BMW
MOTORRAD

RIDER'S MANUAL (US MODEL)

R 18 Classic

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.

GENERAL INSTRUCTIONS

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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.
- 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.
ASC	Automatic Stability Control.
DWA	Anti-theft alarm.
EWS	Electronic immobilizer.

EQUIPMENT

When you ordered your BMW Motorrad, you chose various custom equipment items. This rider's manual describes optional equipment (OE) and selected optional accessories (OA) offered by BMW. 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 reference. 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 repair shop. The information on the vehicle documents always takes precedence over the information in this rider's manual.

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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 centrifugal velocity and deceleration
- Ambient conditions, such as temperature
- 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 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:

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.
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.

OVERVIEWS

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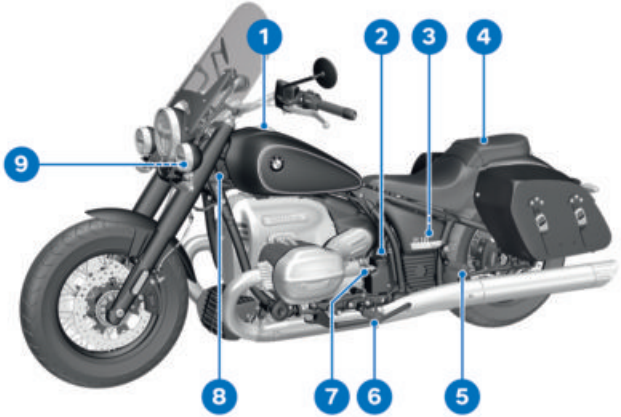
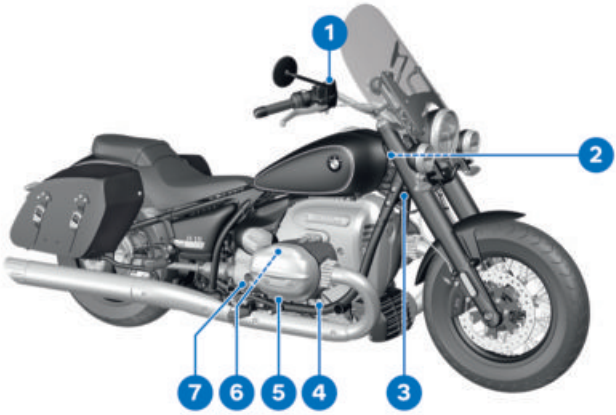
OVERALL VIEW, LEFT SIDE



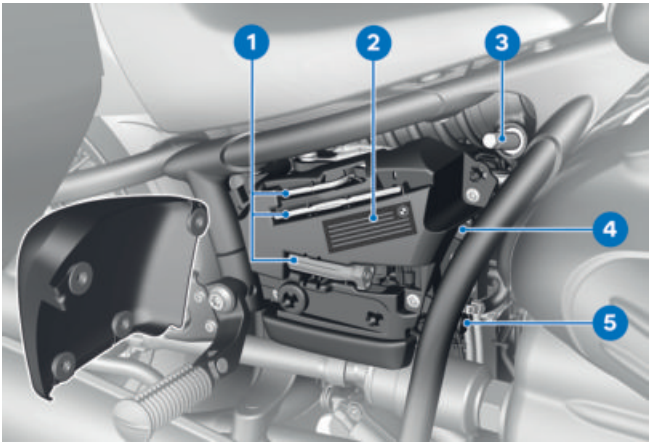
1 Fuel filler opening (➠ 97)
2 Sockets (➠ 154)
3 Loosening the diagnostic socket (behind fairing bracket) (➠ 149)
4 Grab strap
5 Passenger footrest
6 Rider footrest
7 Reverser (➠ 68)
8 Tire pressure table
9 Nameplate (on the left steering head)

OVERALL VIEW, RIGHT SIDE



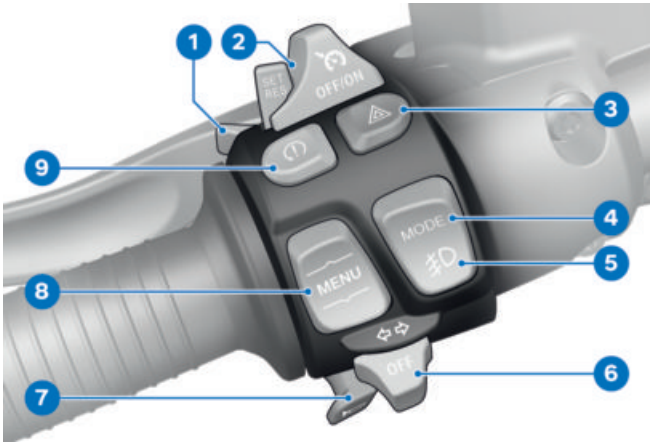
1 Brake fluid reservoir for front wheel brake (➠ 126)
2 Steering lock (➠ 42)
3 Vehicle identification number
4 Engine oil indicator (➠ 121)
5 Ground support point (➠ 142)
6 Oil filler opening (under the cylinder head cover) (➠ 122)
7 Brake fluid reservoir for rear wheel brake (➠ 127)

BEHIND THE RIGHT SIDE TRIM PANEL



1 Onboard vehicle tool kit (➠ 118)
2 Payload table
3 Adjusting the spring preload at the rear wheel (➠ 81)
4 Replacing fuses (➠ 148)
5 Jump-start terminal (➠ 142)

MULTIFUNCTION SWITCH, LEFT



1 High beams and headlight flasher (➠ 47)
2 Cruise control (➠ 64)
3 Hazard warning system (➠ 49)
4 Riding mode (➠ 63)
5 Auxiliary headlights (➠ 48)
6 Turn signals (➠ 49)
7 Horn
8 Rocker button MENU (➠ 50)
9 ASC (➠ 62)

MULTIFUNCTION SWITCH, RIGHT

1 Heated grips (➠ 69)
2 Ignition (➠ 43)
3 Emergency-off switch (➠ 46)
4 Starter button (➠ 91)
–with reverser[OE]
Reverser (➠ 68)

INSTRUMENT CLUSTER

1 Speedometer

2 Indicator and warning lights (➠ 22)

3 Photodiode (for adjusting brightness of instrument lighting)
Indicator light
DWA (➠ 59)
Keyless Ride (➠ 43)

4 Multifunction display (➠ 23)

DISPLAYS

03

INDICATOR AND WARNING LIGHTS

1 ABS (➠ 32)
2 Auxiliary headlights (➠ 48)
3 High beams (➠ 47)
4 Neutral indicator light
5 Cruise control (➠ 64)
6 ASC (➠ 33)
7 Turn signals (➠ 49)
8 General warning light
Display in combination with warning symbols in the multifunction display (➠ 24)

MULTIFUNCTION DISPLAY

1 Value
2 Riding mode (➠ 63)
3 Unit
Trip computer (➠ 50)
4 Gear display
Status
Warning symbol
Shown in combination
with general warning light
(➠ 24)

INDICATOR LIGHTS

Layout

Warnings are indicated by the corresponding warning light. If several warnings are present, all corresponding warning lights and warning symbols are displayed.

You will find an overview of the potential warnings on the following pages.

Warnings that do not have their own warning light are shown as a warning symbol **1** in the multifunction display in conjunction with the general warning light **2**. The general warning light lights up or blinks, depending on the urgency of the warning.

Confirming warnings

Warnings **2** must be confirmed by pressing button **1** at the top or bottom.

The last active display will only be faded in after the warning **2** is confirmed.

If there are several warnings, button **1** must be pressed to view and confirm the respective next warning **2**.

Go to active warnings

Briefly press button **1** repeatedly until WARN is displayed. In addition to the warning **4**, the number of warnings **3** is displayed.

Press button **1** to view the respective next warning **4**.
Press button **2** to return to the previous warning **4**.

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
 lights up.	 is displayed.	Electronic immobilizer is active (➠ 29)
 lights up.	 is displayed.	Radio-operated key outside reception range (➠ 29)
 lights up.	 is displayed.	Replacing the battery of the radio-operated key (➠ 29)
 blinks.	 is displayed.	Engine temperature too high (➠ 29)
 lights up.	 is displayed.	Engine in emergency operation mode (➠ 30)
 blinks.	 is displayed.	Engine warning (➠ 31)
 lights up.	 is displayed.	Vehicle voltage too low (➠ 31)
 lights up.	 is displayed.	Vehicle voltage critical (➠ 31)
 lights up.	 is displayed.	Light source defective (➠ 32)
 blinks.		ABS self-diagnosis not completed (➠ 32)
 lights up.		ABS error (➠ 33)

Indicator and warning lights	Display text	Meaning
 flashes rapidly.		ASC intervention (➠ 33)
 blinks.		ASC self-diagnosis not completed (➠ 33)
 lights up.		ASC switched off (➠ 33)
 lights up.		ASC error (➠ 33)
	 is displayed.	Anti-theft alarm battery discharged (➠ 34)
 lights up.	 is displayed. Additionally, the critical tire pressure blinks.	Tire pressure is the limit range of approved tolerance (➠ 35)
 blinks.	 is displayed. Additionally, the critical tire pressure blinks.	Tire pressure is outside the approved tolerance range (➠ 35)
 lights up.	 is displayed.	Battery of the tire pressure sensor weak (➠ 36)
 lights up.	 is displayed in combination with odometer KM R or MI R.	Fuel has reached reserve volume (➠ 37)
	 is displayed.	Hill Start Control active (➠ 37)

Indicator and warning lights	Display text	Meaning
 lights up.	 blinks.	Hill Start Control automatically de-activated (➠ 37)
	 blinks.	Hill Start Control cannot be activated (➠ 38)
	 is displayed.	Service due (➠ 38)
 lights up.	 is displayed.	Service overdue (➠ 38)

Electronic immobilizer is active

 lights up.

 is displayed.

Possible cause:

The ignition key being used is not authorized for a start, or communication between the ignition key and the engine electronics is disrupted.

- Remove other ignition keys from the ignition key ring.
- Have defective ignition keys replaced, preferably by an authorized BMW Motorrad retailer.

Radio-operated key outside reception range

 lights up.

 is displayed.

Possible cause:

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

- Check the battery in the radio-operated key.
- Replacing the battery of the radio-operated key (➠ 44).
- Use the spare key for further travel.
- Battery of radio-operated key is dead or radio-operated key is lost (➠ 44).
- If the warning symbol appears while driving, remain calm. You can continue driving; the engine will not turn off.
- Have any faulty radio-operated keys replaced by a BMW Motorrad retailer.

Replacing the battery of the radio-operated key

 lights up.

 is displayed.

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.
- Replacing the battery of the radio-operated key (➠ 44).

Engine temperature too high

 blinks.

 is displayed.

ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.

Possible cause:

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

- Ride in the partial load range if possible to cool the engine.

» The available engine power is reduced.

» To provide protection against overheating while at a standstill, the engine is turned off automatically after approx. 5 minutes if its temperature is significantly elevated. The engine can be started again after automatic shut-off. The engine is turned off under the following conditions:

– The side stand is folded out.
– Brake is not engaged.
– The throttle grip is in neutral.

- Should the engine oil temperature frequently be too high, have the fault rectified as quickly as possible by an authorized workshop, preferably an authorized BMW Motorrad Retailer.

Engine in emergency operation mode

 lights up.

 is displayed.

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.

Engine warning

 blinks.

 is displayed.

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.

- 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.

» Continued driving is possible, however it is not recommended.

Vehicle voltage too low

 lights up.

 is displayed.

Generator power is no longer sufficient to supply all consumers and charge the battery. In order to ensure that the engine can be started and the vehicle ridden, the vehicle electronics switch off individual electrical consumers.

Possible cause:

Too many electrical consumers are turned on. Vehicle voltage tends to drop particularly at low rotational speed and when the engine is idling.

- When driving at low rotational speed, switch off electrical consumers that are not necessary for driving safety (e.g. heating vests).

Vehicle voltage critical

 lights up.

 is displayed.

WARNING

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

Possible cause:

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

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

Light source defective

 lights up.

 is displayed.

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:

One or more light sources are faulty.

- Locate defective bulb with visual check.
- Have the LED light source replaced in full; for details please contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis not completed

 blinks.

Possible cause:

 ABS self-diagnosis not completed
The ABS function is not available, as the self-diagnosis function has not been completed. (To check wheel speed sensors, the 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 ABS function is not available until the self-diagnosis has been completed.

ABS error

lights up.

Possible cause:

The ABS control unit has detected an error. The partial integral brake and the Dynamic Brake Control function have failed. The ABS function is not available.

- Continued driving is possible, provided you take into account that the function is not active. Observe additional information on situations that can lead to an ABS fault (➠ 106).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

ASC intervention


flashes rapidly.

ASC has detected instability at the rear wheel and responded by reducing the torque. The ASC indicator and warning light flashes longer than the ASC intervention lasts. This provides the rider with visual feedback for the control action that was taken even after the critical situation has passed.

ASC self-diagnosis not completed


blinks.

Possible cause:

 ASC self-diagnosis not completed
ASC is not available, as the self-diagnosis routine was not completed. (To check wheel speed sensors, the 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 ASC function is not available until the self-diagnosis has been completed.

ASC switched off


lights up.

Possible cause:

The ASC system has been switched off by the driver.

- Turning on the ASC (➠ 62).

ASC error


lights up.

Possible cause:

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

- You may continue driving. Note that the ASC function and the dynamic engine brake control are not available. Observe additional information on situations that can lead to a ASC fault (➠ 107).
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Anti-theft alarm battery discharged

–with anti-theft alarm system (DWA) OE

DWA is displayed.

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

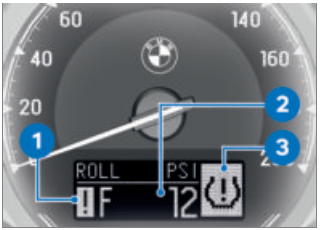
Possible cause:

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

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

Tire pressure

–with tire pressure monitor (TPM) OE



F values **2** refer to the front wheel, R values **2** refer to the rear wheel.

The tire symbol **3** and ! **1** are displayed if the permitted tire pressure has been undershot. The tire pressure **2** flashes.

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 transmits its signal to the vehicle only once the 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 value concerned is borderline in terms of the permitted tolerance, the general warning light lights up in addition. If the determined tire pressure is outside the permitted tolerance, the general warning light will flash.

For more information about the BMW Motorrad TPM, see the "Technology in detail" chapter starting on page (➠ 111).

Tire pressure is the limit range of approved tolerance

–with tire pressure monitor (TPM) OE

lights up.

is displayed. Additionally, the critical tire pressure blinks.

Possible cause:

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

- Correct tire inflation pressure in accordance with instructions on back of cover of Rider's Manual.

Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" chapter.

» Temperature compensation (➠ 112)

Tire pressure is outside the approved tolerance range

–with tire pressure monitor (TPM) OE

blinks.

 is displayed. Additionally, the critical tire pressure blinks.

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 ridability.

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.

» Temperature compensation (➠ 112)

- 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 ridability:

- Do not continue riding.
- Contact roadside service.

Battery of the tire pressure sensor weak

–with tire pressure monitor (TPM) OE

 lights up.

 is displayed.

