



**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.

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4 GENERAL INSTRUCTIONS

OVERVIEW

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 motorcycle, this information has been provided in chapter 2. All maintenance and repair procedures carried out on your vehicle will be documented in the Service chapter. 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.

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

- Instruction.
- » Result of an activity.
-  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 motorcycle, you chose various items of custom equipment. These operating instructions describe optional equipment (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment which you have not ordered. Please note, too, that your motorcycle might not be exactly as illustrated in this manual on account of country-specific differences.

If your motorcycle features equipment that is not described here, you can find these features described in a separate manual.

TECHNICAL DATA

All dimensions, weights and performance data contained in these operating instructions 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 these operating instructions 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 specialist workshop. The information on the vehicle documents always takes precedence over the information in these operating instructions.

TIMELINESS OF THE STATUS OF THIS MANUAL

The high safety and quality level of BMW motorcycles are ensured by consistent, ongoing development efforts embracing their design, equipment and accessories. For this reason, some aspects of your motorcycle may vary from the descriptions in these operating instructions. 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

BMW Motorrad retailer

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

Internet

The Operating Instructions for your motorcycle, 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](https://www.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](https://www.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 driver assistance systems. Control units also make comfort and information 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 driver 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.

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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.

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 socket for onboard diagnosis (OBD).

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. Providing this data within the scope required is on a case-by-case basis, for instance to clarify a criminal offense. Government agencies are authorized by the law applicable in this context to read out the data from the vehicle themselves in individual cases.

Operating data in the vehicle

Control units process data so that the vehicle can run.

Examples of this include:

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

The data is processed only in the vehicle itself and is usually temporary. The data is not stored beyond the period in which the vehicle is operating.

Electronic components such as control units contain components for storing technical information. This may be information about the vehicle's condition, component load, events or faults stored temporarily or permanently.

This information generally documents the condition of a component, module, system or the surrounding area; for example:

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

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

The majority of this data is temporary and is processed only within the vehicle itself.

Only a small amount of event-driven data is stored in the event data recorder and fault memory.

When a vehicle is serviced, such as for repairs, servicing processes, warranty cases and quality assurance measures, this technical information can be read out from the vehicle together with the vehicle identification number.

The information can be read out by a BMW Motorrad retailer or other qualified service partner or specialist workshop.

The vehicle's legally mandated socket for onboard diagnosis (OBD) is used to read out the data.

The data is collected, processed and used by the respective retailer network locations. The data documents the vehicle's technical states and helps with fault finding, compliance with warranty obligations and quality improvements.

The manufacturer also has product monitoring obligations arising from product liability law. The vehicle manufacturer requires technical data from the vehicle in order to fulfill these obligations. The data from the vehicle can also be used to verify customer warranty and guarantee claims.

The fault memory and event data recorder in the vehicle can be reset by a BMW Motorrad retailer or other qualified service partner or

specialist workshop as part of a repair or servicing.

Data input and data transfer in the vehicle

General information

Depending on the equipment, comfort settings and individualized settings in the vehicle can be saved and changed or reset at any time.

Examples of this include:

- Windshield position settings
- Chassis and suspension adjustment settings

It is possible to introduce data into the vehicle entertainment and communication system via a smartphone, for instance.

Depending on the individual equipment, this includes:

- Multimedia data, such as music for playback
- Address book data for use in conjunction with a communication system or integrated navigation system
- Entered navigation 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.

Integrating 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 data, depending on the type of integration, 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 operating instructions or on 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 data protection and usage conditions 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

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can be obtained from the particular service provider.

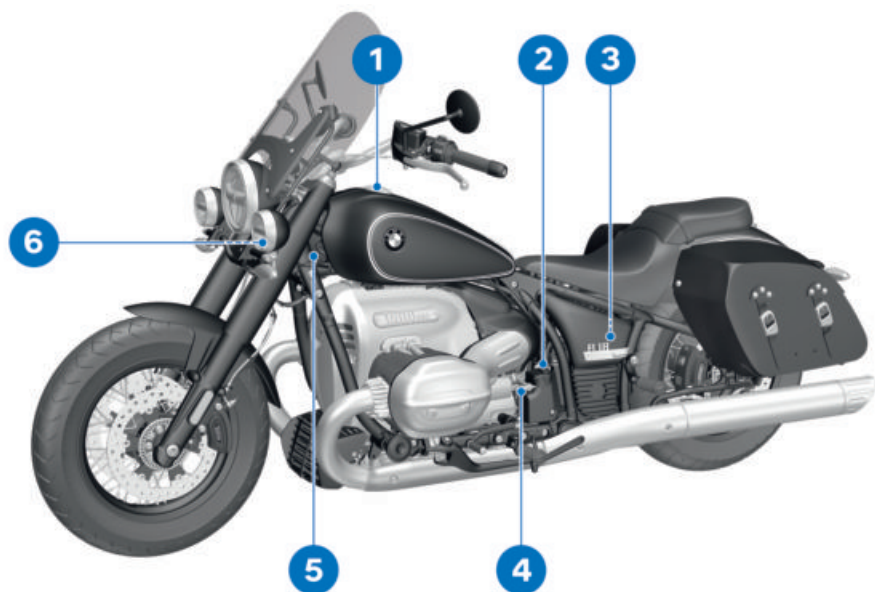
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OVERALL VIEW, LEFT SIDE



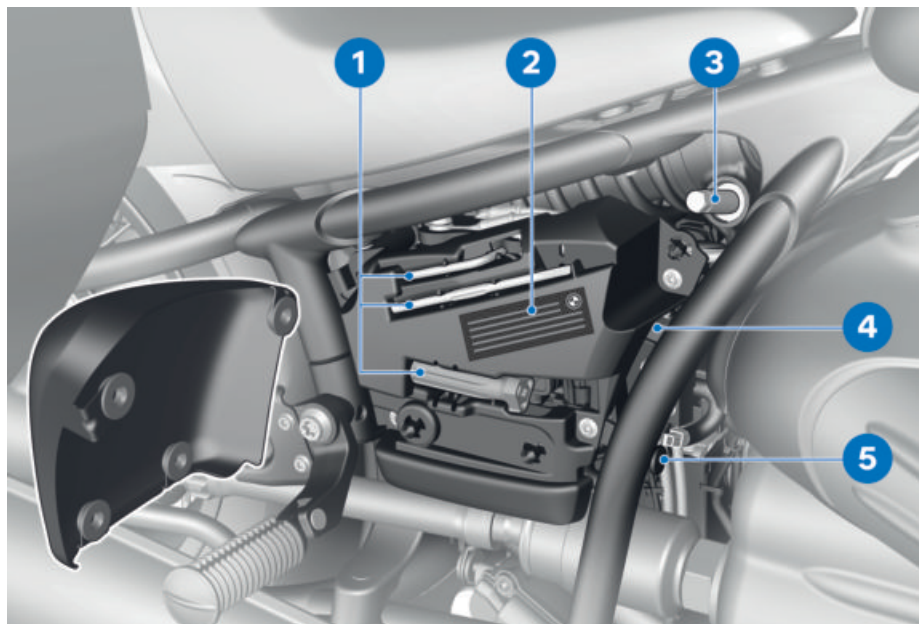
- 1 Fuel filler opening (►► 70)
- 2 Onboard power sockets (►► 110)
- 3 Loosening the diagnostic socket (behind fairing bracket) (►► 106)
- 4 Reverser (►► 50)
- 5 Tire pressure table
- 6 Type plate (on the left steering head)

