenance and adjustment procedures.

- • Instruction.
- » Result of a repair procedure.
- Reference to a page with more detailed information.
- ◁ Indicates the end of accessory or equipment-dependent information.
- Tightening torque.
- Technical data.
- NV National-market version.

OE	Optional equipment. BMW Motorrad optional equipment is already completely installed during motorcycle production.
OA	Optional accessories. BMW Motorrad optional accessories can be purchased and retrofitted at your authorized BMW Motorrad retailer.
ABS	Anti-Lock Brake System.
ACC	Distance control (Active Cruise Control).
ASC	Automatic Stability Control.
D-ESA	Electronic chassis and suspension adjustment.
DTC	Dynamic Traction Control.
DWA	Anti-theft alarm.
EWS	Electronic immobilizer.
TPC	Tire Pressure Control (TPC).

EQUIPMENT

When you ordered your BMW Motorrad motorcycle, you chose various items of custom equipment. This rider's manual describe optional equipment (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment which you have not ordered. Please note, too, that your motorcycle might not be exactly as illustrated in this manual on account of country-specific differences.
If your motorcycle features equipment that is not described here, you can find these features described in a separate manual.

TECHNICAL DATA

All dimensions, weights and performance data contained in this rider's manual refer to the German Institute for Standardization i.e. DIN (Deutsches Institut für Normung e. V.) and comply with their tolerance specifications.
The technical data and specifications in this rider's manual serve as points of refer-

ence. The vehicle-specific data may vary, for instance due to the selected optional equipment, national-market version or country-specific measuring procedures. Detailed values can be obtained from the registration documents or requested from your BMW Motorrad retailer or other qualified service partner or specialist workshop. The information on the vehicle documents always takes precedence over the information in this rider's manual.

CURRENTNESS OF THIS MANUAL

The high safety and quality levels of BMW motorcycles are maintained by constant development work on design, equipment and accessories. For this reason, some aspects of your vehicle may vary from the descriptions in this rider's manual. In addition, BMW Motorrad cannot guarantee the total absence of errors. We hope you will appreciate that no claims can be recognized that are based on the data, illustrations or descriptions in this manual.

ADDITIONAL SOURCES OF INFORMATION

Authorized BMW Motorrad retailer

Your BMW Motorrad retailer is always happy to answer any of your questions.

Internet

The rider's manual for your vehicle, the operating and installation instructions for optional accessories and general BMW Motorrad information related to the technology or other features are available at **bmw-motorrad.com/manuals**.

CERTIFICATES AND OPERATING PERMITS

The certificates for the vehicle and the official operating permits for possible accessories are available at **bmw-motorrad.com/certification**.

DATA MEMORY

General information

Control units are installed in the vehicle. Control units process data received from vehicle sensors, self-generated data or data exchanged between control units, for example. Some control units are required for

safe vehicle operation or provide riding assistance, such as rider assistance systems. Control units also make comfort and infotainment functions possible.
Information about the stored or exchanged data can be obtained from the vehicle manufacturer, such as in the form of a separate booklet.

Personal references
Every vehicle is marked with a unique vehicle identification number. Depending on the country, the vehicle owner can be identified using the vehicle identification number and license plate and with the help of the relevant authorities. There are also other ways to trace data obtained from the vehicle back to the rider or vehicle owner, such as via the ConnectedDrive Account that was used.

Data privacy laws
In accordance with applicable data privacy laws, vehicle users have certain rights over the vehicle manufacturer or company that collects or processes personal data.
Vehicle users have the right to obtain comprehensive information without charge from the locations that store the vehicle user's personal data.
These locations may be:
–The vehicle manufacturer
–Qualified service partners
–Specialist workshops
–Service providers

Vehicle users may request information about the type of personal data that is stored, the purpose for which the data will be used and the source of the data. This information can only be obtained by a registered owner or a person with written proof authorizing use of the vehicle.
The right to information also includes information related to data transmitted to other companies or locations.
The vehicle manufacturer's website contains the appropriate privacy policy notices. The privacy policy notices contain information on the right to delete or correct data. The vehicle manufacturer also provides the manufacturer contact information and the contact information of the data security officer on the Internet.
The vehicle owner can have a BMW Motorrad retailer or other qualified service partner

or specialist workshop read out the data stored in the vehicle for a fee if required.
The vehicle data is read out via the vehicle's legally mandated diagnostic socket.

Legal requirements for the disclosure of data

The vehicle manufacture is required by the law applicable in this context to provide authorities with the data stored by the manufacturer. The provision of this data within the scope required is on a case-by-case basis, for instance to clarify a criminal offense.
Government agencies are authorized by the law applicable in this context to read out the data from the vehicle themselves in individual cases.

Operating data in the vehicle

Control units process data so that the vehicle can run.
Examples of this include:

- Status messages from the vehicle and its individual components, such as wheel RPM, wheel speed and deceleration
- Ambient conditions, such as temperature

The data is processed only in the vehicle itself and is usually temporary. The data is not stored beyond the period in which the vehicle is operating.
Electronic components such as control units contain components for storing technical information. This may be information about the vehicle's condition, component load, events or faults stored temporarily or permanently.
This information generally documents the condition of a component, module, system or the surrounding area; for example:

- Operating conditions of system components, such as fill levels and tire pressure
- Malfunctions and faults in key system components, such as lights and brakes
- Vehicle responses in specific riding situations, such as the activation of riding dynamics systems
- Information about events causing damage to the vehicle

The data is necessary for providing control unit functions. In addition, it is used by the vehicle manufacturer to detect and eliminate malfunctions as well as to optimize vehicle functions.
The majority of this data is temporary and is processed

only within the vehicle itself. Only a small amount of event-driven data is stored in the event data recorder and fault memory.
When a vehicle is serviced, such as for repairs, servicing processes, warranty cases and quality assurance measures, this technical information can be read out from the vehicle together with the vehicle identification number.
The information can be read out by a BMW Motorrad retailer or other qualified service partner or specialist workshop. The vehicle's legally mandated diagnostic socket is used to read out the data.
The data is collected, processed and used by the respective service network locations. The data documents the vehicle's technical states and helps with fault finding, compliance with warranty obligations and quality improvements.
The manufacturer also has product monitoring obligations arising from product liability law. The vehicle manufacturer requires technical data from the vehicle in order to fulfill these obligations. The data from the vehicle can also be used to verify customer warranty and guarantee claims.
The fault memory and event data recorder in the vehicle can be reset by a BMW Motorrad retailer or other qualified service partner or specialist workshop as part of a repair or servicing.

Data input and data transfer in the vehicle

General information

Depending on the equipment, comfort settings and individualized settings in the vehicle can be saved and changed or reset at any time.
Examples of this include:
- Windshield position settings
- Chassis and suspension adjustment settings

It is possible to introduce data into the vehicle entertainment and communication system via a smartphone, for instance.
Depending on the individual equipment, this includes:
- Multimedia data, such as music for playback
- Address book data for use in combination with a communication system or integrated navigation system
- Entered destinations

– Data about the use of Internet services. This data can be stored locally in the vehicle or is on a device connected to the vehicle, such as a smartphone, USB stick or MP3 player. If this data is saved in the vehicle, it can be deleted at any time.

This data is transmitted to third parties only upon personal request as part of the use of online services. The data transmitted depends on the selected settings when using the services.

Incorporating mobile end devices

Depending on the equipment, mobile end devices connected to the vehicle, such as smartphones, are controlled using the vehicle's operating elements.
This enables audio and visual output from mobile end devices through the multimedia system. At the same time, certain information is transmitted to the mobile end device. This includes, for instance, position data and other general vehicle information, depending on the type of incorporation, and makes it possible to optimize the use of selected apps, such as those for navigation or audio playback.
The way the data is processed further is determined by the provider of the particular app used. The range of possible settings depends on the particular app and the operating system of the mobile end device.

Services

General information

If the vehicle has a mobile phone connection, this connection makes it possible to exchange data between the vehicle and other systems. The mobile phone connection is made possible through the vehicle's transmitter and receiver or via personally integrated mobile end devices such as smartphones. Online functions, as they are called, are used over this mobile phone connection. These include online services and apps provided by the vehicle manufacturer or other providers.

Vehicle manufacturer services

In the case of the vehicle manufacturer's online services, the particular functions are described at the appropriate location, such as in the rider's manual or on the manufacturer's website. The relevant legal information on data privacy is also provided there. Personal data may be used in order to provide online services. The data is exchanged over a secure connection, i.e. with the vehicle manufacturer's IT systems which are intended for this purpose.

Any collection, processing and use of personal data that goes beyond the provision of services take place only as permitted by law, on the basis of a contractual agreement or as a result of consent. It is also possible to have the entire data connection activated or deactivated. This is not the case for legally prescribed functions.

Services of other providers

When using the online services of other providers, these services are subject to the responsibility and the term of data protection and use of the respective provider. The vehicle manufacturer has no control over the content exchanged via these services. Information about the type, scope and purpose of collecting and using personal data as part of third-party services can be obtained from the particular service provider.

INTELLIGENT ASSIST SYSTEM

– with intelligent emergency call OE

Principle

The intelligent assist system makes it possible to place manual or automatic emergency calls in the event of an accident, for example.

The emergency calls are answered by an emergency call center authorized by the vehicle manufacturer.

For detailed information on how to operate the intelligent assist system and its features, see Chapter (➠ 73) operation.

Legal basis

The processing of personal data by way of the intelligent assist system complies 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 operation of the intelligent assist system are the signed ConnectedRide contract for this function, as well as the corresponding laws, regulations, and directives of the European Parliament and European Council.
The relevant regulations and directives govern the protection of individuals when processing personal data.
The processing of personal data by the intelligent assist system conforms to the European directive concerning personal data protection.
The intelligent assist system processes personal data only with the consent of the vehicle owner.
The intelligent assist system and other services with additional benefits may process personal data only with the express consent of the individual affected by the data processing, for example, the vehicle owner.

SIM card
The intelligent assist system is operated by way of mobile radio via the installed SIM card in the vehicle. The SIM card is permanently registered to the mobile phone network to enable a fast connection setup. The data is sent to the vehicle manufacturer in the event of an emergency.

Quality improvement
The data transmitted in the event of an emergency call is also used by the vehicle manufacturer to improve the quality of products and services.

Geopositioning
The vehicle position can be determined exclusively by the mobile phone network provider based on their mobile phone cell towers. The network provider cannot link the vehicle identification number and phone number of the installed SIM card. Only the vehicle manufacturer can link the vehicle identification number and phone number of the installed SIM cards.

Emergency call log data
The emergency call log data is stored in the vehicle memory. The oldest log data is deleted regularly. The log data includes for example information about when and where an emergency call was initiated. The log data can be read out from the vehicle memory in exceptional cases. The log data is usually read out only by court order and can only be read out when the relevant devices are connected directly to the vehicle.

Automatic emergency call
The system is designed so that an emergency call is triggered automatically in the event of an accident of a particular severity detected by sensors in the vehicle.

Transmitted information
In the event of an emergency call by the intelligent assist system, the same information is forwarded to the authorized emergency call center as is forwarded by the assist system eCall to the public emergency operations center.
Moreover, through the intelligent assist system, the following additional information is sent to one of the emergency call centers authorized by the vehicle manufacturer and forwarded to the public safety answering point if necessary:
– Accident data, such as the direction of impact detected by the vehicle sensors in order to facilitate planning of the deployment of emergency services.
– Contact information, such as the phone number of the installed SIM card and that of the rider, if available, in order to expedite contact with the individuals involved in the accident.

Data storage
The data related to a triggered emergency call is stored in the vehicle. The data contains information about the emergency call, such as the emergency call location and time.
Audio recordings of emergency calls are stored at the emergency call center.
Customer audio recordings are stored for 24 hours in case the details of the emergency call need to be analyzed. The audio recordings are then deleted.
Emergency call center employee audio recordings are

stored for 24 hours for quality assurance purposes.

Disclosure of personal data

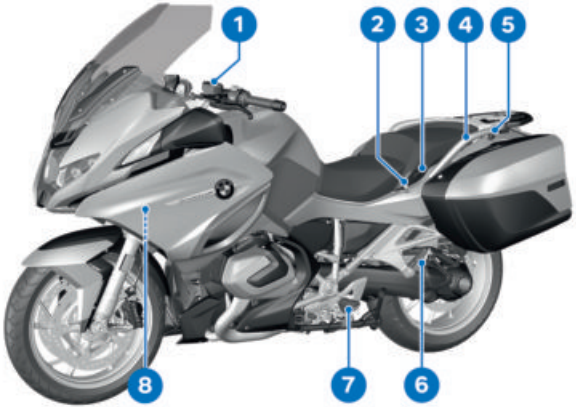
The data processed as part of the intelligent emergency call is processed only for the purpose of providing the emergency call service. The vehicle manufacturer discloses information about the data that it processes or continues to store if necessary as part of its legal obligation.

OVERVIEWS

02

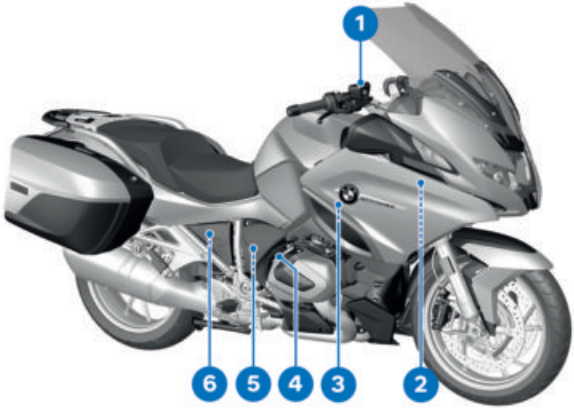
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OVERALL VIEW, LEFT SIDE



1 Clutch fluid reservoir (➠ 212)
2 Seat lock (➠ 152)
3 Passenger seat heater (➠ 97)
4 Passenger grab handle
5 Passenger socket (➠ 240)
6 Passenger footrest
7 Rider footrest
8 Payload table (at left fork leg)
Tire pressure table (at left fork leg)

OVERALL VIEW, RIGHT SIDE



1 Brake fluid reservoir for front wheel brake (➠ 210)

2 Vehicle identification number (on the steering-head bearing)
Nameplate (on the steering-head bearing)

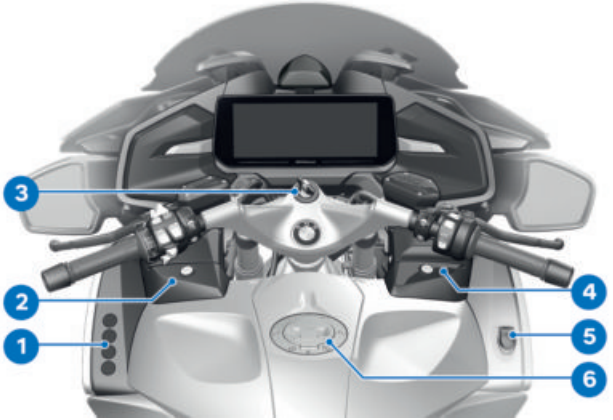
3 Coolant level indicator (behind side panel) (➠ 212)

4 Oil filler opening (➠ 206)

5 Behind the battery cover:
Battery (➠ 229)
Jump-start terminal (➠ 227)
Diagnostic connector (➠ 235)

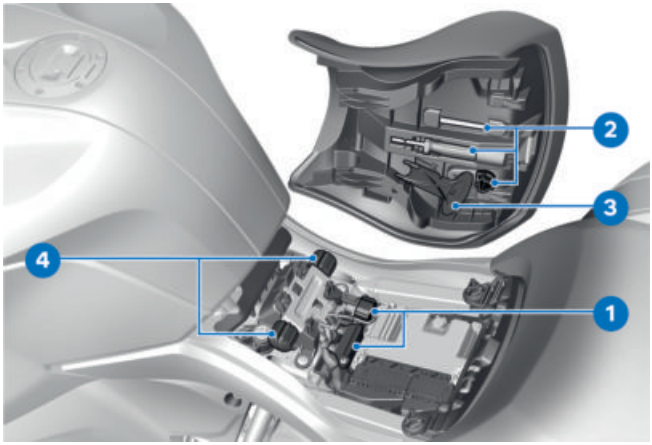
6 Brake fluid reservoir for rear wheel brake (behind the spring strut cover) (➠ 211)

OVERALL DASHBOARD VIEW



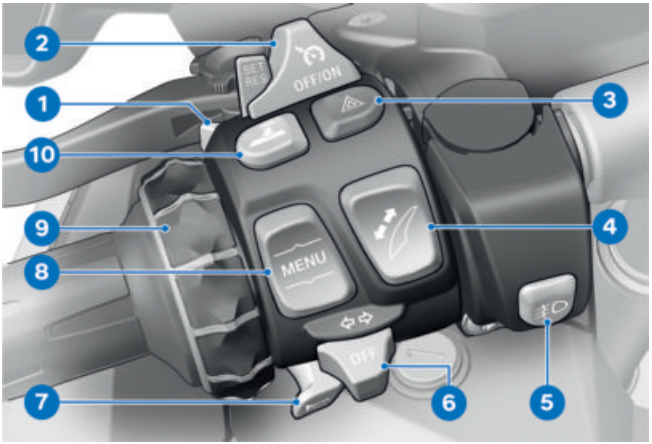
1 Programmable memory buttons (➠ 134)
2 Storage compartment, left (➠ 98)
3 Ignition switch/steering lock (➠ 66)
4 Storage compartment, right (➠ 99)
5 Socket (➠ 240)
6 Fuel filler opening (➠ 172)

UNDER THE RIDER'S SEAT



1 Fuses (➠ 233)
2 Onboard vehicle tool kit (➠ 204)
3 Tool for adjusting the spring preload (➠ 155)
4 Adjustment in setting of rider's seat height (➠ 152)

MULTIFUNCTION SWITCH, LEFT



1 High beams and headlight flasher (➠ 76)
2 Cruise control (➠ 81)
3 Hazard warning system (➠ 77)
4 Windshield adjuster (➠ 148)
5 Auxiliary headlights (➠ 76)
6 Turn signals (➠ 77)
7 Horn
8 Rocker button MENU (➠ 113)
9 Multi-Controller (➠ 113)
10 Distance control (ACC) (➠ 87)

MULTIFUNCTION SWITCH, RIGHT

–with intelligent emergency call[OE]



1 Central locking system (➠ 102)
2 Riding mode (➠ 79)
3 Emergency-off switch (➠ 72)
4 Starter button (➠ 163)
5 SOS button
Intelligent emergency call (➠ 73)

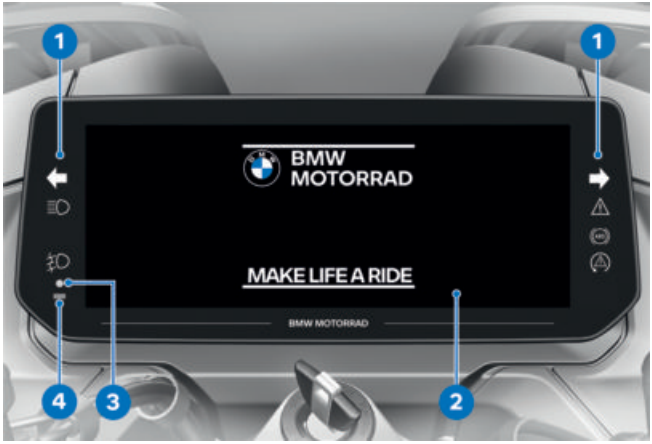
MULTIFUNCTION SWITCH, RIGHT

–without intelligent emergency call[OE]



1 Central locking system (➠ 102)
2 Riding mode (➠ 79)
3 Emergency-off switch (➠ 72)
4 Starter button (➠ 163)

INSTRUMENT CLUSTER



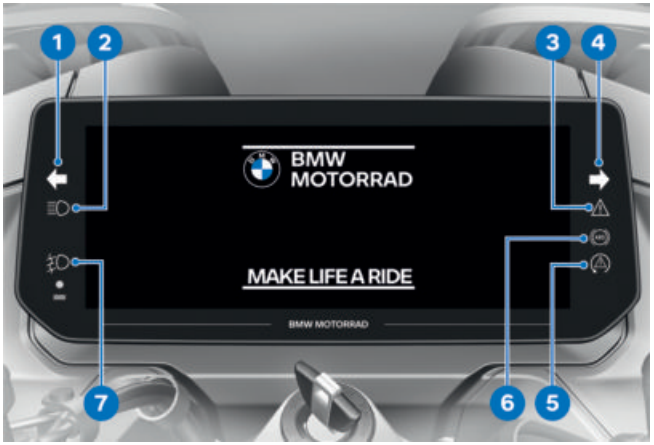
1 Indicator and warning lights (➠ 28)
2 TFT display (➠ 29)
3 Indicator light
DWA (➠ 93)
Keyless Ride (➠ 67)
4 Photodiode (for adjusting brightness of instrument lighting)

DISPLAYS

03

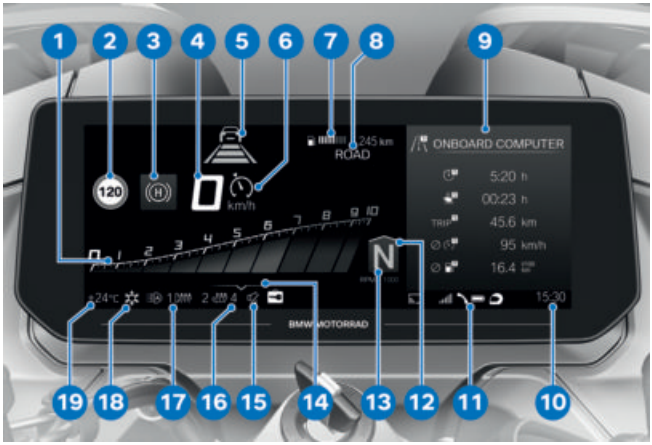
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TFT DISPLAY IN PURE RIDE VIEW 29
TFT DISPLAY IN MENU VIEW 30
INDICATOR LIGHTS 31

INDICATOR AND WARNING LIGHTS



1 Turn signal, left (➠ 77)
2 High beams (➠ 76)
3 General warning light (➠ 31)
4 Turn signal, right (➠ 77)
5 DTC (➠ 54)
6 ABS (➠ 53)
7 Auxiliary headlights (➠ 76)

TFT DISPLAY IN PURE RIDE VIEW



1 Tachometer (➠ 119)
2 Speed Limit Info (➠ 119)
3 Hill Start Control (➠ 89)
4 Speedometer
5 Distance control ACC (➠ 87)
6 Cruise control (➠ 81)
7 Rider info. status line (➠ 117)
8 Riding mode (➠ 79)
9 Split screen (➠ 120)
10 Clock (➠ 122)
11 Connection status (➠ 124)
12 Upshift recommendation (➠ 120)
13 Gear display
14 Operating instructions (➠ 115)
15 Central locking system (➠ 102)
16 Muting (➠ 121)
17 Heating (➠ 96)
18 External temperature warning (➠ 39)
19 Outside temperature

TFT DISPLAY IN MENU VIEW



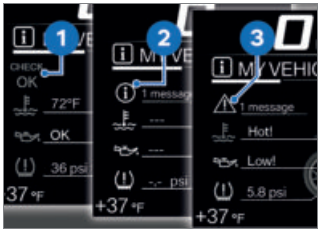
1 Hill Start Control (➠ 89)
2 Speedometer
3 Cruise control (➠ 81)
4 Distance control ACC (➠ 87)
5 Rider info. status line (➠ 117)
6 Riding mode (➠ 79)
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8 Split screen (➠ 120)
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16 Outside temperature
17 Menu area

INDICATOR LIGHTS

Layout

Warnings are indicated by the corresponding warning light. Warnings are indicated by the general warning light in combination with a dialog in the TFT display. The general warning light lights up in either yellow or red, depending on the urgency of the warning.

The general warning light lights up for whichever warning is most urgent at the current time.
You will find an overview of the potential warnings on the following pages.



Check Control display

The messages in the display are shown differently in the display. Different colors and characters are used depending on the priority:

- Green CHECK OK **1**: No message, optimal values.
- White circle with lowercase "i" **2**: Information.
- Yellow warning triangle **3**: Warning, value not optimal.
- Red warning triangle **3**: Warning, value critical.



Value display

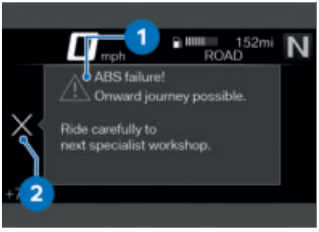
The icons **4** are displayed differently. Different colors are used depending on the assessment of value. Instead of numerical values **8** with units **7**, texts **6** are also displayed:

Color of the icon

- Green: (`OK`) Current value is optimal.
- 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: (---) There is no valid value. Instead of the value, dashes **5** are displayed.

The evaluation of the individual values is possible in part only after a certain riding duration or speed. If a measured value cannot yet be displayed due to unfulfilled measurement conditions, dashes are displayed instead as placeholders. As long as no valid measured value is available, no evaluation is carried out in the form of a colored symbol.



Check Control dialog

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

–If several Check Control messages of the same priority are present, the messages change in the order in which they occur, until they are acknowledged.

–If the icon **2** is active, this can be acknowledged by tilting the Multi-Controller to the left.

–Check Control messages are dynamically added to the screens in the `My vehicle` menu as additional tabs (➠ 115). You can go back to the message as long as the fault is present.

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
	 is displayed.	External temperature warning (➠ 39)
 lights up yellow.	 Remote key not in range.	Radio-operated key outside reception range (➠ 39)
 lights up yellow.	 Keyless Ride failure!	Keyless Ride malfunction (➠ 39)
 lights up yellow.	 Remote key battery low.	Replacing the battery of the radio-operated key (➠ 40)
	 is displayed in yellow.	Voltage of the vehicle electrical system too low (➠ 40)
	 Vehicle voltage low.	
 lights up yellow.	 is displayed in yellow.	Voltage of the vehicle electrical system is critical (➠ 40)
	 Vehicle voltage critical!	
 flashes yellow.	 is displayed in yellow.	Charging voltage critical (➠ 41)
	 Battery critically low!	
 lights up yellow.	 The faulty light source is displayed.	Faulty light source (➠ 41)
 flashes yellow.	 The faulty light source is displayed.	
 lights up yellow.	 Light control failure!	Light control unit failed (➠ 42)

Indicator and warning lights	Display text	Meaning
	Anti-theft alarm batt. capacity low.	Anti-theft alarm system battery is weak (➠ 43)
	Anti-theft alarm battery discharged.	Anti-theft alarm system battery discharged (➠ 43)
	Anti-theft alarm system failure.	DWA malfunction (➠ 44)
lights up yellow.	Engine oil level. Check engine oil level.	Low engine oil level (➠ 44)
lights up yellow.	Engine too hot!	Engine temperature high (➠ 45)
lights up red.	Engine overheating!	Engine overheated (➠ 45)
lights up yellow.	No communication with engine control.	Engine control malfunction (➠ 46)
lights up.		
lights up yellow.	Fault in the engine control.	Engine in emergency operation mode (➠ 46)
flashes red.	Serious fault in the engine control.	Serious fault in the engine control (➠ 47)
lights up yellow.	is displayed in yellow.	Tire pressure is the limit range of approved tolerance (➠ 49)

Indicator and warning lights	Display text	Meaning
	Tire pressure not at set-point.	Tire pressure is the limit range of approved tolerance (➠ 49)
flashes red.	is displayed in red.	Tire pressure is outside the approved tolerance range (➠ 49)
	Tire pressure not at set-point.	
	Tire Press. Monitor. Loss of pressure.	
	"---"	Transmission fault (➠ 50)
lights up yellow.	"---"	Sensor faulty or system fault (➠ 50)
lights up yellow.	Tire Press. Monitor failure!	Tire Pressure Monitor (TPM) malfunction (➠ 51)
lights up yellow.	TPM sensors battery low.	Battery of the tire pressure sensor weak (➠ 51)
	Fall sensor faulty.	Fall sensor defective (➠ 51)
	Cannot start engine.	Motorcycle has fallen over (➠ 51)
lights up yellow.	Emergency call system restricted.	Emergency call function has limited availability (➠ 52)

Indicator and warning lights	Display text	Meaning
 lights up yellow.	 Emergency call system failure.	Emergency call function failed (➠ 52)
 lights up yellow.	 Side stand monitoring faulty.	Side stand monitoring faulty (➠ 52)
 flashes regularly.		ABS self-diagnosis not completed (➠ 53)
 lights up yellow.	 Limited ABS availability!	ABS fault (➠ 53)
 lights up.		
 lights up yellow.	 ABS failure!	ABS failure (➠ 53)
 lights up.		
 lights up yellow.	 ABS Pro failure!	ABS Pro failure (➠ 54)
 lights up.		
 flashes rapidly.		DTC intervention (➠ 54)
 flashes slowly.		DTC self-diagnosis not completed (➠ 55)
 lights up.	 Off!	DTC turned off (➠ 55)
	 Traction control deactivated.	

Indicator and warning lights	Display text	Meaning
 lights up yellow.	 Traction control limited.	Limited DTC availability (➠ 55)
 lights up.		
 lights up yellow.	 Traction control failure!	DTC error (➠ 56)
 lights up.		
 lights up yellow.	 Spring strut adjustment faulty!	D-ESA error (➠ 56)
	 is displayed in green.	Hill Start Control active (➠ 57)
	 blinks yellow.	Hill Start Control automatically deactivated (➠ 57)
	HSC not available. Engine not running.	
	HSC not available. Side stand lined.	
	 is displayed.	Hill Start Control cannot be activated (➠ 57)
	HSC not available. Engine not running.	
 lights up yellow.	 Brake temperature high!	Brake temperature too high (➠ 57)
 lights up yellow.	 Brake temperature critical!	Brake temperature critical (➠ 58)

Indicator and warning lights	Display text	Meaning
 lights up yellow.	 Cruise control not functioning.	Cruise control failed (➠ 58)
 lights up yellow.	 ACC temporarily failed.	Distance control has failed temporarily (➠ 59)
 lights up yellow.	 Distance control failed.	Distance control failed (➠ 59)
	 Audio system Level 3 too hot.	Audio system temperature too high (➠ 59)
	 Audio system voltage is high!	Audio system voltage too high (➠ 60)
	 Low fuel.	Fuel has reached reserve volume (➠ 60)
	 Gear indicator flashes.	Gear not trained (➠ 60)
 flashes in green.		Hazard warning lights system switched on (➠ 61)
 flashes in green.		
	 is displayed in white.	Service due (➠ 61)
	Service due!	
 lights up yellow.	 is displayed in yellow.	Service appointment overdue (➠ 61)
	Service overdue!	

Outside temperature

The outside temperature is displayed in the status line of the TFT display.

Engine heat can lead to spurious measurement readings of the outside temperature when the vehicle is stationary. If the effect of the motor heat becomes excessive, dashes are temporarily displayed instead of the value.



If the outside temperature falls below the limit value of Approx. 37 °F (Approx. 3 °C), there is a risk of black ice formation.

The first time the temperature drops below this value, the outside temperature display and ice crystal symbol will blink in the status line of the TFT display.

External temperature warning



is displayed.

Radio-operated key outside reception range

–with Keyless Ride OE



lights up yellow.



`Remote key not in range. It is not possible to turn on the ignition again.`

Possible cause:

The communication between the radio-operated key and the engine electronics is faulty.

- Check the battery in the radio-operated key.

–with Keyless Ride OE

- Replace the battery of the radio-operated key. (➠ 71)
- Use the spare key for further travel.

–with Keyless Ride OE

- Battery of radio-operated key is drained, spare key is not available. (➠ 70)
- If the Check Control dialog appears while riding, remain calm. You can continue driving; the engine will not turn off.
- Have any faulty radio-operated keys replaced by a BMW Motorrad retailer.

Keyless Ride malfunction

–with Keyless Ride OE



lights up yellow.

`Keyless Ride failure! Do not stop en-`

gine. Engine restart may not be possible.

Possible cause:

The Keyless Ride control unit has diagnosed a communication fault.

- Do not shut off the engine. Visit a specialist workshop immediately if possible, ideally an authorized BMW Motorrad retailer.

» Engine start using Keyless Ride is no longer possible.

» DWA can no longer be activated.

Replacing the battery of the radio-operated key

–with Keyless Ride[OE]

 lights up yellow.

 Remote key battery low. Function limited. Change battery.

Possible cause:

- The battery for the radio-operated key is no longer charged to full capacity. Operation of the radio-operated key is only ensured for a limited time.
- Replace the battery of the radio-operated key. (➠ 71)

Voltage of the vehicle electrical system too low

 is displayed in yellow.

 Vehicle voltage low. Switch off unneeded consumers.

The vehicle voltage is too low. If you continue riding, the vehicle electronics will discharge the battery.

Possible cause:

Consumers with high electrical consumption, e.g. heating vests, are in operation; too many consumers are in operation at the same time, or the battery is defective.

- Switch off consumers that are not needed or disconnect them from the electrical system.
- If the malfunction persists or occurs without any consumers connected, have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Voltage of the vehicle electrical system is critical

 lights up yellow.

 is displayed in yellow.

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

WARNING

Failure of vehicle systems
Accident hazard
• Do not continue riding.

The vehicle voltage is critical. If you continue riding, the vehicle electronics will discharge the battery.
Possible cause:

Consumers with high electrical consumption, e.g. heating vests, are in operation; too many consumers are in operation at the same time, or the battery is defective.

- Switch off consumers that are not needed or disconnect them from the electrical system.
- If the malfunction persists or occurs without any consumers connected, have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Charging voltage critical

 flashes yellow.

 is displayed in yellow.

 `Battery critically low! Risk of accident. Do not continue to operate vehicle.`

WARNING

Failure of vehicle systems
Accident hazard
• Do not continue riding.

The battery is not being charged. If you continue riding, the vehicle electronics will discharge the battery.
Possible cause:

Alternator or alternator drive is faulty, battery is faulty or fuse is blown.

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Faulty light source

 lights up yellow.

 The faulty light source is displayed:


High beam faulty!


Turn indicator front left faulty! or Turn indicator front right faulty!


Low beam faulty!


Front parking lamp faulty!

–with additional headlight OE


Left auxiliary headlight faulty! or Right auxiliary headlight faulty!◁


Tail light faulty!


Brake light faulty!


Rear left turn signal faulty! or Rear right turn signal faulty!


License plate light faulty!

–Have checked by a specialist workshop.


flashes yellow.

–with Adaptive Lights OE


The faulty light source is displayed:


Active headlamp faulty.◁

WARNING

Overlooking the vehicle in traffic due to a defective light source on the vehicle
Safety risk
- Replace defective light sources as quickly as possible. For details please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

Possible cause:

Light source defective.
- Locate faulty light sources by means of a visual inspection.
- Have the LED light source replaced in full; for details please contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

Light control unit failed


lights up yellow.