Possible cause:

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

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

Fuel reserve

The fuel quantity in the fuel tank when the low-fuel warning light switches on depends on the riding dynamics. The more the fuel moves around in the fuel tank (due to frequent changes of leaning angle, frequent braking and acceleration), the harder it is to accurately determine the reserve volume. For this reason, the reserve volume cannot be indicated precisely.

After the low-fuel warning light is switched on, the odometer for the fuel reserve KM R or MI R is displayed automatically.
The distance that can still be traveled with the reserve volume depends on the riding style (i.e. on fuel consumption) and on the fuel quantity that was still available when the light switched on.
The trip distance recorder for the fuel reserve is reset when the fuel quantity after refueling is greater than the fuel reserve.

Fuel has reached reserve volume

lights up.

is displayed in combination with odometer KM R or MI R.

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 most, the fuel tank contains only the reserve volume.

Fuel reserve
Approx. 1.1 gal (Approx. 4 l)

- Refueling (➠ 98).

Hill Start Control active

is displayed.

Possible cause:
The Hill Start Control (➠ 113) was activated by the driver.
- Switch off Hill Start Control.

Hill Start Control automatically deactivated

lights up.

blinks.

Possible cause:
Hill Start Control was switched off automatically.
- Side stand was folded out.
  » Hill Start Control is deactivated when the side stand is folded out.
- Engine was stopped.
  » Hill Start Control is deactivated when the engine is stopped.

Hill Start Control cannot be activated

 blinks.

Possible cause:

The Hill Start Control can not be activated.

- 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.

Service due

 is displayed.

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 overdue

 lights up.

 is displayed.

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.

SERVICE DISPLAY

If service is due within a month, the icon for service **4** and the service date **3** are displayed. The SERV **2** display must be confirmed by pressing button **1**.

If service is due within 700 mi, the symbol for service **4** and the remaining distance **3** will be displayed and counted down in steps of 100 mi. The SERV **2** display must be confirmed by pressing button **1**.

If the service display appears more than one month before the service date, the date stored in the instrument cluster must be set. This situation may occur if the battery is disconnected from the vehicle.

OPERATION

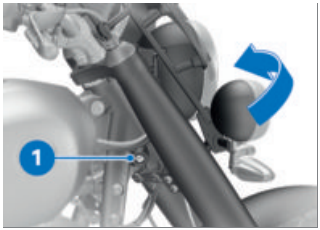
04

STEERING LOCK

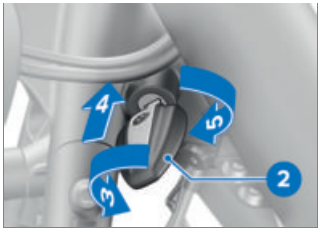
Locking the steering lock

WARNING

Reduced steering angle due to locked steering column
Accident hazard
- Unlock the steering lock before every journey.
- Remove the ignition key from the steering lock before every journey.



- Turn the handlebars to the left and insert the ignition key in the steering lock **1**.

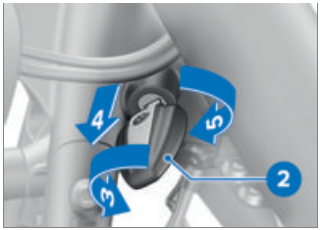


- Turn the ignition key **2** in the steering lock counterclockwise **3**.
- Push the steering lock in using the ignition key **2 4** and hold.
- Turn the ignition key **2** clockwise **5**.

» The steering lock is locked.

- Pull out the ignition key **2**.

Unlocking the steering lock



- Turn the ignition key **2** in the steering lock counterclockwise **3**.

» Steering lock is unlocked **4**.

- Turn the ignition key **2** clockwise **5**.

• Pull out the ignition key **2**.

IGNITION

Radio-operated key

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. If you lose your keys, refer to the notes regarding the electronic immobilizer (EWS) (➠ 46).
The ignition and, where appropriate, anti-theft alarm system are activated with the radio-operated key. The steering lock and fuel cap are manually operated.

If the range of the radio-operated key is exceeded, the vehicle cannot be started.
If the radio-operated key continues to be missing, the ignition will be switched off after approx. 1.5 minutes to protect the battery charge.

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)

Turning on the ignition

Requirement

Radio-operated key is within reception area.

• Press button **1**.
» Parking lights and all function circuits are turned on.
» Engine can be started.
» Pre-Ride-Check is carried out. (➠ 91)
» ABS self-diagnosis is performed. (➠ 92)
» ASC self-diagnosis in progress. (➠ 93)

Turning off the ignition
Requirement
Radio-operated key is within reception area.

- Press button **1**.

» Lights and all electrical circuits are switched off.

Battery of radio-operated key is dead or radio-operated key is lost

- If you lose your keys, refer to the notes regarding the electronic immobilizer (EWS).
- Should you loose the radio-operated key while riding, the vehicle can be started by using the spare key.
- If the radio-operated key battery is dead, you can start the vehicle simply by inserting the folded-in key into the ring antenna under the vehicle's seat.
- Removing the rider's seat (➠ 70).
- Insert spare key or the dead folded-in radio-operated key **1** into the ring antenna **2**.

The spare key or dead, folded-in, radio-operated key must be **inserted** into the opening of the circular antenna.

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.

- Installing the rider's seat (➠ 70).
- Starting the engine (➠ 91).

Replacing the battery of the radio-operated key
Requirement
The key fob transmitter does not react because the battery is weak.

 is displayed.

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 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 Keyless Ride radio-operated key
CR 2032

- Install battery cover **2**.
- » Red LED in instrument cluster blinks.
- » The radio-operated key is working again.

Electronic immobilizer (EWS)

The motorcycle's electronics monitor the data stored in the ignition key by means of a ring antenna. The engine control unit does not enable engine start until this radio-operated key has been recognized as "authorized" for your motorcycle.

An additional ignition key attached to the same ring as the ignition key used to start the engine could "irritate" the electronics, in which case the enabling signal for a start is not issued. The warning is displayed in the multifunction display with the key symbol. Always store ignition keys separately from the ignition key used for starting the vehicle.

If you lose an ignition key, you can have it disabled by your authorized BMW Motorrad retailer.

For this purpose, you should also bring all of the motorcycle's remaining vehicle keys with you. The engine can no longer be started using a disabled radio-operated key; however, a disabled radio-operated key can be enabled again.

Spare keys are available only through an authorized BMW Motorrad retailer. The ignition keys are part of an integrated safety system, so the retailer is under obligation to check the legitimacy of all applications for spare keys.

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

The engine can only be started in the operating position.

LIGHTING

Low beams

- Turning on the ignition (➠ 43).
- Starting the engine (➠ 91).

- Alternatively: with the ignition turned on, pull the switch **1**.

» Low beams are turned on.

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.

High beams and headlight flasher

- Turning on the ignition (➠ 43).

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

Headlight courtesy delay feature

- Turning off the ignition (➠ 44).

- 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

- Turning off the ignition (➠ 44).

- 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.

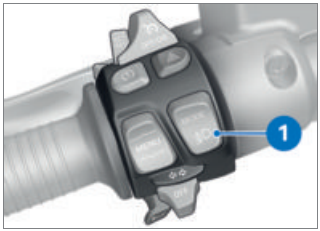
Auxiliary headlights

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.

- Starting the engine (➠ 91).



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

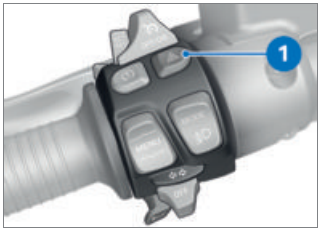
lights up.

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

Hazard warning system

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

- Turning on the ignition (➠ 43).



- 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 and press button **1** again.

Turn signals

- Turning on the ignition (➠ 43).

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

» The turn signals automatically switch off when the distance covered has been reached.

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

MULTIFUNCTION DISPLAY
SELECTING THE DISPLAY

Requirement
The vehicle is stationary.

- Turning on the ignition (➠ 43).

» The trip computer is displayed.

- Repeatedly short-press button **1** until desired value is displayed.

Possible displays:
–Total distance: `MI`
–Trip distance 1: `MI 1`
–Automatic trip distance: `MI A` is automatically reset if at least 6 hours have passed since the ignition was turned off and the date has changed.
–Distance covered since fuel reserve level was reached: `MI R`, can be selected only for fuel reserve.
–Average speed: `ØMPH`
–Vehicle voltage: `VOLT`
–Date: `MM.DD.`
–Average fuel consumption: `ØMPG`
–Current consumption: `MPG`, at vehicle standstill: `G/H`
–Clock: `AM/PM`
–Rotational speed: `RPM`

– with tire pressure monitor (TPM) OE
– Tire pressure indicator for rear wheel: R PSI◁
– with tire pressure monitor (TPM) OE
– Tire pressure indicator for front wheel: F PSI◁
– Remaining mileage until service: SERV, can only be selected if service is due within 600 miles (1000 km), or if service is overdue.
– Service date: SERV, can only be selected if service is due within one month, or if service is overdue.
– Active warnings: WARN, can only be selected if warnings are active.
– Call up the settings menu: SETUP ENTER

• Configuring displays (➠ 58).

Resetting the trip odometer

- Turning on the ignition (➠ 43).

- Press the button **1** briefly and repeatedly until the trip odometer to be reset **3** is displayed.
- Press and hold button **2** until trip odometer **3** is reset.

Resetting average values

- Turning on the ignition (➠ 43).

- Press button **1** repeatedly until the desired average value **3** is displayed.
- Press and hold button **2** until the desired average value **3** is reset.

SETTINGS IN THE INSTRUMENT CLUSTER

Select the SETUP

Requirement

The vehicle is stationary.

- Briefly press button **1** or **2** repeatedly until SETUP ENTER **3** is displayed.
- Press and hold button **2** to start SETUP.
- Briefly press button **1** to select the next parameter.
- Briefly press button **2** to return to the previous parameter.
- The following parameters can be selected in the SETUP:

–Adjust the brightness of the backlighting for the instrument cluster BRIGHT.

–with Hill Start Control OE

–Activate HSC ON or deactivate HSC OFF the Hill Start Control starting-up aid.◁

–with anti-theft alarm system (DWA) OE

–Activate alarm function of anti-theft alarm system automatically after switching off the ignition DWA ON or leave switched off DWA OFF.◁

–Set time display CLOCK.

–Set date DATE.

–Configure displays SET DISPLAY.

–Set units UNIT.

–Reset displays RESET.

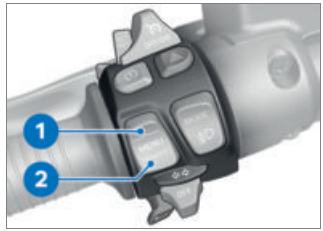
–Exit the SETUP menu SETUP EXIT.

- Press and hold button **2** to go to the desired parameter.

Exit SETUP

Requirement

There are three ways to exit SETUP.



- Press and hold button **1**.

» SETUP ENTER is displayed.

- Alternative: briefly press button **1** or **2** repeatedly until SETUP EXIT is displayed.

- Press and hold button **2**.

» SETUP ENTER is displayed.

- Alternative: Ride off.

Speed for using SETUP
max 6 mph (max 10 km/h)

» When the permissible speed for operation is exceeded, SETUP is exited automatically.

» MI is displayed.

Resetting SETUP

- Turn on the ignition.
- Select the SETUP (➠ 53).

- Briefly press button **1** repeatedly until SETUP RESET is displayed.
- Press and hold button **2** until the RESET display **3** blinks.

The SETUP RESET function also resets the date and time to their standard values.

» SETUP EXIT is displayed.

- Exit SETUP (➠ 53).

Setting the clock

WARNING

Adjusting the clock while riding

Accident hazard

- Adjust the clock only when the motorcycle is stationary.

- Turning on the ignition (➠ 43).

- Briefly press button **1** repeatedly until SETUP ENTER is displayed.
- Press and hold button **2** to open SETUP.
- Briefly press button **1** repeatedly until SET CLOCK is displayed.

- Press and hold button **2** until the hours **3** blink.
- Briefly press button **1** to increment hours.
- Briefly press button **2** to decrement hours.

» The hours are set.

- Press and hold button **2** until the minutes **4** blink.
- Briefly press button **1** to increment minutes.
- Briefly press button **2** to decrement minutes.

» The minutes are set.

- Press and hold button **2** until the minutes no longer blink.

» The clock is set.

- Press and hold button **1** to exit SET CLOCK.

» SETUP ENTER is displayed.

Setting the date

- Turning on the ignition (➠ 43).

- Briefly press button **1** repeatedly until SETUP ENTER is displayed.
- Press and hold button **2** to open SETUP.
- Briefly press button **1** repeatedly until SET DATE is displayed.

- Press and hold button **2** until the month **3** blinks.
- Briefly press button **1** to increment month.
- Briefly press button **2** to decrement month.

» The month is set.

- Press and hold button **2** until the day **4** blinks.

- Briefly press button **1** to increment day.
- Briefly press button **2** to decrement day.

» The day is set.

- Press and hold button **2** until SET YEAR is displayed.

- Briefly press button **1** to increment year **5**.
- Briefly press button **2** to decrement year **5**.
- Press and hold button **2** until the year no longer blinks.

» The year is set.

- Press and hold button **1** to exit SET YEAR.

» The date is set.

» SETUP ENTER is displayed.

Adjusting brightness of backlighting

Requirement

The vehicle is stationary.

- Turning on the ignition (➠ 43).
- Select the SETUP (➠ 53).

- Briefly press button **1** or **2** repeatedly until SET BRIGHT **3** is displayed.
- Press and hold button **2** to go to SET BRIGHT.

» The currently selected setting flashes.

- Briefly press button **1** or **2** repeatedly until the desired brightness of the backlighting is set.
- Press and hold button **2** to confirm the value that is set.
- Alternative: Press and hold button **1** to exit the setting without saving it.
- Exit SETUP (➠ 53).

Setting units

Requirement

The vehicle is stationary.

- Turning on the ignition (➠ 43).
- Select the SETUP (➠ 53).

- Briefly press button **1** or **2** repeatedly until SET UNIT ENTER is displayed.
- Press and hold button **2** to go to SET UNIT.
- Briefly press button **1** or **2** to select the following parameters in the SET UNIT:
  - Change fuel consumption display units to L/100, MPG or KM/L
  - with tire pressure monitor (TPM) OE
  - Change the tire pressure control (RDC) unit to BAR, PSI or KPA◁
  - Change the time display to 24H or 12H
  - Change date format to DMY or MDY

- Press and hold button **2** to go to the desired parameters.

» The currently selected setting flashes.

- Briefly press button **1** or **2** repeatedly until the desired unit **3** is set.
- Press and hold button **2** to confirm the unit **3** that has been set.
- Alternative: Press and hold button **1** to exit the setting without saving it.
- If you want to complete the configuration, press button **1** repeatedly until SET UNIT EXIT is displayed.
- Press and hold button **2** to exit SET UNIT.

» SETUP RESET is displayed.

- If you want to reset the units to the factory setting, press button **1** repeatedly until SET UNIT RESET is shown.
- Press and hold button **2** until the display RESET **3** is flashing.

» The units have been reset to the factory settings.

» The display SET UNIT EXIT is shown.

- Press and hold button **2** to exit SET UNIT.

» SETUP RESET is displayed.

Configuring displays

Requirement

The vehicle is stationary.

- Turning on the ignition (➠ 43).
- Select the SETUP (➠ 53).