OVERALL VIEW, RIGHT


- 1 Brake fluid reservoir for front wheel
brake (➡ 90)
- 2 Steering lock (➡ 32)
- 3 Vehicle identification number
- 4 Engine oil indicator (➡ 86)
- 5 Ground support point (➡ 100)
- 6 Oil filler opening (under the cylinder
head cover) (➡ 87)
- 7 Brake fluid reservoir for rear wheel
brake (➡ 91)

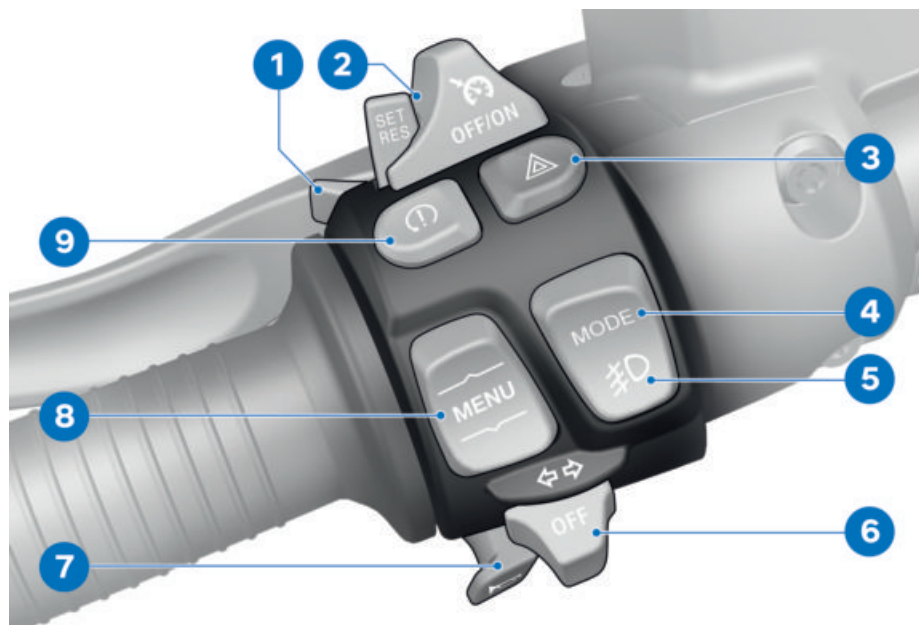
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BEHIND THE RIGHT SIDE TRIM PANEL



- 1 Onboard vehicle tool kit (➡ 84)
- 2 Payload table
- 3 Adjusting the spring preload at the rear wheel (➡ 60)
- 4 Replacing fuses (➡ 105)
- 5 Jump-start terminal (➡ 100)

MULTIFUNCTION SWITCH, LEFT



- 1 High-beam headlight and headlight flasher (➡ 36)
- 2 Cruise control (➡ 47)
- 3 Hazard warning lights (➡ 37)
- 4 Riding mode (➡ 46)
- 5 Auxiliary headlight (➡ 36)
- 6 Turn signals (➡ 37)
- 7 Horn
- 8 Rocker button MENU (➡ 38)
- 9 ASC (➡ 46)

MULTIFUNCTION SWITCH, RIGHT



- 1 Heated grips (⟳ 50)
- 2 Ignition (⟳ 33)
- 3 Emergency-off switch (⟳ 35)
- 4 Starter button (⟳ 65)
– with reverser^{OE}
Reverser (⟳ 50)

INSTRUMENT CLUSTER



- 1 Speedometer
- 2 Indicator and warning lights (► 20)
- 3 Photosensor (for adjusting brightness of instrument lighting)
Indicator light
DWA (► 44)
Keyless Ride (► 32)
- 4 Multifunction display (► 21)

DISPLAYS

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INDICATOR AND WARNING LIGHTS



- 1 ABS (►►► 27)
- 2 Auxiliary headlight (►►► 36)
- 3 High-beam headlight (►►► 36)
- 4 Neutral indicator light
- 5 Cruise control (►►► 47)
- 6 ASC (►►► 27)
- 7 Turn signals (►►► 37)
- 8 General warning light
Display in combination with warning
symbols in the multifunction display
(►►► 22)

MULTIFUNCTION DISPLAY



- 1 Value
- 2 Riding mode (→ 46)
- 3 Unit
- Onboard computer (→ 38)
- 4 Gear indicator
- Status
- Warning symbol
- Shown in conjunction with general warning light (→ 22)

22 DISPLAYS

INDICATOR LIGHTS

Layout

Warnings are displayed by means of the corresponding warning lights.

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 flashes depending on the urgency of the warning.



Confirming warnings

Warnings must be confirmed by pressing button **1**.

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 **2** to view the respective next warning **4**.

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
 lights up.	 is displayed.	Electronic immobilizer is active (▮▮▮ 25)
 lights up.	 is displayed.	Radio-operated key outside reception range (▮▮▮ 25)
 lights up.	 is displayed.	Replacing the battery of the radio-operated key (▮▮▮ 25)
 blinks.	 is displayed.	Engine temperature too high (▮▮▮ 25)
 lights up.	 is displayed.	Engine in emergency operation mode (▮▮▮ 25)
 blinks.	 is displayed.	Engine warning (▮▮▮ 26)
 lights up.	 is displayed.	Vehicle voltage too low (▮▮▮ 26)
 lights up.	 is displayed.	Vehicle voltage critical (▮▮▮ 26)
 lights up.	 is displayed.	Light source defective (▮▮▮ 26)
 blinks.		ABS self-diagnosis not completed (▮▮▮ 27)
 lights up.		ABS error (▮▮▮ 27)
 flashes rapidly.		ASC intervention (▮▮▮ 27)
 blinks.		ASC self-diagnosis not completed (▮▮▮ 27)
 lights up.		ASC switched off (▮▮▮ 27)
 lights up.		ASC error (▮▮▮ 27)
	 is displayed.	Anti-theft alarm battery discharged (▮▮▮ 28)
 lights up.	 is displayed in combination with odometer KM R or MI R.	Fuel has reached reserve volume (▮▮▮ 28)

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DISPLAYS

Indicator and warning lights	Display text	Meaning
	 is displayed.	Hill Start Control active (▮▮▮ 28)
 lights up.	 blinks.	Hill Start Control automatically deactivated (▮▮▮ 28)
	 blinks.	Hill Start Control cannot be activated (▮▮▮ 29)
	 is displayed.	Service due (▮▮▮ 29)
 lights up.	 is displayed.	Service overdue (▮▮▮ 29)

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 (► 34).
- Use the spare key for further travel.
- The battery of the radio-operated key is dead or the radio-operated key is lost (► 33).
- 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 (► 34).

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 (► 77).

- 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.

- Switching on the ASC (► 46).

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 (► 78).
- 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}



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.

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 (► 70).

Hill Start Control active



is displayed.