Light control failure! Have checked by a specialist workshop.

WARNING

Overlooking the vehicle in traffic due to failure of the vehicle lighting

Safety risk

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

The vehicle lighting has failed partially or completely.

Possible cause:

The light control unit has diagnosed a communication fault.

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Anti-theft alarm system battery is weak

–with anti-theft alarm system (DWA) OE

`Anti-theft alarm batt. capacity low. No limitations. Arrange an appointment at a specialist workshop.`

This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

The DWA battery no longer has its full charging capacity. The operation of the DWA with the vehicle battery disconnected is only guaranteed for a limited time.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

Anti-theft alarm system battery discharged

–with anti-theft alarm system (DWA) OE

`Anti-theft alarm battery discharged. No independent alarm. Arrange an appointment at a specialist workshop.`

This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

The DWA battery no longer has any charging capacity. Operation of the DWA is no longer guaranteed when the vehicle battery is disconnected.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

DWA malfunction

–with anti-theft alarm system (DWA) OE


Anti-theft alarm system failure. Have checked by a specialist workshop.

Possible cause:

The DWA control unit has diagnosed a communication fault.

- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

» DWA can no longer be activated or deactivated.

» False alarm possible.

Electronic oil-level check


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

The following conditions must be satisfied in order to use the electronic oil-level check; multiple measurements may be necessary:

–Rider is sitting on the vehicle and the vehicle has been ridden at least min 6 mph (min 10 km/h) beforehand.

–Engine in Neutral for at least 20 seconds.

–Engine is at operating temperature.

–Vehicle stands vertically on a level surface.

–The side stand is retracted and the vehicle is not resting on the center stand.

–The spring strut is set according to the load status, or D-ESA is in the Auto loading mode.

If the measurement is incomplete or the conditions specified above are not fulfilled, an assessment of the oil level is not possible. Dashes (– – –) are indicated in place of the note.

Low engine oil level


lights up yellow.


Engine oil level. Check engine oil level.

Possible cause:

The electronic oil level sensor has detected a low engine oil level. If the motorcycle is not standing vertically on a level surface, the message can also appear even when the oil level is correct. At next refueling stop:

- Check engine oil level. (➠ 206)

If the oil level is too low in the inspection glass:

- Top up engine oil. (➠ 207)

If the oil level is correct in the inspection glass:

- Check whether the conditions for the electronic oil level check are fulfilled.

If the note appears multiple times even though the oil level is slightly below the **MAX** mark:

- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

Engine temperature high

 lights up yellow.

 `Engine too hot! Continue driving at low revs to cool engine.`

ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.

Possible cause:

Coolant level is too low.

- Check the coolant level. (➠ 212)

If coolant level is too low:

- Have the coolant level refilled and the coolant system checked at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

The coolant temperature is too high.

- If possible, continue driving in the part-load range to cool down the engine.
- Should the coolant temperature frequently be too high, have the fault rectified as quickly as possible by an authorized workshop, preferably an authorized BMW Motorrad retailer.

Engine overheated

 lights up red.

 `Engine overheating! Come to a safe stop, then stop the engine.`

ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.

Possible cause:

Coolant level is too low.

- Check the coolant level. (➠ 212)

If coolant level is too low:

- Have the coolant level refilled and the coolant system checked at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

Engine is overheated.

- Carefully come to a stop and turn off the engine until it has cooled down.
- If the engine overheats more frequently, have the fault corrected as soon as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Engine control malfunction

 lights up yellow.

 lights up.

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

Possible cause:

Communication with the engine control unit has malfunctioned.

- Have the malfunction corrected as soon as possible at a repair shop, preferably an authorized BMW Motorrad retailer.

Engine in emergency operation mode

 lights up yellow.

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

WARNING

Unusual handling when the engine is in emergency operation

Accident hazard

- Avoid rapid acceleration and passing maneuvers.

Possible cause:

The engine control unit has diagnosed a fault. In exceptional cases, the engine stops and can no longer be started. Otherwise, the engine runs in emergency operation.

- Continued riding is possible, however, the accustomed engine power may not be available.
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Serious fault in the engine control

 flashes red.

 `Serious fault in the engine control. Onward journey possible. Damage possible. Have checked by a workshop.`

WARNING

Damage to engine during emergency operation

Accident hazard

- Drive slowly and avoid rapid acceleration and passing maneuvers.
- If possible, have the vehicle picked up and the fault eliminated at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Possible cause:

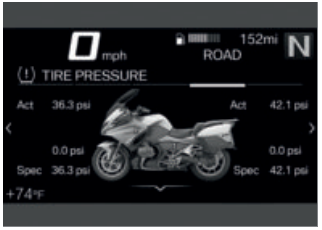
The engine control unit has diagnosed a fault, which can lead to a severe secondary fault. The engine is in emergency operation.

- Continued riding is possible, however it is not recommended.
- Avoid high load and engine speed ranges if possible.
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Tire pressure

– with tire pressure monitor (TPM) [OE]

For the tire pressure display, in addition to the `MY VEHICLE` menu window and the Check Control messages, there is also the `TIRE PRESSURE` window:



The values on the left refer to the front wheel, and the values on the right refer to the rear wheel.
The pressure differential is indicated by the current and set-point tire pressure.
Immediately after the ignition is turned on, only dashes are displayed. The transmission of the tire pressure values does not begin until the following minimum speed is exceeded for the first time:

RDC sensor is not active
min 19 mph (min 30 km/h) (The RDC sensor does not transmit a signal to the motorcycle until this minimum speed has been exceeded.)

The tire pressures are shown in the TFT display with temperature compensation and are always based on the following tire air temperature:
68 °F (20 °C)

If the tire icon is also displayed in yellow or red, this is a warning. The pressure differential is highlighted with an exclamation mark of the same color.

If the value in question is within the limit range of the permitted tolerance, the general warning light also lights up yellow.

If the determined tire pressure is outside the permitted tolerance, the general warning light blinks red.

For further information about the BMW Motorrad tire pressure control (RDC), see the Technology in detail (➠ 194) chapter.

Tire pressure is the limit range of approved tolerance

 lights up yellow.

 is displayed in yellow.

 `Tire pressure not at setpoint. Check tire pressure.`

Possible cause:

The measured tire pressure is within the limit range of the permissible tolerance.

- Correct the tire pressure.
- Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" chapter (➠ 195).

» The target tire pressures can be found in the following locations:

– On the back cover of the operating instructions
– Instrument cluster in the `TIRE PRESSURE` view
– Sign on the left fork leg

Tire pressure is outside the approved tolerance range

 flashes red.

 is displayed in red.

 `Tire pressure not at setpoint. Stop immediately! Check tire pressure.`

 `Tire Press. Monitor. Loss of pressure. Stop immediately! Check tire pressure.`

WARNING

Tire pressure is outside the approved tolerance range.
Risk of accident, deterioration in the handling characteristics of the vehicle.
• Adjust the driving style.

Possible cause:

The measured tire pressure is outside of the permissible tolerance.

- Check tire for damage and drivability.

If the tire is still ridable:

- Correct the tire pressure at the next opportunity.
- Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" chapter (➠ 195).

» The target tire pressures can be found in the following locations:
– On the back cover of the operating instructions
– Instrument cluster in the TIRE PRESSURE view
– Sign on the left fork leg
• Have the tire checked by a specialist workshop for damage, preferably by an authorized BMW Motorrad retailer.

If you are unsure about the tire's drivability:
• Do not continue riding.
• Contact roadside service.

Transmission fault


"– – –"

Possible cause:

The motorcycle has not reached the minimum speed (➠ 194).

 RDC sensor is not active
min 19 mph (min 30 km/h) (The RDC sensor does not transmit a signal to the motorcycle until this minimum speed has been exceeded.)

• Watch the RDC display at higher speed. A continuous error is only present if the general warning lamp also lights up. In this case:
• Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

There is a fault in the radio connection to the RDC sensors. Possible causes are radio systems in the surrounding area, which interfere with the connection between the TPC/RDC control unit and the sensors.
• Observe the RDC display in a different environment. A continuous error is only present if the general warning lamp also lights up. In this case:
• Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Sensor faulty or system fault


lights up yellow.


"– – –"

Possible cause:

Wheels without TPC/RDC sensors are mounted.
• Retrofit wheel set with TPC/RDC sensors.

Possible cause:

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

- Have the malfunction corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Tire Pressure Monitor (TPM) malfunction

 lights up yellow.

 `Tire Press. Monitor failure! Function limited. Have checked by a specialist workshop.`

Possible cause:

The TPM control unit has diagnosed a communication fault.

- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

» Tire pressure warnings not available.

Battery of the tire pressure sensor weak

 lights up yellow.

 `TPM sensors battery low. Function limited. Have checked by a specialist workshop.`

 This fault message is only shown for a short time immediately following the Pre-Ride-Check.

Possible cause:

The battery for the tire inflation pressure sensor is no longer charged to full capacity. Operation of the tire inflation pressure control is only ensured for a limited time.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

Fall sensor defective

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

Possible cause:

The fall sensor is not functioning.

- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

Motorcycle has fallen over

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

Possible cause:

The fall sensor has detected a fall and turned off the engine.

- Raise the vehicle to upright position and check for possible damage.
- Turn ignition off and then on again or turn emergency-off switch on and then off again.

Emergency call function has limited availability

–with intelligent emergency call OE

 lights up yellow.

 Emergency call system restricted. If it occurs again, have it checked by a specialist workshop.

Possible cause:

The emergency call cannot be established automatically or via BMW.

- Please refer to page (➠ 73) for information on using the intelligent emergency call.
- Contact a repair shop, preferably an authorized BMW Motorrad retailer.

Emergency call function failed

–with intelligent emergency call OE

 lights up yellow.

 Emergency call system failure. Schedule an appointment at a specialist workshop.

Possible cause:

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

- Note that the emergency call cannot be placed.
- Contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

Side stand monitoring faulty

 lights up yellow.

 Side stand monitoring faulty Onward journey possible. Stop engine when stationary! Have checked by workshop.

Possible cause:

 The side support switch or its wiring is damaged
The engine is turned off if the speed falls below the minimum limit. The journey cannot be continued.
min 3 mph (min 5 km/h)

- Contact a repair shop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis not completed

 blinks.

Possible cause:

 ABS self-diagnosis routine not completed
ABS is not available, as the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel speed sensors: 3 mph (5 km/h))

- Ride off slowly. Please note that the ABS function is only available after the self-diagnosis has completed.

ABS fault

 lights up yellow.

 lights up.

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

Possible cause:

The ABS control unit has detected an error. The fully integral brake and the Dynamic Brake Control function have failed. The ABS function is limited.

- You may continue riding. Take note of additional information on special situations that can lead to an ABS fault memory entry (➠ 184).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS failure

 lights up yellow.

 lights up.


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

Possible cause:

The ABS control unit has detected an error. The ABS function is not available.

- You may continue riding. Take note of additional information on special situations that can lead to an ABS fault memory entry (➠ 184).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS Pro failure


lights up yellow.


lights up.


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

Possible cause:

The ABS Pro control unit has detected a fault. The ABS Pro function is not available. The ABS function remains available. ABS only supports braking in straight-ahead riding.

- You may continue riding. Take note of additional information on special situations which can lead to an ABS Pro fault memory entry (➠ 184).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

DTC intervention


flashes rapidly.

Possible cause:

DTC has detected instability at the rear wheel and responded by reducing the torque.

The indicator and warning light flashes longer than the DTC intervention lasts. This provides the rider with visual feedback for the control action that was taken even after the critical riding situation has passed.

- You may continue riding. Use caution when riding.

DTC self-diagnosis not completed

 flashes slowly.

Possible cause:

 DTC self-diagnosis not completed
The DTC function is not available, as the self-diagnosis function has not been completed. (To check wheel speed sensors, motorcycle must reach a minimum speed with engine running: min 3 mph (min 5 km/h))

- Ride off slowly. It must be noted that the DTC function is not available until the self-diagnosis has been completed.

DTC turned off

 lights up.

 `Off!`

 `Traction control deactivated.`

Possible cause:

The DTC system has been switched off by the rider.

- Turn the DTC function on and off. (➠ 78)

Limited DTC availability

 lights up yellow.

 lights up.

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

Possible cause:

The DTC control unit has detected an error.

ATTENTION

Damage to components

Damage to sensors, for example, with the resultant malfunctions

- Do not carry along any objects under the rider's or passenger's seat.
- Secure vehicle tools.

- Do not damage the rotational speed sensor.
- Note that the DTC function and the dynamic engine brake control are only available with limitations.
- You may continue riding. Observe additional information on situations that can lead to a DTC fault (➠ 186).

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

DTC error

 lights up yellow.

 lights up.

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

Possible cause:

The DTC control unit has detected an error.

ATTENTION

Damage to components

Damage to sensors, for example, with the resultant malfunctions

- Do not carry along any objects under the rider's or passenger's seat.
- Secure vehicle tools.

- Do not damage the rotational speed sensor.
- Note that the DTC function and the dynamic engine brake control are not available.
- You may continue riding. Observe additional information on situations that can lead to a DTC fault (➠ 186).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

D-ESA error

–with Dynamic ESA[OE]

 lights up yellow.

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

Possible cause:

The D-ESA control unit has detected a fault. Damping action and/or the spring adjustment may be the cause. In the Auto loading mode, the cause may be a fault in the function of the riding position compensation. In this state, the motorcycle is probably heavily damped and is uncomfortable to drive, particularly on poor roadways. Alternatively, the spring setting may be set incorrectly.

- Have the malfunction corrected as soon as possible at an authorized specialist work-

shop, preferably an authorized BMW Motorrad retailer.

Hill Start Control active

 is displayed in green.

Possible cause:

The Hill Start Control (➠ 197) was activated by the rider.

- Switch off Hill Start Control.
- Operate Hill Start Control. (➠ 90)

Hill Start Control automatically deactivated

 blinks yellow.

`HSC not available. Engine not running.`
`HSC not available. Side stand lined.`

Possible cause:

Hill Start Control was switched off automatically.

- Fold in side stand.

» Hill Start Control only functions when the side stand is folded in.

- Start engine.

» Hill Start Control only functions with the engine running.

Hill Start Control cannot be activated

 is displayed.

`HSC not available. Engine not running.`

Possible cause:

Hill Start Control was switched off automatically.

- Fold in side stand.

» Hill Start Control only functions when the side stand is folded in.

- Start engine.

» Hill Start Control only functions with the engine running.

Brake temperature too high

 lights up yellow.

 `Brake temperature high! To cool down, continue riding carefully. Avoid dynamic riding.`

DANGER

Driving with overheated brakes

Risk of accident due to brake failure

- Adapt driving style.
- Use the engine brake to avoid frequent braking.

WARNING

Failure to observe maintenance intervals
Accident hazard
- Comply with the maintenance intervals applicable for the brakes.

Brake temperature critical

 lights up yellow.

 `Brake temperature critical! To cool down, continue riding carefully. Avoid dynamic riding.`

DANGER

Driving with overheated brakes
Risk of accident due to brake failure
- Adapt driving style.
- Use the engine brake to avoid frequent braking.

WARNING

Failure to observe maintenance intervals
Accident hazard
- Comply with the maintenance intervals applicable for the brakes.

Possible cause:
The brake temperature is in a critical range.
- You may continue riding carefully until the warning light goes out.

Cruise control failed

 lights up yellow.

 `Cruise control not functioning. Onward journey possible. Testing by workshop required`

Possible cause:
The control unit has detected an error.
- It must be noted that cruise control and distance control (ACC) are not available.
- You may continue riding. Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Distance control has failed temporarily

–with Active Cruise Control[OE]

 lights up yellow.

 ACC temporarily failed. Check front radar sensor for damage.

Possible cause:

The radar sensor function is impaired.

- It must be noted that the distance control (ACC) function is temporarily unavailable. Cruise control is still available.
- You may continue riding. Check the radar sensor. Remove contamination or objects covering the radar sensor.
- Observe the vehicle care and cleaning instructions (➠ 250).

Distance control 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 an error.

- It must be noted that the distance control (ACC) function is not available. Cruise control is still available.
- You may continue riding. Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Audio system temperature too high

 Audio system Level 3 too hot. Audio system is shut down.

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

Possible cause:

The audio system control unit has diagnosed excess temperature.

- Protect the motorcycle from direct sunlight.
- If the malfunction persists, have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Audio system voltage too high


Audio system voltage is high! Audio system is muted.

Possible cause:

The audio system control unit has diagnosed excess voltage.

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Fuel has reached reserve volume


Low fuel. Ride to the next filling station.

WARNING

Rough engine running or switching off of the engine due to a fuel shortage

Accident hazard, damage to catalytic converter

- Do not drive to the extent that the fuel tank is completely empty.

Possible cause:

At the most, the fuel tank still contains the reserve fuel quantity.


Reserve fuel quantity

Approx. 1.1 gal (Approx. 4 l)

- Refueling procedure. (➠ 172)

Gear not trained

–with Gearshift Assistant Pro OE


Gear indicator flashes.

Possible cause:

The transmission sensor has not been completely taught in.

- Engage neutral N and run the engine for at least 10 seconds while parked to teach in the neutral position.
- Shift all gears with clutch control and ride for at least 10 seconds in each engaged gear.

» The gear display stops blinking when the transmission sensor has been successfully taught in.

–Once the transmission sensor has been fully taught in, the Gear Shift Assistant Pro functions as described (➠ 196).

- If the teach-in procedure is unsuccessful, have the fault corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Hazard warning lights system switched on

 flashes in green.

 flashes in green.

Possible cause:

The hazard warning flasher was switched on by the rider.

- Hazard warning system. (➠ 77)

Service display

 If service is overdue, the service date or the distance covered at which service should have been completed is accompanied by the general warning light in yellow.

If service is overdue, a yellow Check Control message is displayed. The displays for service, service appointment, and remaining distance are also highlighted with exclamation marks in the menu windows MY VEHICLE and SERVICE REQUIREMENTS.

 If the service display appears more than a month before the service date, the current day's date must be reset in the instrument cluster. This situation can occur if the battery was disconnected.

Service due

 is displayed in white.

Service due! Have a service performed at a specialist workshop.

Possible cause:

Service is due because of the mileage or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.

» The operating safety and road safety of the vehicle remains unchanged.

» The best-possible value retention of the vehicle is ensured.

Service appointment overdue

 lights up yellow.

 is displayed in yellow.

Service overdue! Have a service performed at a specialist workshop.

Possible cause:

Service is overdue because of the riding performance or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.

» The operating safety and road safety of the vehicle remains unchanged.
» The best-possible value retention of the vehicle is ensured.

OPERATION

04

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IGNITION SWITCH/STEERING LOCK

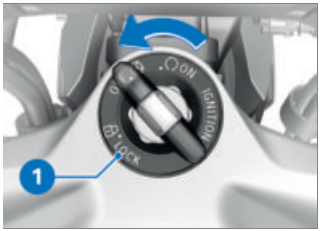
Ignition keys

You are provided with 2 ignition keys.
Should you lose your radio-operated keys, refer to the notes regarding the electronic immobilizer (EWS) (➠ 69).
The same key fits the following locks:
–Ignition switch/steering lock
–Pannier lock
–Stow compartment lock
–Fuel filler cap
–Seat lock

–with topcase OA
–Topcase

Locking the steering lock

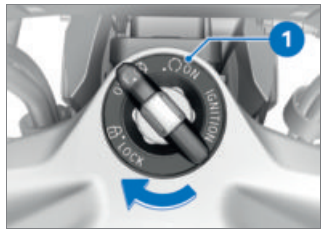
- Turn handlebars to left.



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

» Ignition, lights and all electrical circuits turned off.
» Steering lock is locked.
» The ignition key can be removed.

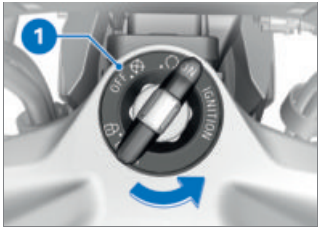
Turning on the ignition



- Insert the ignition key into the ignition switch/steering lock and turn it to position **1**.

» Parking lights and all function circuits are turned on.
» Pre-Ride-Check is carried out. (➠ 164)
» ABS self-diagnosis is performed. (➠ 164)
» DTC self-diagnosis is performed. (➠ 165)

Turning off the ignition



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

» After the ignition has been turned off, the instrument cluster remains turned on for a little while and indicates any existing fault messages.

» Steering lock is not locked.

» Electrically powered accessories remain operational for a limited period of time.

» The charging process possible using the socket on the dashboard.

» The ignition key can be removed.

–with additional headlight OE

- The auxiliary LED headlights are extinguished shortly after the ignition has been turned off.◁

IGNITION WITH KEY-LESS RIDE

Ignition keys

–with Keyless Ride OE

The indicator light for the radio-operated key flashes as long as the radio-operated key is being searched for.
If the radio-operated key or the spare key is detected, it goes out.
If the radio-operated key or the spare key is not detected, it lights up briefly.

You are provided with one radio-operated key and one spare key. Refer to the notes regarding the electronic immobilizer (EWS) (➠ 69) should you lose your keys.
The ignition, fuel filler cap and anti-theft alarm system are activated with the radio-operated key. The seat lock, storage compartment, Topcase and case can be operated manually.

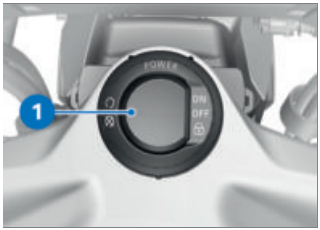
When the range of the radio-operated key is exceeded (e.g. in case or topcase), the motorcycle cannot be started and the central locking system cannot be locked/unlocked.
If the range is exceeded, the

ignition is switched off after approx. 90 seconds, and the central locking system is **not** locked.
It is advisable to carry the radio-operated key directly on your person (e.g. in a jacket pocket) and to also carry the spare key as an alternative.

Range of Keyless Ride radio-operated key
Approx. 3.3 ft (Approx. 1 m)

Locking the steering lock
–with Keyless Ride OE

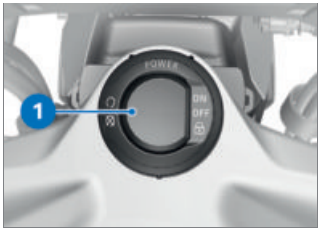
Requirement
Handlebars are turned to the left. Radio-operated key is within reception area.



- Press and hold button **1**.
» Steering lock audibly locks.
» Ignition, lights and all electrical circuits turned off.
- To unlock the steering lock, briefly press button **1**.

Turning on the ignition
–with Keyless Ride OE

Requirement
Radio-operated key is within reception area.



- There are **two** ways to activate the ignition.

Version 1:
- Briefly press button **1**.
» Parking lights and all function circuits are turned on.
–with additional headlight OE
» LED auxiliary headlights are turned on.◁
» Pre-Ride-Check is carried out. (➠ 164)
» ABS self-diagnosis is performed. (➠ 164)
» DTC self-diagnosis is performed. (➠ 165)

Version 2:
- Steering lock is locked; press and hold button **1**.
» Steering lock is unlocked.

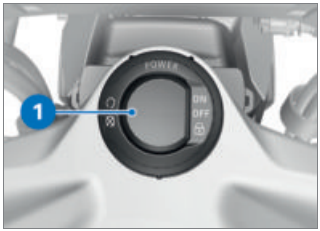
» Parking lights and all function circuits turned on.
–with additional headlight OE
» LED auxiliary headlights are turned on.◁
» Pre-Ride-Check is carried out. (➠ 164)
» ABS self-diagnosis is performed. (➠ 164)
» DTC self-diagnosis is performed. (➠ 165)

Turning off the ignition

–with Keyless Ride OE

Requirement

Radio-operated key is within reception area.



- The ignition can be deactivated in **two** ways.

Version 1:

- Briefly press button **1**.

» Light is turned off.
» Steering lock is not locked.

Version 2:

- Turn handlebars to left.
- Press and hold button **1**.

» Light is turned off.
» Steering lock is locked.

EWS Electronic immobilizer

The motorcycle's electronics monitors the data stored in the ignition key through a ring antenna incorporated in the ignition lock. The engine control unit does not enable engine starting until the ignition key has been recognized as "authorized" for your motorcycle.

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

If you lose an ignition key, you can have it disabled by your BMW Motorrad retailer. When having a radio-operated key disabled you should also bring all of the motorcycle's remaining keys with you.
The engine can no longer be started using a disabled igni-

tion key; however, a disabled ignition key can be enabled again.
Spare keys are available only through an authorized BMW Motorrad retailer. The keys are part of an integrated safety system, so the retailer is under an obligation to check the legitimacy of all applications for replacement/ extra ignition keys.

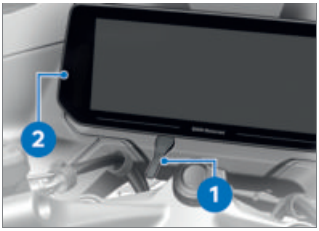
Radio-operated key lost, spare key available

–with Keyless Ride OE

Requirement

The spare key is available.

- Park the motorcycle, making sure the ground is level and firm.
- If you lose your keys, refer to the notes regarding the electronic immobilizer (**EWS**).
- Should you lose the radio-operated key during a trip, the vehicle can be started using the spare key.



- Hold the spare key **1** to the left below the TFT display **2**.

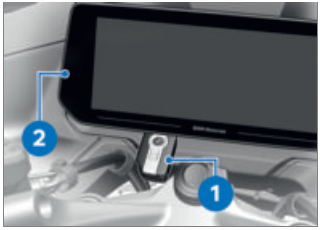
Period in which the engine must be started. Then unlocking must be repeated.	
30 s	

» Pre-Ride-Check is carried out.
–Key has been detected.
–Engine can be started.
- Start engine. (➠ 163)

Battery of radio-operated key is drained, spare key is not available

–with Keyless Ride OE

- Park the motorcycle, making sure the ground is level and firm.



- Hold the radio-operated key **1** to the left below the TFTdisplay **2**.

	Period in which the engine must be started. Then unlocking must be repeated.
30 s	

» Pre-Ride-Check is carried out.
–Key has been detected.
–Engine can be started.
- Start engine. (➠ 163)

Replacing the battery of the radio-operated key

–with Keyless Ride[OE]

If the radio-operated key does not respond when a button is pressed for a short or long time:

- The battery for the radio-operated key no longer has full capacity.

Remote key battery low. Function limited. Change battery.

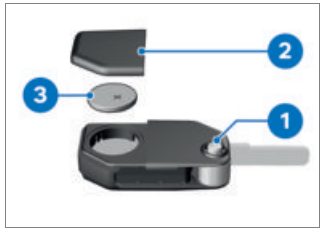
DANGER

Swallowing a battery

Risk of injury or death

- An ignition key contains a button cell as a battery. Batteries or button cells can be swallowed and cause severe or fatal injuries within two hours, e.g. due to internal burns or chemical burns.
- Keep ignition keys and batteries out of the reach (range) of children.
- If it is suspected that a battery or button cell has been swallowed or is inside a body part, seek medical attention immediately.

- Change battery.



- Press button **1**.
» Key bit folds open.
- Press battery cover **2** upward.
- Remove battery **3**.
- Dispose of the old battery in accordance with legal reg-

ulations. Do not dispose of the battery in the household waste.

ATTENTION

Unsuitable or improperly inserted batteries

Component damage

- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, make sure that the polarity is correct.

- Insert the new battery with the positive terminal facing up.

Battery type
For Keyless Ride radio-operated key
CR 2032

- Install battery cover **2**.

» The indicator light in the instrument cluster blinks.

» The radio-operated key is working again.

EMERGENCY-OFF SWITCH



1 Emergency-off switch

WARNING

Operation of the emergency ON/OFF switch when riding

Danger of falling due to blocking of rear wheel

- Do not operate the emergency ON/OFF switch when riding.

The engine can be turned off easily and quickly using the emergency-off switch.



A Engine turned off
B Operating position

INTELLIGENT EMERGENCY CALL

–with intelligent emergency call OE

Emergency call via BMW

Only press the SOS button in an emergency.
Emergency call cannot be ensured if the conditions are unfavorable for technical reasons, e.g. in regions where there is no cellphone reception.
During an emergency call, the position of the vehicle, the selected language and any accident data are transmitted to BMW (➠ 11). Under unfavorable conditions, data transfer can be limited or delayed. This can lead to delayed processing of the emergency call.
Even if an emergency call via BMW is not possible, a call to a public emergency call number may be established. This depends on the respective mobile phone network and the national regulations.

Language for emergency call

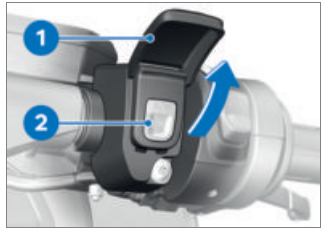
Depending on the market for which it was determined, each vehicle is assigned a language. The BMW Call Center responds in this language.

Only your BMW Motorrad Retailer is able to change the language for the emergency call. This language assignment to the vehicle differs from the display languages the rider is able to select in the TFT display.

Manual emergency call

Requirement

An emergency has arisen. The vehicle is stationary. The ignition is turned on.



• Open cover **1**.

- Briefly press SOSbutton **2**.



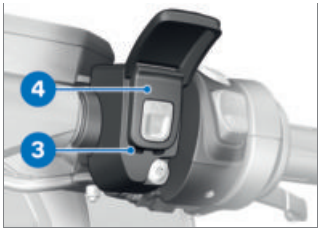
The time until an emergency call is placed is displayed. During this time it is possible to cancel the emergency call by pressing and holding the SOS button.

- Press the emergency-off switch to stop the engine.
- Remove your helmet.

» Once the timer has expired, a voice connection will be established with the BMW Call Center.



The connection has been established.



- Use the microphone **3** and speaker **4** to relay information to the rescue services.

Automatic emergency call

The intelligent emergency call is automatically active once the ignition is switched on and will react if you are involved in a fall.

Emergency call in the event of a minor fall

- A minor fall or crash has been detected.

» An acoustic signal is emitted.



The time until an emergency call is placed is displayed. During this time it is possible to

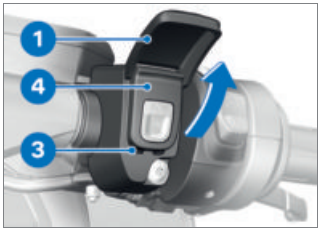
cancel the emergency call by pressing and holding the SOS button.

- If possible, remove helmet and stop the engine.

» Once the timer has expired, a voice connection will be established with the BMW Call Center.



The connection has been established.



- Open cover **1**.
- Use the microphone **3** and speaker **4** to relay information to the rescue services.

Emergency call in the event of a heavy fall

- A heavy fall or crash has been detected.

» The emergency call is sent automatically without delay.

LIGHTING

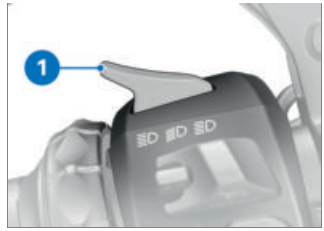
Parking lights

The parking lights come on automatically when the ignition is switched on.

The parking light is a load on the battery. Turn on the ignition only for a limited period.

Low beams

- Turn on the ignition. (➠ 66)
- Start engine. (➠ 163)



- Alternative: With the ignition turned on, pull the switch **1**.

High beams and headlight flasher

- Turn on the ignition. (➠ 66)



- Press switch **1** forward to turn on high beams.
- Pull switch **1** toward rear to actuate headlight flasher.

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

Headlight courtesy delay feature

- Turn off the ignition. (➠ 67)



- Immediately after turning off the ignition, pull switch **1** back and hold until the headlight courtesy delay feature turns on.

» The vehicle lighting lights up for one minute and then turns off automatically.

– This can be used, for example, to light the path to your front door after the vehicle is parked.

Roadside parking lights

- Turn off the ignition. (➠ 67)



- Immediately after turning off the ignition, push button **1** to the left and hold it until the roadside parking lights turn on.
- Turn ignition on and then off again to turn off the roadside parking lights.

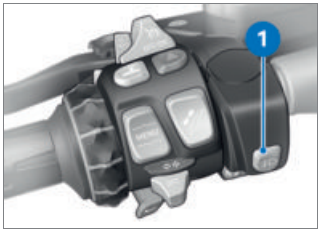
Auxiliary headlights

– with additional headlight OE

Requirement

The low beams must be turned on.

The auxiliary headlights are approved for use as fog lights and may only be used in poor weather conditions. Comply with the country-specific road traffic regulations.



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

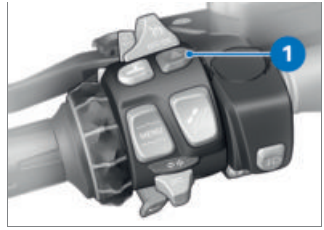
lights up.

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

Hazard warning system

- Turn on the ignition. (➠ 66)

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



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

» Ignition can be turned off.

- To turn off the hazard warning system, turn on the ignition as required and press button **1** once again.

Turn signals

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Vehicle settings` menu, then select the `Lights` menu item.
- Turn `Comfort turn indicator` on or off.



- Press button **1** to the left or right to turn on the turn signals.

» If the comfort turn signal is turned on, the turn signal automatically switches off once the speed-dependent distance has been covered.

- Alternative: Press button **1** to turn off the turn signals.

DYNAMIC TRACTION CONTROL (DTC)

Turning the DTC function on and off

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Assist` menu, then select the `DTC` menu item.
- Deactivate `DTC` to turn off Dynamic Traction Control DTC until the next time the ignition is turned on.

 lights up.

- Activate `DTC` to turn on Dynamic Traction Control DTC. Alternative: turn the ignition off and on again.

 goes out, in the event of incomplete self-diagnosis, the DTC indicator and warning light starts flashing.

- More detailed information on the Dynamic Traction Control (DTC) can be found in the Technology in detail chapter (➠ 186).

ELECTRONIC CHASSIS AND SUSPENSION ADJUSTMENT (D-ESA)

–with Dynamic ESA[OE]

Dynamic ESA adjustment options

The electronic Dynamic ESA chassis and suspension adjustment can automatically adapt your motorcycle to the vehicle load.

For more information on Dynamic ESA, see Chapter "Technology in detail" (➠ 190).

Adjusting damping

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Assist` menu, then select the `Damping` menu item.
- Select the desired damping setting.

The damping cannot be adjusted while the motorcycle is being ridden.

The damping setting remains unchanged even after the ignition has been turned off.

Adjusting the load

- Start engine. (➠ 163)
- Go to the `Settings`, `Assist` menu, then select the `Load` menu item.
- Select the desired load setting.

The load setting remains unchanged even after the ignition has been turned off.

The load setting cannot be adjusted while the motorcycle is underway.