- Briefly press button **1** or **2** repeatedly until SET DISPLAY ENTER is displayed.
- Press and hold button **2** to go to SET DISPLAY.

- Press button **1** or **2** to select the display **3**.

» The following displays can be deactivated:

–Trip distance
–Automatic trip distance
–Average speed
–Voltage of the vehicle electrical system
–Date
–Average consumption

–Current consumption
–Clock
–RPM
–with tire pressure monitor (TPM) OE
» Depending on the vehicle equipment, additionally:
–tire pressure indicator◁
- Press and hold button **2** to go to the desired display.

» The currently selected setting flashes.
- Press button **1** or **2** so that the display **3** is deactivated OFF or activated ON.
- Press and hold button **2** to confirm the value that is set.
- Alternative: Press and hold button **1** to exit the setting without saving it.
- Press and hold button **2** to exit SET DISPLAY.

» SET UNIT ENTER is displayed.

- If you would like to reset the displays to the factory setting, press button **1** repeatedly until SET DISPLAY RESET is shown.
- Press and hold button **2** until the display RESET **3** is flashing.

» Displays have been reset to the factory setting.
» The display SET DISPLAY EXIT is shown.
- Press and hold button **2** to exit SET DISPLAY.

» SET UNIT ENTER is displayed.

ANTI-THEFT ALARM SYSTEM (DWA)

–with anti-theft alarm system (DWA) OE

Activating the DWA

- Turning on the ignition (➠ 43).
- Adjust the DWA (➠ 61).
- Turn off the ignition.

» If the DWA is activated, the DWA will automatically be activated after the ignition is turned off.
» Activation takes approximately 30 seconds to complete.
–Turn signals flash twice.
» DWA is armed.

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

» Activation takes approximately 30 seconds to complete.
» Turn signals flash twice.
» The anti-theft alarm system is active.

- To deactivate the motion sensor (for example, if the motorcycle is being transported on a train and the train's movements could trigger the alarm signal), press the button **1** on the radio-operated key again during the activation phase.

» Turn signals flash three times.
» Motion sensor is deactivated.

Alarm signal

The DWA alarm signal can be triggered by:
– Motion sensor
– Turning on the ignition with an unauthorized ignition key.
– Disconnecting the DWA from the vehicle battery (DWA battery takes over the power supply – alarm sound 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 DWA alarm signal, an alarm tone sounds and the turn signals blink. The type of alarm tone can be set by an authorized BMW Motorrad retailer.

You can cancel a triggered alarm signal at any time by pressing the button **1** of the radio-operated key without deactivating the DWA.

If a DWA alarm signal has been triggered while the motorcycle is unattended, the rider is notified accordingly by an alarm tone sounding once when the ignition is turned on. Then the DWA LED indicates the reason for the DWA alarm signal for one minute.

Light signals on indicator light:

- 1 blink: motion sensor 1
- 2 blinks: motion sensor 2
- 3 blinks: ignition turned on with unauthorized ignition key
- 4 blinks: DWA disconnected from vehicle battery
- 5 blinks: motion sensor 3

Deactivating the DWA

- Turning on the ignition (➠ 43).

- Briefly press button **1**.

» Turn signals flash once.

» DWA is turned off.

Adjust the DWA

- Turning on the ignition (➠ 43).
- Select the SETUP (➠ 53).

- Briefly press button **1** or **2** repeatedly until SET DWA is displayed.
- Press and hold button **2** to go to SET DWA.

» The currently selected setting flashes.
- Briefly press button **1** or **2** to change the setting.

The following settings are available:
- DWA ON: DWA is activated or is activated automatically when the ignition is switched off.
- DWA OFF: DWA is deactivated.

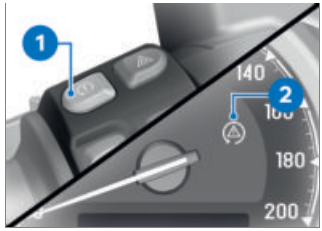
- Press and hold button **2** to confirm the value that is set.
- Alternative: Press and hold button **1** to exit the setting without saving it.
- Exit SETUP (➠ 53).

AUTOMATIC STABILITY CONTROL (ASC)

Turning off the ASC

- Turning on the ignition (➠ 43).

The ASC function can also be deactivated while riding.

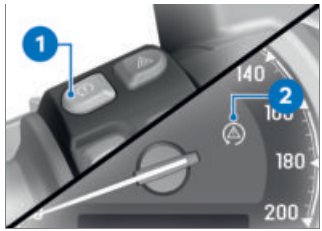


- Press and hold button **1** until the ASC indicator and warning light **2** changes its display behavior.


starts to light up.

» ASC is turned off.

Turning on the ASC



- Press and hold button **1** until the ASC indicator and warning light **2** changes its display behavior.


goes out, and if self-diagnosis has not been completed, it begins to flash.

» ASC is turned on.

- As an alternative, the ignition can also be turned off and then on again.

If the ASC indicator and warning light illuminates after switching the ignition off and on and then continuing driving with the following minimum speed, an ASC fault has occurred.

min 3 mph (min 5 km/h)

RIDING MODE

Use of the riding modes

BMW Motorrad has developed riding scenarios for your vehicle from which you can select the one matching your situation:
- RAIN: Riding on roads that are slick from rain.
- ROLL: Riding on dry roads.
- ROCK: Dynamic riding on dry roads.

The optimum interaction between engine characteristics, ASC control and dynamic engine brake control is provided for each of these scenarios. More detailed information about the riding modes can be found in the "Technology in detail" Chapter (➠ 109).

Select riding mode

- Turning on the ignition (➠ 43).

- Press button **1**.

» The current riding mode **2** is displayed.

- Press button **1** repeatedly until the desired riding mode **2** is displayed.

» When the vehicle is at a standstill, the selected riding mode is activated after approx. 2 seconds.

» The new riding mode is activated while the vehicle is in motion under the following conditions:

–The throttle grip is in Neutral.
–Brake is not engaged.
» Additionally, for vehicles with cruise control:
–Cruise control is deactivated.
» The riding mode that is set and its corresponding engine characteristics and ASC adaptations are also retained after the ignition is turned off.

CRUISE CONTROL

Turning on cruise control

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

» Button **2** is unlocked.

Saving the speed

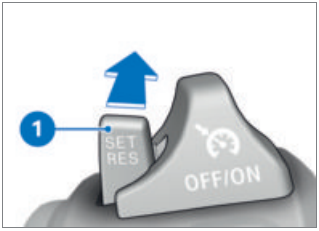
- Briefly push button **1** forward.

Adjustment range of the cruise control (gear-dependent)
12...112 mph (20...180 km/h)

lights up.

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

Accelerating



- Briefly push 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 increases continuously.

» If button **1** is no longer pressed, the speed reached is maintained and saved.

Decelerating

- 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 reduced continuously.

» If button **1** is no longer pressed, the speed reached is maintained and saved.

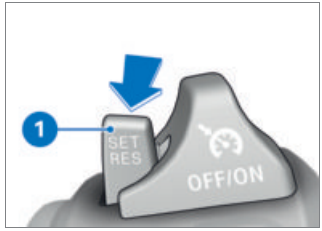
Deactivating the cruise control

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

During an ASC intervention, cruise control is automatically deactivated for safety reasons.

» The indicator light for cruise control goes out.

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.

 lights up.

Turning off cruise control

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

» The system is turned off.
» Button **2** is locked.

HILL START CONTROL

–with Hill Start Control OE

Display

The symbol **1** for the drive-off assistant is displayed in the status field.

Turn Hill Start Control on and off

- Turning on the ignition (➠ 43).
- Select the SETUP (➠ 53).

- Briefly press button **1** or **2** repeatedly until SET HSC is displayed.
- Press and hold button **2** to go to SET HSC.

» The currently selected setting flashes.

- Briefly press button **1** or **2** to change the setting.

The following settings are available:

–HSC ON: Hill Start Control has been activated.
–HSC OFF: Hill Start Control is deactivated.

- Press and hold button **2** to confirm the value that is set.
- Alternative: Press and hold button **1** to exit the setting without saving it.
- Exit SETUP (➠ 53).

Using Hill Start Control

Requirement

Vehicle is at a standstill with the engine running. Hill Start Control is turned on.

ATTENTION

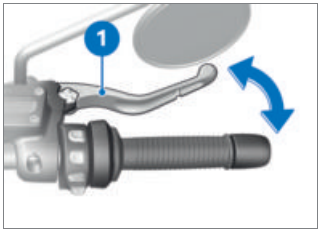
Failure of the drive-off assistant

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 handbrake lever **1** or footbrake lever firmly and then release again.


is displayed.

» Hill Start Control is activated.

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


is hidden.

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

Hill Start Control is deactivated automatically when driving off or when the reverser is activated.


disappears after the brake has been released completely.

» Hill Start Control is deactivated.

- For more information on Hill Start Control, see the "Technology in detail" chapter (➠ 113).

REVERSER

–with reverser OE

General information

The following prerequisites must be fulfilled to use the reverser:
–Motorcycle is standing.
–Engine is running.
–Brake is actuated.
–Transmission is in Neutral.
–Side stand is folded in.
–Clutch is not pulled.

Reversing should be done without a passenger.
On downhill gradients, the reverser is not able to provide any holding function as is the case when a gear is engaged.
The reverser cannot be used on gradients above max 20 %.

Activating reverser

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

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

» The reverser can be used as soon as the R display stops blinking.

Using reverser

- Release brake.
- To reverse, press and hold starter button **1**.

Automatic cancellation

Reversing is canceled automatically:

–if the gradient is too steep

–if there is an obstacle

–if the reversing motor overheats

–if the side stand is folded out

–if the front wheel brake is operated

R will blink in the display if reversing is canceled.

Deactivating reverser

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

Depending on the inclination of the road, tension can be generated in the drivetrain. The selector lever may be very difficult to move.

- To relieve pressure on the drivetrain, activate the front wheel brake and compress the front wheel springs by

pressing the handlebars forward.

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

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

HEATED GRIPS

–with heated grips[OE]

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.

- Starting the engine (➠ 91).

- Press button **1** repeatedly until desired heating level **2** is displayed.

The following settings are available:

Heating off

Low heater output

Medium heater output

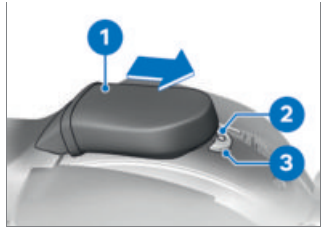
High heater output

» High heater output is used for fast heating of the grips; the switch should then be switched back to a lower heater output.

» If no further changes are made, the selected heating level is set and the heated grip icon is hidden.

SEATS

Removing the passenger seat

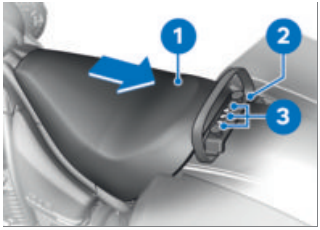


- Park the motorcycle, making sure the ground is level and firm.

- Remove screw **2**.
- Remove holder **3**.
- Pull passenger seat **1** toward rear and remove.

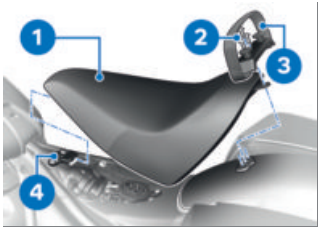
Removing the rider's seat

- Removing the passenger seat (➠ 69).



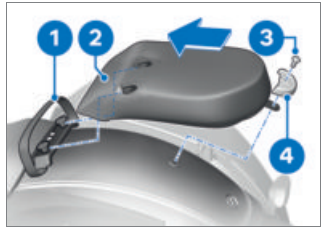
- Remove screws **3**.
- Remove the retaining belt **2**.
- Pull rider's seat **1** toward rear and remove.

Installing the rider's seat



- Insert rider's seat **1** in the mount **4**.
- Position the rider's seat **1** in the rear area and install the grab strap **3** using screws **2**.
- Installing the passenger seat (➠ 70).

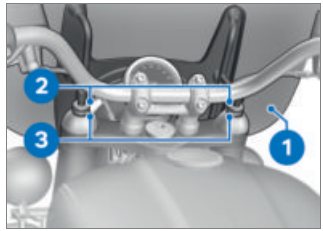
Installing the passenger seat



- Insert the passenger seat **2** in the retainer **1**.
- Position the passenger seat **2** in the rear area and install the holder **4** using the screw **3**.

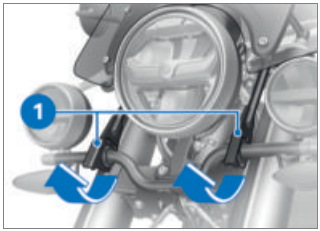
WINDSHIELD

Windshield removal

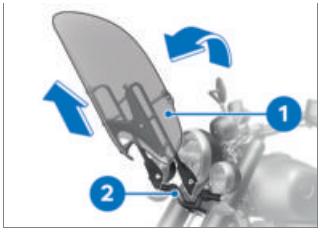


- Turn the knurled nut **2** on the left and right counterclockwise as far as it will go.
- Turn the conical nut **3** on the left and right counterclockwise as far as it will go.

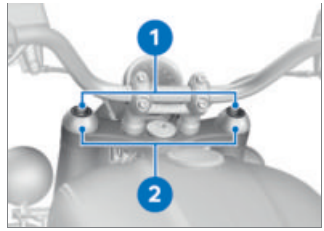
» Windshield **1** sits loosely.



- Open up the retaining clips **1** on the left and right.

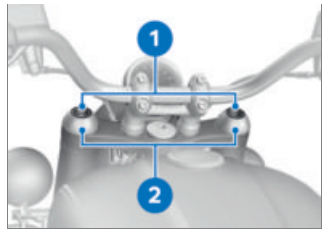


- Fold the windshield **1** forwards and pull it out of the retainer **2**.

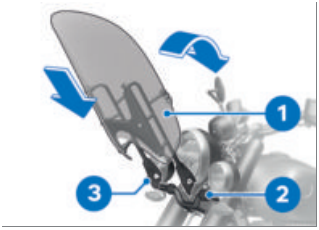


- Remove the insert sleeves **1** from the spring forks **2** and store.

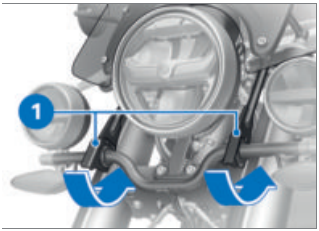
Attaching the windshield



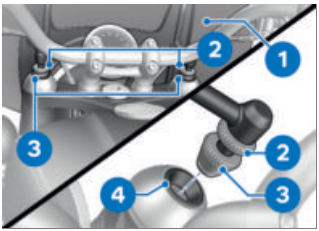
- Insert the insert sleeves **1** in the spring forks **2**.



- Insert the windshield **1** with clamping bracket **3** into the retainer **2**.
- Tilt the windshield **1** backwards.



- Close the retaining clips **1** on the left and right.



- Position the windshield **1** so that the conical nut **3** sits in the insertion sleeves on the left and right **4**.
- Turn the conical nut **3** on the left and right clockwise. In this process, check the fit of the windshield **1**.

Windshield **1** and retaining clip sit loose in the anchorage:

- Keep turning the conical nut **3** on the left and right clockwise.