Possible cause:

The Hill Start Control (► 80) 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 symbol 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

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STEERING LOCK

Locking the steering lock

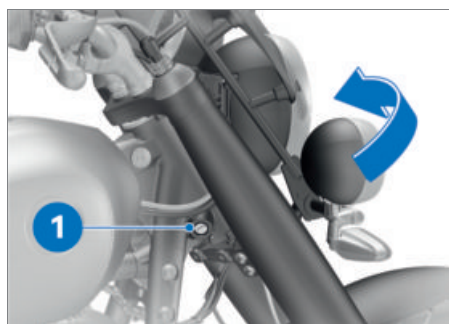


WARNING

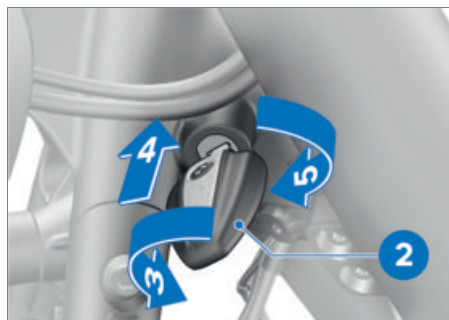
Reduced steering angle due to locked steering column

Accident hazard

- Unlock the steering lock before every journey.
- Remove the ignition key from the steering lock before every journey.

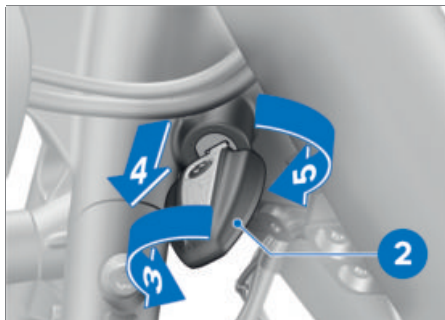


- Turn the handlebars to the left and insert the ignition key in the steering lock 1.



- 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 information regarding the electronic immobilizer (EWS) (34).

The ignition and 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)

Switching on ignition

Requirement

The radio-operated key is within reception range.



- Press button **1**.
- » Parking lights and all function circuits are switched on.
- » Engine can be started.
- » Pre-Ride-Check is carried out. (► 66)
- » ABS self-diagnosis is performed. (► 66)
- » ASC self-diagnosis in progress. (► 67)

Switching off ignition

Requirement

The radio-operated key is within reception range.



- Press button **1**.
- » Lights and all electrical circuits are switched off.

The battery of the radio-operated key is dead or the radio-operated key is lost



- If you lose your keys, refer to the notes regarding the electronic immobilizer (EWS).
- Should you lose the radio-operated key while riding, the motorcycle can be started by using the spare key.
- If the battery in the radio-operated key is drained, the vehicle can be started by simply dipping the folded-in radio-operated key into the ring antenna under the seat.
- Removing the rider's seat (► 51).
- 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 rider's seat (► 51).
- Starting the engine (► 65).

34 OPERATION

Replacing the battery of the radio-operated key

Requirement

The key fob transmitter does not react because the battery is weak.



is displayed.



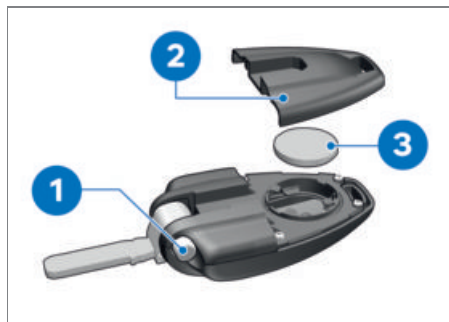
DANGER

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.

- Replace 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 upwards.



Battery type

For Keyless Ride radio-operated key

CR 2032

- Install battery cover **2**.
 - » Red LED in instrument cluster flashes.
 - » 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 switched off easily and quickly using the emergency-off switch.



A Engine is switched off

B Operating position



The engine can only be started in the operating position.

LIGHTING

Low-beam headlight

- Switching on ignition (➡ 33).
- Starting the engine (➡ 65).



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

» Low beam is turned on.

Parking lights

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



The parking lights are a strain on the battery. Do not leave the ignition switched on longer than absolutely necessary.

36 OPERATION

High beams and headlight flasher

- Switching on ignition (➡ 33).



- Press switch 1 forwards to switch on high beams.
- Pull switch 1 toward rear to actuate headlight flasher.

Headlight courtesy delay feature

- Switching off ignition (➡ 33).



- Immediately after turning off the ignition, pull switch 1 back and hold until the headlight courtesy delay feature turns on.
 - » The vehicle lights light up for one minute and then turns off automatically.
- This can be used after parking the vehicle in order to illuminate the path to your front door, for instance.

Roadside parking lights

- Switching off ignition (➡ 33).



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

Auxiliary headlight Requirement

The low beams must be switched 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 (➡ 65).



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

Hazard warning lights

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

- Switching on ignition ( 33).



- Press button **1** to switch on the hazard warning lights.
- » Ignition can be switched off.
- To switch off the hazard warning flasher, switch on the ignition and press button **1** again.

Turn signals

- Switching on ignition ( 33).



- Press button **1** to the left to switch on the left-side turn signals.
- Press button **1** to the right to switch on the right-side turn signals.
- Press button **1** to switch off the turn signal.

Comfort turn indicators



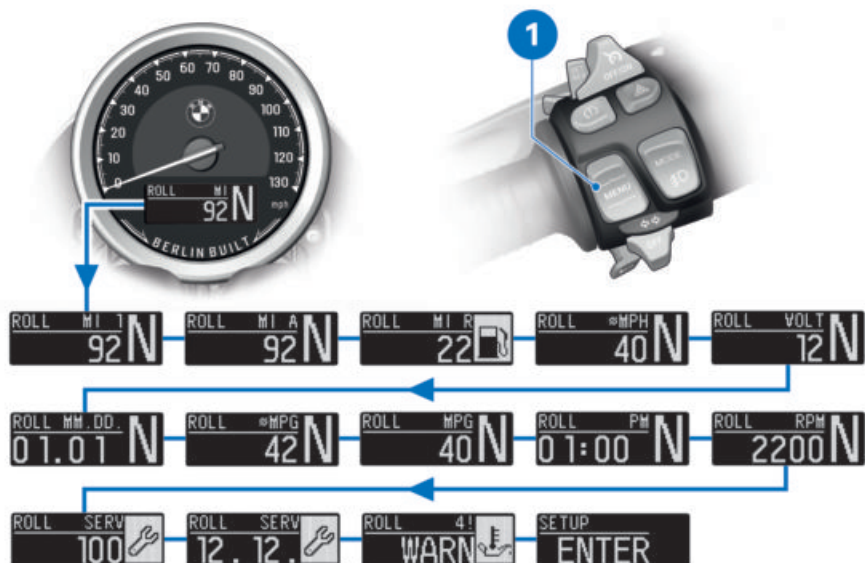
When button **1** is pressed to the right or left, the turn indicators automatically turn off under the following conditions:

- Speed is under 18 mph (30 km/h): after distance covered of 165 ft (50 m).
- Speed is between 18 mph and 60 mph (30 km/h and 100 km/h): after covering a particular distance traveled, depending on the speed, or when accelerating.
- Speed is above 60 mph (100 km/h): after turn indicator flashes five times.