The following message is displayed if no load setting is possible: `Action not possible. Engine needs to run.`

The following message is displayed if no load setting is possible due to excess speed: `Action not possible. Speed too high.`

RIDING MODE

Use

BMW Motorrad has developed riding scenarios for your vehicle from which you can select the one matching your situation:

–ECO: Range-optimized riding.
–RAIN: Riding on wet roads.
–ROAD: Riding on dry roads.

–with riding modes Pro OE
–DYNAMIC: Brisk riding on dry roads.

The optimum interaction between engine characteristics and DTC control is provided for each of these scenarios.

–with Dynamic ESA OE
The chassis and suspension adjustment also adapts to the selected scenarios.

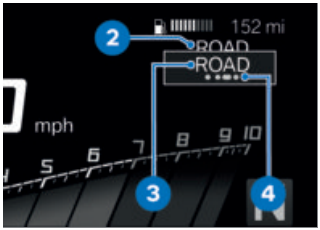
You can find more detailed information regarding the selectable riding modes in the Technology in detail (➠ 191)chapter.

Setting riding mode

- Turn on the ignition. (➠ 66)



- Press button **1**.



The active riding mode **2** fades into the background and is displayed in pop-up **3**. The guide **4** shows how many riding modes are available.



- Press button **1** repeatedly until the desired riding mode is displayed.
  - » When the vehicle is stationary, the selected riding mode is activated after approx. two seconds.
  - » The new riding mode is activated while the vehicle is in motion under the following conditions:
    - – The throttle grip is in idle position.
    - – Brake is not engaged.
  - » The riding mode that is set and its corresponding adjustments of engine characteristics and DTC control are retained even after the ignition is turned off.

CRUISE CONTROL

Turning on cruise control

Requirement

DTC is turned on and ABS is active.

WARNING

Use of the cruise control in unfavorable road conditions

Accident hazard

- Do not use the cruise control in unfavorable road conditions, e.g. in snow, on ice, in torrential rain, in off-road use and on slippery surfaces.
- Do not use cruise control on roads with many curves.



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

» Button **2** is unlocked.

Saving the speed



- Briefly press button **1** forward.

Cruise control can also activate the brake.

Setting range of cruise control (gear-dependent)
9…137 mph (15…220 km/h)

is displayed.

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

Accelerating

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



- Briefly press button **1** forward.
» The speed is increased by 1 mph (1.6 km/h) each time the button is pressed.
- Press button **1** forward and hold.
» The speed is increased in increments of 5 mph (8 km/h).
» If button **1** is no longer pressed, the speed reached is maintained and saved.

Decelerating

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



- Briefly press button **1** backward.
» The speed is decreased by 1 mph (1.6 km/h) each time the button is pressed.
- Press button **1** back and hold.
» The speed is decreased in increments of 5 mph (8 km/h).
» If button **1** is no longer pressed, the speed reached is maintained and saved.

Deactivating cruise control

- Actuate the brakes or throttle grip (ease the throttle beyond the default setting) to deactivate cruise control.

If the clutch remains pulled for more than 1.5 seconds, cruise control is deactivated.

» A message is shown in the display.

Automatic deactivation

Cruise control is deactivated automatically in the following situations:

– When falling below the minimum speed (stalling protection).
– After several seconds when driving at the maximum engine speed.
– In case of ABS or DTC intervention.
– In case of a system error.

If cruise control was automatically deactivated, a message appears in the display.

Resuming previous cruising speed



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

Cruise control is not deactivated by accelerating. If you release the throttle grip, the motorcycle will decelerate only to the cruising speed saved in memory, even though you might have wanted to slow down to a lower speed.

 is displayed.

Turning off cruise control



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

» The system is turned off.

 is hidden.

» Button **2** is locked.

Configuring the character of the cruise control

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Assist` menu, then select the `Cruise control` menu item.
- Select the `Speed control type` menu item.
- Select desired setting.

» The following settings for the acceleration and deceleration behavior are possible:

– `Comfortable`: Smooth acceleration and deceleration of the vehicle.
– `Dynamic`: More pronounced acceleration and deceleration for more dynamic riding style.

DISTANCE CONTROL (ACC)

– with Active Cruise Control OE

Safety instructions

WARNING

ACC does not release riders from their own responsibility
Risk of accident due to misjudgment by the system
- ACC is a driver assist system and not a safety system. You alone are responsible for correct judgment of visibility conditions and the traffic situation and to intervene accordingly.
- Adhere to the imposed speed limits.
- Never take your hands off the handlebar!

WARNING

ACC cannot respond to all objects and traffic situations
Risk of accident
- ACC responds only to vehicles that are ahead and moving in the same direction. This means that pedestrians, animals and vehicles that are stationary or moving in the opposite direction are not detected. Cyclists cannot be reliably detected.
- A vehicle entering the lane from the side cannot be used as a reference object until it has been checked for plausibility by the radar. Due to this, deceleration might be late and abrupt, or it is possible that it will not occur at all.
- Observe the traffic and actively intervene in the respective situations.

WARNING

ACC is not functional in certain situations

Risk of accident if there is no control takeover request and deceleration

- The field of view of the radar must be clear for object detection. During heavy rain, fog or snow and when the radar sensors are dirty or covered, object detection is limited.
- Object detection can be impeded by environmental conditions, e.g. by strong reflections and electromagnetic interference.
- After any accident or after the motorcycle hits the vehicle ahead or tips over, the installation position of the radar sensor must be checked.
- Observe the traffic and actively intervene in the respective situations.

WARNING

ACC cannot detect all objects and traffic situations, or it cannot detect them correctly

Risk of accident

- ACC cannot detect certain objects or complex traffic situations correctly and, due to this, cannot issue warnings and decelerate, or it issues incorrect warnings or decelerates improperly. For example, you must brake on your own when you are approaching accident sites or vehicles at traffic lights or traffic jams.
- Object detection can be limited e.g. in cross traffic, if the road is curvy or uneven or if you are riding unstably or at an angle within a lane.
- Observe the traffic and actively intervene in the respective situations.

WARNING

ACC cannot compensate for excess speed differences
Risk of accident
- ACC cannot perform emergency braking. The deceleration and buildup of deceleration are limited.
- The system cannot compensate for significant speed differences, e.g. when quickly approaching a truck ahead or when another vehicle moves into your lane.
- If the setting range of ACC is exceeded, objects cannot be detected as quickly due to the high speed. Therefore, heightened caution is mandatory.
- Observe the traffic and actively intervene in the respective situations.

WARNING

ACC can lose track of detected objects
Risk of accident
- When ACC deselects a detected object erroneously, the motorcycle will accelerate to the set speed. This can be the case when riding around curves, for instance.
- Observe the traffic and actively intervene in the respective situations.

WARNING

ACC cannot sufficiently decelerate at high speeds going around curves
Risk of accident
- Curve control reduces the riding speed if the distance control is active and the leaning angle is too great. When a vehicle has been detected, the motorcycle decelerates more slowly when at a leaning angle.
- Select an appropriately low speed.

ATTENTION

ACC can misidentify certain objects and traffic situations
Risk of injury due to unexpected brake intervention
- Certain objects and complex traffic situations can cause ACC to issue unnecessary warnings and decelerate. For instance, a narrowed lane (construction area) or flying objects (e.g. balls or plastic bags) can result in a warning or a deceleration being issued by ACC.
- Observe the traffic and actively intervene in the respective situations.

When riding in other countries, the country-specific provisions for operating radar sensors must be observed. The radar sensor must be disconnected if ACC has no radar license for a particular country and the country-specific provisions require it.

Switchover between cruise control and ACC

- Observe safety instructions (➠ 84).
- Turn on the ignition. (➠ 66)

WARNING

Reduced support after switchover to cruise control
Risk of accident
- Unlike ACC, cruise control does not respond to the traffic ahead but adjusts the speed to the stored value.
- Observe the traffic and actively intervene in the respective situations.

- Go to `Settings`, `Assist` menu, select `Cruise control`.
- Activate or deactivate the `Activate ACC`.



- As an alternative, press and hold the button **1**.

» A switchover between cruise control and ACC takes place.

- Note automatic deactivation (➠ 83).
- For more information on the distance control (ACC),

see the Technology in detail (➠ 188) chapter.

Operating ACC

Requirement

`Activate ACC` is activated.

- Observe safety instructions (➠ 84).
- Turn on cruise control. (➠ 81)

 is displayed in gray.

- Save the speed. (➠ 81)

If the speed is above the setting range of 19...99 mph (30...160 km/h), the speed will be adjusted to the maximum speed of 99 mph (160 km/h).



- For turning on: Briefly press button **1**.

» ACC is turned on.

» The set distance is briefly shown in the display.

- For turning off: Change over to cruise control or turn off cruise control altogether.
- Note automatic deactivation (➠ 83).
- For more information on the distance control (ACC), see the Technology in detail (➠ 188) chapter.

Displays in the TFT display

The following icons may be displayed in the TFT display when operating ACC:

Indicator lights

» No object is detected:

 is displayed in green.

» An object is detected:

 is displayed in green.

» Rider exceeds the set speed by turning the throttle grip:

 is displayed in green.

Warning lights

» The system caused ACC control to be shut off:

 is displayed in red.

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

 blinks red.

If a warning light appears in the TFT display:

- Take action to avoid potential danger.

Setting distance



- Briefly press button **1**.

» The set distance is briefly shown in the display.

WARNING

Selected distance is too short for the traffic situation

Risk of accident

- Adjust the distance according to the traffic and weather conditions.
- Maintain the legally prescribed safety distance.

- Repeatedly press the button **1** briefly until the distance has been set.

» The following settings are available:

 Short distance

 Medium distance

 Long distance

» If the ACC detects an object ahead that is moving in the same direction, this is visualized by adding a car to the displayed icon.

» The distance setting remains unchanged even after the ignition has been turned off.

HILL START CONTROL

Activating and deactivating the Hill Start Control

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Assist` menu, then activate or deactivate the menu item `Hill Start Control`.



The icon **1** for Hill Start Control is displayed in the upper status line and in the Pure Ride view.

Operating Hill Start Control

Requirement

Vehicle is at a standstill with the engine running.

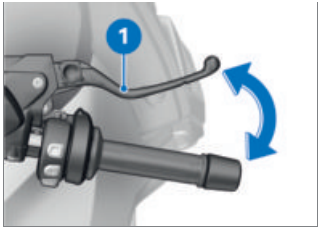
ATTENTION

Failure of the drive-off assistant

Risk of accident

- Secure the vehicle through manual braking.

Hill Start Control is only a convenience system for easier hill-starting and should, therefore, not be confused with a parking brake.



- Apply brake lever **1** or footbrake lever firmly and then release again.

is displayed in green.

» Hill Start Control is activated.

- To turn off Hill Start Control, activate the brake lever **1** or footbrake lever again.

is hidden.

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

Hill Start Control is deactivated automatically when driving off.

disappears after the brake has been released completely.

» Hill Start Control is deactivated.

- More information about the Hill Start Control can be found in the chapter "Technology in detail" (➠ 197).

Operating
Hill Start Control Pro
–with riding modes Pro OE

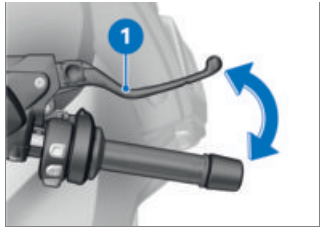
Requirement
Vehicle is at a standstill with the engine running.

ATTENTION

Failure of the drive-off assistant
Risk of accident
- Secure the vehicle through manual braking.

Hill Start Control Pro is only a comfort system to make starting on hills easier and should therefore not be confused with a parking brake.

Hill Start Control Pro drive-off assistant should not be used for gradients of more than 40%.



- Apply brake lever **1** or footbrake lever firmly and then release again.
- Alternatively, apply the brake for about one second after the vehicle has come to a standstill, with a gradient of at least 3%.

is displayed in green.

» Hill Start Control Pro has been activated.

- To turn off Hill Start Control Pro, activate the brake lever **1** or footbrake lever again.

If Hill Start Control Pro was deactivated using the brake lever, then automatic Hill Start Control is deactivated for the next 13.1 ft (4 m).

is displayed in white.

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

Hill Start Control Pro is deactivated automatically when driving off.

 disappears after the brake has been released completely.

» Hill Start Control Pro is deactivated.

- More information about the Hill Start Control Pro can be found in the chapter "Technology in detail" (➠ 197)

Adjusting Hill Start Control Pro

–with riding modes Pro OE

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Assist` menu, then select the `HSC Pro` menu item.
- To turn off Hill Start Control Pro, select `Off`.

» Hill Start Control Pro is deactivated.

- To turn on manual Hill Start Control Pro, select `Manual`.

» Hill Start Control Pro can be activated by firmly applying the handbrake or footbrake lever.

- To turn on automatic Hill Start Control Pro, select `Auto`.

» Hill Start Control Pro can be activated by firmly applying the handbrake or footbrake lever.

» During brake actuation for approximately one second after the vehicle has come to a standstill and on a slope with at least a 3% gradient, Hill Start Control Pro is activated automatically.

» The selected setting is retained even after the ignition is turned off.

ANTI-THEFT ALARM SYSTEM (DWA)

–with anti-theft alarm system (DWA) OE

Activation

- Turn on the ignition. (➠ 66)
- Adjust the DWA. (➠ 95)
- Turn off the ignition. (➠ 67)

» If the DWA is activated, the DWA is automatically activated after the ignition is turned off.

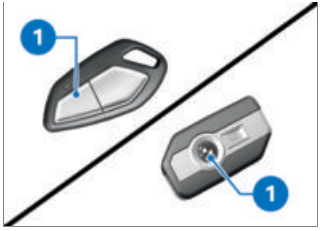
» Activation takes approximately 30 seconds to complete.

» Turn signals flash twice.

» Confirmation tone sounds twice (if programmed).

» DWA is armed.

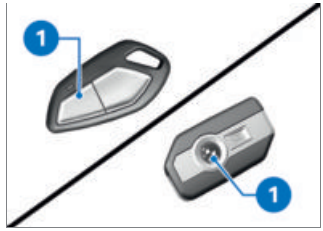
–with central locking system OE
or
–with Keyless Ride OE



- Turn off the ignition. (➠ 67)
- Press button **1** on the remote control or radio-operated key twice.

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

» Activation takes 30 seconds to complete.
» Turn signals flash twice.
» Confirmation tone sounds twice (if programmed).
» DWA is armed.◁



- To deactivate the tilt sensor (for example, if you are about to transport the motorcycle on a train and the strong swaying movement of the moving train could trip the alarm), press button **1** on the remote control or the radio-operated key during the activation phase again.

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

Alarm signal

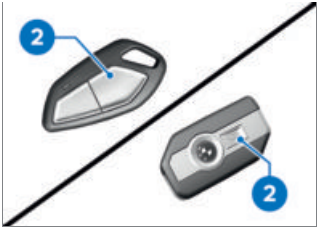
The DWA alarm signal can be triggered by:
–Tilt alarm sensor
–Switch-on attempt with an ignition key.
–Disconnecting the DWA from the vehicle battery (DWA battery takes over the power supply – alarm tone only, turn signals do not flash).

If the radio-operated key is within the reception area, any alarm signal triggered by the tilt alarm sensor is suppressed.

If the DWA battery is discharged, all functions remain operational; the only difference is that the alarm cannot be triggered if the system is disconnected from the vehicle battery.

The duration of the alarm signal is approx. 26 seconds. During the alarm, an alarm tone sounds and the turn signals blink. The type of alarm tone can be set by an authorized BMW Motorrad retailer.

–with central locking system OE
or
–with Keyless Ride OE



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

If an alarm signal has been triggered while the motorcycle was unattended, the rider is notified accordingly by an alarm tone sounding once when the ignition is turned on. The indicator light in the instrument cluster then signals the reason for the alarm signal for one minute.

Light signals on indicator light:

–1x flash: Tilt sensor 1
–2x flash: Tilt sensor 2
–3x flash: Ignition is turned on using an unauthorized ignition key

– 4x flash: DWA disconnected from vehicle battery
– 5x flash: Tilt sensor 3

Deactivation

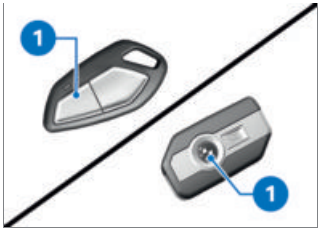
- Turn on the ignition. (➠ 66)

» Turn signals flash once.
» Confirmation tone sounds once (if programmed).
» DWA is turned off.

– with central locking system OE

or

– with Keyless Ride OE



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

If the alarm function is deactivated using the radio-operated key and the ignition is not turned on then, the alarm function will be reactivated automatically after approximately 30 seconds if `Arm automatically` is turned on.

» Turn signals flash once.
» Confirmation tone sounds once (if programmed).
» DWA is turned off.◁

Adjusting the DWA

- Turn on the ignition. (➠ 66)
- Go to the `Settings`, `Vehicle settings` menu, then select the `Alarm system` menu item.

» The following adjustments are available:

– Adapting `Warning signal`
– Turning `Tilt sensor` on and off
– Turning `Arming tone` on and off
– Turning `Arm automatically` on and off

Possible settings

`Warning signal`: Set increasing and decreasing or intermittent alarm tone.

`Tilt sensor`: Activate the tilt sensor to monitor the tilt of the vehicle. The DWA anti-theft alarm system responds, for example, in the event of attempted wheel theft or towing.

Deactivate the tilt sensor when transporting the vehicle to avoid triggering the DWA.

`Arming tone`: Confirmation alarm tone after activating/deactivating the DWA in addition to flashing turn indicators.

Arm automatically: Automatic activation of the alarm function when the ignition is turned off.

HEATING

Operating heated grips

The heated grips option can only be activated when the engine is running.

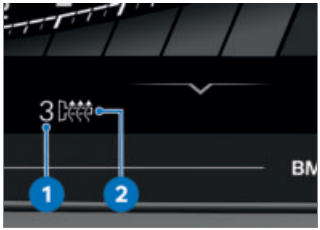
The increase in power consumption caused by the heated grips can drain the battery if you are riding at low engine speeds. If the battery is inadequately charged, the heated grips are switched off to ensure starting capability.

- Start engine. (➠ 163)
- Go to the Settings, Heating menu, then select the Heated handlebar grips menu item.



The grips have five-level heating. The fifth level is used for fast heating of the grips; the switch should then be switched back to one of the lower levels.

- Select the desired heating level.



The selected heating level **1** and the heated grip icon **2** are shown in the display.

Operating the rider's seat heater

–with seat heating OE

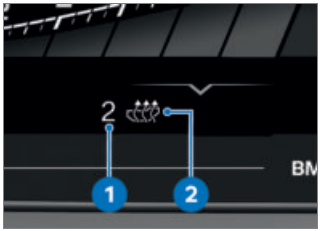
Seat heating can be activated only when the engine is running.

- Start engine. (➠ 163)
- Go to the Settings, Heating menu, then select the Seat heating menu item.



The rider's seat has five-level heating. The fifth level is used for fast heating of the seat; the switch should then be switched back to one of the lower levels.

- Select the desired heating level.



The selected heating level **1** and the seat heating icon **2** are shown in the display.

Operating the passenger seat heater

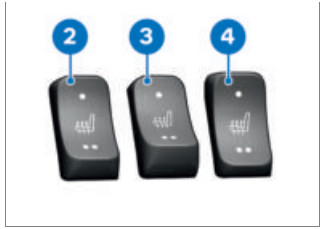
–with seat heating OE

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

- Start engine. (➠ 163)



- Select the desired heating level with **1** switch.

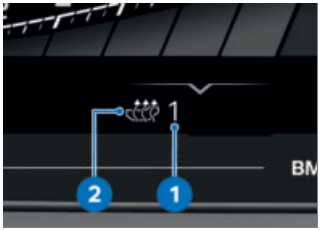


The passenger seat has two-level heating. The second level is used for heating the seat quickly. It is advisable to switch back to the first level as soon as the seat is warm.

–**2** Switch in middle position: Heating off.

–**3** Switch in one-dot position: Low heating output.

–**4** Switch in two-dot position: High heating output.



The selected heating level **1** and the seat heating icon **2** are shown in the display.

STORAGE COMPARTMENT

Operating the left storage compartment

ATTENTION

High temperatures in the storage compartments, especially in summer
Damage to objects housed here, particularly electronic devices such as mobile phones
- Do not place objects that are sensitive to heat in the storage compartment during the summer.
- Ask the manufacturer about possible limits of use and observe them.

ATTENTION

Vibrations during riding
Damage to stored mobile phones
- Make sure that the stored mobile phone is suitable for use on the motorcycle. To do so, ask the manufacturer about limits of use and observe them.

–with central locking system OE
- Press unlocked lock cylinder downwards to open the lid.◁



- Unlock and storage compartment lock **1** using the ignition key.
- Press unlocked lock cylinder downwards to open the lid.

Operating the right storage compartment

–with comfort telephony with enhanced smartphone connection OE

ATTENTION

High temperatures in the storage compartments, especially in summer

Damage to objects housed here, particularly electronic devices such as mobile phones

- Do not place objects that are sensitive to heat in the storage compartment during the summer.
- Ask the manufacturer about possible limits of use and observe them.

ATTENTION

Vibrations during riding

Damage to stored mobile phones

- Make sure that the stored mobile phone is suitable for use on the motorcycle. To do so, ask the manufacturer about limits of use and observe them.



- Unlock and storage compartment lock **1** using the ignition key.
- Press unlocked lock cylinder downwards to open the lid.

–with central locking system OE

- Press unlocked lock cylinder downwards to open the lid.◁

Inductive charging

–with comfort telephony with enhanced smartphone connection OE



Notes about use

Smart phones can be inductively charged using the wireless charging tray **1** in the right storage compartment, provided that this function is supported by the smartphone. Alternatively, the USB charging interface **2** can also be used for charging and takes precedence over inductive charging.

Dimensions

The storage compartment is suitable for smartphones with dimensions up to a maximum of 6.4 in (162 mm) x 3.1 in (78 mm) x 0.35 in (8.8 mm). If the USB charging interface is used for charging, the size is reduced due to the cable connection.

Charge current

This is a 5 V USB charging socket providing a maximum charge current of 2.1 A (maximum charge power of 10.5 W).

The wireless charging tray provides a maximum 1 A of charge current (maximum 5 W of charging power) at 5 V of charging voltage.

Ventilation

Starting from a temperature of 95 °F (35 °C), the fan is turned on in the storage compartment to ensure sufficient air circulation. When charging is in progress, the ventilation turns on in the storage compartment starting at 86 °F (30 °C).

Charging a smartphone

–with comfort telephony with enhanced smartphone connection OE

Requirement

Ignition on.



- Pull the slide plate **2** toward the back.
- Put the smartphone into the storage compartment with the display facing up.

If a protective sleeve is used for your smartphone, the charging performance can be limited due to the increased distance to the charging surface.

» The indicator light **1** will be continuously lit green.
– The smartphone is charging.
- Push the pin **3** next to the slide plate **2** to the left.

» The smartphone is fastened in place.

Removing a smartphone

– with comfort telephony with enhanced smartphone connection OE



- Pull the slide plate **2** toward the back.
- Pull the clip **1** upward to remove the smartphone **3** more easily.

Status indicator light

– with comfort telephony with enhanced smartphone connection OE

The colors of the indicator light mean the following:

– Slowly flashing green: Ready for charging.

The indicator light flashes for 5 seconds after the ignition is switched on.

– Continuously lit green: Inductive charging or USB charging is in progress or completed.
– Quickly flashing yellow: Excess temperature or disruptive foreign object on the charger.
– Slowly flashing red: There is a fault with the fan.

–Continuously lit red: General fault.

If there is a fault, charging is not possible. Have faults corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

CENTRAL LOCKING SYSTEM

Locking

–with central locking system OE



- Turn on ignition and press button **1**.

Only motorcycles without Keyless Ride have a separate remote key for the central locking system and alarm system.

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

» The storage compartments and cases are locked.

–with topcase OA

» The topcase is locked.◁

» These locks can no longer be unlocked manually.


is displayed.

–with anti-theft alarm system (DWA) OE

- Note the information on the functions of the remote control for the anti-theft alarm system as described in the Operation chapter.◁

Unlocking

–with central locking system OE



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

» The storage compartments and cases are unlocked.

–with topcase OA

» The topcase is unlocked.◁

» Once a lock has been locked manually it subsequently has

to be unlocked manually as well.

–with anti-theft alarm system (DWA) OE

- Note the information on the functions of the remote control for the anti-theft alarm system as described in the Operation chapter.◁

Emergency unlocking

–with central locking system OE

If the central locking system can no longer be opened, you can open the cases and topcase manually as follows:

- Remove the case. (➠ 107)
- Open case. (➠ 106)



- First, turn the key in the topcase lock 45° beyond the **LOCK** position, then turn back to the position indicated by the dot and press in the lock cylinder.

» The release lever pops up.

Registration of remote controls

–with central locking system OE

–with anti-theft alarm system (DWA) OE

–without Keyless Ride OE

If a remote control is to be replaced or if you are going to use an additional remote control, you must always register all the remote controls in the set.

- Enable registration of the remote controls as follows:
- Turn on the ignition. (➠ 66)



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

» One sound signal is issued.

- Turn off the ignition within ten seconds.

You can now proceed to register all the remote controls.

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



- Hold down buttons **1** and **2**.
» LED **3** flashes for about ten seconds.
- Once LED **3** no longer flashes, release buttons **1** and **2**.
» **3** LED lights up.
- Press button **1** or button **2**.
» One sound signal is issued and the LED **3** goes out.

To complete logon:

- Turn off the ignition. (➠ 67)
» Three sound signals are issued.
» The logon is also ended in the following situations:
– 4 remote controls have been logged on.
– After logon of the first remote control, no button was pressed for approx. 30 seconds.

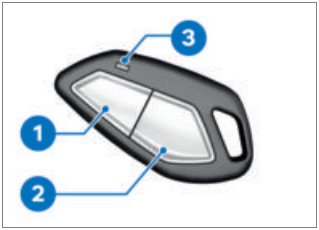
Synchronizing the remote controls

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

If the central locking system stops responding to the signals from a remote control unit then the unit will need to be resynchronized. This scenario can arise (for example) after the remote-control unit's buttons have been pressed frequently while the unit was beyond the range of the DWA.

- Synchronize the remote-control units as follows:

- Turn on the ignition. (➠ 66)



- Hold down buttons **1** and **2**.
» LED **3** flashes for about ten seconds.
- Once LED **3** no longer flashes, release buttons **1** and **2**.
» **3** LED lights up.

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

» One sound signal is issued and the LED **3** goes out.

Replacing battery in the remote-control unit

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

DANGER

Swallowing a battery

Risk of injury or death

- An ignition key contains a button cell as a battery. Batteries or button cells can be swallowed and cause severe or fatal injuries within two hours, e.g. due to internal burns or chemical burns.
- Keep ignition keys and batteries out of the reach (range) of children.
- If it is suspected that a battery or button cell has been swallowed or is inside a body part, seek medical attention immediately.

If the LED lamp on the remote-control unit fails to light up when a button is pressed, or only lights up briefly:

- Replace the battery in the remote-control unit.



- Open the battery compartment cover **1**.
- Dispose of the old battery in accordance with legal regulations. Do not dispose of the battery in the household waste.

ATTENTION

Unsuitable or improperly inserted batteries

Component damage

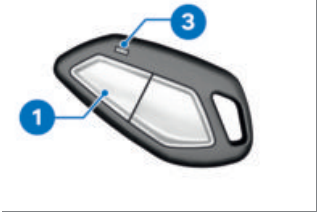
- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, make sure that the polarity is correct.

- Insert the new battery with the positive terminal facing up.

Battery type
For remote-control of central locking system

Battery type
CR 1632

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



- Press button **1** twice.

» LED **3** blinks for a few seconds.

» The remote control is ready to operate again.

CASE

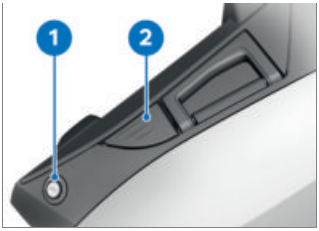
Opening a case

–with central locking system OE

- Open the central locking system if necessary.◁



- Turn the key in the case lock to the position of the dot and remove it.



- Press the lock cylinder **1** downward.

» The release lever **2** pops open.

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

Closing a case



- Pull the release lever **2** all the way up.
- Close case lid and press down. Ensure that nothing gets trapped between the lid and case.

The case can also be locked if the lock is in the **LOCK** position. Under such circumstances, ensure that the ignition key is not in the case.

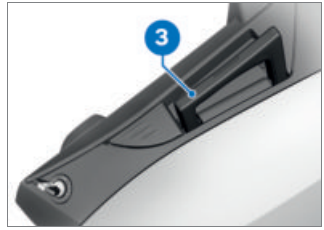
- Press the release lever **2** down until it snaps in.
- Turn the key in the case lock to the **LOCK** position and pull it off.

Removing a case



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

» Carrying handle pops out.

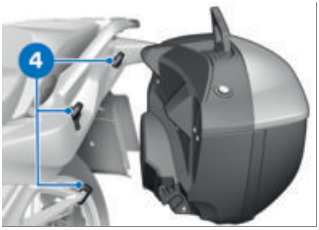


- Pull carrying handle **3** upward to the stop.

» Case is released and can be removed.

Attaching a case

- Fold the carrying handle up to the stop.



- Insert case in the brackets **4**.



- Press the carrying handle **3** down until it snaps in.
- Turn the key in the case lock to the **LOCK** position and pull it off.

Maximum payload and maximum speed

Observe maximum payload and maximum speed.

The following values apply for the combination described here:

Maximum speed when riding with a loaded case
max 112 mph (max 180 km/h)

Payload per case
max 22 lbs (max 10 kg)

TFT DISPLAY

05

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GENERAL NOTES

Warnings

WARNING

Operation of a smartphone while riding

Risk of accident

- Observe the valid road traffic regulations.
- Do not use any smartphone while riding. Applications that do not involve operation are exempt, such as phone calls using a hands-free system.

WARNING

Distraction from traffic conditions and loss of control

Risk of accident through the use of integrated information systems and communication devices during the journey

- Operate these systems or devices only if the traffic situation allows.
- If necessary, stop and operate the system or devices at a standstill.

Connectivity functions

Connectivity functions include media, telephony and navigation. Connectivity functions can be used if the TFT display is connected to a mobile end device and a helmet (➠ 123). You can find more information about the Connectivity functions at:

bmw-motorrad.com/connectivity

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

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

BMW Motorrad Connected App

With the BMW Motorrad Connected App, you can call up information about the vehicle and usage. To use some features such as navigation, the app must be installed on the mobile end device and be connected to the TFT display. The app starts the route guid-

ance and adapts the navigation. In addition to the Bluetooth® connection, the Wi-Fi function must be activated on the mobile end device.

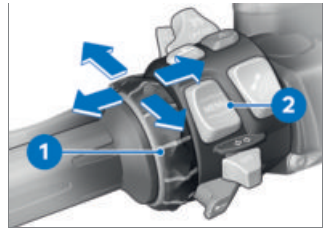
On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.

Currentness of this manual

After the editorial deadline, there may be updates to the TFT display. For this reason, some aspects of your vehicle may vary from the descriptions in this rider's manual. Updated information is available at **bmw-motorrad.com/service**.

PRINCIPLE

Operating elements



All content on the display is controlled by the Multi-Controller **1** and the rocker button MENU **2**.

Different functions are possible depending on the context.

Functions of the Multi-Controller

Turning Multi-Controller upwards:

–Move the cursor up in lists.
–Make settings.
–Increase volume.

Turning Multi-Controller downwards:

–Move the cursor down in lists.
–Make settings.
–Reduce volume.

Tilting the Multi-Controller to the left:

–Activate the function according to the operating feedback.

–Activate function to the left or back.
–After settings, return to menu view.
–In Menu view: Change a hierarchy level up.
–In the menu My vehicle: Browse to the next menu screen.
–In Pure Ride view: Browse to the previous split screen display.

Tilting the Multi-Controller to the right:

–Activate the function according to the operating feedback.
–Confirm selection.
–Confirm settings.
–Browse to the next menu step.
–Scroll to right in lists.
–In the menu My vehicle: Browse to the next menu screen.
–In Pure Ride view: Browse to the next split screen display.

Rocker button MENU functions

Navigation instructions are displayed as a dialog if the Navigation menu has not been called up. Operation of the MENU rocker button is temporarily restricted.

Briefly press the MENU up:

–In Menu view: Change a hierarchy level up.
–In Pure Ride view: Changing the display for rider info. status line.

MENU long press up:

–In Menu view: Open Pure Ride view.

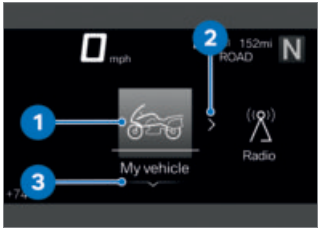
MENU short press down:

–Change a hierarchy level down.
–No function when lowest hierarchy level is reached.

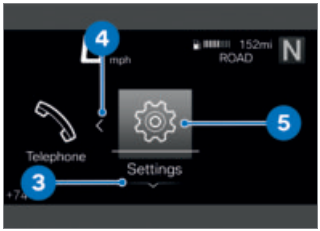
MENU long press down:

–Return to the last menu, after a menu change has been previously carried out by long press of the rocker button MENU at the top.

Operating instructions in the main menu



The operating instructions indicate whether and which interactions are possible.

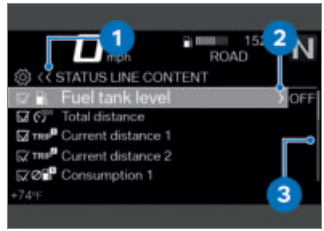


Meaning of the operating instructions:

–Operating instructions **1**: The left end has been reached.
–Operating instructions **2**: You can browse to the right.
–Operating instructions **3**: You can browse down.
–Operating instructions **4**: You can browse to the left.
–Operating instructions **5**: The right end has been reached.

Operating instructions in submenus

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



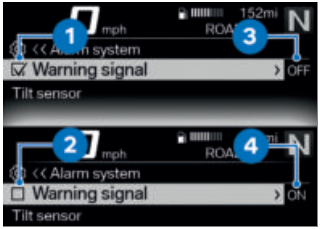
Meaning of the operating instructions:

–Operating instructions **1**: The current display is in a hierarchical menu. One icon indicates one submenu level. Two icons indicate two or more submenu levels. The color of the icon changes depending on whether there is an option to return to the top.
–Operating instructions **2**: You can go to another submenu level.
–Operating instructions **3**: There are more entries than can be displayed.

Show Pure Ride view

- Press and hold the top of the rocker button MENU.