» Windshield **1** is attached.
» The retaining clips can no longer open up.

- Turn the knurled nut **2** on the left and right clockwise as far as it will go.

» Windshield is completely attached.

SOFTBAGS

Maximum load capacity

Observe maximum load capacity.

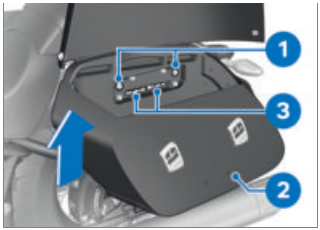
Payload per Softbag
max 17 lbs (max 7.5 kg)

Removing softbags

The Softbags are screwed to the rear frame using 4 connectors each. The connectors must be reused for the screw connection of the

rear wheel cover with the rear frame.

- Park the motorcycle, making sure the ground is level and firm.
- Observe the notes on microencapsulated screws in the Chapter "Preventive maintenance" (➠ 118).

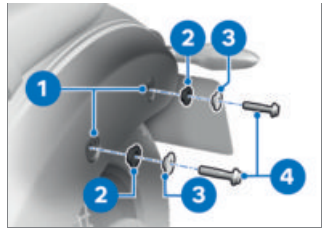


- Remove screws **1**.
- Move off the softbag **2** upward to take it off.

WARNING

Installation of incorrect screws that are too long
Risk of accident as a result of tire damage
- After removing the Softbags for screwing the rear wheel cover to the rear frame, use only the shorter blind screws.

- Remove the blind screws **3** from the softbag **2**.

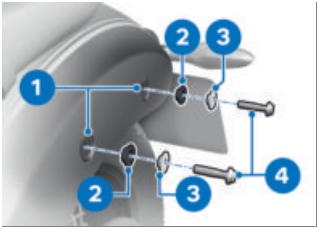


- Install the blind screws **4** with bushings **3** and **2** in the rear frame **1**.

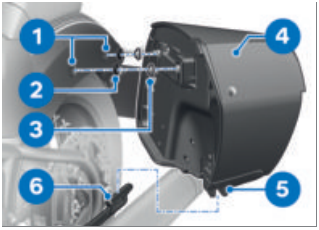
Screw connection left/ right for softbag holder to main frame
M8 x 25
Thread-locking compound: micro-encapsulated
14 lb/ft (19 Nm)

Installing softbags

- Park the motorcycle, making sure the ground is level and firm.
- Observe the notes on microencapsulated screws in the "Preventive maintenance" chapter (➠ 118).



- Remove the blind screws **4** with bushings **3** and **2** from the rear frame **1**.



- Insert the softbag **4** with retaining lug **5** into the retainer **6** from above.
- Attach the softbag **4** with bushings **3** and **2** on the rear frame **1**.

- Fasten softbag **2** using screws **1**.

The Softbags must not be fastened using the short blind screws.

Screw connection bushing for softbag holder to rear frame
M8 x 45
Thread-locking compound: micro-encapsulated
14 lb/ft (19 Nm)

- Clip the blind screws in brackets **3** for retention.

SETTING

05

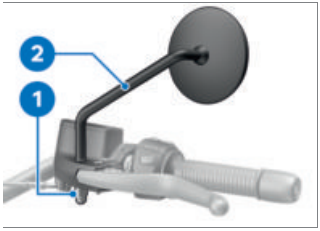
MIRRORS

Adjusting the mirrors

- Move mirrors into desired position by rotating them.

If the adjustment range of the mirror is insufficient for correct alignment, the position of the mirror arm must be adapted.

Adjusting the mirror arm



- Loosen nut **1** with tool from on-board toolkit.
- Turn mirror arm **2** into desired position.
- Tighten nut **1** while holding mirror arm **2** firmly.

Mirror on handlebar fitting
M8
9 lb/ft (12 Nm)

HEADLIGHTS

Headlight beam throw and spring preload

The headlight beam throw generally remains constant due to the adjustment of the spring preload to the load status. However, in the case of very high payloads, the available spring preload adjustment might not be adequate. If that is the case, the headlight beam throw must be adapted to the weight.

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.

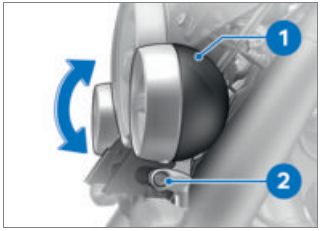
Adjusting the headlight range

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:

- Loosen nut **3**.
- Loosen nut **2**.

» The headlight **1** can be tilted within the adjustment range.

- Adjust the headlight **1** by tilting slightly.
- Secure the headlight position by tightening the nut **2**.
- Tighten nut **3**.



- Loosen the screw **2** on the left and right.

» The auxiliary headlight **1** can be tilted in the adjustment range.

- Adjust the auxiliary headlight **1** by tilting slightly.
- Tighten the screw **2** on the left and right.

If the motorcycle is ridden again with lower payload:

- Have the headlight base setting readjusted by a specialist workshop, preferably an authorized BMW Motorrad retailer.

CLUTCH

Adjusting the clutch lever

WARNING

Modified position of the clutch fluid reservoir

Air in the clutch system

- Do not twist the handlebar fitting or the handlebars.

WARNING

Adjusting the clutch lever while driving

Accident hazard

- Adjust the clutch lever when the motorcycle is stationary.

- Turn the adjustment wheel **1** to the desired position by applying gentle pressure from the rear.

The adjusting screw is easier to turn when the clutch lever is pressed forward.

» Adjustment options:
– From position 1: Shortest distance between handlebar grip and clutch lever
– To position 5: Longest distance between handlebar grip and clutch lever

BRAKES

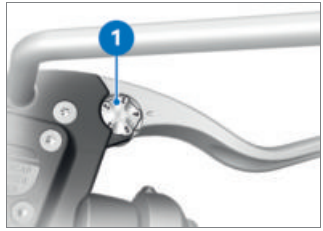
Adjusting the brake lever

WARNING

Modified position of the brake fluid reservoir
Air in the brake system
- Do not twist the handlebar fitting or the handlebars.

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** to the desired position by applying gentle pressure from the rear.

The adjustment screw is easier to turn when the brake lever is pressed forward.

» Adjustment options:
– From position 1: Shortest distance between handlebar grip and brake lever
– To position 5: Longest distance between handlebar grip and brake lever

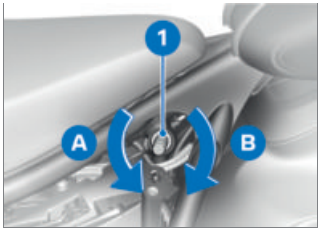
SPRING PRELOAD

Setting

It is essential to set the spring preload at the rear wheel to suit the vehicle 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

- Removing side trim panel (➠ 119).



ATTENTION

Improper adjustment
Damage to the adjustment mechanism
- Adhere to an adjustment range of a maximum of 26 rotations (to limit position).

- To increase the spring preload, turn the hexagon head **1** clockwise in direction **B** using the onboard vehicle tool kit.
- To lower the spring preload, turn the hexagon head **1** counterclockwise in direction **A** using the onboard vehicle tool kit.

Basic setting of spring preload, rear
Rotate hexagon head counterclockwise as far as it will go, then 8 rotations clockwise. (filled up with fuel, with driver weighing approx. 100 kg)
Rotate hexagon head counterclockwise as far as it will go, then 12 rotations clockwise. (One-up with vehicle load approx. 120 kg)
Rotate hexagon head counterclockwise as far as it will go, then 24 rotations clockwise. (Two-up mode with vehicle load approx. 180 kg)

– For a vehicle load deviating from the base settings, the spring preload must be increased by 2 rotations for every 22 lbs (10 kg) of additional weight.

- Installing side trim panel (➠ 119).

GEARSHIFT LEVER

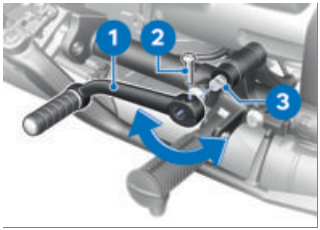
Adjusting the gearshift lever

ATTENTION

Unintentional actuation of the gearshift lever

Damage to the transmission

- Check for the correct setting of the gearshift lever.
- Ensure that the gearshift lever bears no load when not in the process of gear shifting.



- Remove screw **2**.
- Detach the gearshift lever **1** from the gearshift shaft **3**.
- Attach the gearshift lever **1** in the desired position and slide it onto the gearshift shaft **3**.
- Install screw **2**.

	Gearshift lever on gearshift shaft
M6 x 25	
6 lb/ft (8 Nm)	

Setting the shift paddle

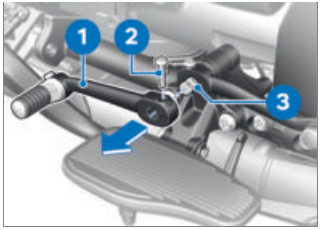
–with running board OE

ATTENTION

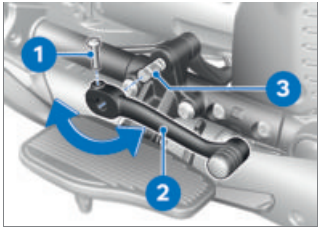
Unintentional actuation of the gearshift lever

Damage to the transmission

- Check for the correct setting of the gearshift lever.
- Ensure that the gearshift lever bears no load when not in the process of gear shifting.



- Remove screw **2** and detach the front gearshift lever **1** from the gearshift shaft **3**.

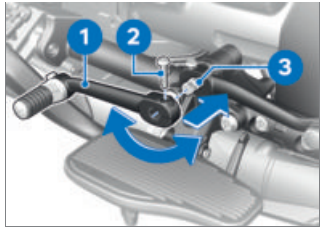


- Remove screw **1**.
- Detach the rear gearshift lever **2** from the gearshift shaft **3**.
- Attach the rear gearshift lever **2** in the desired position and slide it onto the gearshift shaft **3**.
- Check for free movement of the rear gearshift lever.

If the gearshift lever touches the exhaust cover when actuated:

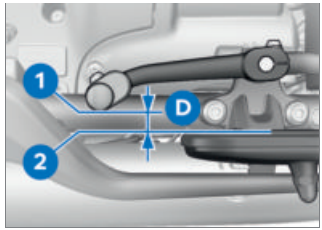
- Correct the setting of the rear gearshift lever.
- Install screw **1**.

Gearshift lever on gearshift shaft
M6 x 25
6 lb/ft (8 Nm)



- Attach the front gearshift lever **1** in the desired position and slide it onto the gearshift shaft **3**.
- Install screw **2**.

Gearshift lever on gearshift shaft
M6 x 25
6 lb/ft (8 Nm)

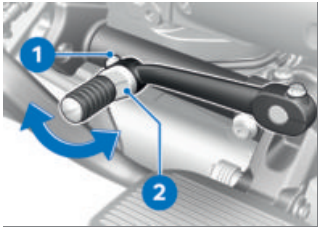


- Observe the minimum distance **D** of min 1 in (min 25 mm) between the lower edge of the foot plate **1** and upper edge of the running board **2**.
- Adjusting the foot plate (➠ 84).

Adjusting the foot plate
–with running board[OE]

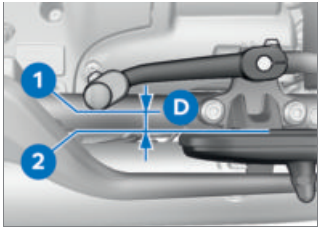
ATTENTION

Unintentional actuation of the gearshift lever
Damage to the transmission
- Check for the correct setting of the gearshift lever.
- Ensure that the gearshift lever bears no load when not in the process of gear shifting.



- Loosen screw **1**.
- Turn the foot plate **2** into the desired position.
- Tighten screw **1**.

	Foot plate eccentric on gearshift lever
M6 x 25	
6 lb/ft (8 Nm)	



- Observe the minimum distance **D** of min 1 in (min 25 mm) between the lower edge of the foot plate **1** and upper edge of the running board **2**.

RIDING

06

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.

Correct loading

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 preload and tire pressure for the current gross motorcycle weight.
- Pack heavy luggage items and cargo as low and as close to the center of the motorcycle as possible.

Payload per Softbag
max 17 lbs (max 7.5 kg)

Speed

If you ride at high speed, always bear in mind that various boundary conditions can adversely affect the handling of your motorcycle, e.g.:
–Incorrect adjustment of the spring strut
–Unevenly distributed load
–Loose clothing
–Insufficient tire pressure
–Tire tread in poor condition
–Etc.

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 the engine and exhaust system while driving

Risk of burning

- Always wear a helmet, riding suit, gloves and boots.
- While driving and after parking the motorcycle, make sure that no persons or objects come into contact with the engine and exhaust system.

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.

In the event of a change to the load status:
– Adjust the spring preload at the rear wheel (➠ 81).

Always before riding off
– Unlock steering lock (➠ 42).
– Check operation of the brake system (➠ 124).
– Check operation of the lighting and signal system.
– Check the clutch function (➠ 128).
– Check tire tread depth (➠ 129).
– Check tire pressure (➠ 128).
– Check that luggage is securely held in place.

At every third refueling stop
– Check engine oil level (➠ 121).
– Check the front brake pad thickness (➠ 124).
– Check the rear brake pad thickness (➠ 125).
– Check the front brake fluid level (➠ 126).
– Check the rear brake fluid level (➠ 127).

STARTING

Starting the engine

- Turning on the ignition (➠ 43).

» Pre-Ride-Check is carried out. (➠ 91)

» ABS self-diagnosis is performed. (➠ 92)

» ASC self-diagnosis in progress. (➠ 93)

- Pull clutch.

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.

To ensure rapid operational readiness of the catalytic converter, the idle speed is briefly increased after the engine starts.

To ensure starting capability at high engine temperatures, the idle speed is briefly increased after the engine starts.

- 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.

» Consult the troubleshooting chart if the engine refuses to start. (➠ 164)

Pre-Ride-Check

After the ignition is turned on, the instrument cluster performs a test of the instrument dials, the indicator and warning lights, and the display—this is referred to as 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 **2** are turned on.

Phase 2

The needle **3** for the speedometer moves to maximum speed.

Phase 3

The needle **3** for the speedometer moves to zero. The indicator and warning lights **2** go out or adopt their functions for operation.

Active warning and service messages are displayed in the display **1**.

After confirmation of the active warning and service messages, the trip computer is displayed in the display **1**.

If the needle has not moved, an indicator and warning light has not been turned on, or segments are missing in the display:

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

ABS self-diagnosis

The self-diagnosis routine checks whether the BMW Motorrad Integral ABS is ready for operation. The self-diagnosis starts automatically when you start the ignition.

Phase 1

» Check on system components monitored by diagnostic system while vehicle is at a standstill.

blinks.

Phase 2

» Check wheel speed sensors while driving off.

blinks.

ABS self-diagnosis completed

» The ABS indicator and warning light goes out.

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

If an ABS error is displayed after the ABS self-diagnosis is completed:

- You may continue driving. Bear in mind that neither the ABS function nor the integral function is available.
- Have the malfunction corrected as soon as possible at a specialist workshop, preferably an authorized BMW Motorrad retailer.

ASC self-diagnosis

The self-diagnosis routine checks whether the BMW Motorrad ASC 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.

 blinks.