When button **1** is pressed and held slightly longer to the right or left, the turn indicators will only turn off automatically after covering the distance traveled, depending on speed.

MULTIFUNCTION DISPLAY

Selecting the display



Requirement

The vehicle is stationary.

- Switching on ignition (➡ 33).
- » The onboard 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 when at least 6 hours pass after switching off the ignition and the date has changed.
- Distance covered after reaching the reserve volume: MI R can only be selected for the reserve volume.
- Average speed: MPH
- Vehicle voltage: VOLT
- Date: MM . DD .
- Average fuel consumption: MPG
- Current fuel consumption: MPG, during vehicle standstill: G/H

- Clock: AM/PM
- Rotational speed: RPM
- Remaining distance covered until service: SERV can only be selected if service is due within 600 mi (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 only selectable if there are warnings that are active.
- Call up the settings menu: SETUP ENTER
- Configuring displays (➡ 43).

Resetting the trip meter

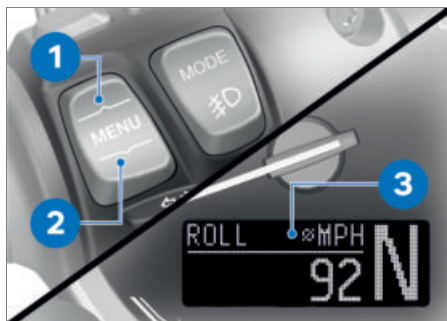
- Switching on ignition (III 33).



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

Resetting average values

- Switching on ignition (III 33).



- 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

Selecting SETUP

Requirement

The vehicle is at a standstill.



- Briefly press button **1** repeatedly until **SETUP ENTER** is displayed.
- Press and hold button **2** to start **SETUP**.
- Briefly press button **1** in each case to select the following parameters in **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**.

Exiting SETUP

Requirement

There are four ways to exit **SETUP**.



- Press and hold button **1**.
 - » **SETUP ENTER** is displayed.
 - » Settings have been saved.
- Alternative method: briefly press button **1** repeatedly until **SETUP EXIT** is displayed.
- Press and hold button **2**.
 - » **SETUP ENTER** is displayed.
 - » Settings have been saved.
- Alternative method: turn the ignition off and on again.
 - » **SETUP** ends without saving the settings.
- Alternative method: riding off.



Speed for using **SETUP**

max 6 mph (max 10 km/h)

- » When the permissible speed for operation is exceeded, **SETUP** ends without saving the settings.
- » **MI** is displayed.

SETUP reset

- Turn on the ignition.
- Selecting **SETUP** (➡ 40).



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

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

- » **SETUP EXIT** is displayed.
- Exiting **SETUP** (➡ 40).

Setting the clock



WARNING

Adjusting the clock while riding Accident hazard

- Adjust the clock only when the motorcycle is stationary.

- Switching on ignition (➡ 33).



- Repeatedly short-press button **1** 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 hours **3** flash.
- Briefly press button **1** to increment hours.
- Briefly press button **2** to decrement hours.
- » The hours are set.
- Press and hold button **2** until minutes **4** flash.
- Briefly press button **1** to increment minutes.
- Briefly press button **2** to decrement minutes.
- » The minutes are set.
- Press and hold button **2** until minutes no longer flash.
- » The clock is set.
- Press and hold button **1** to exit **SET CLOCK**.
- » **SETUP ENTER** is displayed.

Setting the date

- Switching on ignition (➡ 33).



- Repeatedly short-press button **1** until **SETUP ENTER** is displayed.

42 OPERATION

- Press and hold button **2** to open **SETUP**.
- Repeatedly short-press button **1** until **SET DATE** is displayed.



- Press and hold button **2** until month **3** flashes.
- Briefly press button **1** to increment month.
- Briefly press button **2** to decrement month.
- » The month is set.
- Press and hold button **2** until day **4** flashes.
- 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 year no longer flashes.
- » 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 at a standstill.

- Switching on ignition (➡ 33).
- Selecting **SETUP** (➡ 40).



- Briefly press button **1** repeatedly until **SET BRIGHT 3** is displayed.
- Press button **2** repeatedly until the desired backlighting brightness is set.
- Exiting **SETUP** (➡ 40).

Setting units Requirement

The vehicle is stationary.

- Switching on ignition (➡ 33).
- Selecting **SETUP** (➡ 40).



- Briefly press button **1** repeatedly until **SET UNIT ENTER** is displayed.
- Press and hold button **2** to activate **SET UNIT**.

- Briefly press button **1** in each case to select the parameters in SET UNIT:
 - Change fuel consumption display indicator to L/100, MPG or KM/L
 - Change the time display to 24H or 12H
 - Change date format to DMY or MDY



- Briefly press button **2** until each desired unit **3** is set.
- 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 RESET display **3** flashes.
 - » The units have been reset to the factory setting.
 - » The SET UNIT EXIT display is shown.
- Press and hold button **2** to exit SET UNIT.
 - » SETUP RESET is displayed.

Configuring displays

Requirement

The vehicle is stationary.

- Switching on ignition (➡ 33).
- Selecting SETUP (➡ 40).



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



- Press button **2** to deactivate the display OFF or to activate the display ON.
- Press button **1** to select the display **3**.
 - » The following displays can be deactivated:
 - Trip distance
 - Automatic trip distance
 - Average speed
 - Vehicle voltage
 - Date
 - Average consumption
 - Current consumption
 - Clock
 - Rotational speed (RPM)

44 OPERATION

- If you want to complete the configuration, press button **1** repeatedly until SET DISPLAY EXIT is displayed.
- 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 RE-SET display **3** flashes.
- » Displays have been reset to the factory setting.
- » The SET DISPLAY EXIT display 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

- Switching on ignition (➡ 33).
- Setting the DWA (➡ 45).
- Switch off the ignition.
- » If the DWA is activated, the DWA will automatically be activated after the ignition is switched off.
- » Activation takes approximately 30 seconds to complete.
- Turn signals are illuminated twice.
- » DWA is armed.



- Switch off the ignition.
- Press button **1** on the radio-operated key twice.
- » Activation takes approximately 30 seconds to complete.
- » Turn signals are illuminated twice.
- » The anti-theft alarm system is active.



- To deactivate the movement sensor (for example if you are about to transport the motorcycle on a train and the swaying movement of the moving train could trip the alarm signal), press button **1** on the radio-operated key during the activation phase.
- » Turn indicators are illuminated three times.
- » Movement sensor is deactivated.

Alarm signal

The DWA alarm signal can be triggered by:

- Motion sensor
- Switching 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, hazard warning lights do not flash).

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, an alarm tone sounds and the turn indicators flash. The type of alarm tone can be set by a BMW Motorrad retailer.



A triggered alarm signal can be canceled at any time by pressing the button 1 of the radio-operated key without deactivating the DWA.

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

Light signals on indicator light:

- 1 flash: Motion sensor 1
- 2 flashes: Motion sensor 2
- 3 flashes: Ignition switched on with unauthorized ignition key
- 4 flashes: DWA disconnected from motorcycle battery

- 5 flashes: Motion sensor 3

Deactivating the DWA

- Switching on ignition (➡ 33).