Turning functions on and off

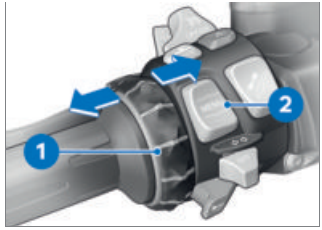


Some menu items are preceded by a box. The box indicates whether the function is turned on or off. Action icons after the menu items illustrate what is switched by briefly tilting the Multi-Controller to the right.

Examples for turning on and off:

–Icon **1** indicates that the function is turned on.
–Icon **2** indicates that the function is turned off.
–Icon **3** indicates that the function can be turned off.
–Icon **4** indicates that the function can be turned on.

Go to the menu



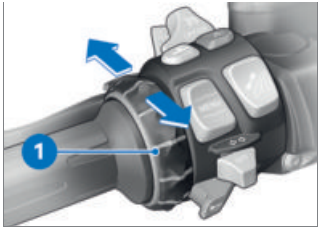
- Show Pure Ride view. (➠ 116)
- Briefly press button **2** downward.

You can go to the following menus:

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

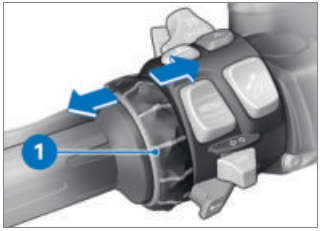
- Briefly press the Multi-Controller **1** to the right repeatedly until the desired menu item is highlighted.
- Briefly press button **2** downward.

Moving the cursor in lists



- Go to the menu. (➠ 116)
- To move the cursor down in lists, turn the Multi-Controller **1** down until the desired entry is highlighted.
- To move the cursor up in lists, turn the Multi-Controller **1** up until the desired entry is highlighted.

Confirming the selection



- Select desired entry.
- Press the Multi-Controller **1** briefly to the right.

Go to the last menu used

- In Pure Ride view: Press and hold the bottom of the MENU rocker button.

» You go to the last used menu, which was exited by pressing and holding upwards.

Changing the display for rider info. status line

Requirement

The vehicle is stationary. The Pure Ride view is displayed.

- Turn on the ignition. (➠ 66)

» All of the information necessary for operating the vehicle on public roads is made available from the on-board computer (e.g. `TRIP 1`) and the travel on-board computer (e.g. `TRIP 2`) in the TFT display. The information can be displayed in the upper status line.

–with tire pressure monitor (TPM) OE

» In addition, information from the Tire Pressure Monitor can be displayed.◁

- Select content of upper status line. (➠ 118)



- Press and hold button **1** to display the Pure Ride view.
- Press button **1** briefly to select the value in the upper 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 tire pressure monitor (TPM) OE

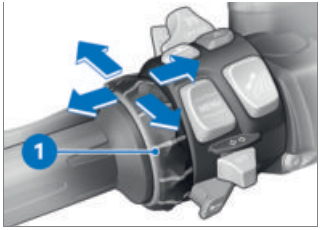
- Tire pressure◁
- Fuel tank level
- Range

Selecting content of upper status line

- Go to menu Settings, Display, Status line content.
- Turn on desired displays.

» It is possible to change between the selected displays in the upper status line. If no displays are selected, only the range is shown.

Making settings



- Select desired settings menu and confirm.
- Turn the Multi-Controller **1** down until the desired setting is highlighted.
- If there are operating instructions, tilt the Multi-Controller **1** to the right.
- If there are no operating instructions, tilt the Multi-Controller **1** to the left.

» The setting is saved.

Turning Speed Limit Info on or off

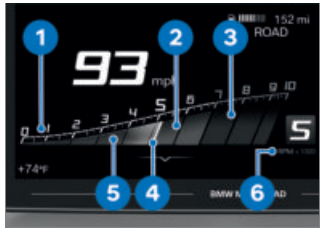
Requirement

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

- `Speed Limit Info` displays the currently permitted maximum speed insofar as this information is provided by the editor of the maps in the navigation system.
- Call up menu `Settings`, `Display`.
- Turn `Speed Limit Info` on or off.

PURE RIDE VIEW

Tachometer



1 Scale
2 Low engine speed range
3 High / red engine speed range
4 Needle
5 Drag pointer
6 Unit for tachometer: 1000 RPM

The red engine speed range changes depending on the coolant temperature: The colder the engine, the lower the speed at which the red engine speed range begins. The warmer the engine, the higher the speed at which the red engine speed range begins.

When the operating temperature has been reached, the red engine speed range display will no longer change.

Range



The range **1** indicates how far you can ride with the remaining fuel. This distance is calculated based on average consumption and the remaining fuel quantity.

– When the vehicle is propped on its side stand, the resulting angle of inclination means that the sensor cannot register the fuel quantity correctly. For this reason, the range is only recalculated when the side stand is folded in.
– The range is output together with a warning after the fuel reserve level is reached.
– After refueling, the range is recalculated if the fuel quantity is greater than the fuel reserve.
– The calculated range is only an approximate figure.

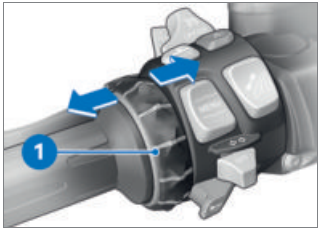
Upshift recommendation



The upshift recommendation in the Pure Ride view **1** or in the status line **2** signals the best time for an upshift from an economical perspective.

SPLIT SCREEN

Turning on the split screen and selecting a display



- Show Pure Ride view. (➠ 116)
- Briefly press the Multi-Controller **1** to the left or right repeatedly until the desired display appears.

- Alternative: Press the Multi-Controller **1** to the right and hold it to return to the last selected display in the split screen.

The following displays can be selected:

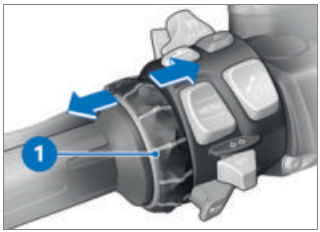
–ONBOARD COMPUTER
–TRIP COMPUTER
–Navigation
–MEDIA

–with audio system OE

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

» The selected display remains even after the ignition is turned off.

Turning off split screen



- Show Pure Ride view. (➠ 116)
- Briefly press the Multi-Controller **1** to the left repeatedly until the split screen disappears.
- Alternative: Press the Multi-Controller **1** to the left and hold it.

GENERAL SETTINGS

Adjusting the volume

- Connect the rider's helmet and the passenger helmet. (➠ 125)
- Increase volume: Turning Multi-Controller upwards.
- Decrease volume: Turning Multi-Controller downwards.
- Mute: Turning Multi-Controller downwards as far as it will go.

» When set to Mute, media playback is paused.

Setting the date

- Turn on the ignition. (➠ 66)
- Go to menu Settings, System settings, Date and time, Set date.
- Set Day, Month, and Year.
- Confirm setting.

Adjusting the date format

- Go to menu Settings, System settings, Date and time, Date format.
- Select desired setting.
- Confirm setting.

Setting the clock

- Turn on the ignition. (➠ 66)
- Go to menu Settings, System settings, Date and time, Set time.
- Set Hour and Minute.

Setting the time format

- Go to menu Settings, System settings, Date and time, Time format.
- Select desired setting.
- Confirm setting.

Setting the units of measurement

- Go to menu Settings, System settings, Units.

The following units of measurement can be set:

–with tire pressure monitor (TPM) OE
–Pressure◁
–Temperature
–Consumption

Setting the language

- Go to menu Settings, System settings, Language.

The following languages can be set:

–German
–English (UK)
–English (US)
–Spanish
–French
–Italian
–Dutch
–Polish
–Portuguese (Brazil)
–Portuguese (Portugal)
–Turkish
–Romanian
–Russian
–Ukrainian
–Thai
–Chinese
–Japanese
–Korean

Adjusting brightness

- Go to menu Settings, Display, Brightness.
- Adjust brightness.

» The brightness of the display is dimmed to the set value if ambient brightness falls below a defined value.

» If the display of the TFT display is faulty, the troubleshooting chart in the Technical Data chapter may provide assistance. (➠ 257)

Resetting all settings

- All settings in the Settings menu can be reset to the factory settings.
- Go to the Settings menu.
- Select Reset all and confirm.

The settings of the following menus are reset:

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

» Existing Bluetooth connections are not deleted.

BLUETOOTH®

Short-range radio technology

Bluetooth is a close-range wireless technology. Bluetooth devices are short-range devices (transmitting with a limited range) 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 license being required.

Although Bluetooth is designed for establishing robust connections over short distances, faults are possible as with any other wireless technology. Connections can be subject to interference, can be briefly interrupted or lost entirely. Especially when several devices are operated in one Bluetooth network, there is no guarantee for smooth operation in every situation.

Possible sources of interference:

– Interference fields due to transmission towers and similar.
– Devices with incorrectly implemented Bluetooth radio standard.
– By nearby Bluetooth-capable devices.
– Shielding by metals or bodies.

Pairing

Two Bluetooth devices have to recognize 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. with operating system iOS, the BMW Motorrad Connected App must be called up before using.

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

– The Bluetooth function of the device must be activated
– The device must be "visible" to others
– Other Bluetooth-capable devices that are not to be connected must be OFF (e.g. mobile phones and navigation systems).

Please consult the operating instructions for your communication system.

Carrying out pairing

- Call up menu `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 end devices is displayed.

Connecting a mobile end device

- Carry out pairing. (➠ 124)
- Activate the Bluetooth function of the mobile end device (see operating instructions for the mobile end device).
- Select `Mobile device` and confirm.
- Select `Pair new mobile device` and confirm.

Mobile end devices are searched for.

 blinks in the lower status line during pairing.

Visible mobile end devices are displayed.

- Select the mobile end device and confirm.
- Observe the instructions for the mobile end device.
- Confirm that the codes match.

» The connection is established and the connection status is updated.

» If the connection cannot be established, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 256)

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

» Telephone data (➠ 134)

» If the phone book is not displayed, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 258)

» If the Bluetooth connection does not work as expected,

the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 257)

Connect the rider's helmet and the passenger helmet

- Carry out pairing. (➠ 124)
- Select `Rider's helmet` or `Passenger helm.` and confirm.
- Show the communication system of the helmet.
- Select `Pair new rider's helmet` or `Pair new passeng. helmet` and confirm.

Helmets are searched for.


blinks in the lower status line during pairing.

Visible helmets are displayed.

- Select helmet and confirm.

» The connection is established and the connection status is updated.

» If the connection cannot be established, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 256)

» If the Bluetooth connection does not work as expected, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 257)

Deleting connections

- Call up menu `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.

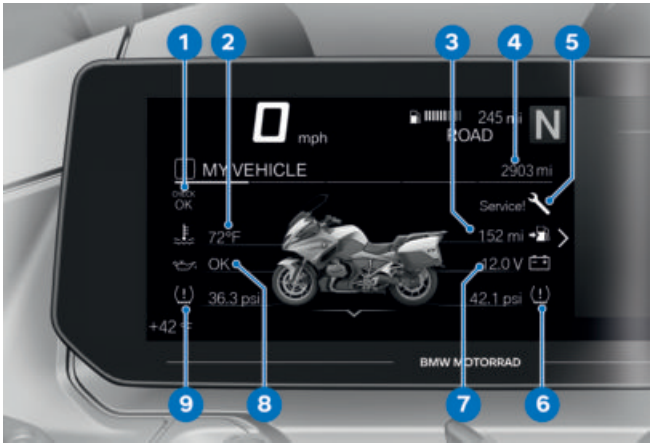
WI-FI

WiFi connection

A WiFi connection is used to transmit the map view from a mobile phone to the TFT display. To enable the full scope of function, WiFi must be enabled on the mobile phone. More information on activating WiFi can be found in the operating instructions of the mobile phone.

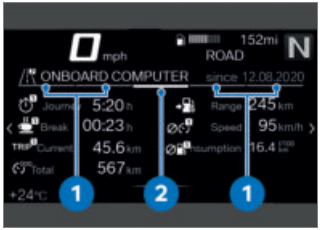
Depending on local conditions, such as a high number of WiFi networks, temporary limitations and connection dropouts can occur.

MY VEHICLE
START SCREEN



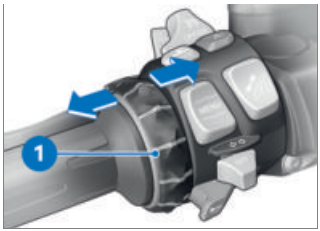
1 Check Control display Layout (➠ 31)
2 Coolant temperature (➠ 45)
3 Range (➠ 120)
4 Odometer
5 Service display (➠ 61)
6 Rear tire pressure (➠ 47)
7 Voltage of the vehicle electrical system (➠ 229)
8 Engine oil level (➠ 44)
9 Front tire pressure (➠ 47)

Operating instructions



–Operating instructions **1**: Tabs that show how far to the left or right you can browse.
–Operating instructions **2**: Tab that shows the position of the current menu screen.

Browsing through menu screens



- Go to the My vehicle menu.
- To browse to the right, briefly push the Multi-Controller **1** to the right.
- To browse to the left, briefly push the Multi-Controller **1** to the left.

The following displays are included in the My vehicle menu:
–MY VEHICLE
–ONBOARD COMPUTER
–TRIP COMPUTER
–with tire pressure monitor (TPM) OE
–TIRE PRESSURE◁
–SERVICE REQUIREMENTS
–CHECK CONTROL MESSAGE (if present)

- Further information on the Check Control messages can be found in the Displays (➠ 31) chapter.

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

On-board computer and travel on-board computer

The ONBOARD COMPUTER and TRIP COMPUTER menu windows show the vehicle and journey data, e.g. average values.

Service requirement



If the time remaining until the next service is less than a month, or if the next service is due within 620 mi (1000 km), a white Check Control message is displayed.

TRIP COMPUTER

Calling up the on-board computer

- Go to the My vehicle menu.
- Scroll to the right until the ONBOARD COMPUTER menu screen is displayed.

» As an alternative, the on-board computer can also be displayed on the split screen.

- Turn on the split screen and select a display. (➠ 120)

Resetting the on-board computer

- Go to the on-board computer. (➠ 129)
- Press MENU rocker button down.
- Select Reset all values or Reset individual values and confirm.

The following values can be reset individually:


Break


Journey



Current


Speed


Consump.

Calling up the travel on-board computer

- Go to the on-board computer. (➠ 129)
- Scroll to the right until the TRIP COMPUTER menu screen is displayed.

» As an alternative, the travel on-board computer can also be displayed on the split screen.

- Turn on the split screen and select a display. (➠ 120)

Resetting the travel on-board computer

- Go to the travel on-board computer. (➠ 129)
- Press MENU rocker button down.
- Select Automatic reset or Reset all values and confirm.

» If Automatic reset is selected, the travel on-board computer is automatically reset if at least 6 hours have passed since the ignition was switched off and the date has changed.

NAVIGATION

Warnings

WARNING

Operation of a smartphone while riding
Risk of accident
- Observe the valid road traffic regulations.
- Do not use any smartphone while riding. Applications that do not involve operation are exempt, such as phone calls using a hands-free system.

WARNING

Distraction from traffic conditions and loss of control
Risk of accident through the use of integrated information systems and communication devices during the journey
- Operate these systems or devices only if the traffic situation allows.
- If necessary, stop and operate the system or devices at a standstill.

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

The BMW Motorrad Connected App is installed on the mobile end device.

On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.

Show map view
Requirement
WiFi is activated on the mobile end device paired via Bluetooth.

- Connect mobile terminal. (➠ 124)
- Call up the BMW Motorrad Connected app.
- Go to the `Navigation` menu.

If the `NAVIGATION` view has been selected in the split screen and you go to the `NAVIGATION` menu at the same time, the split screen view is ended automatically, and the navigation is displayed on the entire TFT display.

Entering destination address

- Connect mobile terminal. (➠ 124)
- Go to the BMW Motorrad Connected app and start the guidance.
- Go to the Navigation menu.

» Active destination guidance is displayed.

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

» If the active route guidance is not displayed, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 258)

Select destination from most recent destinations

- Call up menu Navigation, Recent destinations.
- Select destination and confirm.
- Select Start route guidance.

Select destination from favorites

- The FAVORITES menu shows all destinations that have been saved as a favorite in the BMW Motorrad Connected app. It is not possible to create new favorites on the TFT display.
- Call up menu Navigation, Favorites.
- Select destination and confirm.
- Select Start guidance.

Entering special destinations

- Special destinations, e.g. landmarks, can be displayed on the map.
- Call up menu Navigation, POIs.

The following locations can be selected:

– At current location
– At destination
– Along the route

- Select in which location you want to search for special destinations.

The following point of interest can be selected:

– Filling station

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

Specifying route criteria

- Call up menu Navigation, Route criteria.

The following criteria can be selected:

– Route type

–Avoid
- Select desired Route type.
- Turn desired Avoid on or off.

The number of enabled avoidances is displayed in brackets.

Display route info

- Go to the Navigation, Settings menu, then select the Route info menu item.

You can select between the following options:
–Destination
–Waypoint
- Select desired option.

» The remaining distance and time are displayed.

Editing guidance

- Call up menu Navigation, New destination.

You can select between the following destinations:
–Recent destinations
–Favorites
–POIs
- Select destination from one of the three destination categories.
- Select Edit route guidance in the destination entry.
- Select Add stop to add the selected destination as a waypoint.
- Select Start guidance to overwrite the current destination.

Ending route guidance

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

Switching spoken instructions on or off

- Connect the rider's helmet and the passenger helmet. (➠ 125)
- The navigation can be read out by a computer voice. To do this, the Spoken instructions must be turned on.
- Call up menu Navigation, Active route guidance.
- Turn Spoken instructions on or off.

Repeating the last spoken instruction

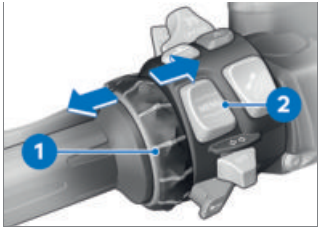
- Call up menu Navigation, Active route guidance.
- Select Current instruction and confirm.

MEDIA

Prerequisite

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

Controlling audio playback



- Go to the Media menu.

BMW Motorrad recommends setting the volume for media and conversations via mobile end devices to the maximum before starting a journey.

- Adjust the volume. (➠ 121)
- Selecting next title in the player: Briefly tilt the Multi-Controller **1** to the right.
- Select last title or beginning of the current title in the player: Briefly tilt the Multi-Controller **1** to the left.
- Go to context menu: Press button **2** downward.

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

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

In the Audio settings submenu, you can adjust the following settings:
– Turn Shuffle on or off.
– Repeat: Select : Off, One (current title) or All.
– with audio system OE
– Select Output device.◁
– with audio system OE
– Select Sound profile.◁
– with audio system OE
– Adjust Equalizer.◁

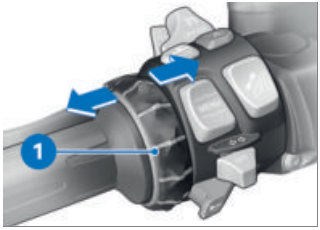
» If the playlist is not displayed on the TFT display, the troubleshooting chart in the Technical data chapter may provide assistance. (➠ 258)

TELEPHONE

Prerequisite

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

Making a phone call



- Go to the Telephone menu.

When a call comes in, a pop-up opens.

- Accepting a call: Tilt the Multi-Controller **1** to the right.
- Rejecting a call: Tilt the Multi-Controller **1** to the left.
- Ending a call: Tilt the Multi-Controller **1** to the left.

Mute

The microphone in the helmet can be muted during active conversations.

Conversations with multiple users

A second telephone call can be accepted during a conversation. The first conversation will be put on hold. The number of active telephone calls is displayed in the Telephone menu. It is possible to switch between two conversations.

Telephone data

Depending on the mobile end device, telephone data is transferred to the vehicle automatically after pairing (➠ 123).
Phone book: List of contacts saved in the mobile end device
Call list: List of telephone calls with the mobile end device
Favorites: List of favorites saved in the mobile end device

PROGRAMMABLE MEMORY BUTTONS

Operating the programmable memory buttons



You can assign individual functions to the programmable memory buttons.

- Press a button lightly.

» The assigned function is shown in the TFT display.

- Press a button firmly.

» The assigned function is executed.

Assigning functions

- In the Settings, System settings, Favourite button menu, select.
- Select the desired programmable memory button from Favorite button 1 to Favorite button 4.
- Select the desired function or Not assigned.

» The function is assigned to the respective programmable memory button.

DISPLAYING SOFTWARE VERSION

- Go to menu Settings, Information, Software version.

DISPLAYING LICENSE INFORMATION

- Go to menu Settings, Information, Licenses.

AUDIO SYSTEM

06

RADIO 138
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SATELLITE RADIO 142
HD RADIO RECEPTION 144
AUDIO PLAYBACK VIA HELMET 144

RADIO

Starting

- Turn on the ignition. (➠ 66)

After the ignition is switched on, the radio menu will be available after a short time.

Turning the radio on and off

- Go to the Radio menu and turn Radio on or off.

» If the radio is turned off, Radio off is displayed in the lower status line.

Selecting a source

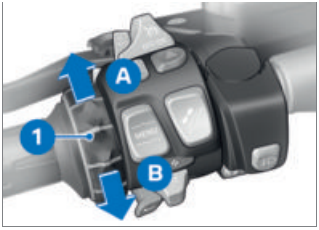
- Select the Source menu. Select Favorites, AM, FM or SiriusXM. For the AM and FM wave range, the HD radio option exists (availability may vary by country).

Selecting a station

- Select a source. (➠ 138)
- Select the FM stations menu.

For each selectable source, there is a specific station menu.

For HD Radio stations, the subprograms can be selected using the station list.

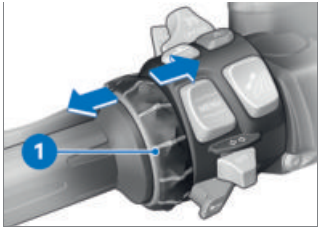


- Turn Multi-Controller **1** in the **A** or **B** direction to browse through the stations.
- Press the Multi-Controller to the right to select the desired station.

Selecting frequency

- Go to Source menu, select AM or FM.
- In the AM options or FM options menu, select the Frequency setting using the menu item Search selection.
- Change over to the player.

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

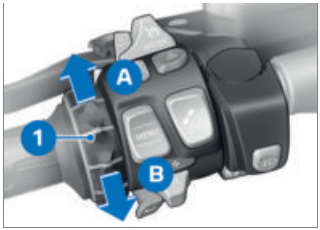


- Briefly press Multi-Controller **1** to the left or right to set the desired frequency using the frequency band.

Saving a station

- Select a station or frequency from the frequency band.
- Press the rocker button MENU downward.
- Select the `Add as favorite` menu item.

» The previously selected station appears on the Favorites list.



- Turn Multi-Controller **1** in the **A** or **B** direction to select the desired memory capacity.

» The current assignment of the memory location is displayed.

» If a station is already saved in the selected memory location, a message opens. The following selection options are available:

- Select `Cancel` to refrain from saving the selected station.
- Select `Save` in order to overwrite the memory location.

» The station list reopens.

Favorites list

Selected stations or frequencies can be added as favorites. A total of up to 20 favorites can be saved.
There are two ways to add favorites:

Version 1

- Select a station. (➠ 138)
- Select the `Add as favorite` menu item.

» The previously selected station appears on the Favorites list.

- Press Multi-Controller to the right.

» The selected station has been saved as a favorite.

Version 2

- Select a station. (➠ 138)
- Press Multi-Controller to the right once more.

» The Favorites list opens.

- Press Multi-Controller to the right once more.

» The selected station has been saved as a favorite.

» The view automatically switches back to the stations list.

Deleting a Favorites list

Requirement

A Favorites list with at least one entry exists.

- Select `Delete list of favorites` at the bottom end of the Favorites list.

» A dialog opens.

- Confirm deletion.

» The Favorites list is deleted.

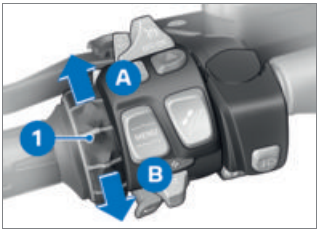
AUDIO SETTINGS

Loudspeakers and Bluetooth

The audio system plays back sound through either the vehicle's speakers, an output device connected by Bluetooth or the helmet. Should the Bluetooth function not be offered in certain countries, then audio playback is only possible via the loudspeakers.

If a BMW Motorrad communication system with Bluetooth radio standard 2.0 or higher is connected, the volume control can be operated by Multi-Controller (➠ 144). If devices are paired that are not compatible with Bluetooth radio standard 2.0 or higher, the volume cannot be controlled by Multi-Controller.

Adjusting the volume



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

Selecting an output device

- Go to the `Media`, `Audio settings` menu, then select the `Output device` menu item.

» The following settings are available:

– Speakers: Speaker for audio playback selected.
– Helmet: Helmet or other Bluetooth-capable output device for audio playback is selected.
» The default setting is Speakers.

Selecting a sound profile

- Go to the Radio, Audio settings menu, then select the Sound profile menu item.

» The following settings are available:
– Bass-Boost
– Treble-Boost
– Voice
– Studio
– Balanced
» The default setting is Bass-Boost. All sound profiles take effect only if Speakers is selected.
» For an optimal sound experience without a helmet, the Studio sound profile should be selected. All other sound profiles are optimized for playback while a helmet is worn.

Adjusting sound settings

- Go to the Radio, Audio settings menu, then select the Equalizer menu item.

» The following settings are available:
– Treble: Reduce (-1...-5) or increase (+1...+5) treble
– Bass: Reduce (-1...-5) or increase (+1...+5) bass
– Volume control: switch off speed-dependent volume boost (1) or select a level (2...4).

- Select the desired menu item, make the adjustment and exit the menu.

» The sound settings take effect only if 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 on four levels. Level 4 corresponds to maximum increase. If level 1 is selected, the volume boost feature is deactivated.
Automatic volume adjustment only functions if Speakers is selected as the output device.

PLAYER

Shown in display

The following information is displayed by the view in the TFT display (depending on country):
–Selected source (➠ 138).
–Station (➠ 143).
–Frequency
–Artist
–Title
–Frequency band

Changing the station or frequency

Requirement

A frequency can be selected only in the AM or FM frequency bands, and Frequency must be selected in the options.

- Select a source. (➠ 138)
- Press the Multi-Controller to the right or left to select the desired station or the desired frequency.

In order to be able to change the frequency, the Frequency menu item must be selected in the AM options or FM options menu.

SATELLITE RADIO

Availability

The functions for the reception of satellite radio described in this chapter are only offered in countries in which the reception of SiriusXM is possible.

Subscribing to a station

To listen to a station, it must first be subscribed to. Subscribing to a station can generate costs not borne by BMW Motorrad.
You can find more information on the available transmitters at **siriusxm.com**.

Activating stations

A station is activated by phone by calling the phone number 1-888-539-7474. In addition, the Radio ID is required.

Calling up information

The following list entry is displayed under Radio, SiriusXM information:
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.` is displayed.

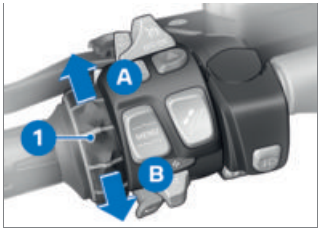
Selecting a category and station

- To change the category, go to the `SiriusXM station` menu and select `Category`.

» The following options are available for selection:

– `All categories`: Shows all stations subscribed to.
– `Category`: indicates a category, e.g. rock.
– `Unsub. channel`: Shows all stations not subscribed to.

- Select the desired station.

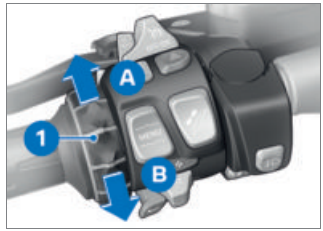


- Turn Multi-Controller **1** in the **A** or **B** direction to select the desired station from the selected category.

Saving a station

- Select a category and station. (➠ 143)
- Press the Multi-Controller to the right to select a station.
- Press the Multi-Controller to the right once more and select `Add as favorite`.

» The Favorites list opens.



- Turn Multi-Controller **1** in the **A** or **B** direction to select the desired memory capacity.

» The current assignment of the memory location is displayed.

» If a station is already saved in the selected memory location, a message opens. The following selection options are available:

- Select `Cancel` to refrain from saving the selected station.
- Select `Save` in order to overwrite the memory location.

» The Favorites list closes automatically and redirects the user to the previous view.

Playing stored station
Requirement

`Favorites` must be selected as `Source`.

- Select the `Favorites` menu item.

» The Favorites list is displayed.

- Press the Multi-Controller to the right to select the desired station.

System messages

Under certain circumstances, the following messages are shown:

`SiriusXM subscription updated.`
The subscription is updated.

`SiriusXM Channel not subscribed.`
The station has not been subscribed to.

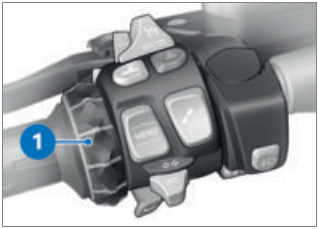
`SiriusXM No signal.`
The `SiriusXM` service was interrupted due to a weak signal.

HD RADIO RECEPTION

The signal strength of HD Radio stations may vary depending on the location. If the digital signal is not strong enough, there will be an automatic switchover to the analog signal. During the switchover, a short interruption may occur. If AM has been selected as the source, significantly inferior sound quality can be heard after the switchover.
As soon as the digital signal is available again, there will be another automatic switchover back to the HD Radio station.

AUDIO PLAYBACK VIA HELMET

Connecting the rider's helmet



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

– The volume of the helmet speaker can be adjusted directly using the Multi-Controller **1**.
– Changing the volume in the helmet will be reflected in the display.

The volume for helmet 2 cannot be adjusted with the Multi-Controller.

SETTING

07

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DAMPING 155

MIRRORS

Adjusting the mirrors



- Move mirror into the desired position by pressing lightly on the edge of the glass.

HEADLIGHTS

Headlight range and spring preload

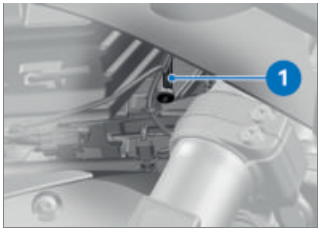
Through the adaptation of the spring preload, the headlight range generally remains constant.

Only with a very heavy payload can adjustment of the spring preload be insufficient. If that is the case, the headlight range must be adapted to the load.

If there are doubts as to the correct headlight range, have the adjustment checked by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

Adjusting the headlight range Requirement

If the spring preload adjustment is no longer able to maintain the correct beam height to avoid dazzling oncoming traffic owing to high vehicle payloads:



- Adjust the headlight range at the adjustment screw **1**.

WINDSHIELD

Adjusting the windshield

- Turn on the ignition. (➠ 66)

» When riding off, the windshield automatically moves to its last position before the ignition was turned off.



- Press top of button **1** to raise the windshield.
- Press bottom of button **1** to lower the windshield.
- Turn off the ignition. (➠ 67)

» The windshield automatically moves to the lower end position.

If the windshield encounters resistance before reaching the end position, the pressure-sensitive finger guard system activates. The windshield is stopped and moves upwards slightly. After several seconds, the windshield will attempt to move to the end position again.

- Ensure clearance of the windshield.

» The windshield does not automatically move to the lower end position.

- Turn on the ignition. (➠ 66)
- Move windshield to the upper and lower end positions using button **1**.
- Turn off the ignition. (➠ 67)

» The adjustment range of the windshield is calibrated.

» The windshield does not respond to pressing the button **1**.

- Please contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

If a windshield has been installed that is not approved by BMW Motorrad, correct functioning of the anti-trap mechanism cannot be guaranteed.

- In this case: Ensure clearance of the windshield before you turn off the ignition.

CLUTCH

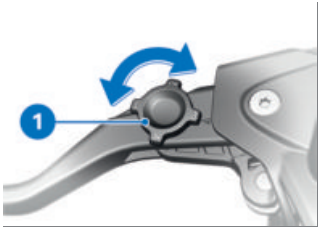
Adjusting the clutch lever

WARNING

Adjusting the clutch lever while driving

Accident hazard

- Adjust the clutch lever when the motorcycle is stationary.



- Turn the adjustment wheel **1** into the desired position.

The adjustment wheel can be turned more easily if you press the clutch lever forward when doing so.

» Adjustment options:

– Position 1: Minimum distance between handlebar grip and clutch lever.

– Position 4: Maximum distance between handlebar grip and clutch lever.

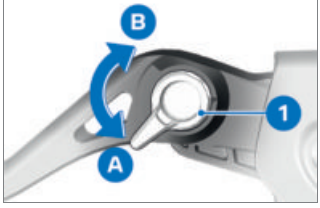
– with Option 719 Billet pack Classic II OE

or

– with Option 719 Billet pack Storm II OE

or

– with Option 719 Billet pack Shadow II OE



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

» Adjustment options:

– From position **A**: Minimum distance between handlebar grip and clutch lever.

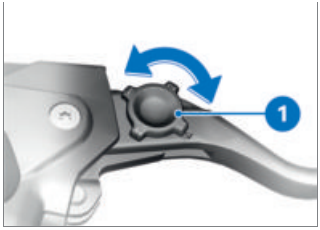
– Five steps toward position **B** to increase the distance between the handlebar grip and the clutch lever.◁

BRAKES

Setting the brake lever

WARNING

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

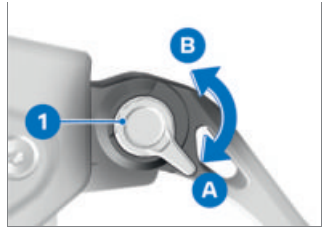


- Turn the adjustment wheel **1** into the desired position.

The adjustment wheel can be turned more easily if you press the handbrake lever forward when doing so.

» Adjustment options:
– Position 1: Minimum distance between handlebar grip and brake lever.
– Position 4: Maximum distance between handlebar grip and brake lever.

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

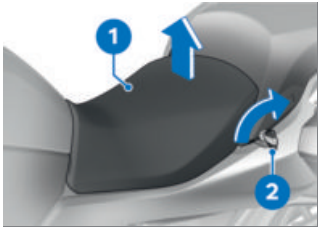


- Turn the adjustment lever **1** to the desired position.

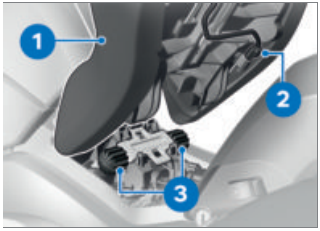
» Adjustment options:
– From position **A**: Minimum distance between handlebar grip and brake lever.
– Five steps toward position **B** to increase the distance between the handlebar grip and the brake lever.◁

SEATS

Removing the rider's seat



- Turn the ignition key **2** clockwise.
- Lift up rider's seat **1** at the rear.