Phase 2

» Checking system components capable of diagnosis while riding off.

 blinks.

ASC self-diagnosis completed

» The ASC indicator and warning light goes out.

- Check the display of all indicator and warning lights.

ASC self-diagnosis not completed
ASC is not available because 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: min 3 mph (min 5 km/h))

If an ASC error is displayed after the ASC self-diagnosis is completed:

- You may continue riding. Note that the ASC function

and the dynamic engine brake control are not available.
- 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, drive in frequently changing engine load and engine speed ranges, avoiding extended periods at constant rpm.
- Choose curvy, slightly hilly sections of road if possible.
- Observe the load condition during break in.

 Load condition when breaking in
No full throttle (Odometer reading max. 1000 km)

- Observe engine run-in speed.

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

- Observe mileage, after which the running-in check 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. Only once the surface has been roughened can the tires 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.

BRAKES

How do you achieve the shortest braking distance?

The dynamic load distribution between the front and rear wheel changes during braking. The heavier you 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 extra weight transfer to the front wheel. The clutch should also be engaged at the same time. When the rider uses the (frequently practiced) extreme method of 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 Integral ABS.

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

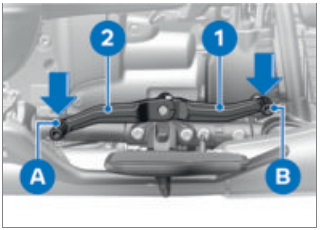
Poorer braking action due to moisture and dirt
Accident hazard
- Brake until brakes are dry or clean; clean if necessary.
- Brake early until the full braking action is available again.

SHIFTING WITH SHIFT PADDLE

–with running board OE

Operating the shift paddle

If running boards are used, a gear shift is carried out using a shift paddle.



- Downshifting: Push gearshift lever **2** down at position **A**.
- Upshifting: Push gearshift lever **1** down at position **B**.

PARKING YOUR MOTORCYCLE

Side stand

- Switch 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.

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) 89 AKI (95 ROZ/RON) 90 AKI
 Alternative fuel quality
Regular unleaded (max. 15% ethanol, E15) 87 AKI (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.

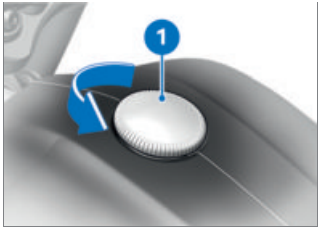
ATTENTION

Component damage
Component damage due to overfilled fuel tank
- If the fuel tank is overfilled, the excess fuel will flow into the carbon canister and lead to component damage there.
- Only fill the fuel tank to the lower edge of the fuel filler neck.

ATTENTION

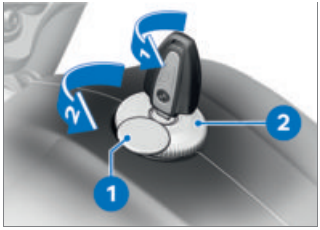
Contact of fuel and plastic surfaces
Damage to surfaces (become unattractive or cloudy)
- Immediately clean plastic surfaces after contact with fuel.

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

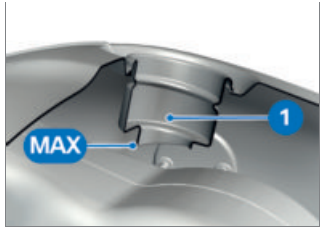


- Turn the fuel tank sealing cap **1** counterclockwise and take it off.

–Lockable with fuel cap OE



- Swivel the protective cap **1** to the side.
- Unlock the fuel tank sealing cap **2** using the ignition key. Turn counterclockwise.
- Turn the fuel tank sealing cap **2** counterclockwise and take it off.◁



- Refuel with a fuel of the specified quality, but no higher than the lower edge of the fuel filler neck **1**.

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. 4.2 gal (Approx. 16 l)

Fuel reserve
Approx. 1.1 gal (Approx. 4 l)

- Position the fuel tank sealing cap and close off turning clockwise.

–Lockable with fuel cap OE

- Lock the fuel tank sealing cap using the ignition key. Turn clockwise.
- Pull the ignition key out and swivel the protective cap over the tank lock.◁

SECURING MOTORCYCLE 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

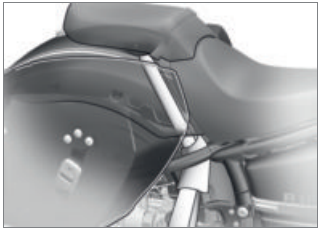
- Secure the motorcycle against tipping to the side, preferably with the assistance of a second person.

- Push the motorcycle onto the transport surface, and do not prop it on its side 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.

- Guide the tensioning belt over the steering head and tension it down.



- First, guide the tensioning belts on the left and right through the rear wheel swinging arm.
- Guide the tensioning belts on the left and right upwards between the rear wheel cover and the rear frame.
- Place the tensioning belts on the left and right around the rear frame and guide them down through the rear wheel swinging arm.
- Tighten all tensioning belts evenly.

» The vehicle is lashed down securely (suspension is compressed).

TECHNOLOGY IN DETAIL

07

GENERAL NOTES

More information on the topic of technology is available at **bmw-motorrad.com/technik**.

GENERAL DRIVE FUNCTIONS

Gearshift speed control

If the clutch is operated while riding and the throttle grip is turned back, the RPM does not drop to idle speed immediately. The gearshift speed control maintains the RPM above idle speed for several seconds and thus reduces the RPM difference between the engine and transmission when engaging the clutch. The breakdown torque during a gear change is reduced, and the shifting comfort for the rider is increased. The gearshift speed control is active in the RAIN and ROLL riding modes.

Maximum RPM limit at a standstill

To prevent the vehicle from rolling away uncontrollably, the maximum RPM is limited to 3600 RPM under the following conditions:

- Gear is engaged.
- Clutch is pulled.
- Riding speed < 2 mph (3 km/h).

RPM is increased when the vehicle is rolling in Neutral

If the gear is shifted to Neutral at a speed above 19 mph (30 km/h), the RPM does not drop to idle speed immediately. The RPM remains elevated to ensure better adaptation to the RPM to the first gear. This reduces the load on the rear-wheel drive during gear shifting and increases the shifting comfort for the rider.

ANTILOCK BRAKING SYSTEM (ABS)

Partially integral brake

Your motorcycle is equipped with a partially integral brake configuration. Both front and rear wheel brakes are applied simultaneously when you pull the brake lever. The footbrake lever acts only on the rear wheel brake.
The BMW Motorrad Integral ABS adapts the braking force distribution between the front and rear wheel brake to the loading of the motorcycle during braking.

ATTENTION

Attempt at a Burn-out despite integral function
Damage to rear wheel brake and clutch
- A Burn-out may occur only when the vehicle starts from a standstill. A Burn-out is not within the scope of the vehicle's intended use and can therefore result in fault memory entries.

How does 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 brake pressure is exceeded when the driver increases the brake pressure, the wheels begin to lock and driving stability is lost; this could result in a fall. 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?
Rough roads can briefly lead to a loss of contact between the tires and the road surface. The transferable braking force is then 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, ABS must assume extremely low coefficients of friction (gravel, ice, snow) so that the wheels turn in every imaginable case and driving stability is ensured. After detecting the actual conditions, the system adjusts the optimum brake pressure.

How is the BMW Motorrad Integral ABS noticeable to the rider?
If the ABS system must reduce the braking forces due to the conditions described above, then vibrations can be felt at the handbrake 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 counterpressure earlier than when the footbrake lever is actuated before or together with the brake lever.

Lifting off rear wheel

During extremely heavy and rapid decelerations it is possible that the BMW Motorrad ABS 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 features of the BMW Motorrad 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.

Special situations

To detect the tendency of the wheels to lock up, the speeds of the front and rear wheel are compared. If the system registers implausible data for an extended period of time, it will switch off the ABS as safety precaution and a display will alert you to an ABS error. A self-diagnosis routine 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:

– Warming up the engine on an auxiliary stand at idle 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 maintenance?

WARNING

Brake system not regularly serviced
Accident hazard
- To ensure that the BMW Motorrad ABS is in a properly maintained condition, it is vital that the specified service intervals are kept to.

Reserves for safety

The potentially shorter stopping distances which BMW Motorrad ABS permits must not be used as an excuse for a careless driving 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.

AUTOMATIC STABILITY CONTROL (ASC)

How does ASC work?

BMW Motorrad ASC compares the wheel centrifugal velocities of the front and rear wheels. The speed difference is used to determine the slip rate, and thus the stability reserves at the rear wheel. The engine control adapts the engine torque when the slip limit is exceeded.

Special situations

As the lean angle increases, the capacity to accelerate is also increasingly limited by the laws of physics. This can result in delayed acceleration when exiting very tight turns.

The system compares the rotational speeds of the front and rear wheels to detect whether the rear wheel is spinning without traction or skidding. If implausible values are detected over an extended period of time, the ASC function is switched off for safety reasons and an ASC error is displayed. A self-diagnosis must be completed before the fault memory entry can be displayed.
In the following unusual driving conditions, the BMW Motorrad ASC can be turned off automatically.

Unusual riding conditions:
- Riding on the rear wheel (wheelie) for an extended period with ASC deactivated
- Rear wheel spinning when stationary with front wheel brake engaged (burn-out)
- Warming up the engine on an auxiliary stand in Neutral or with a gear engaged

ASC is reactivated by turning the ignition off and on and then riding at a speed above 3 mph (5 km/h).

If the front wheel loses contact with the ground under extreme acceleration, the ASC reduces the engine torque until the front wheel makes contact with the ground again.
If this happens, BMW Motorrad recommends that you respond by twisting back the throttle grip somewhat to return to stable riding conditions as quickly as possible.

Slippery road
On very loose surfaces (e.g. sand and snow), the interventions of the ASC can reduce the drive force at the rear wheel to such a degree that the rear wheel no longer turns sufficiently.
In this case, BMW Motorrad recommends switching off the ASC temporarily.
Note that the rear wheel will spin on the loose surface, and close the throttle grip in a timely manner before reaching a solid surface.
Then switch on ASC again.

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:
–RAIN
–ROLL
–ROCK

For each riding mode, a coordinated setting is available for the following systems: ASC control, dynamic engine brake control and the engine characteristics. In the ROCK riding mode, the engine operates with high power while in neutral, which makes the performance capacity of the opposed-twin engine perceptible even when the vehicle is at a standstill. The direct throttle response ensures unfiltered power output and makes the power train's cylinder capacity impressively perceptible.

Throttle response

–In the RAIN riding mode: Soft throttle response.
–In the ROLL riding mode: Optimal throttle response.
–In the ROCK riding mode: Direct throttle response.

Automatic Stability Control (ASC)

–In the RAIN riding mode: maximum stability on wet roads. Acceleration may be reduced on dry roads.
–In the ROLL riding mode: high performance on dry roads. In poor road conditions, optimum stability cannot be guaranteed.
–In the ROCK riding mode: maximum performance. Stability may be impaired on poorly surfaced roads or if using unsuitable tires.

Changing the setting

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 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 in the display until the riding mode has been switched over.

ENGINE DRAG TORQUE CONTROL

How does dynamic engine brake control work?

The purpose of the dynamic engine brake 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 driving dynamics, excess drag torque can make the slip at the rear wheel increase severely and impede driving stability. The dynamic engine brake control limits 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 ASC, the dynamic engine brake control compares the wheel circumferential velocities of the front and rear wheel. The dynamic engine brake 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 dynamic engine brake control

–In the RAIN and ROLL riding modes: Maximum stability
–In the ROCK riding mode: Reduced intervention when compared to the RAIN and ROLL riding modes

DYNAMIC BRAKE CONTROL

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 emergency braking is applied at a speed of more than 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 is exceeded for the first time.

 Minimum speed for the transmission of the RDC measured values:
min 19 mph (min 30 km/h)

Before initial reception of the tire pressure, –– is shown in the display for each tire. The sensors continue to transmit the measured values for some time after the vehicle comes to a stop.

 Transmission time of the measured values after vehicle standstill:
min 15 min

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 limit range of the permissible tolerance.
- Tire pressure outside the permissible tolerance.

Temperature compensation

The tire pressure is temperature dependent, i.e. 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 the following tire air temperature:
68 °F (20 °C)

Tire pressure gauges at filling stations do not compensate for temperature; the tire pressure that is measured depends on the tire air temperature. 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 rider's manual. The difference between the two values must be compensated with the tire pressure gauge at the filling station.

 Example
According to the rider's manual, the tire pressure should have the following value:
36.3 psi (2.5 bar)
The following value is indicated in the display:
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 produce the correct tire pressure, this must be increased to the following value:
37.7 psi (2.6 bar)

HILL START CONTROL

–with Hill Start Control OE

Hill Start Control function

The Hill Start Control drive-off assistant function prevents uncontrolled rolling back on slopes by means of targeted intervention in the partial 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.

Behavior when the vehicle is rolling back or skidding

–The brake pressure increases when the vehicle is rolling back with Hill Start Control active.

–If the rear wheel skids, the brake is released again after approx. 1.1 yards (1 m). This prevents, for example, the vehicle from skidding with a locked rear wheel.

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 the indicator and warning lights, the following behavior is to alert the rider to the deactivation of the Hill Start Control:

Brake warning jerk

–The brake is released briefly and is immediately reactivated.

–This causes a jerking behavior that the rider can feel.

– The partial integral ABS brake system sets a speed of approx. 0.6–1.2 mph (1–2 km/h).
– The rider must brake the vehicle manually.
– After two minutes, or when the brake is applied, Hill Start Control is deactivated completely.

When the ignition is switched off, the holding pressure is built up immediately and without brake warning jerk.

ADAPTIVE HEADLIGHT

– with Adaptive Lights[OE]

Function

In addition to the low beams, high beams and daytime running lights or parking lights, the headlight is equipped with separate LED elements with their own reflectors. Depending on the angle, the LED elements are also switched on for the low beams in order to improve the illumination of the interior range of the curve. The adaptive front lighting is optimized for an angle of up to 25°.
The adaptive headlights are activated under the following conditions:

– The angle is greater than 7°.
– The speed is higher than 6 mph (10 km/h).
– The low beams are switched on.

MAINTENANCE

08

GENERAL NOTES

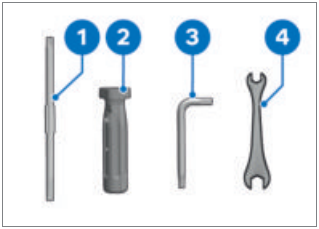
The "Preventive maintenance" chapter describes work involving the checking and replacement of wearing parts that can be performed with a minimum of effort.
If specific tightening torques are to be taken into account for installation, these are listed. An overview of all required tightening torques is 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 Reversible screwdriver insert
Slotted blade and T25 torx
–Replacing fuses (➠ 148).

2 Screwdriver handle
–Topping up the engine oil (➠ 122).
–Use with screwdriver insert

3 Torx wrench T30
–Topping up the engine oil (➠ 122).
–Removing the rider's seat (➠ 70).

3 –Removing the passenger seat (➠ 69).

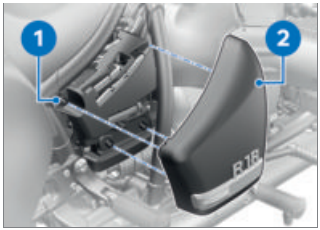
4 Open-ended wrench
Key range: 10/13 mm
–Adjusting the spring preload at the rear wheel (➠ 81).
–Adjusting the mirror arm (➠ 78).