- Briefly press button 1.
 - » Turn indicators are illuminated once.
 - » DWA is switched off.

Setting the DWA

- Switching on ignition (➡ 33).
- Selecting SETUP (➡ 40).



- Briefly press button 1 repeatedly -until SET DWA is displayed.
- Briefly press button 2 to change the adjusted value.

The following settings are available:

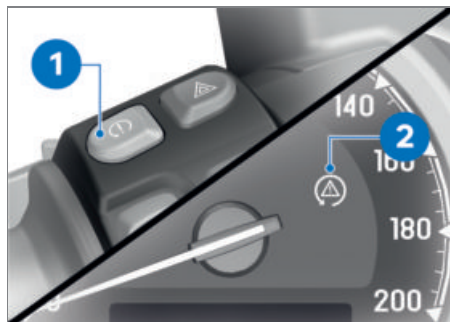
- DWA ON: DWA is activated or is activated automatically when the ignition is switched off.
- DWA OFF: DWA is deactivated.
- Press and hold button 1 to exit SET DWA.
 - » SETUP ENTER is displayed.

AUTOMATIC STABILITY CONTROL (ASC)

Switch off the ASC

- Switching on ignition (➡ 33).

 The ASC function can also be deactivated while riding.

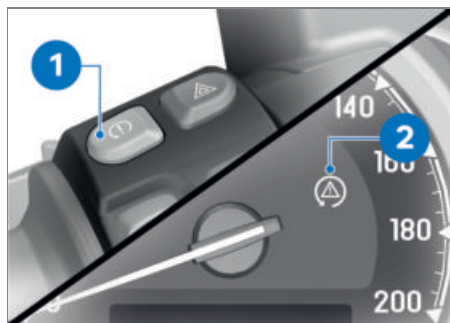


- Press and hold button **1** until the ASC indicator and warning light **2** changes its display behavior.

 starts to light up.

» ASC is switched off.

Switching 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 switched on.

- As an alternative, the ignition can also be switched 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 (➡ 78).

Select riding mode

- Switching on ignition (➡ 33).



- Press button **1**.

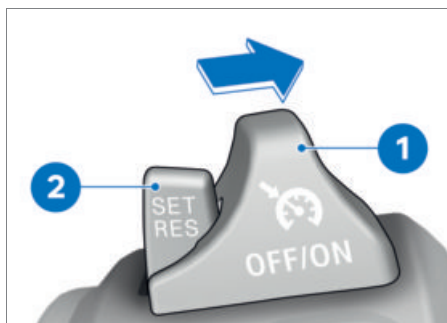
» The current riding mode **2** is displayed.



- Press button **1** repeatedly until the desired riding mode **2** is displayed.
- » When at a vehicle 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:
 - Throttle grip is at idle position.
 - 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 switched off.

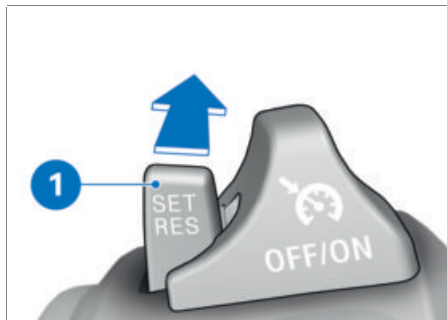
CRUISE CONTROL

Switching on the cruise control



- Slide switch **1** to the right.
- » Button **2** is unlocked.

Storing speed



- Briefly press button **1** forwards.



Adjustment range of the cruise control (gear-dependent)

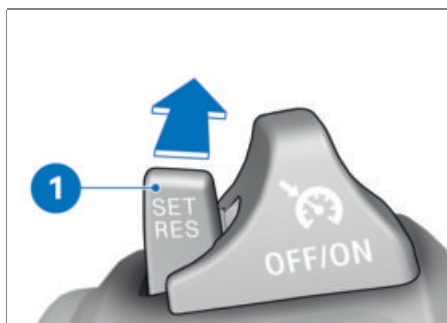
12...112 mph (20...180 km/h)



lights up.

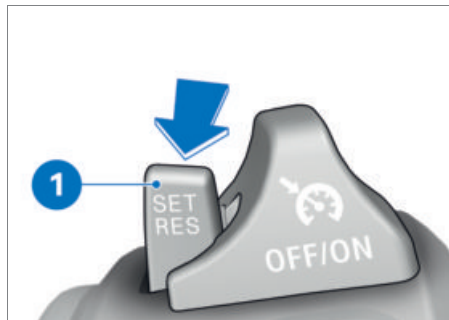
- » The motorcycle maintains your current cruising speed and the setting is saved.

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.

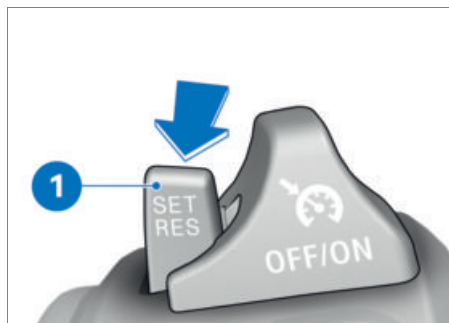
Deactivating the cruise control

- 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

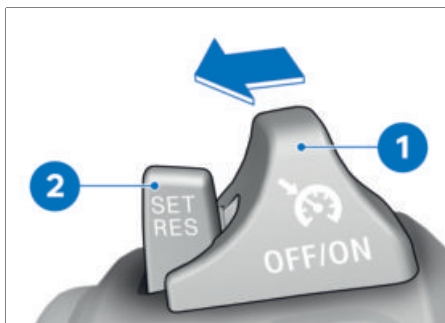


- Briefly push button **1** back to return to the speed saved beforehand.

 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.

Switching off the cruise control

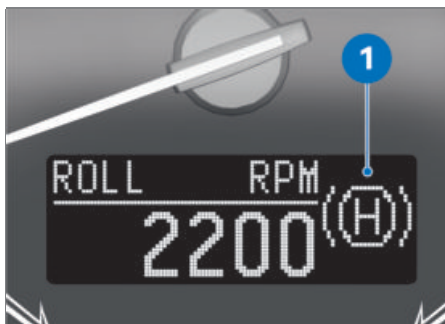


- Push switch **1** to the left.
 - » The system is switched off.
 - » Button **2** is locked.

HILL START CONTROL

– with Hill Start Control^{OE}

Display



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

Switch Hill Start Control on and off

- Switching on ignition (➡ 33).
- Selecting SETUP (➡ 40).



- Briefly press button **1** repeatedly until SET HSC is displayed.
 - Briefly press button **2** to change the adjusted value.
- The following settings are available:
- HSC ON: Hill Start Control has been activated.
 - HSC OFF: Hill Start Control is deactivated.
 - Press and hold button **1** to exit SET HSC.
 - » SETUP ENTER is displayed.

Operating Hill Start Control

Requirement

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



ATTENTION

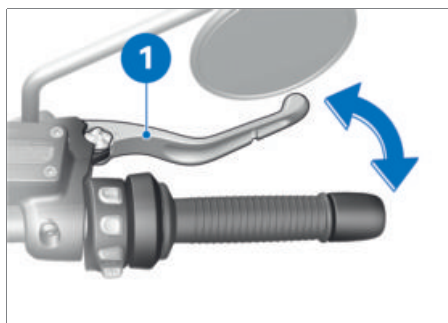
Failure of the drive-off assistant

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 switch off the Hill Start Control, actuate the handbrake 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 Chapter "Technology in detail" (➡ 80).