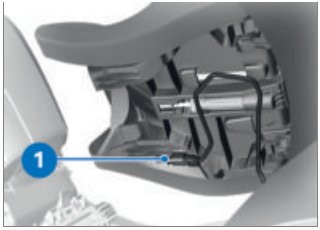
- Remove rider's seat **1** from seat bracket **3** toward rear.

–with seat heating OE

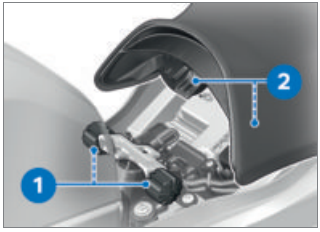
- Disconnect the plug connection **2** of the seat heating.◁
- Lay rider's seat on a clean and dry surface with the upholstered side down.

Installing the rider's seat

–with seat heating OE



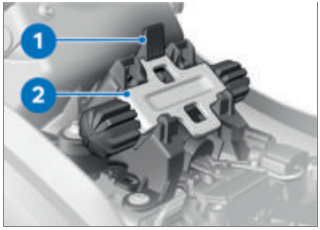
- Connect seat heating plug connection **1**.◁



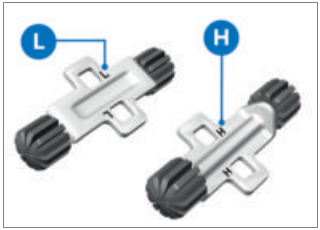
- Position the rider's seat with mounts **2** in the stop pads **1** on the left and right.
- Lower the rear of the rider's seat and engage the seat in the locking mechanism.

Adjusting the rider's seat height

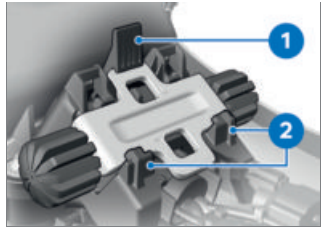
- Remove the rider`s seat. (➠ 152)



- Pull the lock **1** forward and remove the adjuster plate **2**.



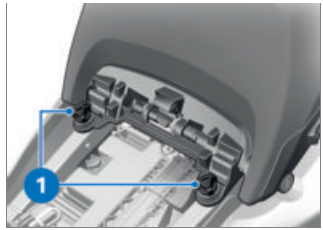
- Turn the shim to the **L** position to achieve the lower seat height.
- Turn the shim to the **H** position to obtain the higher seat height.



- Insert shim in the desired position into the mounts **2** and then press into the lock **1**.
- Install the rider's seat. (➠ 152)

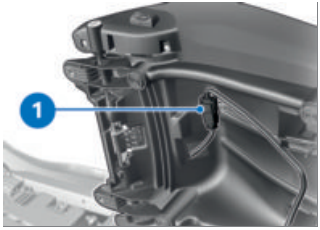
Removing the passenger seat

- Remove the rider`s seat. (➠ 152)



- Remove the screws **1** using the onboard vehicle tool kit.
- Pull passenger seat forwards slightly and lift.

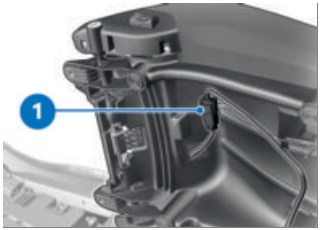
–with seat heating OE



- Disconnect seat heating plug connection **1** and remove passenger seat.◁
- Lay the passenger seat on a clean and dry surface with the upholstered side down.

Installing the passenger seat

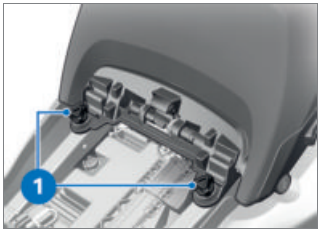
–with seat heating OE



- Connect seat heating plug connection **1**.◁



- Place passenger seat on the stands **1**.



- Install the screws **1** using the onboard vehicle tool kit.

SPRING PRELOAD

Setting

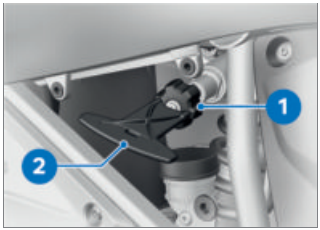
It is essential to set the spring preload at the rear wheel to suit the load carried by the motorcycle. Increase spring preload if the payload increases and reduce spring preload accordingly if the payload decreases.

Adjusting the spring preload at the rear wheel

WARNING

Adjusting the spring preload while riding.
Accident hazard
- Adjust the spring preload only when the motorcycle is stationary.

- Park the motorcycle, making sure the ground is level and firm.
- Remove suspension strut cover. (➠ 205)



WARNING

Uncoordinated settings of spring preload and spring strut damping.
Poorer handling.
- Adjust damping characteristic to changed spring preload.

- To increase the spring preload, turn the adjustment wheel **1** clockwise using the tool **2**.
- To reduce the spring preload, turn the adjustment wheel **1** counterclockwise using the tool **2**.

Basic setting of spring preload, rear
–without Dynamic ESA OE
Turn adjuster wheel counterclockwise as far as possible. (One-up without load)
Turn adjuster wheel as far as possible counterclockwise, then 10 turns clockwise. (One-up with load)
Turn adjuster wheel clockwise as far as possible. (Two-up and load)◁

- Install suspension strut cover. (➠ 205)

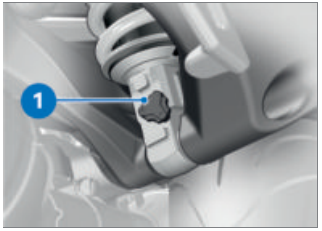
DAMPING

Setting

The damping must be adjusted to the road conditions and the spring preload.
–A rough road requires softer damping than a smooth road.
–An increase in spring preload requires firmer damping, a reduction in spring preload requires softer damping.

Adjusting damping at the rear wheel

- Park the motorcycle, making sure the ground is level and firm.
- Adjust damping from the left side of the vehicle.



- To increase damping, turn the adjustment screw **1** clockwise.
- To reduce damping, turn the adjustment screw **1** counterclockwise.

Basic setting of rear wheel damping
–without Dynamic ESA OE
Turn the adjuster knob as far as possible clockwise, then 6 clicks counterclockwise. (One-up without load)
Turn the adjuster knob as far as possible clockwise, then 4 clicks counterclockwise. (One-up with load)

Basic setting of rear wheel damping
Turn the adjuster knob as far as possible clockwise, then 2 clicks counterclockwise. (Two-up with load)◁

RIDING

08

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REGULAR CHECK 162
STARTING 163
BREAKING IN 166
SHIFTING GEARS 167
BRAKES 168
PARKING YOUR MOTORCYCLE 170
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FASTENING MOTORCYCLE IN PLACE FOR TRANS-
PORTATION 176

SAFETY INSTRUCTIONS

Rider's equipment

Do not ride without the correct clothing! Always wear:
–Helmet
–Rider's suit
–Gloves
–Boots

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

WARNING

Seizure of loose textile fabrics, luggage items or straps in open running rotating vehicle parts (wheels, prop shaft)
Risk of accident
- Make sure that no loosely worn textile fabrics can get caught in open, running and rotating vehicle parts.
- Keep luggage items as well as tension belts and lashing straps away from open, running and rotating vehicle parts.

Vehicle load

WARNING

Reduced riding stability caused by overloading and uneven loading
Accident hazard
- Do not exceed the gross weight limit and observe the loading information.

- Adjust spring setting and damping rate for the gross vehicle weight.
- Ensure that case volumes on left and right are equal.
- Make sure that weight is uniformly distributed between right and left.
- Pack heavy pieces of luggage and cargo as low and as close to the center of the motorcycle as possible.
- Observe the maximum payload and maximum speed; also see the Accessories chapter (➠ 108).

–with tank bag OA
- Observe the maximum payload of the tank bag.

Payload of tank bag
max 11 lbs (max 5 kg)◁

Speed

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

– Settings of spring struts
– Unevenly distributed load
– Loose clothing
– Insufficient tire pressure
– Tire tread in poor condition
– Etc.

Maximum speed with winter tires

DANGER

Maximum speed of the motorcycle is higher than the permissible maximum rated speed of the tires.

Risk of accident due to tire damage at high speed.

- Observe the maximum permissible speed for the tyres.

With winter tires, the maximum permissible speed for the tires must be observed.

Attach a sticker specifying the maximum speed permitted within the field of view of the instrument cluster.

Risk of poisoning

Exhaust gas contains carbon monoxide, which is colorless and odorless but highly toxic.

WARNING

Harmful exhaust gas

Danger of suffocation

- Do not inhale exhaust fumes.
- Do not run the engine in closed rooms.

WARNING

Inhalation of vapors that are harmful to health

Damage to health

- Do not inhale vapors from operating fluids and plastics.
- Only use the vehicle outdoors.

Risk of burning

CAUTION

Intense heating up of engine and exhaust system while riding

Burn hazard

- After parking the motorcycle, make sure that no persons or objects come into contact with the engine and exhaust system.

WARNING

Opening the radiator cap
Risk of burning
- Do not open the radiator cap when it is hot.
- Check the coolant level exclusively at the expansion tank and top up if necessary.

Catalytic converter

There is a danger of overheating and damage if misfiring causes unburned fuel to enter the catalytic converter.
The following must be observed:
- Do not run the fuel tank dry.
- Do not run the engine with the spark plug connector removed.
- Stop the engine immediately if it misfires.
- Use unleaded fuel only.
- Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in the catalytic converter
Damage to catalytic converter
- Note the points listed for protection of the catalytic converter.

Danger of overheating

ATTENTION

Engine idling for a lengthy period while at a standstill
Overheating due to insufficient cooling; in extreme cases vehicle fire
- Do not allow the engine to idle unnecessarily.
- After starting, ride off immediately.

Modifications

ATTENTION

Modifications to the motorcycle (e.g. engine control unit, throttle valves, clutch)
Damage to the affected parts, failure of safety-relevant functions, expiration of warranty
- Do not make any modifications.

REGULAR CHECK

Observe checklist

Use the following checklist to check your motorcycle at regular intervals.

Always before riding off

– Check operation of the brake system (➠ 208).
– Check operation of the lighting and signal system.
– Check the clutch function (➠ 212).
– Check tire tread depth (➠ 215).
– Check tire pressure (➠ 214).
– Check that the case and luggage are firmly secured.

– without Dynamic ESA OE
– Adjust the spring preload at the rear wheel (➠ 155).
– Adjust damping at the rear wheel (➠ 156).

At every third refueling stop

– Check engine oil level (➠ 206).
– Check the front brake pad thickness (➠ 208).
– Check the rear brake pad thickness (➠ 209).
– Check the front brake fluid level (➠ 210).
– Check the rear brake fluid level (➠ 211).
– Check the coolant level (➠ 212).

STARTING

Starting the engine

- Turn on the ignition. (➠ 66)

» Pre-Ride-Check is carried out. (➠ 164)
» ABS self-diagnosis is performed. (➠ 164)
» DTC self-diagnosis is performed. (➠ 165)

- Engage Neutral, or pull back the clutch lever if a gear is engaged.

You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch itself off if it is started with the transmission in neutral and then a gear is engaged before retracting the side stand.

- For cold start and at low temperatures: Pull clutch.



- Press starter button **1**.

The starting procedure is automatically canceled if the battery voltage is too low. Recharge the battery before you attempt to start the engine again, or use jump-starting. More detailed information can be found in the Maintenance chapter under Jump-starting.

» Engine starts.
» If the engine fails to start, the troubleshooting chart in the chapter Technical Data can provide assistance. (➠ 256)

Pre-Ride-Check

After the ignition is turned on, the instrument cluster performs a test of the indicator and warning lights – what we call the "Pre-Ride-Check". Starting the engine before the test is completed will cancel the remainder of the test.

Phase 1

All indicator and warning lights are turned on.
After a longer standstill of the vehicle, an animation is displayed during the system start.

Phase 2

The general warning light changes from red to yellow.

Phase 3

All of the indicator and warning lights that have been turned on are turned off in reverse order.

If one of the indicator and warning lights was not turned on:

- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Depending on the riding mode or its configuration, the intervention of electronic stability control systems can be restricted.
Possible restrictions are displayed as a pop-up message, e.g. `Caution! ABS & DTC setting.`.
You can find more detailed information regarding electronic stability control systems such as ABS and DTC in the "Technology in detail" chapter.

ABS self-diagnosis

The self-diagnosis routine determines whether BMW Motorrad fully integral ABS Pro is ready for operation. The self-diagnosis starts automatically when you turn on the ignition.

Phase 1

» Checking system components capable of diagnosis while vehicle is at a standstill.

 blinks.

Phase 2

» Check the wheel speed sensors while riding off.

 blinks.

ABS self-diagnosis completed

» The ABS indicator and warning light extinguishes.

 ABS self-diagnosis routine not completed
ABS is not available, as the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel speed sensors: 3 mph (5 km/h))

If an ABS fault is displayed after the ABS self-diagnosis is completed:

- You may continue riding. Bear in mind that neither the ABS function nor the fully integral function is available.
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

DTC self-diagnosis

The self-diagnosis routine is determining whether BMW Motorrad DTC is ready for operation. The self-diagnosis runs automatically when you switch on the ignition.

Phase 1

» Check of system components monitored by the diagnostic system while the vehicle is at a standstill.

 flashes slowly.

Phase 2

» Checking system components capable of diagnosis while riding off.

 flashes slowly.

DTC self-diagnosis completed

» The DTC icon is no longer displayed.

- Check the display of all indicator and warning lights.

 DTC self-diagnosis not completed
The DTC function is not available, as the self-diagnosis function has not been completed. (To check wheel speed sensors, motorcycle must reach a minimum speed with engine running: min 3 mph (min 5 km/h))

If a DTC fault is displayed after the DTC self-diagnosis is completed:

- You may continue riding. Please note that the DTC function is restricted or is not available at all.
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

BREAKING IN

Engine

- In the period preceding the break-in service, ride in frequently changing engine load and engine speed ranges, avoiding extended periods at constant rpm.
- Choose curvy, slightly hilly routes if possible.
- Observe the engine run-in speeds.

 Engine break-in speeds
<5000 min^{-1} (Mileage 0…621 miles (0…1000 km))
No full throttle (Mileage 0…621 miles (0…1000 km))

- Observe mileage, after which the break-in inspection should be performed.

 Carrying out the running-in check
311…746 miles (500…1200 km)

Brake pads

New brake pads must be run in before they achieve their optimum friction force. This initial reduction in braking effect can be compensated for by exerting greater pressure on the brake levers.

WARNING

New brake pads

Extension of the braking distance, accident hazard

- Brake early.

Tires

New tires have a smooth surface. They must be roughened by riding in a restrained manner at varying lean angles until the tires are run in. This running in procedure is essential if the tire tread is to achieve maximum grip.

WARNING

Loss of adhesion of new tires on wet roads and at extreme angles

Accident hazard

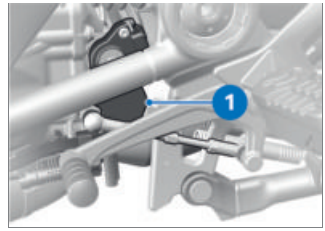
- Always think well ahead and avoid extreme angles.

SHIFTING GEARS

–with Gearshift Assistant Pro OE

Gear Shift Assistant Pro

More detailed information on Pro Gear Shift Assistant can be found in the "Technology in detail" chapter.



- The gears are shifted into as usual with foot force on the gearshift lever.

» The sensor **1** on the gearshift shaft detects the intent to shift gears and triggers the shift assistance.

» If you are riding at a constant speed in a low gear at high RPMs and attempt to shift gears without clutch control, it can cause a strong load-change response. BMW Motorrad recommends only shifting gears with clutch control in these riding situations. Riders should avoid using the Gear Shift Assistant in the range of the RPM limiter.

» Shift assistance is not available in the following situations:

–Clutch disengaged.

–Gearshift lever not in its initial position.

– When upshifting with the throttle valve closed (coasting overrun) or when decelerating.
– When downshifting with the throttle valve open or when accelerating.
• To enable another gear change with the Gear Shift Assistant, the gearshift lever must be fully released after the first shifting process.

BRAKES

How do you achieve the shortest braking distance?

The dynamic load distribution between the front and rear wheel changes during braking. The more pressure you apply to the brake, the greater the weight transfer to the front wheel. Increases in the load on an individual wheel are accompanied by a rise in the effective brake force that the wheel can provide.

To achieve the shortest possible braking distance, the front wheel brake must be applied quickly and with progressively greater levels of force. This procedure provides ideal utilization of the dynamic load increase to the front wheel. The clutch should also be engaged at the same time. When the rider uses the (frequently practiced) extreme emergency braking in which the brake pressure is generated as quickly as possible and with great force, dynamic load distribution lags behind the progressive increase in deceleration rate and the brake force cannot be completely transferred to the road.

Locking up of the front wheel is prevented by BMW Motorrad fully integral ABS Pro.

WARNING

Lifting off of the rear wheel due to heavy braking

Accident hazard

• When braking heavily, bear in mind that the ABS control cannot always be relied on to prevent the rear wheel from lifting off the ground.

Descending mountain passes

WARNING

Braking should be done predominantly using the rear wheel brake when riding on downhill routes

Loss of braking effect, destruction of the brakes due to overheating

- Apply the front and rear wheel brake and use the engine brake.

DANGER

Driving with overheated brakes

Risk of accident due to brake failure

- Adapt driving style.
- Use the engine brake to avoid frequent braking.

WARNING

Failure to observe maintenance intervals

Accident hazard

- Comply with the maintenance intervals applicable for the brakes.

Wet, soiled brakes

Moisture and dirt on the brake discs and the brake pads result in a decrease in the braking effect.

Delayed or poorer braking effect must be expected in the following situations:

- When riding in the rain and through puddles.
- After washing the vehicle.
- When driving on roads with salt spread on them.
- After working on the brakes due to oil or grease residues.
- When driving on soiled roads or offroad.

WARNING

Poorer braking action due to moisture and dirt

Accident hazard

- Brake until brakes are dry or clean; clean if necessary.
- Brake early until the full braking action is available again.

ABS Pro
Physical riding limits

WARNING

Braking in curves
Danger of falling despite ABS Pro
- The rider is always responsible for adapting his/her driving style.
- Do not reduce the system's extra safety margin with careless riding or unnecessary risks.

ABS Pro is available in all riding modes.

–with riding modes Pro OE
The supporting function of the Dynamic Brake Control is also available.

Falling cannot be excluded
Although ABS Pro represents valuable support and an enormous safety advantage for the rider when braking in the inclined position, it by no means redefines the physical riding limits. It is still possible to exceed those limits through misjudgments or riding errors. In extreme cases this my result in a fall.

Use on public roads
ABS Pro helps make riding your motorcycle on public roads even safer. When braking due to unexpected hazards in curves, ABS Pro prevents blocking and slipping of the wheels within the scope of the physical riding limits.

ABS Pro was not developed to increase the individual braking performance in the inclined position.

–with riding modes Pro OE
In the event of emergency braking, Dynamic Brake Control enhances the braking effect and intervenes if the throttle grip is accidentally actuated during braking.

PARKING YOUR MOTORCYCLE

Side stand
- Turn off engine.

ATTENTION

Poor ground conditions in area of stand
Component damage cause by tipping over
- Always check that the ground under the stand is level and firm.

ATTENTION

Loading of the side stand with additional weight
Component damage cause by tipping over
- Do not sit on the motorcycle when it is parked on the side stands.

- Fold out side stand and park motorcycle.
- If the slope of the road permits, turn the handlebars to the left.
- On slopes point the motorcycle uphill and engage 1st gear.

Center stand
- Turn off engine.

ATTENTION

Poor ground conditions in area of stand
Component damage cause by tipping over
- Always check that the ground under the stand is level and firm.

ATTENTION

Folding in the center stand in case of strong movements
Component damage cause by tipping over
- Do not sit on the vehicle while it is resting on the center stand.

- Fold down center stand and prop up motorcycle.
- On slopes point the motorcycle uphill and engage 1st gear.

REFUELING

Fuel quality
Requirement
For optimal fuel consumption, the fuel should be sulfur-free or very low in sulfur content.

ATTENTION

Refueling with leaded fuel
Damage to catalytic converter
- Do not refuel with leaded gasoline or gasoline with metallic additives, e.g. manganese or iron.

ATTENTION

Use of Ethanol E85 as fuel
Damage to the engine and fuel supply
- Do not refuel with E85, i.e. fuel with an ethanol content of 85 %, or with Flex Fuel.

- Observe the maximum ethanol content of the fuel.

Fuel additives clean the fuel injection system and the combustion area. Fuel additives should be used when refueling with low-quality fuels or during longer periods of downtime. Your authorized BMW Motorrad retailer can provide you with more detailed information.

Recommended fuel quality
Premium unleaded (max. 15% ethanol, E15) min 89 AKI (min 95 ROZ/ RON) 90 AKI

Alternative fuel quality
Regular unleaded (restrictions with regard to power and fuel consumption) (max. 15% ethanol, E15) min 87 AKI (min 91 ROZ/ RON) 87 AKI

Refueling procedure

WARNING

Fuel is highly flammable
Fire and explosion hazard
- Do not smoke. Never bring a naked flame near the fuel tank.

WARNING

Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank
Accident hazard
- Do not overfill the fuel tank.

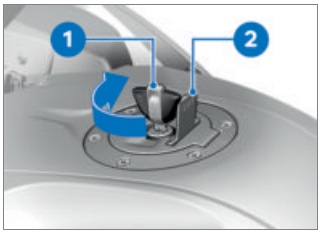
ATTENTION

Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.

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



- Open the protective flap **2**.
- Unlock the fuel tank cap in a clockwise direction using the ignition key **1** and open it.

–with central locking system OE

- Press down the unlocked lock cylinder and open the cap of the fuel tank.◁



- Refuel with a fuel quality as specified above, but no higher than the lower edge of the fuel filler neck. This is the maximum level.

If refueling is carried out after running on fuel reserve, the resulting filling capacity must be greater than the fuel reserve so that the new fill level is detected and the fuel reserve indicator light is switched off.

The "usable fuel quantity" specified in the technical data is the fuel quantity, which can be refueled if the fuel tank was completely emptied, i.e., if the engine dies off due to lack of fuel.

Usable fuel quantity
Approx. 6.6 gal (Approx. 25 l)

 Reserve fuel quantity
Approx. 1.1 gal (Approx. 4 l)

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

Refueling procedure

–with Keyless Ride OE

Requirement

Steering lock is unlocked.

WARNING

Fuel is highly flammable

Fire and explosion hazard

- Do not smoke. Never bring a naked flame near the fuel tank.

WARNING

Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank

Accident hazard

- Do not overfill the fuel tank.

ATTENTION

Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.

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

–with Keyless Ride OE

- Turn off the ignition. (➠ 69)

After the ignition is switched off, the fuel filler cap can be opened within the specified run-on time even without the radio-operated key being within the reception area.

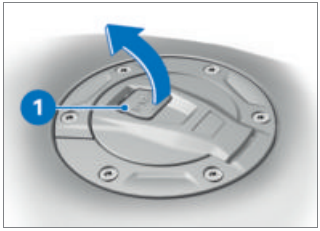
 After-running period for opening the fuel filler cap
2 min

» There are **2 ways** to open the fuel filler cap:

–Within the after-run period.

–After the after-run period is over.

Version 1
Requirement
Within the after-run period



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

» Fuel filler cap unlocked.

- Open fuel filler cap completely.

Version 2
Requirement
After the after-run period is over

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

» The indicator light for the radio-operated key blinks as long as the radio-operated key is being searched for.

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

» Fuel filler cap unlocked.

- Open fuel filler cap completely.



- Refuel with a fuel quality as specified above, but no higher than the lower edge of the fuel filler neck. This is the maximum level.

If refueling is carried out after running on fuel reserve, the resulting filling capacity must be greater than the fuel reserve so that the new fill level is detected and the fuel reserve indicator light is switched off.

The "usable fuel quantity" specified in the technical data is the fuel quantity, which can be refueled if the fuel tank was completely emptied, i.e., if the engine dies off due to lack of fuel.

Usable fuel quantity
Approx. 6.6 gal (Approx. 25 l)

Reserve fuel quantity
Approx. 1.1 gal (Approx. 4 l)

- Press fuel filler cap of fuel tank down firmly.

» Fuel filler cap snaps in audibly.

» The fuel cap automatically locks after the after-run period is over.

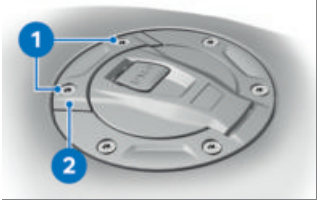
» The engaged fuel cap snaps in immediately when the steering lock is locked or the ignition is turned on.

Open fuel filler cap emergency unlocking

–with Keyless Ride[OE]

The fuel filler cap cannot be opened.

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



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

» Fuel filler cap unlocked.

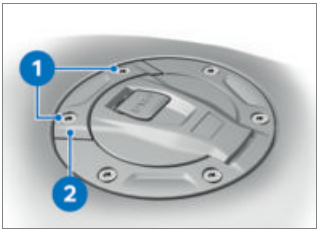
- Open fuel filler cap completely.
- Refueling. (➠ 174)
- Close fuel filler cap emergency release. (➠ 176)

Close fuel filler cap emergency unlocking

–with Keyless Ride[OE]

Requirement

Fuel filler cap is closed.



- Position the emergency unlocking **2**.
- Install screws **1**.

FASTENING MOTORCYCLE IN PLACE FOR TRANSPORTATION

- Protect all components from being scratched where tensioning belts are routed, for example, by using adhesive tape or soft cloths.



ATTENTION

Motorcycle tips to the side when raising

Component damage cause by tipping over

- Secure the motorcycle against tipping to the side, preferably with the assistance of a second person.

- Push the motorcycle onto the transportation flat and hold it in position; do not place it on the side stand or center stand.
- Secure the motorcycle from tipping with support from a second person.



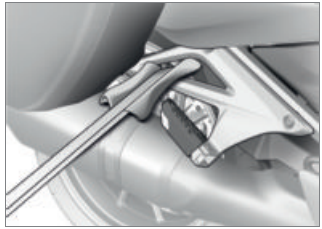
ATTENTION

Pinching of components

Component damage

- Do not pinch components, e.g. brake lines or wiring harnesses.

- Pass the front tensioning belts on the left and right through the fork bridge and strap the motorcycle down.



- Fasten and tighten the tensioning belts at the rear on the brackets for the passenger footrests on both sides.
- Tighten all tensioning belts evenly; the vehicle should be

pulled down with the springs compressed as much as possible.

TECHNOLOGY IN DETAIL

09

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GENERAL NOTES

More information on the topic of technology is available at **bmw-motorrad.com/technik**.

ANTILOCK BRAKING SYSTEM (ABS)

Fully integral brake

Your motorcycle is equipped with a fully integral brake. With this brake system, both the front and rear wheel brakes are actuated upon actuation of a brake lever (hand or footbrake lever).

BMW Motorrad fully integral ABS Pro adapts the braking force distribution between the front and rear wheel brakes during braking by means of ABS modulation to suit the load carried by the motorcycle.

ATTENTION

Attempt at a burn-out despite integral function

Damage to rear-wheel brake and clutch

- Do not perform burn-out.

How does the Integral ABS work?

The maximum braking force that can be transferred to the road is partially dependent on the coefficient of friction of the road. Gravel, ice, snow and wet roads offer a considerably lower coefficient of friction than a dry, clean asphalt surface. The poorer the coefficient of friction of the road is, the longer the braking distance will be.

If the maximum transferable braking force is exceeded when the rider increases the brake pressure, the wheels begin to lock and riding stability is lost, and a fall can result. Before this situation occurs, ABS is activated and the brake pressure is adjusted to the maximum transferable braking force. This enables the wheels to continue to turn and maintains riding stability regardless of the road condition.

What happens when rough roads are encountered?

Bumpy or rough roads can briefly lead to a loss of contact between the tires and the road surface, until the transferable braking force is reduced to zero. If braking is carried out in this situation, ABS must reduce the brake pressure to ensure riding stability when restoring contact to the road. At this point in time, the BMW Motorrad fully integral ABS Pro must assume extremely low friction coefficients (gravel, ice, snow) so that the running wheels turn in every imaginable case and the driving stability is ensured. After detecting the actual conditions, the system adjusts the optimum brake pressure.

In what ways is the Integral ABS noticeable to the rider?

If the ABS system has to reduce the braking force due to the conditions described above, then vibrations can be felt through the handlebar brake lever.

If the brake lever is pulled, then brake pressure is built up at the rear wheel with the integral function. If the footbrake lever is not actuated until after this, the brake pressure already built up can be felt as counter-pressure earlier than when the footbrake lever is actuated before or together with the brake lever.

Lifting off rear wheel

However, during extremely significant and rapid decelerations it is possible that the BMW Motorrad fully integral ABS Pro cannot prevent the rear wheel from lifting off the ground. In these cases, the motorcycle can also flip end over end.

WARNING

Lifting off of the rear wheel due to heavy braking

Accident hazard

- When braking heavily, bear in mind that the ABS control cannot always be relied on to prevent the rear wheel from lifting off the ground.

What are the design characteristics of the Integral ABS?

The BMW Motorrad ABS ensures riding stability on any surface within the limits of riding physics.

At speeds greater than min 2 mph (min 4 km/h), the BMW Motorrad ABS can ensure riding stability on any surface within the limits of riding physics. At lower speeds, the BMW Motorrad ABS cannot provide optimal support on all surfaces due to system limitations.

The system is not optimized for the special requirements encountered under the extreme conditions of competitive off-road and racetrack use.

Special situations

To detect the tendency of the wheels to lock up, the speeds of the front and rear wheel are compared. If implausible values are detected over an extended period of time, the ABS function is deactivated for safety reasons and an ABS fault is indicated. A self-diagnosis must be completed before the fault memory entry will be displayed.

Apart from problems with the BMW Motorrad ABS, unusual riding conditions can also cause a fault memory entry to be generated:

– Warm-up on the center or auxiliary stand in neutral or with gear engaged.
– Rear wheel locked-up for a longer period of time by engine brake, e.g. when riding downhill on slippery surfaces.

Should a fault memory entry occur due to an unusual riding condition, the ABS function can be reactivated by switching the ignition off and then on again.

How important is regular preventive maintenance?

WARNING

Failure to have maintenance performed on the brake system regularly.

Accident hazard

- To ensure that the ABS is in a properly maintained condition, it is vital that the specified service intervals be observed.

Reserves for safety

The potentially shorter stopping distances which BMW Motorrad fully integral ABS Pro permits must not be used as an excuse for a careless riding style. ABS is primarily a means of ensuring a safety margin in genuine emergencies.

WARNING

Braking in curves

Risk of accident despite ABS

- The rider is always responsible for adapting his/her driving style.
- Do not reduce the additional safety function with careless riding or unnecessary risks.

Further development of ABS to ABS Pro

In the past, the BMW Motorrad ABS system provided for a very high level of safety while braking during straight-ahead riding. Now ABS Pro also offers increased safety even when braking in curves. ABS Pro prevents the wheels from locking up, even in the event that the brakes are applied quickly. ABS Pro reduces abrupt changes in steering forces, especially during shock braking, and therefore decreases the risk of the motorcycle lifting off the ground inadvertently.

ABS control

From a technical standpoint, ABS Pro adjusts the ABS control to the angle of inclination of the motorcycle in dependence on the respective riding situation. Signals for the roll and yaw rate and the lateral acceleration are used to determine the inclination of the motorcycle.

With an increasing angle, the brake pressure gradient is increasingly limited at the start of braking. This results in a slower pressure buildup. In addition, the pressure modulation in the range of the ABS control is more uniform.

Advantages for the rider

The advantages of ABS Pro for the rider are sensitive response and high braking and riding stability with the best possible deceleration, even in curves.

DYNAMIC TRACTION CONTROL (DTC)

How does traction control work?

The traction control compares the wheel circumferential velocities of the front and rear wheels. The slip, and with it the stability reserves at the rear wheel, are determined from the speed difference. The engine control adapts the engine torque when the slip limit is exceeded.

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

The system is not optimized for the special conditions encountered under the extreme conditions of competitive off-road and racetrack use. BMW Motorrad DTC can be switched off in such instances.

WARNING

Risky riding style

Risk of accident despite DTC

- The rider is always responsible for adapting his/her driving style.
- Do not reduce the system's extra safety margin with careless riding or unnecessary risks.

Special situations

As the angle of inclination increases, the capacity to accelerate is more and more limited in accordance with the laws of physics. This can result in reduced acceleration when coming out of very tight curves.

To detect spinning or slipping away of the rear wheel, the DTC compares the speeds of the front and rear wheel and takes the angle of inclination and other factors into account.

If the values for the angle of inclination are detected to be implausible for a long period, a substitute value is used for the angle of inclination/the DTC is turned off. In these cases, a DTC fault is displayed. A self-diagnosis must be completed

before the fault message can be displayed.
Under the following unusual riding conditions, the BMW Motorrad Traction Control may be switched off automatically.

Unusual riding conditions:
- Riding on the rear wheel (wheelie) for a longer period.
- Rear wheel spinning in place with front wheel brake engaged (burn-out).
- Warm up on the center stand in Neutral or with gear engaged.

ENGINE DRAG TORQUE CONTROL

– with riding modes Pro [OE]

How does engine drag torque control work?

The purpose of the engine drag torque control is to safely prevent unstable riding conditions that are related to excess drag torque at the rear wheel. Depending on the road condition and riding dynamics, excess drag torque can make the slip at the rear wheel increase severely and impede riding stability. The engine drag torque control reduces slip at the rear wheel to a safe, setpoint slip that is dependent on the mode.

Causes of excess slip at the rear wheel:
- Riding in coasting overrun on a road with low coefficient of friction (e.g. wet leaves).
- Hopping when shifting gears down.
- Hard brake onset in sporty riding style.

Like the BMW Motorrad DTC traction control, the engine drag torque control compares the wheel centrifugal velocities of the front and rear wheels, which are calculated from the wheel speeds and the tire radius. The engine drag torque control can determine the slip, and therefore the stability reserve, on the rear wheel using the speed difference.
If the slip exceeds the respective limit value, the engine torque is increased by slightly opening the throttle valves. The slip is reduced, and the vehicle is stabilized.

Effect of the engine drag torque control

–In ECO, RAIN and ROAD riding modes: Maximum stability.

–with riding modes Pro OE

–In DYNAMIC riding mode: Compared to the ECO, RAIN and ROAD riding modes, the control intervention is reduced.

DISTANCE CONTROL (ACC)

–with Active Cruise Control OE

What is ACC?