SIDE PANELS

Removing side trim panel

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

The work steps described here for the right side trim panel also logically apply to the left side.

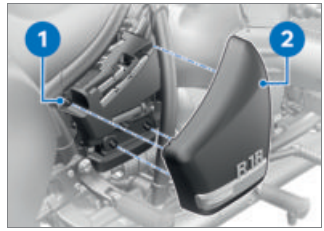


- Loosen the side trim panel **2** from retaining pins **1**.

Installing side trim panel

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

The work steps described here for the right side trim panel also logically apply to the left side.

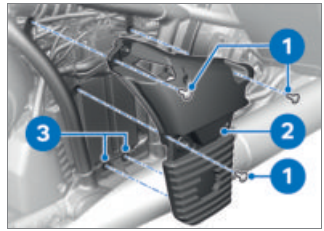


- Insert the side trim panel **2** in the holding pins **1**.

FAIRING BRACKET

Removing fairing bracket, left

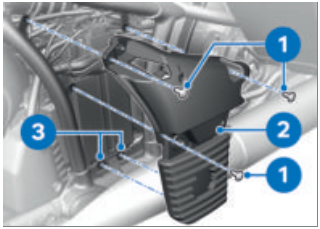
- Removing side trim panel (➠ 119).



- Remove screws **1** from the left fairing support **2**.

- Loosen the left-side fairing support **2** from grommets **3** and remove it.

Installing fairing bracket, left



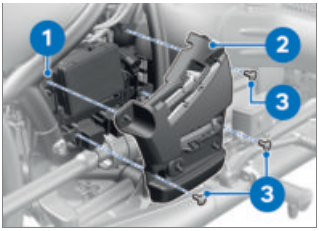
- Insert the left-side fairing support **2** in grommets **3**.
- Install screws **1** in the left fairing support **2**.

	Support for side cover on frame
M5 x 14	
Thread-locking compound: micro-encapsulated	
4 lb/ft (5 Nm)	

- Installing side trim panel (➠ 119).

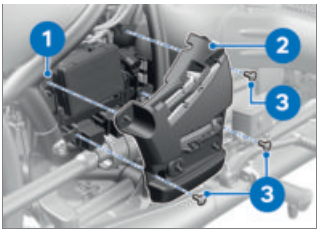
Removing fairing bracket, right

- Removing side trim panel (➠ 119).



- Remove screws **3** from the right fairing support **2**.
- Loosen the right fairing support **2** from the grommet **1** and remove it.

Installing fairing bracket, right



- Insert the right fairing support **2** into the grommet **1**.
- Install screws **3** in the right fairing support **2**.

	Support for side cover on frame
M5 x 14	
Thread-locking compound: micro-encapsulated	
4 lb/ft (5 Nm)	

- Installing side trim panel (➠ 119).

FRONT WHEEL STAND

Attaching front wheel stand

ATTENTION

Use of the front wheel stand without an additional auxiliary stand

Component damage caused by tipping over

- Place the motorcycle on an auxiliary stand before lifting the front wheel with the front wheel stand.

- Ensure that the motorcycle is standing securely.
- Place the motorcycle on an auxiliary stand.
- Mounting the rear-wheel stand (➠ 121).
- For a description of the correct installation, please refer to the instructions for the front-wheel stand.
- Your authorized BMW Motorrad retailer will be very happy to assist you in choosing a suitable auxiliary stand.

REAR-WHEEL STAND

Mounting the rear-wheel stand

- For a description of the correct installation, please refer to the instructions for the rear-wheel stand.
- Your authorized BMW Motorrad retailer will be very happy to assist you in choosing a suitable auxiliary stand.

ENGINE OIL

Checking the engine oil level

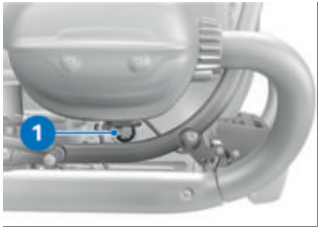
ATTENTION

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.

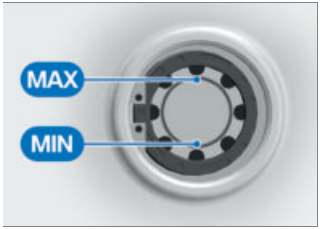
- Turn off engine at operating temperature.
- Hold the motorcycle upright, making sure that the ground is firm and level.
- Wait five minutes to allow oil to drain into the oil pan.



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**.



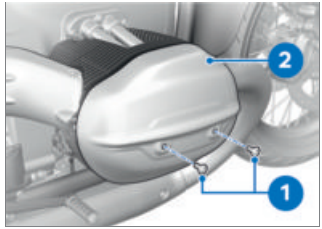
Specified level of engine oil
Between **MIN** and **MAX** mark

If the oil level is below the **MIN** mark:
- Topping up the engine oil (⇒ 122).

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

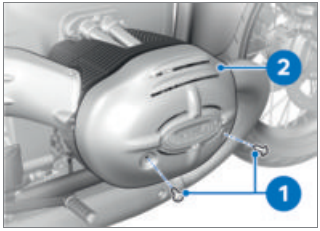
BMW Motorrad recommends occasionally checking the engine oil after a journey of min 31 miles (min 50 km) in order to reduce the environmental impact.

Topping up the engine oil
- Park the motorcycle, making sure the ground is level and firm.

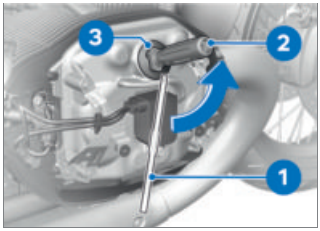


- Remove screws **1** using the onboard vehicle tool kit and take off the cover **2**.

–with Option 719 design package Aero[OE]



- Remove screws **1** using the onboard vehicle tool kit and take off the cover **2**.◁



- Clean the area around the oil filler opening.
- To be able to apply force more easily, insert the interchangeable screwdriver insert **1** Phillips-end first, into the screwdriver handle **2** (from on-board toolkit).
- Position the tool on the cap **3** and turn it counterclockwise.
- Remove cap **3** of oil filler opening.

ATTENTION

Use of too little or too much engine oil

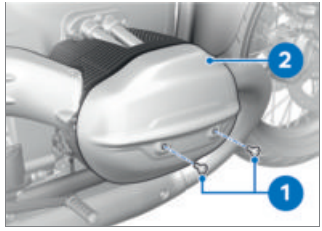
Engine damage

- Always make sure that the oil level is correct.

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

Engine oil refilling quantity
max 0.5 quarts (max 0.5 l) (Difference between **MIN** and **MAX**)

- Checking the engine oil level (➠ 121).
- Install the cap **3**.

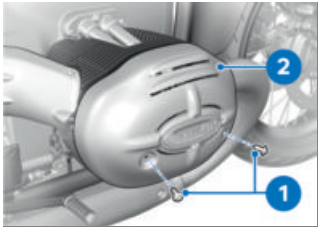


- Attach the cover **2** and install screws **1**.

Cylinder head cover on cylinder head
M6

Cylinder head cover on cylinder head
Joint compound: Oiling the rubber bushing
7 lb/ft (10 Nm)

–with Option 719 design package Aero OE



- Attach the cover **2** and install screws **1**.

Cylinder head cover on cylinder head
M6
Joint compound: Oiling the rubber bushing
7 lb/ft (10 Nm)◁

BRAKE SYSTEM

Checking function of brakes

- Actuate the handbrake lever.

» There is a clearly perceptible pressure point.

- Press the footbrake lever.

» There is a clearly perceptible pressure point.

If resistance points are not clearly perceptible:

ATTENTION

Improper working on the brake system

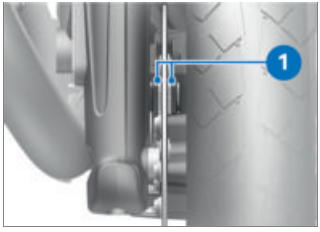
Endangering of the operating safety of the brake system

- Have all work on the brake system carried out by experts.

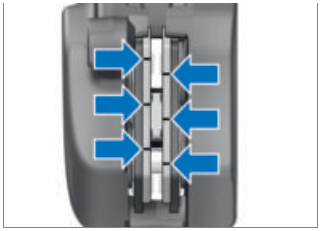
- Have the brakes checked by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking the front brake pad thickness

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



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



Front brake-pad wear limit
min 0.04 in (min 1 mm) (Only friction material without carrier plate. The wear marks (grooves) must be clearly visible.)

If the wear marks are no longer visible:

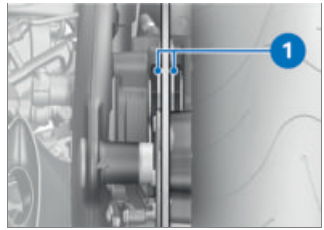
WARNING

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 specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking the rear brake pad thickness

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



- Visually inspect the brake pad thickness. Viewing direction: Between rear wheel and rear-wheel guide toward brake pads **1**.

Rear brake-pad wear limit
min 0.04 in (min 1 mm) (Only friction material without carrier plate. The wear marks (grooves) must be clearly visible.)

If the wear marks are no longer 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 specialist workshop, 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.

- Hold the motorcycle upright, making sure that the ground is firm and level.

- Align the handlebars so that the brake fluid reservoir is positioned horizontally.
- Check the brake fluid level in the sight glass **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.)

If the brake fluid level falls below the approved level:

- Have the defect rectified as soon as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking the rear brake fluid level

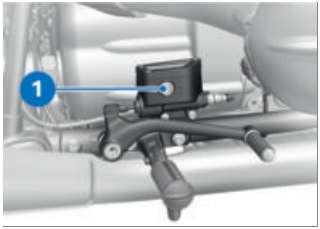
WARNING

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.

- Hold the motorcycle upright, making sure that the ground is firm and level.



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

If the brake fluid level falls below the approved level:

- Have the defect rectified as soon as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.

CLUTCH

Checking clutch function

- Pull the clutch lever.

» There is a clearly perceptible pressure point.

If no clear pressure point can be felt:

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

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

Valve inserts open of their own accord at high speeds
Sudden loss of tire inflation pressure
- Use valve caps with rubber sealing ring and screw on firmly.

- Park motorcycle. Ensure that the ground is firm and level.
- Check tire pressure against data below.

 Front tire pressure
36.3 psi (2.5 bar) (with tire cold)

 Rear tire pressure
42.1 psi (2.9 bar) (One-up mode, with cold tires)
42.1 psi (2.9 bar) (Two-up mode with load, with cold tires)

If tire pressure is too low:
- Correct 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 motorcycle. Ensure that the ground is firm and level.
- Measure tire tread depth in main tread grooves with wear marks.

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 wheel rims

- Park motorcycle. Ensure that the ground is firm and level.
- Visually inspect rims for defects.
- Have damaged rims checked and, if necessary, renewed by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking spokes

- Park motorcycle. Ensure that the ground is firm and level.
- Run the handle of a screwdriver or similar object over the spokes and listen to the sound pattern.

If the sound pattern is uneven:

- Have spokes checked by a specialist workshop, preferably by an authorized BMW Motorrad retailer.

WHEELS

Effect of wheel sizes on suspension control systems

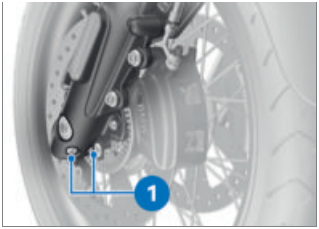
The wheel sizes play an important role with suspension control systems such as ABS. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes resulting from conversion to wheels not installed as standard 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 must be adapted to the new wheel sizes.

Removing the front wheel

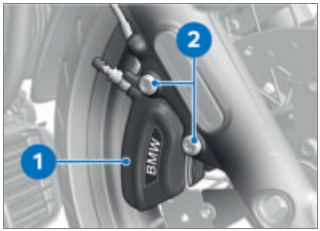
- Place the motorcycle on an auxiliary stand.
- Mounting the rear-wheel stand (➠ 121).



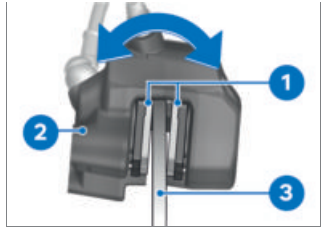
- Loosen the clamping bolts **1** on the left and right.

- Raise front of motorcycle until the front wheel can turn freely.
- Attaching front wheel stand (➠ 121).

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



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



- Push the brake pads **1** apart slightly by turning the brake caliper **2** against the brake disc **3**.

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.

ATTENTION

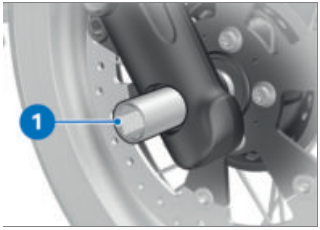
Using hard or sharp-edged objects near the component
Component damage
- Do not scratch components, if necessary tape off or cover.

- Mask off areas of the wheel rim that could get scratched

in the process of removing the brake calipers.

- Carefully pull the brake calipers back and outward to remove them from the brake discs.

- Loosen screw **1** but **do not remove**.
- Slightly press the quick-release axle with the screw **1** for a better grip on the right side.
- Remove screw **1**.



- Pull out the quick-release axle **1** while supporting the front wheel.

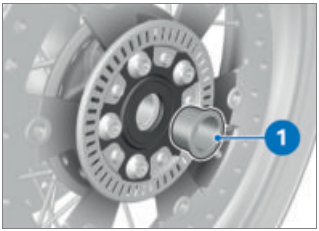
ATTENTION

Improper removal of the front wheel

Damage to the wheel speed sensor

- When rolling out the front wheel, pay attention to the wheel speed sensor.

- Place front wheel down and roll it forward out of the front suspension.



- Remove the spacer bushing **1** from the wheel hub.

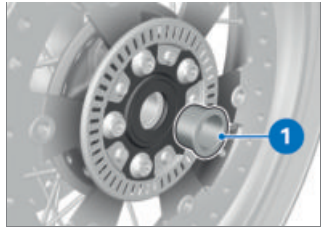
Installing the front wheel

WARNING

Use of a wheel which does not comply with series specifications
Malfunctions during control interventions by ABS and ASC
- Please see the information on the effect of wheel sizes on the ABS and ASC 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 collar facing outward.

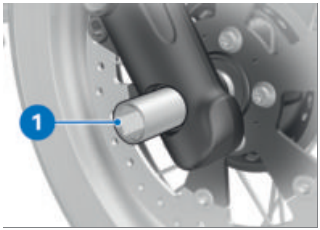
ATTENTION

Front wheel installation opposite the running direction
Accident hazard
- Observe running direction arrows on tire or rim.

ATTENTION

Improper installation of the front wheel
Damage to the wheel speed sensor
- When rolling in the front wheel, pay attention to the wheel speed sensor.

- Roll the front wheel into the front suspension.