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 idle position.
- Side stand is retracted.
- Clutch is not pulled.

50 OPERATION

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 steep gradients.



Gradient for reverser

max 20 %

Activating reverser



- Turn the selector level **1** to the R position.
 - » Gear indicator **2** switches from "N" to "R".
 - » The reverser can be used as soon as the display "R" stops flashing.

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 flash in the display if reversing is canceled.

Deactivating reverser



- Turn the selector level **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 level **1** to the F position.
 - » Gear indicator **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 (➡ 65).



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

The following settings are available:



Heating off



Low heater output



Medium heater output

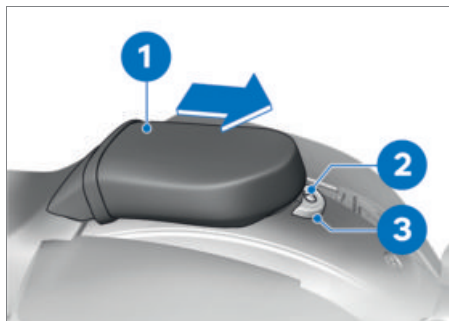


High heater output

- » 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 passenger seat

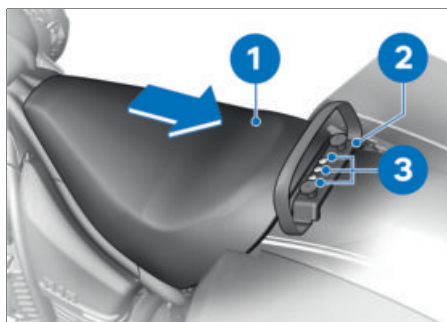


- Park motorcycle. Ensure that the ground is firm and level.

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

Removing the rider's seat

- Removing passenger seat (➡ 51).



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

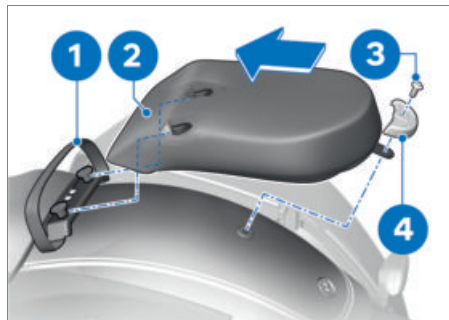
Installing rider's seat



- Insert rider's seat **1** in the mount **4**.
- Position the rider's seat **1** in the rear area and install the retaining bracket **3** using screws **2**.
- Installing the passenger seat (➡ 52).

52 OPERATION

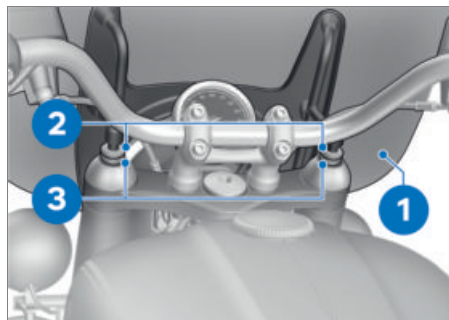
Installing the passenger seat



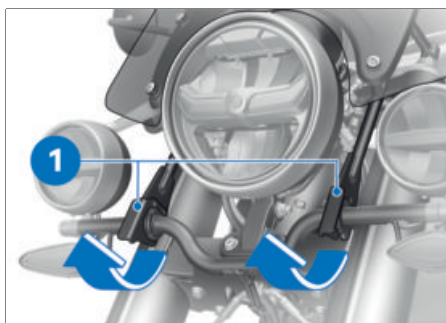
- Insert the passenger seat **2** in the retaining bracket **1**.
- Position the passenger seat **2** in the rear area and install the holder **4** using the screw **3**.

WINDSHIELD

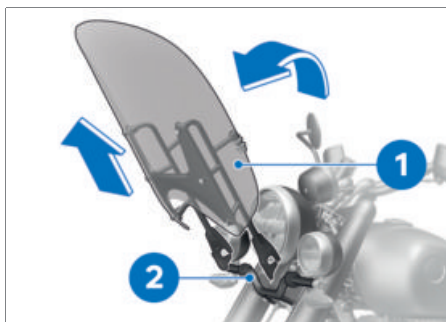
Windscreen removal



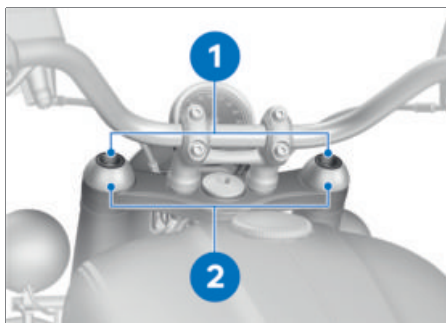
- Turn the knurled nut **2** on the left and right counterclockwise as far as it will go.
- Turn the conical nut **3** on the left and right counterclockwise as far as it will go.
- » Windscreen **1** sits loosely.



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

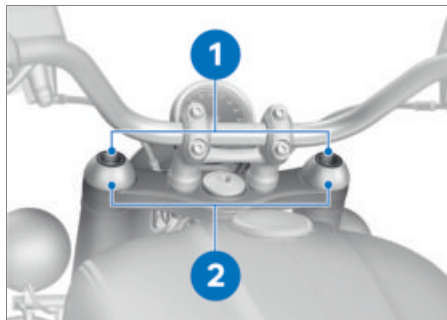


- Fold the windscreen **1** forwards and pull it out of the retaining bracket **2**.



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

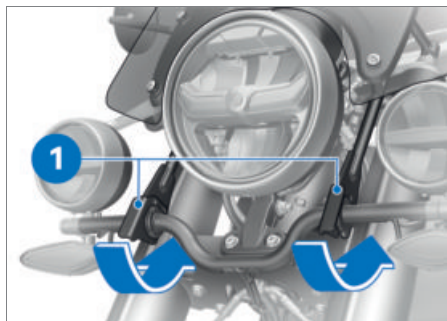
Attaching the windscreen



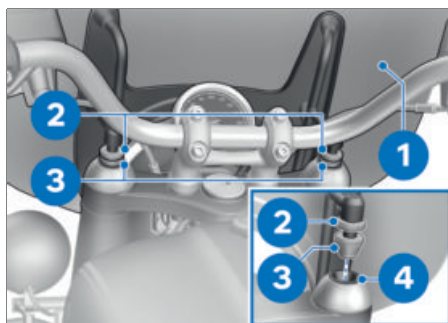
- Insert the insert sleeves **1** in the spring forks **2**.



- Insert the windscreen **1** with the retaining clip **3** into the retaining bracket **2**.
- Tilt the windscreen **1** backwards.



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



- Position the windscreen **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 windscreen **1**.

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

- Keep turning the conical nut **3** on the left and right clockwise.
 - » Windscreen **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.
 - » Windscreen is completely attached.

SOFTBAGS

Maximum load capacity

Observe maximum load capacity.