BMW Motorrad ACC is adaptive cruise control with distance control. The function enables the rider to specify a desired speed and desired distance from the vehicle in front. This speed is maintained automatically as long as the distance to motorists and cyclists in front does not fall below the distance selected by the rider. If it is undershot, the speed is reduced until the desired distance is reached again.

The rider is still in charge and can intervene at any time and overrule ACC.

The ACC function has two characteristics: `Comfortable` and `Dynamic`. They influence the acceleration and deceleration behavior when control is activated.

How does ACC work?

Objects in front are detected by the front radar sensor. At the same time, the radar sensor uses the yaw rate and vehicle speed to determine the driving path, i.e. the corridor in which the motorcycle will move in the next Approx. 328.1 ft (Approx. 100 m). If one of the detected objects is located in the driving path, a response is triggered and the speed is adjusted to ensure that the desired distance to the object is achieved.

Control functions of ACC

ACC control is divided into the three following control functions:

–**Cruise control**: The speed stored by the rider is adjusted.

–**Distance control**: The speed stored by the rider is adjusted while taking into account the distance to the vehicles in front.

–**Curve control**: When riding around curves, the speed is also reduced as necessary and the function aims to achieve a comfortable angle (e.g. 20°).

In addition, the braking and acceleration dynamics are limited as the angle increases so that the rider is not surprised by sudden braking or acceleration maneuvers. For example, curve control prevents unexpected acceleration when an object is lost and the selected speed is too high. An object can be lost if the vehicle in front is only detected by the radar to a limited extent when it is traveling around the curve.

Speed range of ACC

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

- 19...99 mph (30...160 km/h)
- If ACC is activated in the 99...155 mph (160...250 km/h) speed range, the maximum speed of 99 mph (160 km/h) is selected.

Limits of ACC

ACC is subject to the system limits described below:

- **Detected objects**: The object detection of the radar sensor is limited to vehicles driving in front.
- **Radar range**: The radar has a maximum field of vision of Approx. 393.7 ft (Approx. 120 m). At high speeds and with dynamic movement of the rider's vehicle, e.g. when changing lanes, object detection may be limited.
- **Adjacent lane interference and loss of objects**: Adjacent lane interference and loss of objects: In case of an unsteady riding style, curvy roads or offset driving within a lane, detected vehicles may occasionally be assigned to the wrong lane. The distance control is then applied to the wrong vehicle, which can lead to unexpected braking or acceleration. Due to the system-side limitation of vehicle acceleration and deceleration, handling always remains manageable for the rider.
- **Limitation of riding dynamics**: Acceleration or deceleration of the motorcycle controlled by ACC is limited. The increase in acceleration or deceleration is also limited. This prevents a sudden, significant change in acceleration or deceleration. This limitation is further limited as the angle of the motorcycle increases. In case of very steep inclines and a heavy load, it is possi-

ble that maximum accelerations in ACC mode will not be reached.

– **Environmental influences**: The range of vision of the radar sensor can be reduced by environmental influences. Heavy rain, snow and thick fog reduce the range of vision, sometimes significantly.
– **Interfering reflections**: Strong reflections, e.g. when entering tunnels or in case of tall guardrails, can make object detection difficult.

Influence on the ACC performance

The rider can support the performance of ACC through the following behavior:

– Steady riding style.
– Drive as close to the center of the lane as possible behind the vehicle in front.
– Clearly change lanes during passing maneuvers to support the deselection of the vehicle in front.
– Return to the lane behind vehicles in front as soon as possible to provide time for object selection.

ELECTRONIC CHASSIS AND SUSPENSION ADJUSTMENT (D-ESA)

– with Dynamic ESA OE

Riding position compensation

The electronic Dynamic ESA chassis and suspension adjustment can automatically adapt your motorcycle to the vehicle load. If the suspension adjustment is set to `Auto`, the rider does not have to deal with adjusting the vehicle load.

BMW Motorrad recommends the `Auto` chassis and suspension adjustment.

When the motorcycle is started and while it is being ridden, the system monitors the compression of the rear wheel and corrects the spring setting to ensure that the correct riding position is set. The damping is also automatically adjusted to the vehicle load.

Using ride height sensors, Dynamic ESA detects the movements of the suspension and responds to them by adjusting the EDC valves. As a result, the suspension is adjusted to the conditions of the ground surface.

Dynamic ESA calibrates itself at regular intervals to ensure

that the system is operating correctly.

Possible settings
Damping modes
–`Road`: damping for comfortable road travel

–`Dynamic`: damping for dynamic road travel

Load settings
–`Min`: Minimum spring setting (only suitable as an aid for mounting the motorcycle)
–`Auto`: Riding position compensation with automatic setting of spring setting and damping (recommended chassis setting)

RIDING MODE

Selection

In order to adjust the motorcycle to the road condition and the desired riding experience, it is possible to select one of the following riding modes:
–ECO
–RAIN
–ROAD
–with riding modes Pro OE
–DYNAMIC

For each of these riding modes, there is a coordinated setting for the DTC systems, dynamic engine brake control and the throttle response.

–with Dynamic ESA OE
Dynamic ESA can be set regardless of the selected riding mode.

DTC can be switched off in any riding mode. The following explanations always refer to the electronic stability control systems that are switched on.

Torque and throttle response
–In ECO riding mode: restrained throttle response, reduced torque.
–In RAIN riding mode: soft throttle response, maximum torque.
–In ROAD riding mode: optimum throttle response, maximum torque.

–with riding modes Pro OE
–In DYNAMIC riding mode: direct throttle response, maximum torque.

Traction control DTC

–In the RAIN riding mode: maximum stability on wet roads. Acceleration may be reduced on dry roads.
–In the ECO and ROAD riding modes: high stability on dry road. The intervention of the DTC occurs later than in the RAIN riding mode. Spinning of the rear wheel without traction is avoided wherever possible.
–In the ECO, RAIN and ROAD riding modes, the front wheel is prevented from lift-off.
–In the DYNAMIC riding mode, the intervention of the DTC occurs later than in the ECO and ROAD riding modes. High performance on dry roads. In poor road conditions, optimum stability cannot be guaranteed.

Switchover

Riding modes can be changed when the vehicle is at a standstill with the ignition switched on. A changeover while riding is possible under the following conditions:

–No drive torque at rear wheel.
–No brake pressure in the braking system.

For a changeover while riding, the following steps must be carried out:

–Turn back throttle grip.
–Do not actuate brake lever.
–Deactivate the adaptive cruise control.

First, the desired riding mode is preselected. The switchover does not take place until the affected systems are in the required state.
The Selection menu does not disappear from the display until the riding mode has been switched over.

ECO mode

The ShiftCam technology bridges the gap between maximum dynamics and maximum efficiency. While the full load cams make the full valve stroke available for maximum combustion chamber filling and high power output, the partial load cams open the intake valves significantly less and at different widths. The gas exchange losses are reduced by de-throttling, friction is reduced, the mixture

is agitated more thoroughly and burned more effectively, and the fuel consumption drops.
The ECO mode supports the rider by means of the ECO indicator and engine characteristics (E-gas adjustment) in the targeted operation of the combustion engine within the operating range of the partial load cam, which is the optimum for consumption, and thus to achieve a maximum range.
The fill level of the green bar of the ECO indicator in the TFT display visualizes whether the drive is operating in the consumption-optimized range of the partial load cam and, if so, at which distance to the switching threshold. The length of the bar here represents the remaining load reserve to the point of the switch to the full load cam. The color turns gray if the load requirement increases and a change to the full load cam has taken place. The ECO display varies depending on the selected gear, the load requirement and rotational speed. Even outside the operating range of the partial load cam, when the bar is gray, the ECO mode provides advantages with regard to an efficient riding style by reducing the maximum available torque and peak power output.

Due to of the reduced acceleration capability in the ECO mode, it is recommended that the riding mode be changed before attempting critical passing maneuvers with a heavy vehicle load or in two-up operation.

Applying a defensive riding style can further reduce fuel consumption (➠ 199) .

DYNAMIC BRAKE CONTROL

–with riding modes Pro[OE]

Dynamic Brake Control function

The Dynamic Brake Control function helps the rider in the event of emergency braking.

Detection of emergency braking

–Emergency braking is detected when the front wheel brake is applied quickly and with force.

Behavior during emergency braking

–If hazard braking is applied at a speed of min 6 mph (min 10 km/h), in addition to the ABS function, the Dynamic Brake Control function will also be activated.
–In the event of partial braking with high brake pressure gradients, Dynamic Brake Control will increase the integral brake pressure on the rear wheel. This shortens the braking distance, enabling controlled braking.

Behavior in the event of accidental activation of the throttle grip

–If the throttle grip is accidentally actuated during emergency braking (throttle position >5%), the intended braking effect is ensured by the Dynamic Brake Control ignoring the opening process of the throttle grip. This ensures the effectiveness of emergency braking.
–If the gas is shut off (throttle position <5%) during the intervention of the Dynamic Brake Control, the engine torque required by the ABS brake system will be restored.
–If hazard braking is stopped and the throttle grip is still under actuation, the Dynamic Brake Control adjusts the engine torque back to the rider's choice.

TIRE PRESSURE MONITOR (RDC)

–with tire pressure monitor (TPM) OE

Function

A sensor located in each tire monitors the air temperature and the tire pressure and transmits this information to the control unit.
The sensors are equipped with a centrifugal controller, which does not enable the transmission of the measured values until the minimum speed of min 19 mph (min 30 km/h) is exceeded for the first time.
Before initial reception of the tire pressure, –– is shown in the display for each tire. The sensors continue to transmit the measured values for min 15 min after the vehicle comes to a stop.
If an RDC control unit is installed but the wheels have no sensors, a fault message is generated.

Tire inflation pressure ranges

The RDC control unit distinguishes between three inflation pressure ranges matched to the motorcycle:

- Tire pressure within the permissible tolerance.
- Tire pressure at the limits of the permissible tolerance.
- Tire pressure outside the permissible tolerance.

Temperature compensation

The tire pressure is temperature-dependent: it increases or decreases together with the tire air temperature. The tire temperature is dependent on the outside temperature, the riding style and the length of the journey.

The tire pressures are shown in the multifunction display with temperature compensation and are always based on a tire air temperature of 68 °F (20 °C). Tire pressure gauges at filling stations do not make any compensation for the tire air temperature, the tire pressure indicated depends on the temperature of the air in the tire. As a result, in most cases the values displayed there do not match the values shown in the display.

Tire pressure adjustment

Compare the RDC value in the display with the value on the back cover of the operating instructions. The difference between the two values must be compensated with the tire inflation pressure tester at the filling station.

 Example
According to the Owner's Manual, the tire pressure should be as follows:
36.3 psi (2.5 bar)
The multifunction display shows the following figure:
33.4 psi (2.3 bar)
The shortfall is thus:
2.9 psi (0.2 bar)
The tester at the filling station shows:
34.8 psi (2.4 bar)
To obtain the correct tire pressure, that has to be increased to the following figure:
37.7 psi (2.6 bar)

GEAR SHIFT ASSISTANT

–with Gearshift Assistant Pro[OE]

Gear Shift Assistant Pro

Your motorcycle is equipped with the Gear Shift Assistant Pro originally developed for racing but now specially adapted for touring use. It allows you upshift and downshift under almost any load conditions and in virtually all engine-speed ranges without operating the clutch or accelerator.

Benefits

–70-80 % of all gear shifts can be performed without using the clutch.
–Less movement between rider and passenger due to shorter gear-change intervals.
–Throttle valve does not have to be closed when changing gear under acceleration.
–During deceleration and downshifts (throttle plate closed) the system blips the throttle valve to obtain the correct engine speed.
–Shifting times are faster than when the clutch is used to shift gears.

For the system to detect the rider's intention to change gears, the gearshift lever previously not operated must be moved against the spring force by a certain amount of "overtravel" in the desired direction with a normal to brisk action and held in that position until the gear change is completed. A further increase of the force applied to the gearshift lever during the gear-shift operation is not necessary. After the gear change is completed, the gearshift lever must be fully released before the Gear Shift Assistant Pro can execute a new gear change. The load condition (throttle position) should remain constant both prior to and during execution of gear shifts using the Gear Shift Assistant Pro. Changing the throttle position during the gear-shift operation may cause the function to abort and/or the gear change to fail. The Gear Shift Assistant Pro does not provide support when gear shifts are made with clutch control.

Downshifts

–Downshifts are assisted up to the speed at which the engine reaches maximum rpm in the gear to be engaged. Overrevving is thus prevented.

 Maximum engine speed
max 9000 min^{-1}

Upshifts

–Upshifting is only possible if the current RPM is higher than the release threshold for the next higher gear.

–The engine speed is thus prevented from dropping below idle speed.

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

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

 Release thresholds
5th gear
min 1550 min^{-1}
6th gear
min 1600 min^{-1}

HILL START CONTROL

Hill Start Control function

The Hill Start Control ride-off assistant function prevents uncontrolled rolling back on slopes by means of targeted intervention in the fully integral ABS brake system without the rider having to continuously operate the brake lever. When Hill Start Control is activated, pressure builds in the rear brake system so that the motorcycle remains stationary on a sloping surface. The brake pressure in the brake system depends on the gradient.

Influence of gradient on brake pressure and starting behavior

–Stopping on a slight incline builds up only a small amount of brake pressure. The brake is released quickly when riding off, making it possible to ride off more smoothly. Ad-

ditional turning of the throttle grip is hardly required.
– Stopping on a steeper slope increases the amount of brake pressure built up. The brake is a bit slower to release when riding off. More torque is required to ride off, making additional turning of the throttle grip necessary.

Behavior when the vehicle is rolling back or slipping
– The brake pressure increases when the vehicle is rolling back with the Hill Start Control activated.
– If the rear wheel slips, the brake is released again after Approx. 3.3 ft (Approx. 1 m). This prevents the vehicle from slipping with a locked rear wheel, for example.

Releasing the brake when switching off the engine or during timeout
Hill Start Control is deactivated when the engine is switched off using the emergency-off switch, when the side stand is folded out, or after it times out (10 minutes).
In addition to indicator and warning lights, the following vehicle behavior should make the rider aware that the Hill Start Control is deactivated:

Brake warning jerk
– The brake is released briefly and is immediately reactivated.
– This causes a jerking behavior that the rider can feel.
– The full integral ABS brake system sets a speed of Approx. 1…1 mph (Approx. 1…2 km/h).
– The rider must brake the vehicle manually.
– After two minutes, or when the brake is applied, the cruise control is deactivated completely.

When the ignition is switched off, the holding pressure is built up immediately and without brake warning jerk.

– with riding modes Pro[OE]
Hill Start Control Pro
It is possible to automatically activate the holding function using Hill Start Control Pro.

SHIFTCAM

Principle of ShiftCam function

The motorcycle is equipped with the BMW ShiftCam technology—a technique for varying the valve timing and the valve stroke on the intake side. The centerpiece of this technology is a one-piece intake trip camshaft that has two cams per valve to be actuated: one for partial load and one for full load. The partial load cam has been developed with regard to fuel economy optimization and smooth running. The partial load cam reduces both the valve timings adapted for this purpose and the intake valve stroke. Furthermore, the intake cams for the left and right intake valve differ in stroke and angle position when the partial load cam is activated. This causes a staggered opening of the two intake valves at different widths. The advantage is that the fuel-air mixture flowing into the combustion chamber is more strongly swirled and more effectively burned. Overall, this results in optimal fuel efficiency and noticeably improves the smoothness of running. The full load cam is optimized for performance and releases the maximum intake valve stroke. In order to vary the valve timing and the valve stroke, the intake camshaft is shifted axially. For this purpose, the pins of an electromechanical actuator mesh with a shift gate on the intake camshaft. This allows for the actuation of the intake valves depending on load and motor speed and, as a result, an uncompromising symbiosis of performance and low fuel consumption.

ADAPTIVE HEADLIGHT

–with Adaptive Lights OE

How do the adaptive headlights work?

The standard installed dimming unit in the headlight consists of two reflectors that generate low-beam headlights using LED. Ride height sensors at the front and rear wheel suspension provide data for continuous headlight range control. Thanks to the pitching compensation, the light always illuminates the optimal, preset area when riding on straight stretches of road, regardless of the riding conditions and load status. Using Adaptive Headlights, the dimming unit addi-

tionally rotates around an axis, depending on the angle, and compensates for the angle of roll of the vehicle. The angle of rotation is 70° (± 35°).
In addition to the pitching compensation, therefore, the low-beam headlight is adjusted to compensate for the lean angle during riding. Both movements are overlaid so that a highlight in the curve results. This results in significantly improved illumination of the road when riding around curves and thus an enormous increase in active safety.

MAINTENANCE

10

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GENERAL NOTES

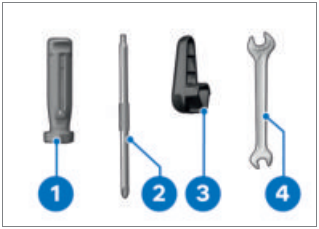
The "Preventive maintenance" chapter describes work involving the checking and replacement of wearing parts that can be performed with a minimum of effort.
If specific tightening torques are to be taken into account for installation, these are listed. An overview of all required tightening torques is contained in the chapter "Technical data".

Microencapsulated screws

The microencapsulation is a chemical threadlocker. An adhesive is used to create a solid connection between screw and nut or component. Microencapsulated screws, therefore, are suitable for single use only. After removal, the internal thread must be cleaned to remove adhesive. During installation, a new microencapsulated screw must be used. Therefore, before removal, ensure that you have suitable tools for cleaning the thread and have a replacement screw. If you carry out the work improperly, the locking function of the screw might no longer be guaranteed, which puts you in danger!

Special tools and thorough specialized knowledge are required to carry out some of the work described here. If you are in doubt, consult a repair shop, preferably your authorized BMW Motorrad retailer.

ONBOARD VEHICLE TOOL KIT



1 Screwdriver handle

2 Reversible screwdriver insert
Phillips PH1 and Torx T25
– Remove and install trim panel components.

3 Tool for oil cap
– Top up engine oil. (➠ 207)
– Remove the rear seat. (➠ 153)
– Install the passenger seat. (➠ 154)

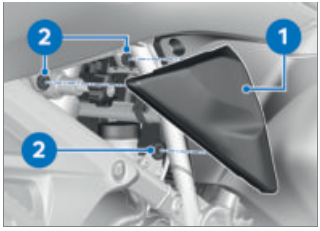
4 Open-ended wrench
Key range: 8/10 mm

4 –Removing the battery (➠ 231).

SPRING STRUT COVER

Removing suspension strut cover

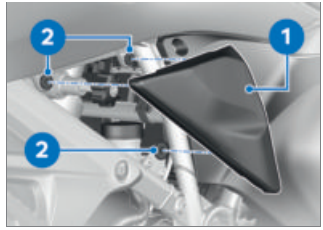
- Park the motorcycle, making sure the ground is level and firm.



- Loosen the spring strut cover **1** from the grommets **2**.

Installing suspension strut cover

- Park the motorcycle, making sure the ground is level and firm.



- Insert the spring strut cover **1** into the grommets **2**.

FRONT WHEEL STAND

Attaching the front wheel stand

ATTENTION

Use of BMW Motorrad front wheel stand without additional center or auxiliary stand

Component damage cause by tipping over

- Place the motorcycle on a center or auxiliary stand before lifting the front wheel with the BMW Motorrad front-wheel stand.

- Ensure that the motorcycle is standing securely.
- Make sure the ground is level and firm and put the motorcycle on its center stand.



- For a description of the correct installation, please refer to the instructions for the front wheel stand.
- BMW Motorrad offers a suitable auxiliary stand for each vehicle. Your authorized BMW Motorrad retailer will be very happy to assist you in choosing the suitable auxiliary stand.

ENGINE OIL

Checking the engine oil level

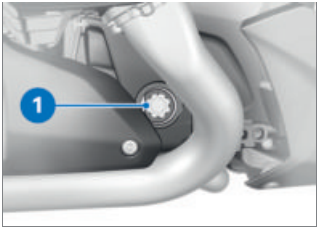
ATTENTION

Misinterpretation of the oil filling quantity, as the oil level is temperature-dependent (the higher the temperature, the higher the oil level)

Engine damage

- Only check the oil level after a longer journey or when the engine is warm.
- Run the engine in Neutral until the fan starts.
- Turn off engine at operating temperature.
- Make sure the ground is level and firm and put the motorcycle on its center stand.
- Wait five minutes to allow oil to drain into the oil pan.

BMW Motorrad recommends occasionally checking the engine oil after a journey of min 31 miles (min 50 km) in order to reduce the environmental impact.



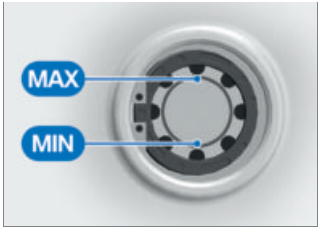
ATTENTION

Lateral tipping of the vehicle

Component damage cause by tipping over

- Secure the vehicle from tipping over laterally, preferably with the support of a second person.

- Read oil level on the display **1**.



Specified level of engine oil
Between **MIN** and **MAX** mark

If the oil level is below the **MIN** mark:

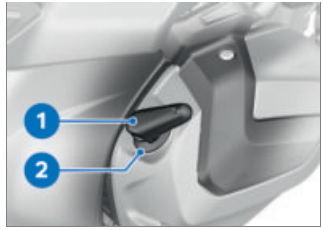
- Top up engine oil. (➠ 207)

If the oil level is above the **MAX** mark:

- Have the oil level corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Topping up the engine oil

- Park the motorcycle, making sure the ground is level and firm.



- Clean the area around the oil filler opening.
- Hold the oil cover tool **1** against the oil filler opening **2** and remove by turning counterclockwise.

ATTENTION

Use of too little or too much engine oil

Engine damage

- Always make sure that the oil level is correct.

- Top up the engine oil to the specified level.

Engine oil, quantity for topping up
max 0.8 quarts (max 0.8 l) (Difference between **MIN** and **MAX**)

- Check engine oil level. (➠ 206)
- Install cap **2** of oil filler opening.

BRAKE SYSTEM

Checking brake function

- Actuate the handbrake lever.

» The pressure point must be clearly perceptible.

- Press the footbrake lever.

» The pressure point must be clearly perceptible.

If resistance points are not clearly perceptible:

ATTENTION

Improper working on the brake system

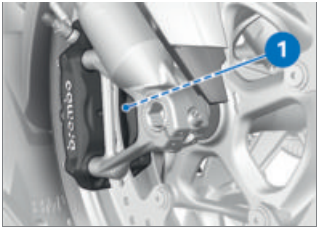
Endangering of the operating safety of the brake system

- Have all work on the brake system carried out by experts.

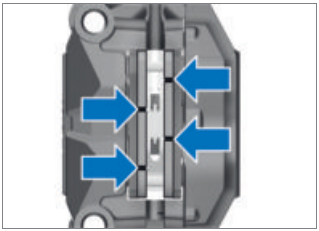
- Have the brakes checked by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking the front brake pad thickness

- Park the motorcycle, making sure the ground is level and firm.



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



Front brake-pad wear limit
0.04 in (1.0 mm) (Only friction lining without carrier plate. The wear marks (grooves) must be clearly visible.)

If the wear marks are no longer clearly visible:

WARNING

Dropping below the minimum pad thickness
Reduced braking action, damage to the brake
- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.

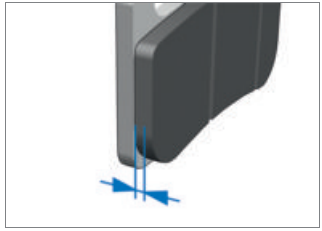
- Have brake pads renewed at a repair shop, preferably an authorized BMW Motorrad retailer.

Checking the rear brake pad thickness

- Park the motorcycle, making sure the ground is level and firm.



- Conduct a visual inspection of the brake pad thickness. Direction of view: from rear, looking at brake pads **1**.



Rear brake-pad wear limit
0.04 in (1.0 mm) (Only friction lining without carrier plate.)

If wear limit is reached:

WARNING

Dropping below the minimum pad thickness
Reduced braking action, damage to the brake
- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.

- Have brake pads renewed at a repair shop, preferably an authorized BMW Motorrad retailer.

Checking the front brake fluid level

WARNING

Insufficient or contaminated brake fluid in the brake fluid reservoir
Considerably reduced braking power caused by air, dirt or water in the brake system
- Stop riding immediately until fault is rectified.
- Check brake fluid level regularly.
- Make sure that the lid of the brake fluid reservoir is cleaned before opening.
- Make sure that brake fluid is used from a sealed container only.

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



- Check brake fluid level at brake fluid reservoir for front wheel brake **1**.

The brake fluid level in the brake-fluid reservoir drops due to brake pad wear.



Front brake fluid level
Brake fluid, DOT4
The brake fluid level must not fall below the **MIN** mark. (Brake fluid reservoir horizontal, vehicle standing upright)

If the brake fluid level falls below the approved level:

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

Checking the rear brake fluid level

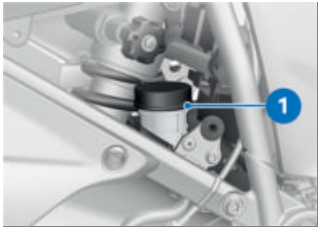
WARNING

Insufficient or contaminated brake fluid in the brake fluid reservoir

Considerably reduced braking power caused by air, dirt or water in the brake system

- Stop riding immediately until fault is rectified.
- Check brake fluid level regularly.
- Make sure that the lid of the brake fluid reservoir is cleaned before opening.
- Make sure that brake fluid is used from a sealed container only.

- Make sure the ground is level and firm and put the motorcycle on its center stand.
- Remove suspension strut cover. (➠ 205)



- Check the brake fluid level at the brake fluid reservoir for rear wheel brake **1**.

The brake fluid level in the brake-fluid reservoir drops due to brake pad wear.



Rear brake fluid level
Brake fluid, DOT4
The brake fluid level must not fall below the **MIN** mark. (Brake fluid reservoir horizontal, vehicle standing upright)

If the brake fluid level falls below the approved level:

- Have the fault rectified as soon as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.
- Install suspension strut cover. (➠ 205)

CLUTCH

Checking the clutch function

- Pull the clutch lever.

» The pressure point must be clearly perceptible.

If no clear pressure point can be felt:

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

COOLANT

Checking the coolant level

- Park the motorcycle, making sure the ground is level and firm.
- Allow the engine to cool down.



- Check coolant level at expansion tank **1**.



Required coolant level
Between **MIN** and **MAX** marks on the expansion tank (Engine cold)

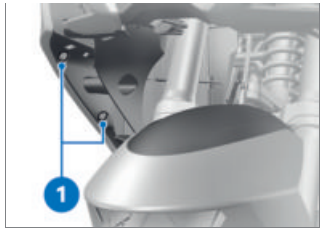
If the coolant level drops below the permitted level:

- Top up coolant. (➠ 214)

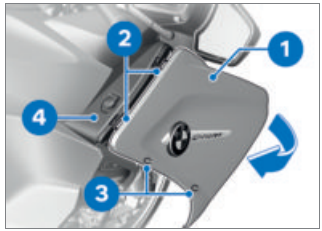
Topping up coolant

WARNING

Opening the radiator cap
Risk of burning
- Do not open the radiator cap when it is hot.
- Check the coolant level exclusively at the expansion tank and top up if necessary.



- Remove screws **1**.



- Pull the front side trim panel **1** outward.

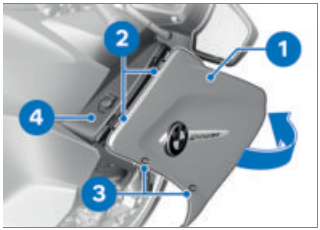
» Holding pins **3** are pulled out of grommets.

- Pull the side trim panel **1** upward out of the side section **4**

and remove it. When doing so, pay attention to the lugs **2**.



- Open the cap **1** of the coolant expansion tank and top up coolant to the specified level.
- Check the coolant level. (➠ 212)
- Close the cap of the coolant expansion tank.

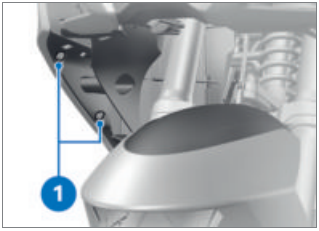


- Attach the side trim panel **1** with lugs **2** on the side section **4**.

Make sure that the rubber sleeves are correctly installed and not pressed out during installation.

- Swivel side trim panel **1** inward.

» Holding pins **3** are pushed into grommets.



- Install screws **1**.

TIRES

Checking tire pressure

WARNING

Incorrect tire inflation pressure

Poorer handling characteristic of motorcycle, reduction of tire service life

- Ensure proper tire inflation pressure.

WARNING

Automatic opening of vertically installed valve inserts at high speeds
Sudden loss of tire inflation pressure
- Use valve caps with rubber sealing ring and screw on firmly.

- Park the motorcycle, making sure the ground is level and firm.
- Check tire pressure against data below.

Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" chapter.

 Front tire pressure
36.3 psi (2.5 bar) (with tire cold)

 Rear tire pressure
42.1 psi (2.9 bar) (with tire cold)

If tire pressure is too low:
- Correct the tire pressure.

Checking tire tread depth

WARNING

Riding with heavily worn tyres
Risk of accident due to poorer rideability
- If necessary, replace the tyres before the legally specified minimum tread depth is reached.

- Park the motorcycle, making sure the ground is level and firm.
- Check tire tread depth in main tread grooves with wear indicators.

Tread wear marks are integrated into the main grooves on every tire. If the tire tread has worn down to the level of the marks, the tire is completely worn. The locations of the marks are indicated on the edge of the tire, e.g. by the letters TI, TWI or by an arrow.

When the minimum tread depth is reached:
- Replace the worn tire.

RIMS

Checking rims

- Park the motorcycle, making sure the ground is level and firm.
- Visually inspect rims for defects.
- Have damaged rims checked and, if necessary, renewed by a specialist workshop, preferably an authorized BMW Motorrad retailer.

WHEELS

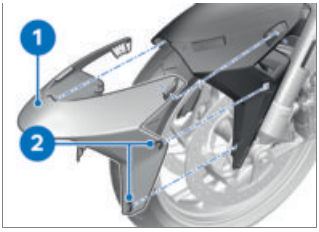
Effect of wheel sizes on suspension control systems

The wheel sizes play an important role with suspension control systems. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes resulting from conversion to wheels not installed as standard equipment can seriously affect the control efficiency of these systems. The sensor rings required for wheel speed detection must also match the installed control systems and may not be replaced.
If you want to convert your motorcycle to different wheels, please contact a specialist workshop, preferably a BMW Motorrad retailer. In some cases, the data stored in the control units can be adapted for the new wheel sizes.

Removing the front wheel

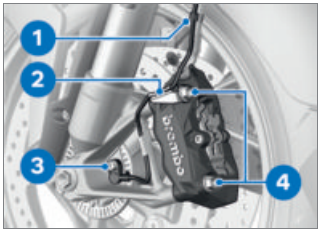


- Remove the screws **1** on the left and right.

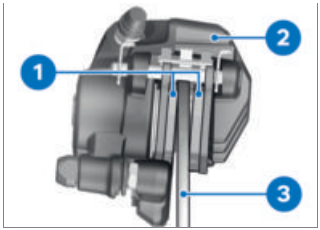


- Loosen the front-wheel cover **1** at hook **2** and remove it.

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



- Detach wheel speed sensor cable from holding clips **1** and **2**.
- Remove the screw **3** and remove the wheel speed sensor from the drilled hole.
- Remove the mounting bolts **4** of the left and right brake calipers.



- Push brake pads **1** apart slightly by turning the brake caliper **2** back and forth against brake disk **3**.

ATTENTION

Using hard or sharp-edged objects near the component

Component damage

- Do not scratch components, if necessary tape off or cover.

- Mask off areas of the wheel rim that could get scratched in the process of removing the brake calipers.

ATTENTION

Unintentional pressing together of brake pads

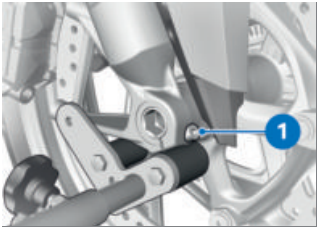
Component damage when mounting the brake caliper or when pressing the brake pads apart

- Do not actuate the brakes with the brake caliper removed.

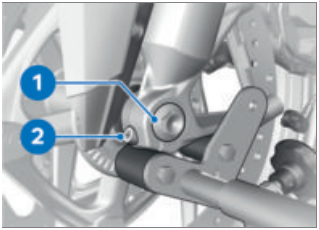
- Carefully pull the brake calipers back and outward to remove them from the brake disks.

- Make sure the ground is level and firm and place the motorcycle on its center stand
- Raise front of motorcycle until the front wheel can turn freely. Use a suitable front

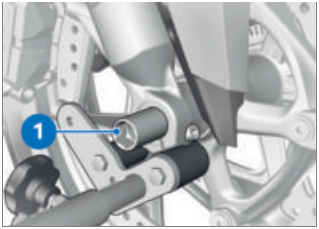
wheel stand to raise the motorcycle.
- Attach the front wheel stand. (➠ 205)



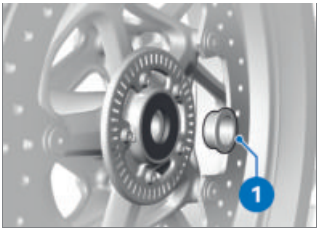
- Loosen the right axle clamping screw **1**.



- Remove screw **1**.
- Loosen the left axle clamping screw **2**.
- Slightly press the quick-release axle inward for a better grip on the right side.



- Pull out the quick-release axle **1** while supporting the front wheel.
- Place front wheel down and roll it forward out of the front suspension.



- Remove the spacer bushing **1** from the wheel hub.

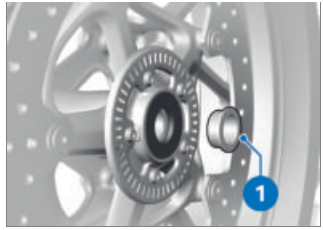
Installing the front wheel

WARNING

Use of a wheel which does not comply with series specifications
Malfunctions during control interventions by ABS and DTC
- Please see the information on the effect of wheel sizes on the ABS and DTC chassis control systems at the beginning of this chapter.

ATTENTION

Tightening of screwed connections with incorrect tightening torque
Damage or loosening of screwed connections
- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.



- Lubricate the contact surface on the spacer bushing **1**

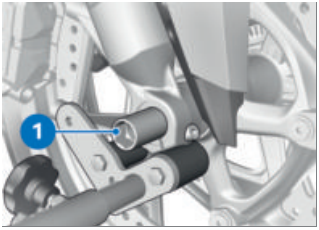
Lubricant
Optimoly TA

- Insert the spacer bushing **1** into the wheel hub on the left side with the seat facing outwards.