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

Lubricant
Optimoly TA

WARNING

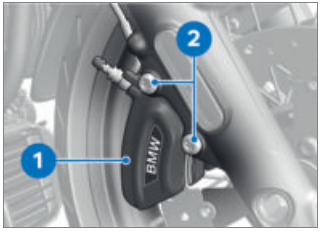
Improper installation of quick-release axle
Loosening of the front wheel
- After the brake caliper is fastened and the spring fork is relaxed, tighten the quick-release axle and axle clamping with the specified torque.

- Lift the front wheel and install the quick-release axle **4**.
- Remove front wheel stand and firmly compress front forks. Do not actuate hand-brake lever at the same time.
- Attaching front wheel stand (➠ 121).

- Install screw **1**. Brace quick-release axle on the right side at the same time.

Screw on quick-release axle
M20 x 1,5 - 8.8

Screw on quick-release axle
37 lb/ft (50 Nm)



- Position brake caliper **1** on right and install screws **2**.

Brake caliper on telescopic forks
M10 x 40 - 10.9
41 lb/ft (56 Nm)

- Position brake caliper **1** on left and install screws **3**.

Brake caliper on telescopic forks
M10 x 40 - 10.9

Brake caliper on telescopic forks
41 lb/ft (56 Nm)

- Fasten cable tie **2**.

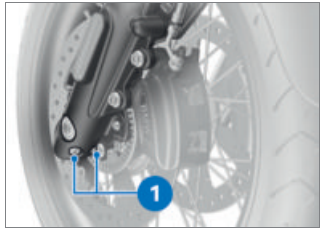
WARNING

Brake pads do not contact the brake disc

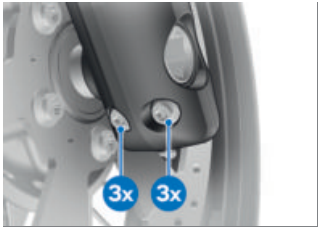
Risk of accident due to delayed braking effect.

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



- Tighten the clamping bolts **1** on left and right to the appropriate torque.

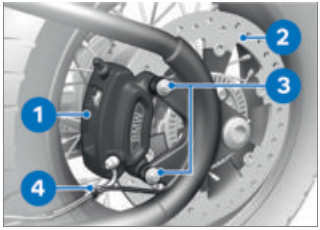


Clamping bolts in subframe
Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time
M8 x 35 - 8.8
14 lb/ft (19 Nm)

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

Removing the rear wheel

- Raise motorcycle, preferably with a rear-wheel stand.
- Shift into first gear.
- Removing softbags (➠ 72).
- Mounting the rear-wheel stand (➠ 121).
- Removing the silencer (➠ 140).
- Remove the license plate.



- Remove cable tie **4**.
- Remove screws **3**.

ATTENTION

Actuation of the front wheel brake or rear wheel brake with removed brake calipers and brake pads (the front wheel brake also actuates the rear wheel brake (integral brake))

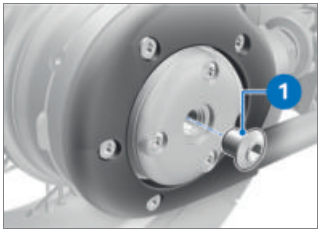
Pushing out the brake piston

- Do not actuate the brakes when the brake caliper is removed.
- Install the brake caliper with brake pads or use a reset tool.

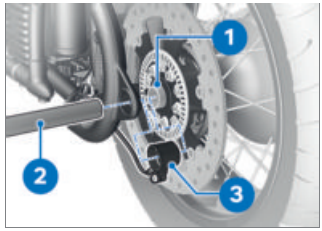
ATTENTION

Using hard or sharp-edged objects near the component
Component damage
- Do not scratch components, if necessary tape off or cover.

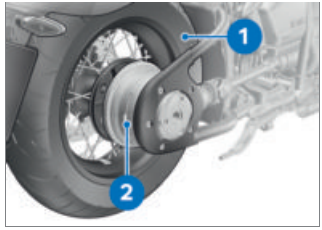
- Mask off areas of the wheel rim that could get scratched in the process of removing the brake calipers.
- Loosen the brake caliper **1** from the brake disc **2** and put aside.



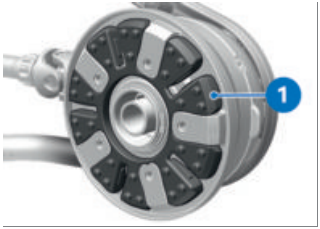
- Remove screw **1**.



- Remove the quick-release axle **2**; let the sensor holder **3** hang on the cable.
- Remove the bushing **1**.



- Support the rear wheel **1** e. g. using a block of wood.
- Pull the rear wheel **1** off the rear-wheel drive **2** and remove it.



- Check the jerk damper rubber **1** and replace it if necessary.

Installing the rear wheel

WARNING

Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC

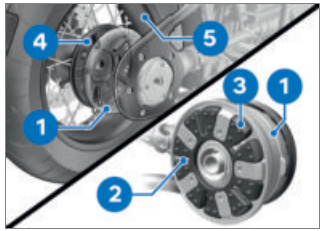
- Please see the information on the effect of wheel sizes on the ABS and ASC chassis control systems at the beginning of this chapter.

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.

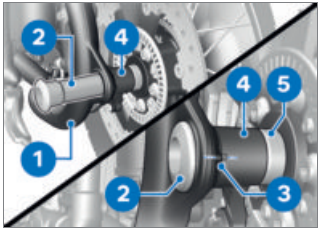


- Lightly lubricate the jerk damper rubber **3**.

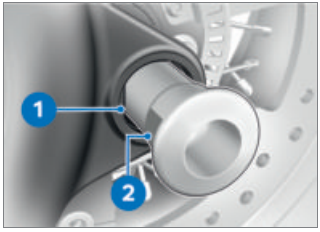
Installation aid
Silicone spray

- Install the rear shock absorber rubber **3** in the rear-wheel drive **1**.
- Attach and support the rear wheel **5**.
- Insert the rear wheel **5** in the rear-wheel drive **1**.

» Engage the cast-metal ribs **4** in the recesses in the shock absorber rubber **2**.

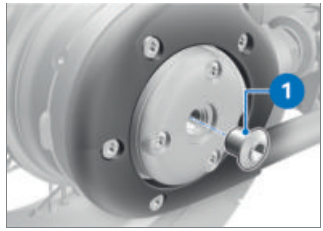


- Install the bushing **5**.
- Attach the sensor holder **4** and quick-release axle **2**.
- Align the identification marks **3** on the sensor holder **4** and rear wheel swinging arm **1** to each other.
- Insert the quick-release axle **2**.



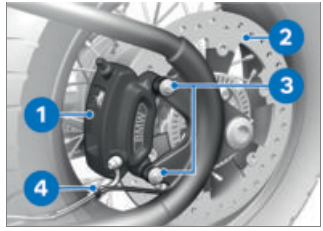
- Align the mating surface on the quick-release axle **2** to the mating surface on the rear frame **1**.

» The quick-release axle can be completely inserted.



- Install screw **1**.

Screw on rear wheel quick-release axle
M20 x 1,5 - 8.8
74 lb/ft (100 Nm)



- Attach the brake caliper **1** to the brake disc **2**.
- Install screws **3**.

Rear brake caliper on rear wheel swinging arm
M10 x 40 - 10.9
41 lb/ft (56 Nm)

- Fasten cable tie **4**.
- Remove the adhesive tape from the 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.
- Attach the license plate.
- Installing the silencer (➠ 140).
- Installing softbags (➠ 73).
- Remove the rear-wheel stand.

MUFFLER

Removing the silencer

CAUTION

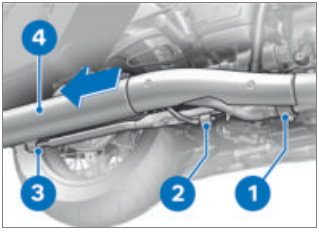
Hot exhaust system

Burn hazard

- Do not touch hot exhaust system.

The work steps described here for the right silencer also logically apply to the left silencer.

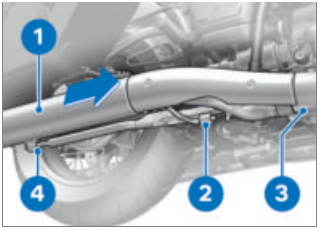
- Allow the silencer to cool down.
- Raise motorcycle, preferably with a rear-wheel stand.
- Mounting the rear-wheel stand (➠ 121).



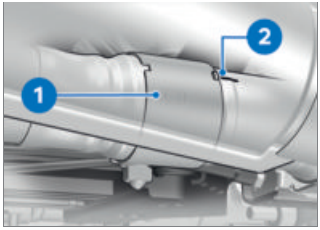
- Loosen clamp **1**.
- Pull the silencer **4** out of bracket **2** and **3** and take off.

Installing the silencer

The work steps described here for the right silencer also logically apply to the left silencer.



- Attach the silencer **1** to bracket **2** and **4**.
- Slide the silencer **1** onto the exhaust manifold **3**.



- Align the clamp with recess **1** to the snap-in lug and the mark **2**.

» Snap-in lug engages in the recess of the clamp.

- Tighten clamp **1**.

	Circlip on the silencer and exhaust manifold
18 lb/ft (24 Nm)	

LIGHT SOURCE

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.

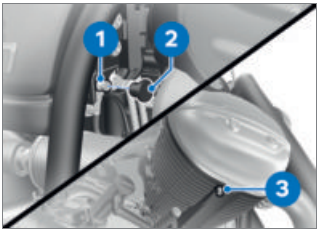
ATTENTION

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.

- Do not disconnect the battery from the electrical system for an external start.
- Park the motorcycle, making sure the ground is level and firm.



- Remove protective cap **2**.
- Begin by connecting one end of the red jumper cable to the jump-start terminal **1** on the discharged battery and the other end to the positive terminal of the donor battery.
- Use the black jumper cable to connect the ground support

point **3** to the negative terminal of the second battery.
- Let the engine of the donor vehicle run during the 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.

To start the engine, do not use start sprays or similar items.

- Allow both engines to idle for a few minutes before disconnecting the jumper cables.
- First, disconnect the jumper cable from the ground support point **3** and then from the jump-start terminal **1**.
- Install the protective cap **2**.

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.
- Observe the notes on charging on the following pages.
- Do not turn the battery upside down.

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 a connected 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.

- Disconnect any devices connected to the onboard power socket.
- Comply with operating instructions of charger.
- Charge the battery connected to the vehicle using the onboard power socket.

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

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.

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

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.

- Charge a disconnected battery directly on the terminals.

Charging a disconnected battery

- Charge battery using a suitable charger.

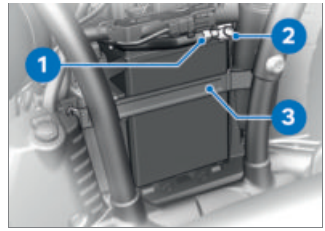
- Comply with operating instructions of charger.
- Once battery is fully charged, disconnect charger's terminal clips from battery terminals.

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

–with anti-theft alarm system (DWA) OE

- Turn off the anti-theft alarm system if necessary.◁
- Turning off the ignition (➠ 44).
- Removing fairing bracket, left (➠ 119).



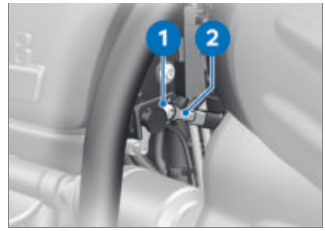
ATTENTION

Incorrect battery disconnection

Danger of short circuit

- Follow the disconnection sequence.

- Remove the negative battery cable **1** with the screw **2**.
- Remove the retaining strap **3**.



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

ATTENTION

Battery makes contact with the silencer during removal/ installation

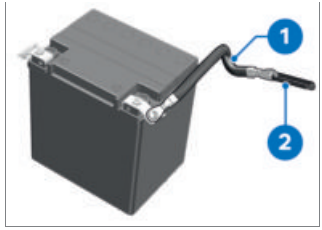
Component damage

- Protect the silencer from being scratched, through a method such as using cardboard.

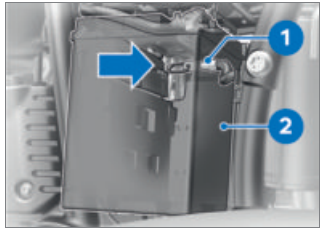
- Pull out the battery **2** completely; when doing so, pay attention to the adapter cable for the positive terminal **1**.

Installing a battery

If the vehicle has been disconnected from the battery for a long time, the current date must be entered in the instrument cluster to make sure the service display is working properly.



- Fasten cable ties **2** as an installation aid on the adapter cable for the positive terminal **1**.



ATTENTION

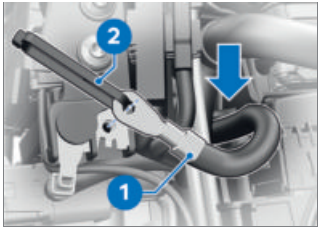
Battery makes contact with the silencer during removal/ installation

Component damage

- Protect the silencer from being scratched, through a method such as using cardboard.

- Slide in the battery **2** with the adapter cable for the positive terminal **1** facing forward.

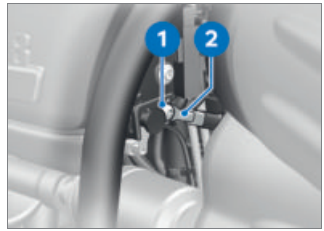
- Route the adapter cable for the positive terminal **1** as closely as possible to the opening **(arrow)**.



- On the right side of the motorcycle, grasp the adapter cable for the positive terminal **1** at the opening **(arrow)** by the cable tie and thread it in.
- Remove cable tie **2**.

- Slide in the battery completely; when doing so, pay attention to the routing of the adapter cable for the positive terminal **1**.

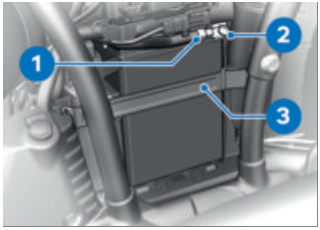
– The adapter cable for the positive terminal **1** must be routed between the battery and battery carrier in the recess **2**.
– Du not crush the adapter cable for the positive terminal **1** between battery and battery carrier.



ATTENTION

Incorrect battery connection
Danger of short circuit
- Follow the installation sequence.

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



- Install the negative battery cable **1** with the screw **2**.
- Install the retaining strap **3**.
- Installing fairing bracket, left (➠ 120).

–with anti-theft alarm system (DWA) OE

- Turn on the anti-theft alarm system if necessary.
- Setting the clock (➠ 54).
- Setting the date (➠ 55).◁

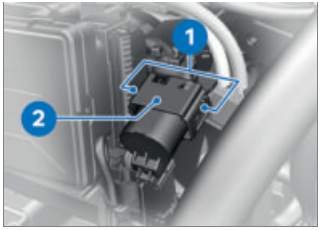
FUSES

Replacing fuses

ATTENTION

Bypassing defective fuses
Risk of short circuit and fire
- Do not bypass defective fuses.
- Replace defective fuses with new fuses.

- Turning off the ignition (➠ 44).
- Park the motorcycle, making sure the ground is level and firm.
- Removing fairing bracket, right (➠ 120).



- Press lock **1** on both sides.
- Pull off the fuse box **2**.