Payload per Softbag

max 17 lbs (max 7.5 kg)

Removing softbags



WARNING

Improperly removed softbags

Risk of accident due to component damage

- It is mandatory to remove the retainer after taking off the softbags.

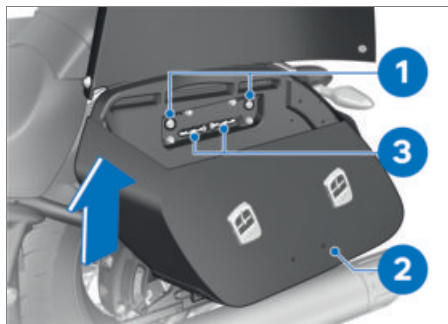


The Softbags are screwed to the rear frame using 4 connectors each. The connectors must be reused for the screw

54 OPERATION

connection of the rear wheel cover with the rear frame.

- Park the motorcycle, making sure that the ground is firm and level.
- Observe the notes on microencapsulated screws in the Chapter "Preventive maintenance" (► 84).



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

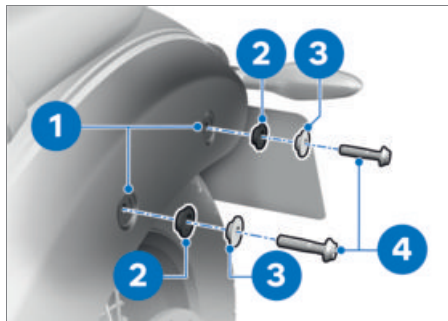


WARNING

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 bushes **3** and **2** in the rear frame **1**.

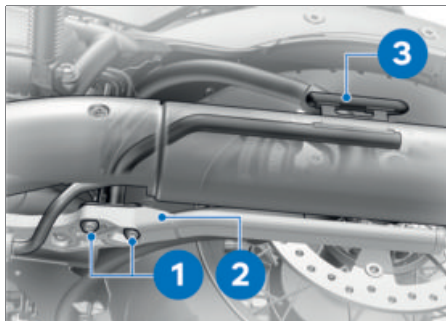


Screw connection left/right for softbag holder to main frame

M8 x 25

Thread-locking compound: micro-encapsulated

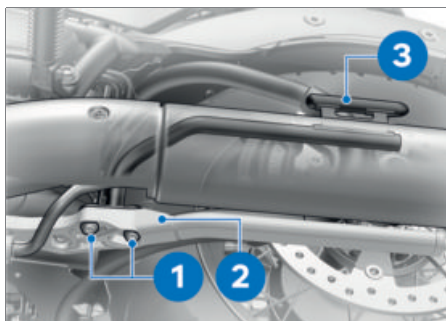
14 lb/ft (19 Nm)



- Remove screws **1**.
- Remove the retainer **3** from the main frame **2**.

Installing softbags

- Park the motorcycle, making sure that the ground is firm and level.
- Observe the notes on microencapsulated screws in the Chapter "Preventive maintenance" (► 84).



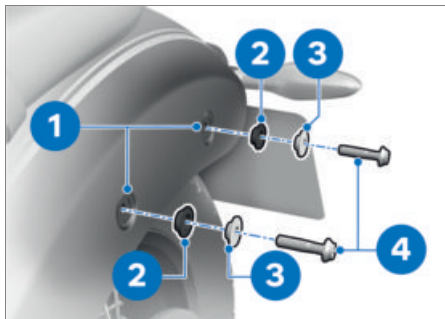
- Clean the contact surface of the retainer on the main frame **2**.
- Position the retainer **3**.
- Install screws **1**.

 Screw connection left/right for softbag holder to main frame

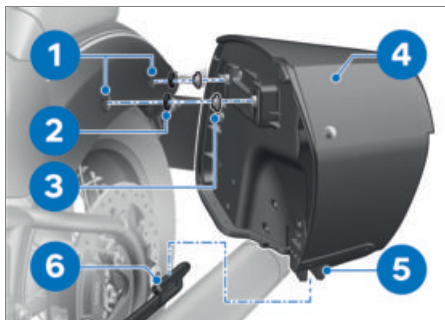
M8 x 25

Thread-locking compound: micro-encapsulated

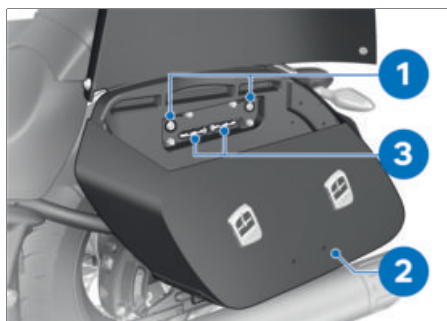
14 lb/ft (19 Nm)



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



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



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

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

 Screwing the softbag to the rear frame

Thread-locking compound: micro-encapsulated

14 lb/ft (19 Nm)

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

SETTING

05

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MIRRORS

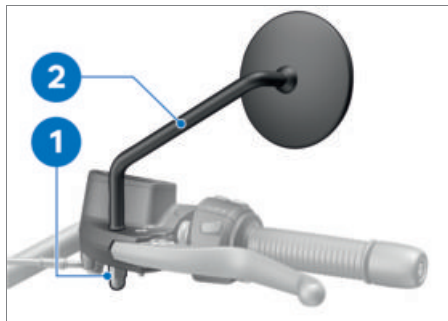
Adjusting mirrors



- Move mirrors into desired position by rotating.

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

Adjusting 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

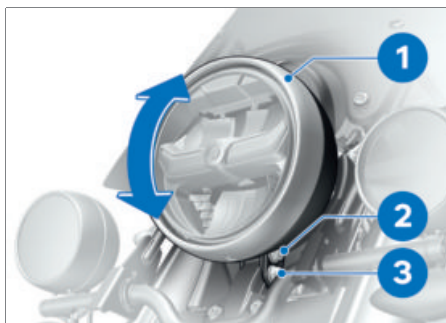
Headlight beam throw and spring preload

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.

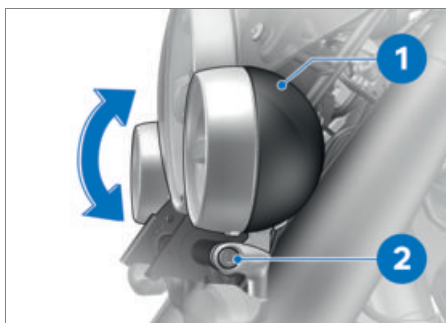
 If there are doubts as to the correct headlight range, have the adjustment checked by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

Headlight beam throw adjust

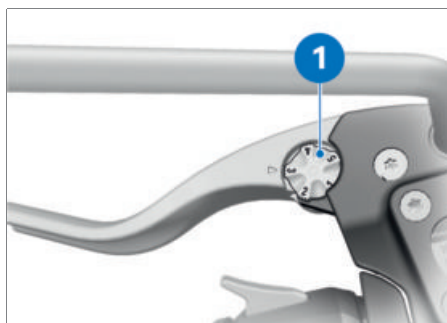


When the spring preload adjustment is no longer able to maintain the correct beam height to avoid dazzling oncoming traffic owing to high vehicle payloads:

- 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 default setting readjusted by a specialist workshop, preferably an authorized BMW Motorrad retailer.