ATTENTION

Front wheel installation opposite the running direction
Accident hazard
- Observe running direction arrows on tire or rim.

- Roll the front wheel into the front suspension.



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

Lubricant
Optimoly TA

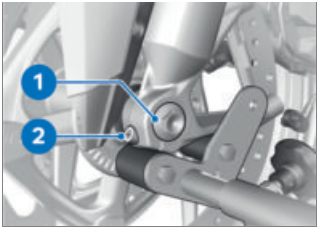
WARNING

Improper installation of quick-release axle

Loosening of the front wheel

- After the brake caliper is fastened and the spring fork is relaxed, tighten the quick-release axle and axle clamping with the specified torque.

- Lift the front wheel and install the quick-release axle **1**.
- Remove front wheel stand and firmly compress front forks. Do not actuate brake lever at the same time.
- Attach the front wheel stand. (➠ 205)

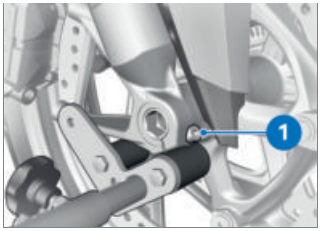


- Install the screw **1** to the specified torque. Brace quick-release axle on the right side at the same time.

Quick-release axle in telescopic fork
M12 x 20
22 lb/ft (30 Nm)

- Tighten left-hand axle clamping screw **2** to the specified torque.

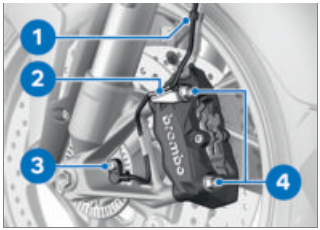
Clamping screw for quick-release axle in telescopic fork
M8 x 35
14 lb/ft (19 Nm)



- Tighten right-hand axle clamping screw **1** to the specified torque.

Clamping screw for quick-release axle in telescopic fork
M8 x 35
14 lb/ft (19 Nm)

- Remove the front wheel stand.
- Put the brake calipers on the left and right onto the brake disks.



- Install mounting bolts **4** on left and right to the specified torque.

Radial brake calipers on telescopic forks
M10 x 65
28 lb/ft (38 Nm)

- Remove adhesive tape from wheel rim.

WARNING

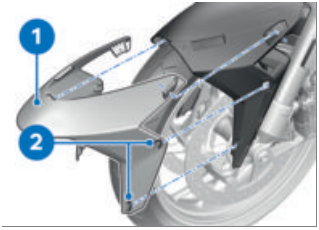
Brake pads do not contact the brake disc

Risk of accident due to delayed braking effect.

- Before driving off, check that the braking effect kicks in without any delay.

- Engage the brakes repeatedly until the brake pads make contact with the discs.
- Insert the wheel speed sensor cable into the holding clips **1** and **2**.
- Insert the wheel speed sensor into the drilled hole and install screw **3**.

Wheel speed sensor on fork
M6 x 16
Joint compound: Micro-encapsulated or medium-strength screw lock
6 lb/ft (8 Nm)



- Attach the front-wheel cover **1**, paying attention to the hook **2**.

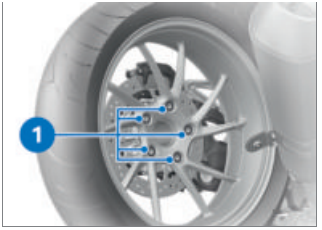


- Install screws **1** on left and right.

	Front-wheel cover at rear front-wheel cover
M5 x 14	
Thread-locking compound: micro-encapsulated	
1 lb/ft (2 Nm)	

Removing the rear wheel

- Make sure the ground is level and firm and put the motorcycle on its center stand.
- Shift into first gear.
- Swivel out the muffler. (➠ 224)



- Remove the screws **1** of the rear wheel while supporting the wheel.
- Tilt the rear wheel out to the side.

Installing the rear wheel

WARNING

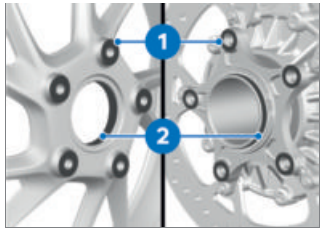
Use of a wheel which does not comply with series specifications
Malfunctions during control interventions by ABS and DTC
- Please see the information on the effect of wheel sizes on the ABS and DTC chassis control systems at the beginning of this chapter.

ATTENTION

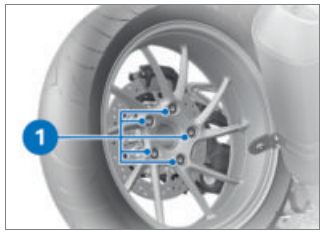
Tightening of screwed connections with incorrect tightening torque
Damage or loosening of screwed connections
- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.

ATTENTION

Rear wheel installation counter to running direction
Risk of accident
- Observe running direction arrow on tire or rim.



- Clean contact surfaces of the wheel hub **1** and wheel centering device **2**.
- Place rear wheel on rear wheel support.



- Install the lug bolts **1** to the specified torque.

Tighten rear wheel on wheel flange
Tightening sequence: Tighten crosswise
M10 x 1.25 x 40
44 lb/ft (60 Nm)

- Fasten the muffler. (➠ 225)

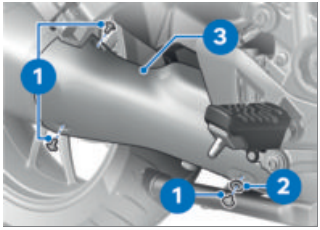
SILENCER

Swiveling out the silencer

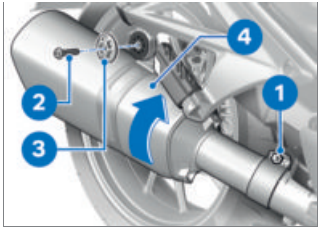
CAUTION

Hot exhaust system
Burn hazard
- Do not touch hot exhaust system.

- Park motorcycle on the center stand. Ensure that the ground is firm and level.
- Allow the silencer to cool down.



- Remove screws **1**.
- Remove the screw with lock washer **2**.
- Remove muffler cover **3**.



- Loosen screw **1**.
- Remove the screw **2** with lock washer **3**.
- Turn muffler **4** clockwise outward.

–with sports muffler OE



- Loosen circlip **1**.◁

–with sports muffler[OE]

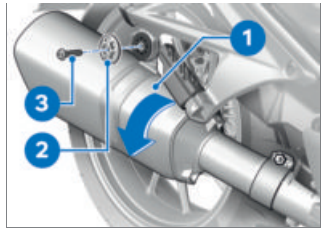


- Remove the screw **1** with lock washer **2**.
- Turn muffler **3** clockwise outward.◁

Fastening silencer

ATTENTION

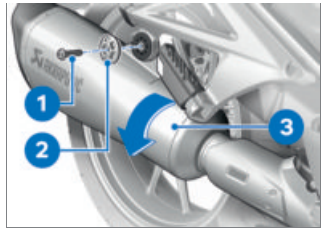
Tightening of screwed connections with incorrect tightening torque
Damage or loosening of screwed connections
- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.



- Turn muffler **1** counterclockwise until it rests on the passenger footpeg bracket.
- Install lock washer **2** and screw **3**.

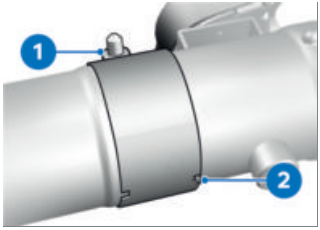
Muffler on rear frame
M8 x 35
14 lb/ft (19 Nm)

–with sports muffler[OE]



- Turn muffler **3** counterclockwise until it rests on the passenger footpeg bracket.
- Install lock washer **2** and screw **1**.

Muffler on rear frame
M8 x 35
14 lb/ft (19 Nm)◁



- Shift the circlip with recess **1** as far forward as possible and align it with the snap-in lug **2**.

» Snap-in lug engages in the recess of the clamp.

- Tighten circlip **1**.

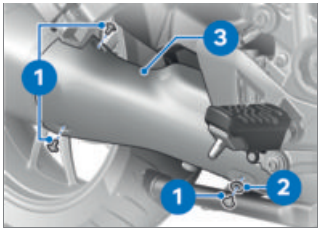
Clamp on silencer and exhaust manifold
16 lb/ft (22 Nm)

–with sports muffler[OE]



- Tighten circlip **1**.

Clamp on silencer and exhaust manifold
16 lb/ft (22 Nm)◁



- Position muffler cover **3**.
- Install screws **1**.
- Install the screw with lock washer **2**.

Trim on end muffler
4 lb/ft (5 Nm)

LIGHT SOURCES

Replacing the LED light source

WARNING

Overlooking the vehicle in traffic due to a defective light source on the vehicle
Safety risk
- Replace defective light sources as quickly as possible. For details please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

All light sources on the vehicle are LED light sources. The service life of the LED light sources is longer than the assumed service life of the vehicle. If an LED light source is faulty, please contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

JUMP-STARTING

CAUTION

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

ATTENTION

Current too high when jump-starting the motorcycle
Cable fire or damage to the motorcycle electronics
- Do not jump-start the motorcycle using the power socket, only via the battery terminal.

ATTENTION

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

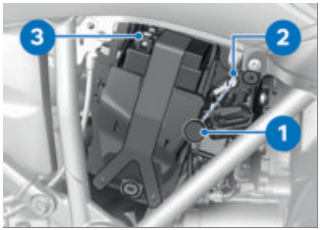
ATTENTION

Jump-starting with a voltage higher than 12 V

Damage to the motorcycle's electronics

- The battery of the donor motorcycle must have a voltage of 12 V.

- Park the motorcycle, making sure the ground is level and firm.
- Remove the battery cover. (➠ 231)
- Do not disconnect the battery from the electrical system for an external start.



- Remove protective cap **1**.
- Begin by connecting the red jumper cable to the remote positive terminal **2** on the empty battery and the other end to the positive terminal of the donor battery.
- Then clamp one end of the black jumper cable to the donor battery's negative terminal **3** while connecting the other end to the empty battery's negative terminal.
- Run engine of donor vehicle during jump-starting procedure.
- Start the engine of the vehicle with the empty battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt to start the engine to protect the starter motor and the donor battery.
- Allow both engines to idle for a few minutes before disconnecting jumper cables.
- Disconnect the jumper cable from the negative terminal first, then from the positive terminal.

To start the engine, do not use start sprays or similar items.

- Install the protective cap.
- Install the battery cover. (➠ 233)

BATTERY

Maintenance instructions

Correct battery care and maintenance combined with proper charging and storage procedures extends the battery's service life, and is also required for warranty claims.
Compliance with the points below is important in order to maximize battery service life:
– Keep the surface of the battery clean and dry.
– Do not open the battery.
– Do not top up with water.
– Be sure to read and comply with the instructions for charging the battery on the following pages.
– Do not turn the battery upside down.

ATTENTION

Discharging of the connected battery by the vehicle electronics (e.g. clock)
Total discharge of battery leading to a rejection of warranty claims
- During riding breaks of more than 4 weeks, connect a trickle-charger to the battery.

BMW Motorrad has developed a trickle-charger specially designed for compatibility with the electronics of your motorcycle. Using this charger, you can keep the battery charged during long periods when the motorcycle is not being used without having to disconnect the battery from the motorcycle's onboard systems. Additional information is available at your authorized BMW Motorrad retailer.

Charging connected battery

- Remove devices connected to onboard power sockets.

ATTENTION

Charging the battery connected to the vehicle using the battery terminals
Damage to the motorcycle's electronics
- Disconnect the battery before charging on the battery terminals.

ATTENTION

A fully discharged battery must be charged via a power socket or extra socket.

Damage to vehicle electronics

- A fully discharged battery (battery voltage less than 12 V, indicator lights and multifunction display remain off when ignition is switched on) must always be charged directly at the poles of the **disconnected** battery.

ATTENTION

Unsuitable chargers connected to the power socket

Damage to charger and vehicle electronics

- Use suitable BMW chargers. The correct charger is available through your authorized BMW Motorrad retailer.

- Charge disconnected battery using the socket on the dashboard.

The connected battery can be charged only by means of the power socket in the dashboard.

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

- Comply with operating instructions of charger.

If you are unable to charge the battery via the onboard socket, you may be using a charger that is not compatible with your motorcycle's electronics. In this case, charge the battery directly from the terminals of the battery disconnected from the vehicle.

Charging disconnected battery

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

In the case of longer periods when the motorcycle is not being used, the battery must be recharged regularly. See the instructions for caring for your battery. Always fully recharge the battery before returning it to use.

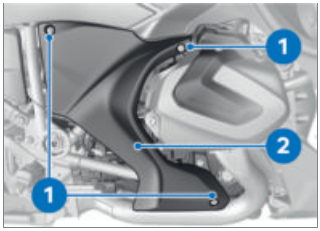
Removing the battery

ATTENTION

Incorrect battery disconnection

Danger of short circuit

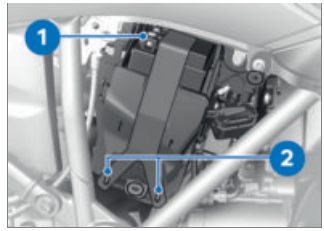
- Follow the disconnection sequence.



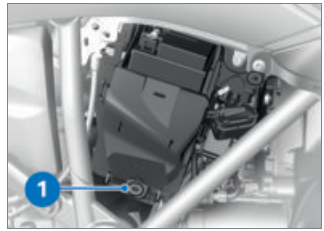
- Turn off the ignition.
- Remove screws **1**.
- Remove the battery cover **2**.

–with anti-theft alarm system (DWA) OE

- Turn off DWA if necessary.◁



- Disconnect the negative battery cable **1** and rubber strap **2**.
- Insulate the negative battery cable **1** with adhesive strip.



- Pull the retaining plate at position **1** outward and remove it upward.
- Lift battery slightly out of holder sufficiently for positive terminal to be accessible.



- Disconnect the positive battery cable **1** and pull out the battery.

» The battery has been removed.

Installing the battery

ATTENTION

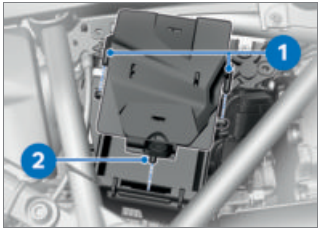
Incorrect battery connection
Danger of short circuit
- Follow the installation sequence.



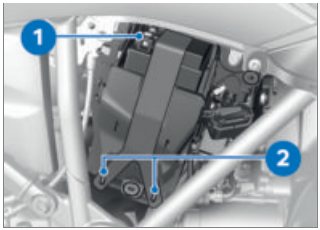
- Fasten the positive battery cable **1**.

Wiring harness on battery
M6 x 11
3 lb/ft (3.5 Nm)

- Slide the battery into the holder, paying attention to the correct routing of the positive battery cable **1**.



- First press retaining plate under the battery at position **2** and then press into the mounts **1**.

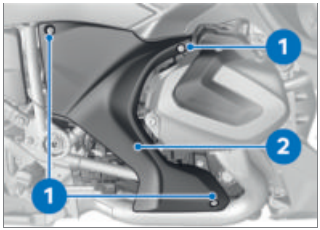


- Remove the adhesive strip from the negative battery cable **1**.

- Fasten negative battery cable **1**.

	Wiring harness on battery
M6 x 11	
3 lb/ft (3.5 Nm)	

- Fasten battery with rubber strap **2**.



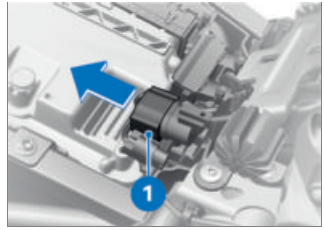
- Attach the battery cover **2**.
- Install screws **1**.
- Set the clock. (➠ 122)
- Set the date. (➠ 121)

FUSES

Replacing fuses

ATTENTION

Bypassing defective fuses
Risk of short circuit and fire
- Do not bypass defective fuses.
- Replace defective fuses with new fuses.

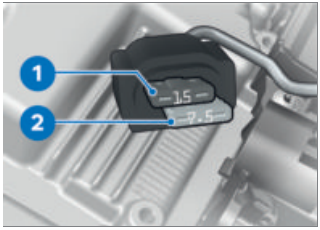


- Turn off the ignition.
- Remove the rider`s seat. (➠ 152)
- Pull off the fuse box **1**.
- Replace defective fuse in accordance with fuse assignment.

If the fuses blow frequently, have the electrical system checked by an authorized specialized workshop, preferably an authorized BMW Motorrad retailer.

- Insert the fuse box **1**.
- Install the rider's seat. (➠ 152)

Fuse layout



1 15 A
Instrument cluster
Anti-theft alarm system (DWA)
Ignition lock
Diagnostic socket
Topcase light
Cut-off relay

2 7.5 A
Multifunction switch, left
Tire Pressure Monitor (TPM)
Seat heating
Sensor group
Front radar

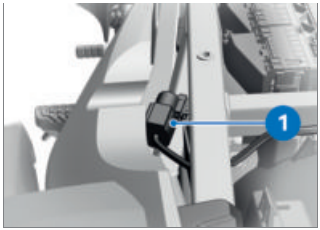
Fuse for alternator regulator



1 50 A
Alternator regulator

Have the fuse exchanged by a specialist workshop, preferably an authorized BMW Motorrad dealer.

Fuse for audio system



1 15 A
Fuse for audio system

Have the fuse exchanged by a specialist workshop, preferably an authorized BMW Motorrad dealer.

DIAGNOSTIC CONNECTOR

Detaching the diagnostic connector

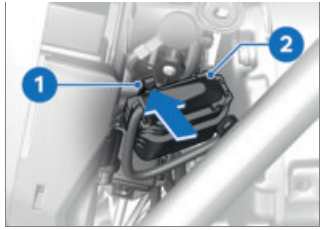
CAUTION

Incorrect procedure when disconnecting the diagnostic socket for onboard diagnosis

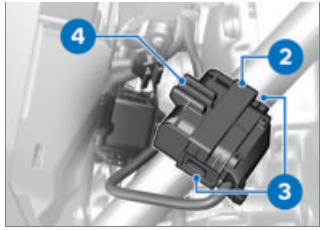
Vehicle experiences malfunctions

- Do not have the diagnostic socket disconnected except during BMW Motorrad service by a specialist workshop or other authorized persons.
- Have work carried out by appropriately trained personnel.
- Observe the specifications of the vehicle manufacturer.

- Remove the battery cover. (➠ 231)



- Press the hook **1** and remove the diagnostic socket **2** by pulling it upwards.

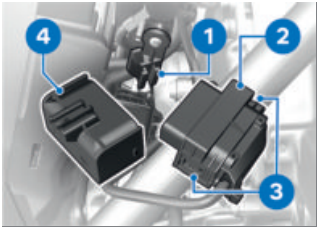


- Press locks **3** on both sides.
- Detach the diagnostic socket **2** from the holder **4**.

» The interface for the diagnostics and information system can be connected to the diagnostic connector **2**.

Fastening the diagnostic connector

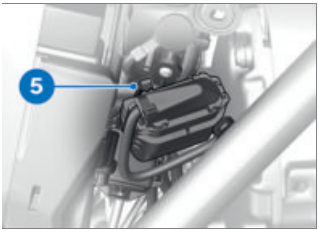
- Disconnect the interface for the diagnostics and information system.



- Insert the diagnostic socket **2** into the holder **4**.

» The locking mechanisms **3** engage on both sides.

- Connect the bracket **4** to the mount **1**.



- Make sure that the hook **5** engages.
- Install the battery cover. (➠ 233)

ACCESSORIES

11

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SOCKETS 240
TOPCASE 241
OPTIONAL ACCESSORIES 244

GENERAL NOTES

CAUTION

Use of products from other manufacturers
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 motorcycles without constituting a safety hazard. Nor is this guarantee provided when the official approval of a specific country has been granted. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW motorcycles and, consequently, they are not sufficient in some circumstances.
- Use only parts and accessories approved by BMW for your motorcycle.

The safety, function and suitability of the parts and accessory products have been thoroughly tested by BMW. Therefore, BMW assumes responsibility for these products. BMW shall not be held liable for unapproved parts and accessory products of any kind.
Comply with the legal requirements for any modifications. Consult the road traffic licensing regulations of your country.
Your authorized BMW Motorrad retailer offers you qualified advice for choosing original BMW parts, accessories and other products.
More information on the topic of accessories is available at: **bmw-motorrad.com/equipment**

SOCKETS

Connecting electrical devices
– The ignition must be turned on before electrical devices connected to the onboard power sockets can be put into operation.

Cable layout
– The cables from the on-board sockets to the auxiliary devices must be routed in such a way that they do not impede the rider.
– Cable layout must not restrict the steering angle and the handling characteristics.
– Cables must not be trapped.

Automatic shutoff

– The onboard sockets are automatically switched off during the starting procedure.
– To relieve the electrical system, the sockets are turned off 60 seconds after the ignition has been switched off. Accessories with low electrical consumption might not be detected by the vehicle electronics. In these cases, onboard sockets are already turned off shortly after the ignition is turned off.
– In case of insufficient battery voltage, the onboard sockets are switched off to maintain the starting capability of the vehicle.
– If the maximum loadability specified in the technical data is exceeded, the onboard sockets are switched off.

TOPCASE

– with topcase OA

Opening topcase

– with central locking system OE

• Open the central locking system if necessary.◁



• Turn the key in the topcase lock to the position of the dot and remove it.



• Press the lock cylinder **1** downward.
» The release lever **2** pops open.
• Pull the release lever **2** all the way up and open the topcase lid.

Closing topcase



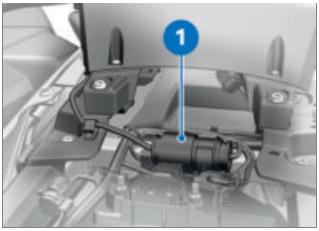
- Pull the release lever **2** all the way up.
- Close Topcase lid and hold it down. Ensure that nothing gets trapped between the lid and case.

The topcase can also be locked if the lock is in the **LOCK** position. Under such circumstances, ensure that the vehicle key is not in the topcase.

- Press the release lever **2** down until it snaps in.
- Turn the key in the topcase lock to the **LOCK** position and remove it.

Removing the topcase

- Remove the rider`s seat. (➠ 152)
- Remove the rear seat. (➠ 153)



- Disconnect the plug connection **1**.
- Thread out the connector from the topcase to the rear.
- Open topcase.
- If applicable, empty the topcase and lift out the bottom mat.



- Push the slide latch **2** outward and hold it in this position.
- Turn the rotary fastener **3** in the arrow direction **RELEASE**.

» Release warning **4** is visible.

- Close topcase.



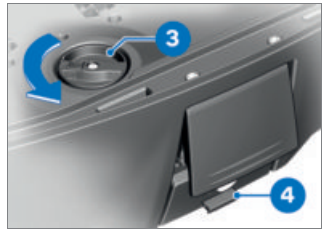
- Raise the rear of the topcase and take it off the luggage rack.
- Install the passenger seat. (➠ 154)
- Install the rider's seat. (➠ 152)

Installing the topcase

- Remove the rider`s seat. (➠ 152)
- Remove the rear seat. (➠ 153)
- If applicable, empty the topcase and lift out the bottom mat.



- Set the topcase on the luggage rack.
- Open topcase. (➠ 241)

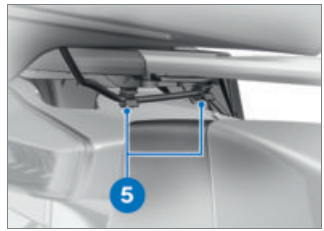


- Turn the rotary fastener **3** up to the stop in the arrow direction **LOCK** while pressing down on the back edge of the topcase.

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

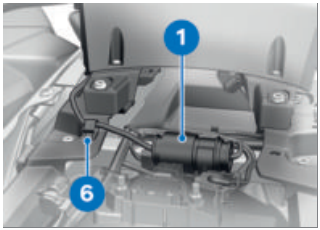
If the release warning is still visible the topcase is not correctly locked in place.

- Make sure that the topcase has a correct fit on the luggage rack.



- Attach the connecting cable to the inside of the fasten-

ers **5** and route it towards the front.



- Work the cable into position at the positions **6**.
- Connect plug connection **1**.
- Install the passenger seat. (➠ 154)
- Install the rider's seat. (➠ 152)

Maximum payload and maximum speed

Observe maximum payload and maximum speed.
The following values apply for the combination described here:

Maximum speed when riding with a loaded topcase
max 112 mph (max 180 km/h)
Payload of Topcase
max 11 lbs (max 5 kg)

OPTIONAL ACCESSORIES

Available optional accessories



Your BMW Motorrad retailer offers you expert advice when choosing genuine BMW parts, accessories and other products such as luggage systems or windshields.
You can find all optional accessories from BMW Motorrad on our website: **bmw-motorrad.com**.

CARE

12

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CLEANING SENSITIVE VEHICLE PARTS 249
CARE OF PAINTWORK 250
PAINT PRESERVATION 251
STORING THE MOTORCYCLE 251
PUTTING THE MOTORCYCLE INTO OPERATION 252

CARE PRODUCTS

BMW Motorrad recommends that you use cleaning and care products available at your authorized BMW Motorrad retailer. BMW Care Products have been materials tested, lab-tested, and field tested and provide optimum care and protection for the materials used in your vehicle.

ATTENTION

Use of unsuitable cleaning and care agents

Damage to motorcycle parts

- Do not use any solvents such as nitro thinners, cold cleaners, fuel or similar, and do not use cleaning agents that contain alcohol.

ATTENTION

Use of highly acidic or alkaline cleaning agents

Damage to motorcycle parts

- Observe the dilution ratio on the packaging of the cleaning agents.
- Do not use highly acidic or alkaline cleaning agents.

WASHING THE VEHICLE

BMW Motorrad recommends that you use BMW Insect Remover to soften and wash off insects and stubborn dirt from painted parts before washing the motorcycle.

To prevent stains, do not wash the vehicle immediately after it has been exposed to bright sunlight and do not wash it in the sun.

Regularly clean the fork tubes of contamination.

Make sure that the vehicle is washed frequently, especially during the winter months.

To remove road salt, clean the vehicle and any add-on parts with cold water immediately after completion of every trip.

After rides in the rain, in high humidity and after the vehicle is washed, condensation can form inside the headlight. During this process, the headlight can become foggy for a while. If moisture accumulates in the headlight on an ongoing basis, contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

WARNING

Damp brake disks and brake pads after washing the motorcycle, after riding through water or in the rain

Poorer braking action, accident hazard

- Brake early until the brake rotors and brake pads are dry.

ATTENTION

Increased effect of salt caused by warm water

Corrosion

- Only use cold water to remove road salt.

ATTENTION

Damage caused by high water pressure from high-pressure cleaners or steam-jet devices

Corrosion or short circuit, damage to labels, to seals, to hydraulic brake system, to the electrical system and the seat

- Exercise caution when using high-pressure or steam-jet devices.

CLEANING SENSITIVE VEHICLE PARTS

Plastics

ATTENTION

Use of unsuitable cleaning agents

Damage to plastic surfaces

- Do not use abrasive cleaners or cleaners containing alcohol or solvents.
- Do not use insect sponges or sponges with a hard surface.

Clean plastic components with water and BMW plastic care emulsion. This includes in particular:

–Windshields and wind deflectors

–Headlight diffusers made of plastic

–Glass cover of the instrument cluster

–Black, unpainted parts

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

TFT display
Clean the TFT display with warm water and detergent. Then dry with a clean cloth, e.g. a paper towel.

Chrome
Carefully clean chrome parts with plenty of water and BMW Motorrad Care Products motorcycle cleaner. This is required in particular for removing road salt.
Use BMW Motorrad metal polish for additional treatment.

Radiator
Clean the radiator regularly to prevent overheating of the engine due to inadequate cooling. For example, use a garden hose with low water pressure.

ATTENTION

Bending of radiator fins
Damage to radiator fins
- When cleaning, ensure that the cooler fins are not bent.

Rubber
Treat rubber parts with water or BMW rubber care product.

ATTENTION

Use of silicone sprays for care of rubber seals
Damage to rubber seals
- Do not use silicone sprays or care products that contain silicone.

Radar sensor
–with Active Cruise Control OE



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

CARE OF PAINTWORK

Washing the motorcycle regularly will help counteract the long-term effects of substances that damage the paint, especially if your motorcycle is ridden in areas with high air pollution or natural sources of dirt, such as tree resin or pollen. However, remove particularly aggressive substances imme-

diately; otherwise changes in the paint or discoloration may occur. These include spilled fuel, oil, grease and brake fluid as well as bird droppings.
It is recommended to use BMW Motorrad solvent cleaner and then apply BMW Motorrad high-gloss polish to preserve the paint.
Contaminants on the paint surface are particularly easy to see after washing the vehicle. Remove this type of dirt immediately with cleaning benzene or ethyl alcohol on a clean cloth or cotton ball. BMW Motorrad recommends removing tar stains with BMW tar remover. Then add a protective wax coating to the paint at these locations.

ATTENTION

Paint damage from metal polish
Risk of damage
- Do not treat paints and chrome lacquers with metal polish.

PAINT PRESERVATION

Apply a preservative when water fails to bead up on the painted surface.
BMW Motorrad recommends BMW Motorrad high gloss polish or agents that contain carnauba or synthetic wax for paint preservation.

Chrome lacquer must not be preserved with chrome polish.
Only use the agents recommended by BMW Motorrad.

STORING THE MOTORCYCLE

- Completely fill the motorcycle's fuel tank.

Fuel additives clean the fuel injection system and the combustion area. Fuel additives should be used when refueling with low-quality fuels or during longer periods of downtime. Your authorized BMW Motorrad retailer can provide you with more detailed information.

- Clean the motorcycle.
- Remove battery. (➠ 231)
- Spray brake lever and clutch lever as well as center and side stand pivots with a suitable lubricant.

- Preserve bare metal and chrome-plated parts with an acid-free grease (Vaseline).
- Park motorcycle in a dry room, raising it to relieve both wheels.

PUTTING THE MOTORCYCLE INTO OPERATION

- Remove the protective wax coating.
- Clean the motorcycle.
- Install the battery. (➠ 232)
- Observe checklist (➠ 162).

TECHNICAL DATA

13

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TROUBLESHOOTING CHART

Engine does not start.

Possible cause	Remedy
Side stand extended and gear engaged	Retract side stand.
Gear engaged and clutch not disengaged	Place transmission in neutral or disengage clutch.
No fuel in tank	Refueling procedure. (🡆 172)
Battery drained	Charge the connected battery. (🡆 229)
Overheating protection for starter motor has activated. Starter motor can only be actuated for a limited period.	Leave the starter motor to cool down for around 1 minute until it becomes available again.

Bluetooth connection is not established.

Possible cause	Remedy
Necessary pairing steps were not performed.	Refer to the operating instructions of the communication system for the necessary steps for pairing.
The communication system is not connected automatically despite successful pairing.	Switch off the communication system of the helmet and connect again after one to two minutes.
Too many Bluetooth devices are stored in the helmet.	Delete all pairing entries in the helmet (see the operating instructions of the communication system).
There are additional vehicles with Bluetooth-capable devices nearby.	Avoid simultaneous pairing with multiple vehicles.

Bluetooth connection is disrupted.

Possible cause	Remedy
Bluetooth connection to the mobile end device is interrupted.	Switch off energy saving mode.
Bluetooth connection to the helmet is interrupted.	Switch off the communication system of the helmet and connect again after one to two minutes.
Bluetooth connection interrupted.	The temperature of the TFT display is too high. Bluetooth is deactivated. The brightness of the TFT display is reduced. Avoid direct sunlight on the TFT display. Do not continue riding until components have cooled down.
Volume in the helmet cannot be adjusted.	Switch off the communication system of the helmet and connect again after one to two minutes.
Volume in helmet is too low.	Set volume for media and conversations to maximum on the mobile end device.

TFT display faulty.

Possible cause	Remedy
TFT display brightness reduced.	The temperature of the TFT display is too high. The brightness of the TFT display is reduced. Avoid direct sunlight on the TFT display. Do not continue riding until components have cooled down.

Phone book is not displayed in the TFT display.

Possible cause	Remedy
Phone book was has not yet been transferred to the vehicle.	When pairing to the mobile end device, confirm the transfer of the telephone data (134).
Not all contacts are displayed.	The number of phone book entries in the TFT display that can be saved is limited. Reduce the number of phone book entries in the mobile end device.

Active route guidance is not displayed in the TFT display.

Possible cause	Remedy
Navigation from the BMW Motorrad Connected App was not transferred.	Call up the BMW Motorrad Connected App on the connected mobile end device before riding.
Route guidance cannot be started.	Ensure that there is a data connection to the mobile end device and check the map data on the mobile end device.

The playlist is not displayed in the TFT display.

Possible cause	Remedy
There are too many tracks in the playback list on the mobile end device.	Reduce the number of tracks in the playback list on the mobile end device.