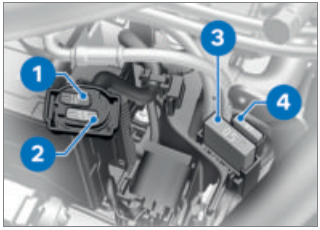
If the fuses blow frequently, have the electrical system checked by an authorized specialized workshop, preferably an authorized BMW Motorrad retailer.

- Replace defective fuse in accordance with following fuse assignment diagram.

» Fuse layout (➠ 149)

- Insert the fuse box **2**. Make sure that the lock **1** engages on both sides.
- Installing fairing bracket, right (➠ 120).

Fuse layout



Fuse 1
10 A (Anti-theft alarm system (DWA), instrument cluster, OBD connector, cut-off relay, ignition switch)
Fuse 2
7.5 A (Sensor box, round instrument, left multifunction switch)
Main fuse
50 A (Main fuse)
Fuse 4
15 A (OA connector fuse block)

DIAGNOSTIC SOCKET

Detaching the diagnostic socket

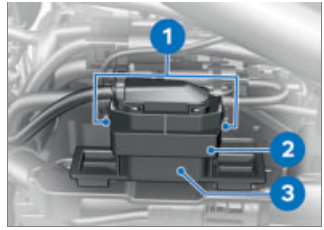
CAUTION

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.

- Removing fairing bracket, left (➠ 119).



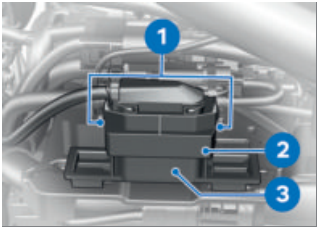
- Press locking mechanisms **1**.

- Detach the diagnostic socket **2** from the holder **3**.

» The interface for the diagnostic and information system can be connected to the diagnostic socket **2**.

Fastening the diagnostic socket

- Disconnect the interface for the diagnostics and information system.



- Insert the diagnostic socket **2** into the holder **3**.

» The locks **1** engage.

- Installing fairing bracket, left (➠ 120).

ACCESSORIES

09

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

Notes on using onboard power sockets:

Automatic shutoff

The onboard power sockets are automatically switched off under the following conditions:

- In order to retain the starting capability of the motorcycle if the battery voltage is too low
- If the maximum load capacity specified in the technical data is exceeded
- During the starting operation

Connecting electrical devices

The ignition must be turned on before electrical devices connected to the onboard power sockets can be put into operation. To relieve the electrical system, the sockets are turned off 60 seconds after the ignition has been switched off.

Cable layout

Observe the following when routing cable from power sockets to additional devices:

– Cables must not impede the rider.
– Cables must not restrict the steering angle and handling characteristics.
– Cables must not become trapped.

LUGGAGE

Securing luggage on motorcycle

WARNING

Reduced riding stability caused by overloading and uneven loading

Accident hazard

- Do not exceed the gross weight limit and observe the loading information.

- Correct loading (➠ 88).
- Stow luggage in original BMW Motorrad accessories, such as side bags.

» Additional information on the luggage systems and their attachment is available from your authorized BMW Motorrad retailer.

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

10

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 MOTORCYCLE 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.

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.

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 immediately; 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.
- Removing the battery (➠ 145).
- Spray the brake lever and clutch lever as well as side stand pivots with a suitable lubricant.
- Preserve bare metal and chrome-plated parts with an acid-free grease (petroleum jelly).
- 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.
- Installing a battery (➠ 146).
- Observe checklist (➠ 90).

TECHNICAL DATA

11

TROUBLESHOOTING CHART

Engine does not start.

Possible cause	Remedy
Side stand is extended and gear is engaged.	Fold in side stand.
Clutch is not pulled.	Pull back the clutch lever in neutral or when a gear is engaged.
Fuel tank is empty.	Fuel quality (➠ 97).
Battery is drained.	Charging a connected battery (➠ 143).
Overheating protection for starter motor has triggered. 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.

THREADED CONNECTIONS

Front wheel	Value	Valid
Brake caliper on telescopic forks		
M10 x 40 - 10.9	41 lb/ft (56 Nm)	
Clamping bolts in subframe		
M8 x 35 - 8.8	**Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time**	
	14 lb/ft (19 Nm)	
Screw on quick-release axle		
M20 x 1,5 - 8.8	37 lb/ft (50 Nm)	

Rear wheel	Value	Valid
Screw on rear wheel quick-release axle		
M20 x 1,5 - 8.8	74 lb/ft (100 Nm)	
Rear brake caliper on rear wheel swinging arm		
M10 x 40 - 10.9	41 lb/ft (56 Nm)	

Exhaust system	Value	Valid
Circlip on the silencer and exhaust manifold		
	18 lb/ft (24 Nm)	

Mirror arm	Value	Valid
Mirror on handlebar fitting		
M8	9 lb/ft (12 Nm)	

Frame	Value	Valid
Screw connection left/right for softbag holder to main frame		
M8 x 25, Replacing the screw micro-encapsulated	14 lb/ft (19 Nm)	
Screw connection bushing for softbag holder to rear frame		
M8 x 45, Renewing the screw micro-encapsulated	14 lb/ft (19 Nm)	
Support for side cover on frame		
M5 x 14 micro-encapsulated	4 lb/ft (5 Nm)	

FUEL	
Recommended fuel quality	Premium unleaded (max. 15% ethanol, E15) 89 AKI (95 ROZ/RON) 90 AKI
Alternative fuel quality	Regular unleaded (max. 15% ethanol, E15) 87 AKI (91 ROZ/RON) 87 AKI
Usable fuel quantity	Approx. 4.2 gal (Approx. 16 l)
Fuel reserve	Approx. 1.1 gal (Approx. 4 l)
Fuel consumption	42 mpg (5.6 l/100 km), In accordance with WMTC
CO2 emissions	129 g/km, In accordance with WMTC
Emission standard	TIER 2, measured in accordance with FTP75

ENGINE OIL	
Engine oil, capacity	Approx. 1.1 gal (Approx. 4.0 l), with filter replacement
Engine oil specification	SAE 15W-50, API SJ / JASO MA2, BMW Motorrad recommends BMW Motorrad ADVANTEC Pro.
Engine oil refilling quantity	max 0.5 quarts (max 0.5 l), Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

ENGINE	
Engine number location	Lower left part of crankcase
Engine type	A70B18A
Engine design	Air-/oil-cooled two-cylinder four-stroke opposed-twin engine with two chain-drive camshafts above the crankshaft
Displacement	1802 cc (1802 cm^3)
Cylinder bore	4.2 in (107.1 mm)
Piston stroke	3.9 in (100 mm)
Compression ratio	9.6:1
Nominal capacity	90 hp (67 kW), At RPM: 4750 min^{-1}
Torque	117 lb/ft (158 Nm), At RPM: 3000 min^{-1}
Maximum engine speed	max 5750 min^{-1}
Idle speed	$950^{\pm 50}$ min^{-1}, Engine at operating temperature

CLUTCH	
Clutch design	Single-plate dry clutch

TRANSMISSION	
Transmission design	Claw-shift 6-speed transmission in separate transmission housing
Transmission oil	FUCHS Titan EG 4218 SAE 70W-80

Transmission gear ratios	1,160, Primary gear ratio 2,438 (39:16), 1st gear 1,696 (39:23), 2nd gear 1,296 (35:27), 3rd gear 1,065 (33:31), 4th gear 0,903 (28:31), 5th gear 0,784 (29:37), 6th gear 3.091, Transmission output ratio

REAR-WHEEL DRIVE	
Type of final drive	Cardan shaft drive with bevel gears
Rear axle differential oil	FUCHS Titan EG 4218 SAE 70W-80

FRAME	
Frame design	Double loop steel frame with screwed-on joists
Location of type plate	Steering head frame, middle
Location of the vehicle identification number	Front frame, below steering head

CHASSIS	
Front wheel	
Type of front suspension	Telescopic forks
Spring travel, front	4.7 in (120 mm), on front wheel

Rear wheel	
Type of rear-wheel guide	Steel double armed swinging arm
Design of rear-wheel suspension	Directly linked spring strut with adjustable spring preload
Spring travel on the rear wheel	3.5 in (90 mm), on rear wheel
Basic setting of spring preload, rear	Rotate hexagon head counterclockwise as far as it will go, then 8 rotations clockwise, filled up with fuel, with driver weighing approx. 100 kg Rotate hexagon head counterclockwise as far as it will go, then 12 rotations clockwise, One-up with vehicle load approx. 120 kg Rotate hexagon head counterclockwise as far as it will go, then 24 rotations clockwise, Two-up mode with vehicle load approx. 180 kg

BRAKES

Front wheel	
Type of front wheel brake	Two-rotor disk brake, diameter 300 mm, 4-piston fixed caliper
Front brake pad material	Sintered metal
Front brake disc thickness	0.2 in (5 mm), New min 0.18 in (min 4.5 mm), Wear limit

Rear wheel	
Type of rear wheel brake	Single disc brake, diameter 300 mm, 4-piston fixed caliper
Rear brake pad material	Sintered metal
Rear brake disc thickness	0.28 in (7 mm), New min 0.26 in (min 6.5 mm), Wear limit

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	H, minimum requirement: 130 mph (210 km/h)
Front wheel	
Front wheel design	Spoked wheel
Front-wheel rim size	3.00" x 16"
Front tire designation	130/90 B16
Load index for front tire	At least 54
Permitted front wheel imbalance	max 0.2 oz (max 5 g)
Rear wheel	
Rear wheel design	Spoked wheel
Rear-wheel rim size	5.0" x 16"
Rear tire designation	180/65 B16
Load index for rear tire	At least 73
Permissible rear-wheel imbalance	max 1.6 oz (max 45 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), One-up mode, with cold tires 42.1 psi (2.9 bar), Two-up mode with load, with cold tires

ELECTRICAL SYSTEM

Fuses	
Fuse 1	10 A, Anti-theft alarm system (DWA), instrument cluster, OBD connector, cut-off relay, ignition switch
Fuse 2	7.5 A, Sensor box, round instrument, left multifunction switch
Main fuse	50 A, Main fuse
Fuse 4	15 A, OA connector fuse block
Electrical rating of onboard socket	5 A
Battery	
Battery design	Absorbent Glass Mat
Battery voltage	12 V
Battery capacity	26 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK MAR8AI-10DS
Light sources	
All light sources	LED

ANTI-THEFT ALARM SYSTEM	
Activation time	Approx. 30 s
Alarm duration	Approx. 26 s
Battery type (For Keyless Ride radio-operated key)	CR 2032

DIMENSIONS	
Motorcycle length	96.1 in (2440 mm), over license-plate carrier
Motorcycle height	52.8 in (1342 mm), over windshield, at DIN unloaded vehicle weight
Motorcycle width	38 in (964 mm), with mirrors
Front-seat height	28 in (710 mm), measured without driver, at DIN unloaded vehicle weight
–with rider's seat, low[OE]	27.2 in (690 mm), measured without driver, at DIN unloaded vehicle weight
Rider's inside-leg arc, heel to heel	65.2 in (1655 mm), measured without driver, at DIN unloaded vehicle weight
–with rider's seat, low[OE]	64.2 in (1630 mm), measured without driver, at DIN unloaded vehicle weight

WEIGHTS	
Unloaded vehicle weight	805 lbs (365 kg), DIN unloaded vehicle weight, ready for road, 90 % full tank of gas, without OE
Gross vehicle weight	1235 lbs (560 kg)
Maximum payload	430 lbs (195 kg)
Payload per Softbag	max 17 lbs (max 7.5 kg)

PERFORMANCE DATA	
Maximum speed	112 mph (180 km/h)

SERVICE

12

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 authorized BMW Motorrad retailer at our website: **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 SERVICE HISTORY

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 electronic Service History (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 electronic Service History 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 History.

Objection

At the BMW Motorrad retailer or specialist workshop, the vehicle owner can object to the entry of data in the electronic Service History 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 History.

BMW MOTORRAD MOBILITY SERVICES

As the owner of a new BMW motorcycle, you can benefit from the protection afforded by the various BMW Motorrad mobility services in the event of a breakdown (e.g., BMW Roadside Assistance, breakdown service, vehicle recovery service).

Contact your authorized BMW Motorrad retailer for additional information on available mobility services.

MAINTENANCE WORK

BMW pre-delivery check

The BMW pre-delivery check is carried out by your authorized BMW Motorrad retailer before it turns the motorcycle over to you.

BMW break-in service

The BMW break-in service must be performed when the motorcycle has been driven between 300 mi and 750 mi (500 km and 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 mileage ridden. 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	X	X	X	X		
5		X	X	X	X	X	X	X	X	X	X		
6			X		X		X		X		X		
7			X		X		X		X		X		X[b]
8					X				X			X[c]	X[c]
9												X[d]	X[d]

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 Replace the air filter insert

5 Check valve clearance

6 Replace all spark plugs

7 Oil change in the bevel gears

8 Change transmission oil

9 Change brake fluid in the entire system

[a] Annually or every 6000 mi (10000 km) (whichever comes first)

[b] Every 2 years or every 12000 mi (20000 km) (whichever comes first)

[c] For the first time after one year, then every two years or 24000 mi (40000 km) (whichever comes first)

[d] 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.

- Performing the vehicle test using the BMW Motorrad diagnostic system
- Set the service date and remaining distance 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 tire pressure and tread depth
- Check the tension of the spokes and tighten as needed
- Checking the lighting and signal system
- Charging the battery
- Functional check for engine starting suppression
- Final inspection and road safety check
- Confirming the BMW Motorrad 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
- Checking steering-head bearing
- 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
- Draining the oil condensate hose
- Checking the tire pressure and tread depth
- Check side stand for ease of movement
- Check the tension of the spokes and tighten as needed
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Checking charging state of battery
- Final inspection and road safety check
- Set the service date and remaining distance using the BMW Motorrad diagnostic system
- Confirming the BMW Motorrad 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	☐	☐
Replacing air filter insert	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

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	☐	☐
Replacing air filter insert	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

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	☐	☐
Replacing air filter insert	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
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BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
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Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
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	Yes	No
BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
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Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

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BMW Motorrad Service	☐	☐
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Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
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Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

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	Yes	No
BMW Motorrad Service	☐	☐
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Replacing all spark plugs	☐	☐
Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

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	☐	☐
Replacing air filter insert	☐	☐
Checking valve clearance	☐	☐
Replacing all spark plugs	☐	☐
Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

Stamp, signature

BMW Motorrad Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

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BMW Motorrad Service	☐	☐
Oil change in engine with filter	☐	☐
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Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

Notes

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performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
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Oil change in bevel gears	☐	☐
Changing gear oil	☐	☐
Changing front brake fluid	☐	☐
Changing brake fluid, rear	☐	☐

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

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

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

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 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:

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Taiwan
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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
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Thailand

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:

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United States (USA)
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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:

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Thailand

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.

Original Rider's Manual, printed in Germany.

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) 89 AKI (95 ROZ/RON) 90 AKI
Alternative fuel quality	Regular unleaded (max. 15% ethanol, E15) 87 AKI (91 ROZ/RON) 87 AKI
Usable fuel quantity	Approx. 4.2 gal (Approx. 16 l)
Fuel reserve	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), One-up mode, with cold tires 42.1 psi (2.9 bar), Two-up mode with load, with cold tires

You can find further information on all aspects of your vehicle at:
bmw-motorrad.com

Order No.: 01 40 5 A66 701
03-2022, 5th edition, 07