SCREW CONNECTIONS

Front wheel	Value	Valid
Radial brake calipers on telescopic forks		
M10 x 65	28 lb/ft (38 Nm)	
Fork bridge, bottom at slider tube		
M8 x 35	**Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time**	
	14 lb/ft (19 Nm)	
Wheel speed sensor on fork		
M6 x 16 Micro-encapsulated or medium-strength screw lock	6 lb/ft (8 Nm)	
Quick-release axle in telescopic fork		
M12 x 20	22 lb/ft (30 Nm)	

Rear wheel	Value	Valid
Tighten rear wheel on wheel flange		
M10 x 1.25 x 40	**Tightening sequence: Tighten crosswise**	
	44 lb/ft (60 Nm)	

Exhaust system	Value	Valid
Muffler on rear frame		
M8 x 35	14 lb/ft (19 Nm)	
Clamp on silencer and exhaust manifold		
	16 lb/ft (22 Nm)	

Mirror arm	Value	Valid
Mirror on bracket		
M6 x 50	6 lb/ft (8 Nm)	

FUEL	
Recommended fuel quality	Premium unleaded (max. 15% ethanol, E15) min 89 AKI (min 95 ROZ/ RON) 90 AKI
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption) (max. 15% ethanol, E15) min 87 AKI (min 91 ROZ/ RON) 87 AKI
Usable fuel quantity	Approx. 6.6 gal (Approx. 25 l)
Reserve fuel quantity	Approx. 1.1 gal (Approx. 4 l)
Fuel consumption	49 mpg (4.8 l/100 km), In accordance with WMTC
CO2 emissions	110 g/km, according to WMTC
Emission standard	TIER 2, measured in accordance with FTP75

ENGINE OIL	
Engine oil, capacity	max 1.1 gal (max 4 l), with filter replacement
Specification	SAE 5W-40, API SL/ JASO MA2, Additives (for instance, molybdenum-based substances) are prohibited, because they would attack the coatings on engine components, BMW Motorrad recommends BMW Motorrad ADVANTEC Ultimate oil.
Engine oil, quantity for topping up	max 0.8 quarts (max 0.8 l), Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

ENGINE	
Engine number location	Lower right of engine block beneath the starter
Engine type	A74B12M
Engine design	Air-cooled/liquid-cooled two-cylinder four-stroke opposed-twin engine with two overhead, spur-gear-driven camshafts, a counterbalance shaft, and variable intake camshaft control BMW Shift-Cam
Displacement	1254 cc (1254 cm^3)
Cylinder bore	4 in (102.5 mm)
Piston stroke	3 in (76 mm)

Compression ratio	12.5:1
Nominal capacity	134 hp (100 kW), at engine speed: 7750 min^{-1}
Torque	105 lb/ft (143 Nm), at engine speed: 6250 min^{-1}
Maximum engine speed	max 9000 min^{-1}
Idle speed	1050 min^{-1}, Engine at operating temperature

CLUTCH

Clutch design	Multi-disk oil-bath clutch, slipper clutch

TRANSMISSION

Transmission design	Dog-engagement 6-speed transmission with helical gears
Transmission gear ratios	1.000 (60:60 teeth), Primary gear ratio 1.650 (33:20 teeth), Transmission input ratio 2.438 (39:16 teeth), 1st gear 1.714 (36:21 teeth), 2nd gear 1.296 (35:27 teeth), 3rd gear 1.059 (36:34 teeth), 4th gear 0.943 (33:35 teeth), 5th gear 0.848 (28:33 teeth), 6th gear 1.061 (35:33 teeth), Transmission output ratio

REAR-WHEEL DRIVE	
Type of final drive	Shaft drive with bevel gears
Gear ratio of rear-wheel drive	2.75 (33/12 teeth)
–with alternative gear ratio OE	2.82 (31/11 teeth)
Rear axle differential oil	SAE 70W-80, above 5 °C and below 5 °C

FRAME	
Frame design	Steel-tube frame with partially self-supporting drive unit, steel-tube rear frame
Location of type plate	Frame at front left on steering head
Location of the vehicle identification number	Frame at front right below steering head

CHASSIS	
Front wheel	
Type of front suspension	BMW Telelever, upper fork bridge tilt decoupled, trailing arm mounted in engine and on telescopic fork, centrally positioned spring strut supported on trailing arm and frame
Design of the front-wheel suspension	Central spring strut with coil spring
–with Dynamic ESA OE	Central spring strut with coil spring and expansion tank, electrically adjustable rebound-stage and compression damping
Spring travel, front	4.7 in (120 mm), on wheel

Rear wheel	
Type of rear-wheel guide	Cast-aluminum single swing arm with BMW Motorrad Paralever
Design of rear-wheel suspension	Central spring strut with coil spring, adjustable rebound-stage damping and spring preload
–with Dynamic ESA [OE]	Central spring strut with coil spring and expansion tank, electrically adjustable rebound-stage and compression damping, electrically adjustable spring preload
Spring travel on the rear wheel	5.4 in (136 mm), on wheel

BRAKES

Front wheel	
Type of front wheel brake	Hydraulically operated twin disk brake with 4-piston radial calipers and floating brake disks
Front brake pad material	Sintered metal
Front brake disc thickness	0.18 in (4.5 mm), New 0.16 in (4 mm), Wear limit
Free travel of brake actuation (Front wheel brake)	0.06...0.08 in (1.6...2.1 mm), at piston

Rear wheel	
Type of rear wheel brake	Hydraulically operated disk brake with 2-piston floating caliper and fixed brake disk
Rear brake pad material	Sintered metal
Rear brake disc thickness	0.2 in (5 mm), New min 0.18 in (min 4.5 mm), Wear limit
Blow-by clearance of foot-brake lever	0.04...0.06 in (1...1.5 mm), Between frame and footbrake lever

WHEELS AND TIRES	
Recommended tire combinations	An overview of the current tire approvals is available from your authorized BMW Motorrad retailer.
Speed category of front/rear tires	W, minimum requirement: 168 mph (270 km/h)
Front wheel	
Front wheel design	Aluminum cast wheel
Front-wheel rim size	3.50" x 17"
Front tire designation	120/70 - ZR17
Load index for front tire	At least 58
Permissible front wheel load	max 463 lbs (max 210 kg)
Permissible front-wheel imbalance	max 0.2 oz (max 5 g)

Rear wheel	
Rear wheel design	Aluminum cast wheel
Rear-wheel rim size	5.50" x 17"
Rear tire designation	180/55 - ZR17
Load index for rear tire	At least 73
Permissible rear wheel load	max 728 lbs (max 330 kg)
Permissible rear-wheel imbalance	max 0.2 oz (max 5 g)
Tire inflation pressures	
Front tire pressure	36.3 psi (2.5 bar), with tire cold
Rear tire pressure	42.1 psi (2.9 bar), with tire cold

ELECTRICAL SYSTEM	
Electrical rating of onboard sockets	max 12 A, All onboard power sockets in total
Fuse 1	15 A, Instrument cluster, anti-theft alarm system (DWA), ignition lock, diagnostic socket, topcase light, cut-off relay
Fuse 2	7.5 A, Left multifunction switch, Tire Pressure Control (RDC), seat heating, sensor group, front radar
Fuse 3	15 A, Audio system
Main fuse	50 A, Voltage regulator

Battery	
Battery design	AGM (Absorbent Glass Mat), maintenance-free
Battery voltage	12 V
Battery capacity	16 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8AI-10
Light sources	
All light sources	LED

ANTI-THEFT ALARM SYSTEM	
Activation time	Approx. 15 s
Alarm duration	Approx. 28 s
Battery type (For Keyless Ride radio-operated key)	CR 2032
Battery type (For remote-control of central locking system)	CR 1632

DIMENSIONS	
Motorcycle length	87.2 in (2215 mm), over splash guard
Motorcycle height	55.7…62 in (1415…1575 mm), over windshield, at DIN unloaded vehicle weight
–with windshield, high OE	56.7…63.3 in (1440…1609 mm), over windshield, at DIN unloaded vehicle weight
–with windshield, sport OE	53.3…58.5 in (1354…1485 mm), over windshield, at DIN unloaded vehicle weight

Motorcycle width	39 in (990 mm), with case 39 in (990 mm), with mirrors
Front-seat height	31.7...32.5 in (805...825 mm), without rider, at DIN unloaded vehicle weight
–with rider's seat, low OE	29.9...30.7 in (760...780 mm), without rider, at DIN unloaded vehicle weight
–with rider's seat, high OE	32.7...33.5 in (830...850 mm), without rider, at DIN unloaded vehicle weight
Rider's inside-leg arc, heel to heel	71.3...72.8 in (1810...1850 mm), without rider, at DIN unloaded vehicle weight
–with rider's seat, low OE	68.5...70.1 in (1740...1780 mm), without rider, at DIN unloaded vehicle weight
–with rider's seat, high OE	73.8...75.4 in (1875...1915 mm), without rider, at DIN unloaded vehicle weight

WEIGHTS

Unloaded vehicle weight	615 lbs (279 kg), DIN unloaded vehicle weight, ready for road, 90% full tank of gas, without OE
Gross vehicle weight	1113 lbs (505 kg)
Maximum payload	498 lbs (226 kg)
Payload per case	max 22 lbs (max 10 kg)
Payload of Topcase	max 11 lbs (max 5 kg)

PERFORMANCE DATA	
Maximum speed	>124 mph (>200 km/h)
Maximum speed when riding with a loaded case	max 112 mph (max 180 km/h)
Maximum speed when riding with a loaded topcase	max 112 mph (max 180 km/h)

RADIO	
Wavebands	FM, AM, HD Radio™ receiver and SDARS
Wavebands	
FM	87.75...107.9 MHz
AM	530...1710 kHz

SPEAKERS (VEHICLE-SPECIFIC)	
Impedance	4 Ω
Output power	15 W, RMS, per speaker unit
Frequency range	0.02...20 kHz

SERVICE

14

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REPORTING SAFETY DEFECTS

If you think that your motorcycle has a fault which may cause an accident, injury or death, you must inform the NHTSA (National Highway Traffic Safety Administration) immediately and BMW of North America, LLC.

If the NHTSA receives other similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, the NHTSA may order the manufacturer to perform a recall and remedy campaign. However, the NHTSA cannot become involved in individual problems between you, your authorized BMW Motorrad retailer, or BMW of North America, LLC.

You can contact the NHTSA by calling the Vehicle Safety Hotline on 1–888–327–4236 (Teletypewriter TTY for the hearing impaired: 1–800–424–9153) for free, by visiting the website at http:// www.safercar.gov or by writing to Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. Further information on vehicle safety is available at http:// www.safercar.gov.

Canadian customers who wish to report a safetyrelated defect to Transport Canada, Defect Investigations and Recalls, may call the toll-free hotline 1–800–333–0510. You can also obtain other information about motor vehicle safety from http:// www.tc.gc.ca/roadsafety.

BMW MOTORRAD SERVICE

With its worldwide retailer network, BMW Motorrad can attend to you and your motorcycle in over 100 countries around the globe. Authorized BMW Motorrad retailers have the technical information and expertise needed to reliably conduct all preventive maintenance and repair procedures on your BMW.
You will find the nearest BMW Motorrad retailer on our website at **bmw-motorrad.com**.

WARNING

Improperly performed maintenance and repair work
Accident hazard caused by subsequent damage
- BMW Motorrad recommends having corresponding work on the motorcycle carried out by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

To ensure that your BMW is always in optimum condition, BMW Motorrad recommends that you comply with the maintenance intervals specified for your motorcycle.
Have all preventive maintenance and repair procedures confirmed in the Service chapter in this manual. Documented proof of scheduled preventive maintenance is essential for generous treatment of claims submitted after the warranty period has expired (goodwill).

You can obtain information on the contents of the BMW Motorrad Services from your BMW Motorrad retailer.

BMW MOTORRAD ELECTRONIC SERVICE HISTORY (ESH)

Entries

Maintenance work that has been performed is recorded in the diagnostics and information system. Like a Service Booklet, these entries provide proof of regular maintenance.
If an entry is made in the vehicle's eSH, service-related data is stored on the central IT systems of BMW AG in Munich, Germany.

When there is a change in vehicle owner, the data entered in the eSH can also be viewed by the new vehicle owner. A BMW Motorrad retailer or specialist workshop can view the data entered in the electronic Service Manual.

Objection

At the BMW Motorrad retailer or specialist workshop, the vehicle owner can object to the entry of data in the electronic Service Manual with the related storage of data in the vehicle and the transfer of data to the vehicle manufacturer during his time as the vehicle owner. In this case, no entry is made in the vehicle's electronic Service Manual.

BMW MOTORRAD MOBILITY SERVICES

The BMW Motorrad Mobility Services furnish you and your new BMW motorcycle with extra security by offering a wide array of assistance services in the event of a breakdown (mobile service, breakdown assistance, vehicle recovery and retrieval, etc.).
Contact your authorized BMW Motorrad retailer for additional information on available mobility services.

MAINTENANCE WORK

BMW Motorrad pre-delivery check

The BMW Motorrad pre-delivery check is carried out by your authorized BMW Motorrad retailer before it turns the vehicle over to you.

BMW Motorrad break-in service

The BMW Motorrad run-in check must be carried out between 300 mi (500 km) and 750 mi (1200 km).

BMW Motorrad Service

BMW Motorrad service is carried out once a year.
The scope of the services performed may be dependent on the age of the vehicle and the distance covered.
Your BMW Motorrad retailer confirms that the service has been performed and enters the date for the next service.
For riders with a high annual distance traveled, it may be necessary to come in for service before the entered date. In these cases, a corresponding maximum distance covered will also be entered in the

confirmation of service. If this distance covered is reached before the next service appointment, service must be performed sooner.

The service display in the multifunction display reminds you of the next service appointment approx. one month or 620 mi (1000 km) before the entered values.

More information on the topic of service is available at:
bmw-motorrad.com/service

The required scope of maintenance work for your vehicle can be found in the following maintenance schedule.

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[b]
5			X		X		X		X		X		
6			X		X		X		X		X		
7			X		X		X		X		X		
8												X[c]	X[c]

1 BMW Motorrad break-in inspection (including oil and oil filter change)
2 Standard scope of BMW Motorrad service
3 Engine oil change with filter
4 Oil change in the bevel gears
5 Check valve clearance
6 Replace all spark plugs
7 Replace the air filter insert
8 Change brake fluid in the entire system

[a] Annually or every 6000 mi (10000 km) (whichever comes first)
[b] Every two years or every 12000 mi (20000 km) (whichever comes first)
[c] At first after one year, then every two years

BMW MOTORRAD BREAK-IN SERVICE

BMW Motorrad break-in service

The BMW Motorrad break-in service repair procedures are listed below. The actual scope of maintenance required for your vehicle may differ.

- Setting the service date and remaining distance
- Performing the vehicle test using the BMW Motorrad diagnostic system
- Engine oil change with filter
- Change oil in the angular gearbox
- Checking the front wheel brake fluid level
- Checking the rear wheel brake fluid level
- Checking the coolant level
- Check the tire tread depth and tire pressure
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Final inspection and road safety check
- Performing the vehicle test using the BMW Motorrad diagnostic system
- Confirming the BMW service in the vehicle literature

MAINTENANCE CONFIRMATIONS

BMW Motorrad Service standard scope

The repair procedures belonging to the BMW Motorrad Service standard package are listed below. The actual maintenance work applicable for your vehicle may differ.

- Performing the vehicle test using the BMW Motorrad diagnostic system
- Visual inspection of the clutch system
- Visual inspection of the brake lines, brake hoses and connections
- Checking the front brake pads and brake discs for wear
- Checking the front wheel brake fluid level
- Checking the rear brake pads and brake disc for wear
- Checking the rear wheel brake fluid level
- Checking the coolant level
- Checking side stand for ease of movement
- Checking center stand for ease of movement
- Checking the tire pressure and tread depth
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Final inspection and road safety check
- Performing the vehicle test using the BMW Motorrad diagnostic system
- Set the service date and remaining distance using the BMW Motorrad diagnostic system
- Checking charging state of battery
- Confirming the BMW service in the vehicle literature

BMW Motorrad pre-delivery check

performed

on_____

Stamp, signature

BMW Motorrad break-in service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

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BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

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BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
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or, if reached earlier
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	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

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at km_____

Next service
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or, if reached earlier
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BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
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Work performed

	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
Oil change in bevel gears	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Replacing air filter insert	☐	☐
Changing brake fluid in entire system	☐	☐

Notes

Stamp, signature

SERVICE CONFIRMATIONS

The table serves to provide evidence of maintenance and repair work, as well as installed optional accessories and special campaigns performed.

Work performed	at km	Date

Work performed	at km	Date

CERTIFICATE FOR EWS 295
CERTIFICATE FOR REMOTE CONTROL 298
CERTIFICATE FOR KEYLESS RIDE 302
CERTIFICATE FOR KEYLESS RIDE 304
CERTIFICATE FOR KEYLESS RIDE 306
CERTIFICATE FOR KEYLESS RIDE 308
CERTIFICATE FOR TIRE PRESSURE MONITOR 310
CERTIFICATE FOR TFT INSTRUMENT CLUSTER 311
CERTIFICATE FOR ACTIVE CRUISE CONTROL 315
CERTIFICATE FOR AUDIO SYSTEM 320
IP NOTICE: HD RADIO™ 321
CERTIFICATE FOR CHARGING STORAGE COMPARTMENT 322

Declaration of Conformity

Radio equipment electronic immobiliser (EWS4)

For all countries without EU

Technical information
Frequency Band: 134 kHz
(Transponder: TMS37145 / Type DST80, TMS3705 Transponder Base Station IC)
Output Power: 50 dBµV/m

Manufacturer and Address
Manufacturer:
BECOM Electronics GmbH
Address: Technikerstraße 1, A-7442 Hochstraß

Argentina

RAMATEL
H-25246

Australia/New Zealand

R-NZ

Brunei

AITI
TA No: DTA-007061

United Arab Emirates

TRA
REGISTERED No:
ER89926/20

DEALER No:
DA96133I20

Philippiens

NTC
Type Approved
No.: ESD-RCE-2023298

South Africa

TA-2020/6131
ICASA
APPROVED

India

ETA-SD-20200905860

Belarus

TP BY

Indonesia

72790/SDPPI/2021
13349

Dilarang melakukan perubahan Spesifikasi yang dapat Menimbulkan gangguan fisik dan/atau elektromagnetik terhadap lingkungan sekitarnya

Paraquay

CONATEL

NR: 2020-11-I-0834

Singapore

Complies with
IMDA Standards
N3504-20

Taiwan

低功　電波　射性電機管　辦法
第十二條　經型式認證合格之低功率射頻電 機，非經許可，公司、商號或使用者均不得擅 自變更頻率、加大功率或變更原設計之特性及 功能。第十四條　低功率射頻電機之使用不 得影響飛航安全及干擾合法通信；經發現有干 擾現象時，應立即停用，並改善至無干擾時方 得繼續使用。 前項合法通信，指依電信法規定作業之無線電 通信。

Malaysia

MCMC

RFCL/47A/0920/S(20-3358)

Israel

מספר אישור אלחוטי של משרד התקשורת הוא 51-74908
אסור להחליף את האנטנה המקורית של המכשיר ולא
לעשות בו כל שינוי טכני אחר

United States (USA)

Contains FCC ID:
ODE-MREWS5012
FCC § 15.19 Labelling requirements
This device complies with part 15 of the FCC Rules and Industry Canada's licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

FCC § 15.21 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Requirements

To comply with FCC RF exposure compliance requirements, the device must be installed to provide a separation distance of at least 20 cm from all persons.

Serbia

P1620118300

Canada

Contains IC:
10430A-MREWS5012
This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

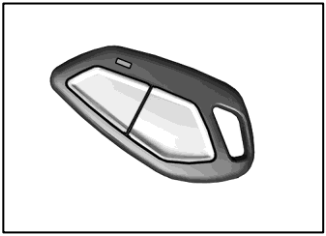
(1) this device may not cause interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Vietnam

A1109091120AF04A3

Certifications
Remote Control for central locking system



Česky
Meta System S.p.A. tímto prohlašuje, že tento PF240009 je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.

Dansk
Undertegnede Meta System S.p.A. erklærer herved, at følgende udstyr PF240009 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Deutsch
Hiermit erklärt Meta System S.p.A., dass sich das Gerät PF240009 in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

Eesti
Käesolevaga kinnitab Meta System S.p.A. seadme PF240009 vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

English
Hereby, Meta System S.p.A., declares that this PF240009 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Español
Por medio de la presente Meta System S.p.A. declara que el PF240009 cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Ελληνική
ΜΕ ΣΗΝ ΠΑΡΟΥΣΑ Meta System S.p.A. ΔΗΛΩΝΕΙ ΟΣΙ PF240009 ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Français
Par la présente Meta System S.p.A. déclare que l'appareil PF240009 est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Italiano
Con la presente Meta System S.p.A. dichiara che questo PF240009 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Latviski
Ar šo Meta System S.p.A. deklarē, ka PF240009 atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

Lietuvių
Šiuo Meta System S.p.A. deklaruoja, kad šis PF240009 atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

Nederlands
Hierbij verklaart Meta System S.p.A. dat het toestel PF240009 in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Malti
Hawnhekk, Meta System S.p.A., jiddikjara li dan PF240009 jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Magyar
Alulírott, Meta System S.p.A. nyilatkozom, hogy a PF240009 megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.

Polski
Niniejszym Meta System S.p.A. oświadcza, że PF240009 jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.

Português
Meta System S.p.A. declara que este PF240009 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Slovensko
Meta System S.p.A. izjavlja, da je ta PF240009 v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Slovensky
Meta System S.p.A. týmto vyhlasuje, že PF240009 spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Suomi
Meta System S.p.A. vakuuttaa täten että PF240009 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Svenska
Härmed intygar Meta System S.p.A. att denna PF240009 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Íslenska
Hér með lýsir Meta System S.p.A. yfir því að PF240009 er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.

Norsk
Meta System S.p.A. erklærer herved at utstyret PF240009 er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

USA, Canada

Product name: TX BMW
MR FCC ID: P3O98400
IC:4429A - TXBMWMR

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration Of Conformity

R&TTE Declaration Of Conformity (DoC)

CE 0470

We: **Meta System S.p.A.**

with the address: Via Majakovskij 10 b/c/d/e 42124
Reggio Emilia, Italy

Declare

Under own responsibility that the product:

TX BMW MR

To which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&TTE Directive (1999/5/EC).
This product is in conformity with the following standards:

Health & Safety (art. 3.1)	EN 60950-1
EMC (art. 3.2)	ETSI EN 301 489-1/-3
Spectrum Human exposure	ETSI EN 300 220 - 2
	EN 62311

According to Directive 1999/5/

CE Reggio Emilia, 14/07/2010

Technical Director Lasagni Cesare

Declaration of Conformity

Keyless Ride ECU

For all Countries without EU

Model name: HUF8485

Technical information
Frequenzy band: 134,45 kHz
Output/Transmission Power: 42 dBµV/m

Manufacturer and Address
Huf Hülsbeck &
Fürst GmbH & Co. KG
Steeger Str. 17,
42551 Velbert, Germany

Argentina

RAMATEL
H-27411

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR00031290ANRT2022
Date d'agrément: 06/01/2022

Nigeria

Connection and use of this communications equipment is permitted by the Nigerian Communications Commission

United Arabic Emirates

TRA

TRA – United Arab Emirates
Dealer ID: DA36976/14
TA RTTE: ER04912/22
Model: HUF8485
Type: BMW

Malaysia

MCMC
HIDF17000037

Paraguay

CONATEL
2022-01-I-0052

Philippines

NTC
Type Approved
No. ESD-RCE-2228692

Pakistan

Approved by PTA
TAC NO: 9.122/2022
PTA
Pakistan Telecom Authority

South Africa

TA-2022/0251
ICASA
APPROVED

Oman

OMAN - TRA
R/13020/22
D100428

Vietnam

THACO AUTO
C900248
ICT

Singapore

Complies with IMDA Standards DA105282

Indonesia

81597/SDPPI/2022
13349

Canada
This device complies with part 15 of the FCC Rules and 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.

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.

United States (USA)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

Thailand



Declaration of Conformity

Keyless Ride Key

For all Countries without EU

Model name: HUF5794

Technical information
Frequenzy band: 433,92 MHz
Output/Transmission Power: 10 mW

Manufacturer and Address
Huf Hülsbeck &
Fürst GmbH & Co. KG
Steeger Str. 17,
42551 Velbert, Germany

Oman

OMAN - TRA
R/13021/22
D100428

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR00031289ANRT2022
Date d'agrément: 06/01/2022

Nigeria

Connection and use of this communications equipment is permitted by the Nigerian Communications Commission

United Arabic Emirates

TRA

TRA – United Arab Emirates
Dealer ID: DA36976/14
TA RTTE: ER04909/22
Model: HUF5794
Type: BMW

Malaysia

MCMC
HIDF17000037

Paraguay

CONATEL
2022-01-I-0051

Philippines

NTC
Type Approved
No. ESD-RCE-2228693

Pakistan

Approved by PTA
TAC NO: 9.140/2022
PTA
Pakistan Telecom Authority

South Africa

TA-2022/0252
ICASA
APPROVED

Belarus

TPBY

Vietnam

THACO AUTO
C900248
ICT

Serbia

И005 22

Indonesia

81598/SDPPI/2022
13349

Singapore

Complies with IMDA Standards DA105282

Canada

This device complies with part 15 of the FCC Rules and 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.

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.

United States (USA)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

Thailand

กสทช.

เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับใบอนุญาตให้มี ใช้ซึ่งเครื่องวิทยุคมนาคม หรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช. เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุคมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาต วิทยุคมนาคมตามพระราชบัญญัติวิทยุคมนาคม พ.ศ. 2498

กสทช. | โทรคมนาคม
กำกับดูแลเพื่อประชาชน
Call Center 1200 (โทรฟรี)

Declaration of Conformity

Keyless Ride ECU

For all Countries without EU

Model name: HUF8465

Technical information
Frequenzy band: 134,45 kHz
Output/Transmission Power:
42 dBµV/m

Manufacturer and Address
Huf Hülsbeck &
Fürst GmbH & Co. KG
Steeger Str. 17,
42551 Velbert, Germany

Argentina

RAMATEL
H-27885

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR 9389 ANRT 2014
Date d'agrément: 24/06/2014

Nigeria

Connection and use of this communications equipment is permitted by the Nigerian Communications Commission

United Arabic Emirates

TRA

TRA – United Arab Emirates
Dealer ID: DA36976/14
TA RTTE: ER59309/17
Model: HUF8465
Type: ELV incl. ECU

Malaysia

MCMC
HIDF17000037

Philippines

NTC
Type Approved
No. ESD-1409281C

South Africa

TA-2014/886
ICASA
APPROVED

Vietnam

THACO AUTO
C900248
ICT

Indonesia

81555/SDPPI/2022
13349

Paraguay

CONATEL
2020-05-I-0278

Singapore

Complies with
IMDA Standards
DA101586

Canada
This device complies with part 15 of the FCC Rules and 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.

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.

United States (USA)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

Thailand



Declaration of Conformity

Keyless Ride Key

For all Countries without EU

Model name: HUF5750

Technical information
Frequenzy band: 434,42 MHz
Output/Transmission Power: 10 mW

Manufacturer and Address
Huf Hülsbeck &
Fürst GmbH & Co. KG
Steeger Str. 17,
42551 Velbert, Germany

Argentina

CNC COMISIÓN NACIONAL DE COMUNICACIONES
H-17115

Morocco

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR 8851 ANRT 2014
Date d'agrément: 17/01/2014

Nigeria

Connection and use of this communications equipment is permitted by the Nigerian Communications Commission

United Arabic Emirates

TRA

TRA – United Arab Emirates
Dealer ID: DA36976/14
TA RTTE: ER57698/17
Model: HUF5750
Type: RF transceiver for BMW Motorcycles

Malaysia

MCMC
HIDF17000037

Paraguay

CONATEL
2020-05-I-0277

Philippines

NTC
Type Approved
No. ESD-1408693C

Belarus

TP BY

South Africa

TA-2013/1674
ICASA
APPROVED

Vietnam

THACO AUTO
C900248
ICT

Singapore

Complies with IMDA Standards DA101586

Indonesia

81556/SDPPI/2022
13349

Serbia

И005 19

Canada
This device complies with part 15 of the FCC Rules and 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.

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.

United States (USA)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

Thailand



Certification Tire Pressure Control (TPC)

FCC ID: MRXBC54MA4
IC: 2546A-BC54MA4

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term “IC:” before the radio certification number only signifies that Industry Canada technical specifications were met.

FCC ID: MRXBC5A4
IC: 2546A-BC5A4

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARNING: Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term “IC:” before the radio certification number only signifies that Industry Canada technical specifications were met.

Declaration of Conformity

Radio equipment TFT instrument cluster

For all Countries without EU

Model name: ICC10in

Technical information
The ICC10in can operate in one of two operating modes:
1. Normal mode, with Bluetooth and WLAN on, and
2. Radio off mode (only available during vehicle manufacturing).

BT operating frq. Range:
2402 – 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)

Manufacturer and Address
Manufacturer:
Robert Bosch GmbH
Address:
Robert-Bosch-Platz 1,
70839 Gerlingen, Germany

Turkey
Robert Bosch GmbH, ICC10in tipi telsiz sisteminin 2014/53/EU nolu yönetmeliğe uygun olduğunu beyan eder. AB Uygunluk Beyanı'nın tam metni, aşağıdaki internet adresinden görülebilir: http://cert.bosch-carmultimedia.net

Brazil
Este equipamento não tem direito proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.
Para maiores informações, consulte o site da ANATEL www.anatel.gov.br

Thailand
เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามข้อกำหนดของ กทช.
(This telecommunication equipments is in compliance with NTC requirements)

Argentina
RAMATEL
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 co-localisée ou opérant en conjonction avec autre antenne ou émetteur.

United States (USA)
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by Robert Bosch GmbH may void the FCC authorization to operate this equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiofrequency radiation exposure Information: This equipment complies with FCC 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 co-located or operating in conjunction with any other antenna or transmitter.

Japan

This device is granted pursuant to the Japanese Radio Law（電波法) and the Japanese Telecommunications Business Law (電気通信事業法)

本製品は、電波法と電気通信事業法に基づく適合証明を受けております。

This device should not be modified (otherwise the granted designation number will become invalid)

本製品の改造は禁止されています。（適合証明番号などが無効となります。）



R 201-200559

T 20 0138 201

Korea

Equipment Name: BMW A-Kombi
Basic model number: ICC10in
Manufacturer/Country of Origin: Robert Bosch GmbH / 포르투갈
Zertifikatsnummer:
R-R-BO2-ICC10in

Serbia



ID: И011 20

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

Taiwan, Republic of

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。

Declaration of Conformity

Mid Range Radar

For all Countries without EU

Model name: MRRe14FCR

Technical information
Frequenzy band: 76 - 77 GHz
Nominal radiated power:
e.i.r.p. (peak detector): 32 dBm
Nominal radiated power:
e.i.r.p. (RMS detector): 27 dBm

Manufacturer and Address
Manufacturer:
Robert Bosch GmbH
Address:
Robert-Bosch-Platz 1,
70839 Gerlingen, Germany

024

COMISIÓN NACIONAL DE COMUNICACIONES
C-20030

NTC
Type Approved
No. ESD-1716172C

И00517

IFETEL: RCPBOMR17-0598

TRC No. TRC/LPD/2017/254

MCMC
CIDF15000490

CLASS A
NBTC ID. A57003-17-0042

TRA
REGISTERED No:
ER55421/17

DEALER No:
DA36758/14

Complies with
IMDA Standards
DB03227

Complies with
IMDA Standards
DB 105658

TA-2017/2013
ICASA
APPROVED

CONATEL
2017-06-I-0000162

72726/SDPPI/2021
13349

AGREE PAR L'ANRT MAROC
Numéro d'agrément: MR 13900 ANRT 2017
Date d'agrément: 04/05/2017

CCAE17LP0940T7

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 co-located 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.

United States (USA)
NOTICE:
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.

Changes or modifications made to this equipment not expressly approved by Robert Bosch GmbH may void the FCC authorization to operate this equipment.
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Radiofrequency radiation exposure Information:
This equipment complies with FCC 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 co-located or operating in conjunction with any other antenna or transmitter.

Japan

当該機器には電波法に基づく、技術基準適合証明等を受けた特定無線設備を装着している。

Translation: This equipment contains specified radio equipment that has been certified to the technical regulation conformity certification under the Radio Law.

本無線機器の改造を禁ずる（これに反した場合は当該認証登録番号は無効となる）

Translation: This radio device should not be modified (otherwise the granted designation number will become invalid)

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.

Hong Kong

HKCA 1035: automotive radar: radio equipment exempted from licensing!

South Korea

[Class B Equipment]
B급 기기 (가정용 방송통신기자재)
이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며,
모든 지역에서 사용할 수 있습니다.
Translation: This equipment has been approved under EMC Registration as a Class B device (for domestic use) and can be used in both residential and commercial areas.
[RF Warnings]
해당 무선 설비는 운용 중 전파혼신 가능성이 있음
Translation: This radio equipment has potential for interference during operation.

Taiwan, Republic of

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。

Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้มีคว
ามสอดคล้องตามมาตรฐานหรือข้อกำ
ำหนดทางเทคนิคของ กสทช

เครื่องวิทยุคมนาคมนี้มีระดับการแผ่ค
ลื่นแม่เหล็กไฟฟ้าสอดคล้องตามมาตร
ฐานความปลอดภัยต่อสุขภาพของมนุ
ษย์จากการใช้เครื่องวิทยุคมนาคมที่ค
ณะกรรมการกิจการกระจายเสียง
กิจการโทรทัศน์
และกิจการโทรคมนาคมแห่งชาติประ
กาศกำหนด

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.

Sultanate of Oman

OMAN TRA
TA-R/4353/17
D080134

Declaration of Conformity

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.

IP notice: HD Radio™



HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents.

For patents see http://dts.com/patents.

HD Radio, Artist Experience, and the HD, HD Radio, and "ARC" logos are registered trademarks or trademarks of iBiquity Digital Corporation in the United States and/or other countries.

Declaration of Conformity

Radio equipment
Wireless charging device

For all Countries without EU

Model name: WCA
Motorrad-Ladestaufach

Technical information:
Wireless chraging operates in the frequency range from 110 kHz to 115 kHz with a maximum power of 6 W.

Manufacturer and Address
Manufacturer:
Bury Sp. z o.o.
Address:
ul. Wojska Polskiego 4,
39-300 Mielec, Poland

Argentina

RAMATEL
H-25468

Belarus

TP BY

Marocco
AGREE PAR L'ANRT MAROC
Numéro d'agrément :
MR 00025359 ANRT 2020
Date d'agrément :
01/09/2020

UAE

TRA
REGISTERED No:
ER88980/ 20
DEALER No:
DA0132302/14

Singapore

Complies with
IMDA Standards
DA103787

USA

FCC ID: QZ9-LADESTAUFACH

NOTICE:
Changes or modifications made to this equipment not expressly approved by Bury Sp. z o.o. may void the FCC authorization to operate this equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 and to Part 18 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure:
This device has been tested for human exposure limits and found compliant at a minimum distance of 5 cm during operation. Thus during the operation of device a distance of 5 cm must be respected in every direction.

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The descriptions and illustrations in this manual may vary from your own motorcycle's actual equipment, depending upon its equipment level and accessories as well as your specific national version. 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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WARNING

Harmful substances
Operating and preventive maintenance of a passenger vehicle or off-road vehicle can expose you to substances such as exhaust gases, carbon monoxide, phthalates and lead, which are known to the State of California to be carcinogenic as well as detrimental to childbirth and reproduction.
- To minimize exposure, avoid breathing exhaust gases, do not put the engine in Neutral except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.
- Further information is available at: **www.P65Warnings.ca.gov/passenger_vehicle**

Important data for refueling stop:

Fuel	
Recommended fuel quality	Premium unleaded (max. 15% ethanol, E15) min 89 AKI (min 95 ROZ/RON) 90 AKI
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption) (max. 15% ethanol, E15) min 87 AKI (min 91 ROZ/RON) 87 AKI
Usable fuel quantity	Approx. 6.6 gal (Approx. 25 l)
Reserve fuel quantity	Approx. 1.1 gal (Approx. 4 l)
Tire inflation pressures	
Front tire pressure	36.3 psi (2.5 bar), with tire cold
Rear tire pressure	42.1 psi (2.9 bar), with tire cold

You can find further information on all aspects of your vehicle at:
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