- 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: Smallest distance between handlebar grip and clutch lever
- To position 5: Largest distance between handlebar grip and clutch lever

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.

BRAKE

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.

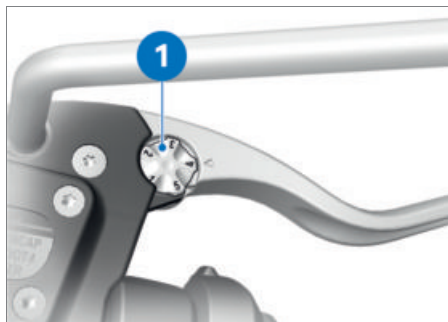


WARNING

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: Smallest distance between handlebar grip and brake lever
- To position 5: Greatest distance between handlebar grip and brake lever

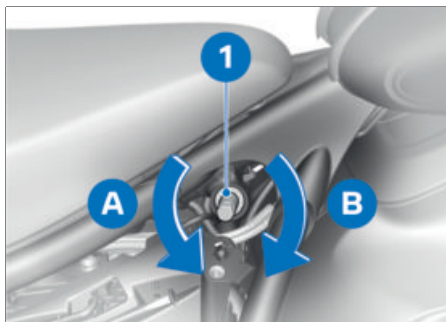
SPRING PRELOAD

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 spring preload at the rear wheel

- Removing side trim panel ( 84).



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. 220 lbs (100 kg))

Rotate hexagon head counterclockwise as far as it will go, then 12 rotations clockwise. (One-up with vehicle load approx. 264 lbs (120 kg))

Rotate hexagon head counterclockwise as far as it will go, then 24 rotations clockwise. (Two-up mode with vehicle load approx. 396 lbs (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 ( 85).

RIDING

06

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SECURING MOTORCYCLE FOR TRANSPORTATION	71

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 (► 60).

Always before riding off

- Unlock steering lock (► 32).
- Check operation of the brake system (► 88).
- Check operation of the lighting and signal system.
- Check the clutch function (► 92).
- Check tire tread depth (► 92).
- Check tire pressure (► 92).
- Check that luggage is securely held in place.

At every third refueling stop

- Check engine oil level (► 86).
- Check the front brake pad thickness (► 89).
- Check the rear brake pad thickness (► 89).
- Check the front brake fluid level (► 90).
- Check the rear brake fluid level (► 91).

STARTING

Starting the engine

- Switching on ignition (► 33).
- » Pre-Ride-Check is carried out. (► 66)
- » ABS self-diagnosis is performed. (► 66)
- » ASC self-diagnosis in progress. (► 67)
- 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. (→ 120)

Pre-Ride-Check

After the ignition is switched 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 routine is completed will cancel the remainder of the routine.

Phase 1



All indicator and warning lights 2 are switched 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 on-board computer is displayed in the display 1.

If the needle did not move, an indicator and warning light was not switched 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. 620 mi (1000 km))

- Observe engine run-in speed.

	Engine run-in speed
max 4000 min ⁻¹ (Odometer reading max. 620 mi (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.

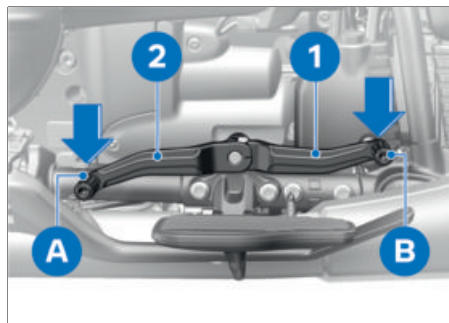
SHIFTING WITH SHIFT PADDLE

– with running board^{OE}

Operating the shift paddle

When using running boards, the gearshift lever cannot be operated by lifting up by foot.

Upshifting is accomplished by 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 grade

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 (91) (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.



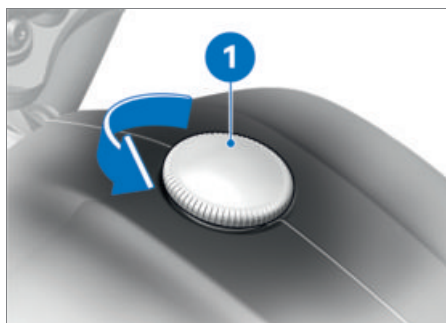
ATTENTION

Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

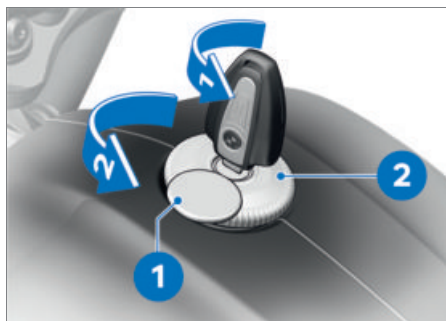
- Immediately clean plastic surfaces after contact with fuel.

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

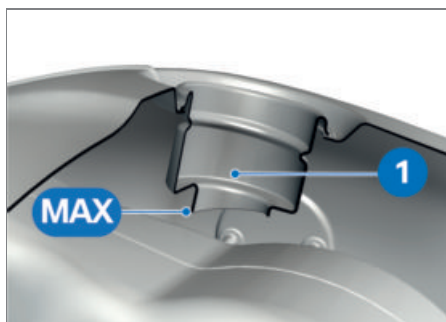


- Turn the fuel tank sealing cap **1** counter-clockwise and take it off.

– 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** counter-clockwise and take it off.◁



- Refuel with a fuel meeting the listed specifications, continuing until fuel is no higher than lower edge of 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 where tensioning straps are routed from being scratched. For example, use adhesive strips 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 motorcycle onto transport surface, and do not place on side stand.
- Secure the motorcycle from tipping with support from a second person.

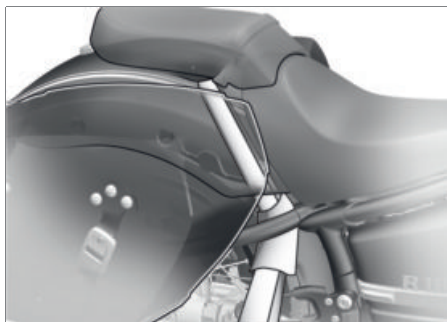


ATTENTION

Pinching of components

Component damage

- Do not pinch components, e.g. brake lines or wiring harnesses.
- Guide the tensioning strap over the steering head and tension it down.



- First, guide the tensioning straps on the left and right through the rear wheel swinging arm.
- Guide the tensioning straps on the left and right upwards between the rear wheel cover and the rear frame.
- Place the tensioning straps on the left and right around the rear frame and guide them down through the rear wheel swinging arm.
- Tighten all tensioning straps evenly.
- » The vehicle is pulled down against its springs with the suspension compressed strongly.

TECHNOLOGY IN DETAIL

07

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GENERAL NOTES

More information on the topic of technology is available at:

bmw-motorrad.com/technology

GENERAL DRIVE FUNCTIONS**Shifting 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 shifting 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 gearshift is reduced, and the shifting comfort for the rider is increased. The shifting speed control is active in the RAIN and ROLL riding modes.

Maximum RPM limit at a standstill

To prevent the motorcycle 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.

ANTI-LOCK 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 counter-pressure 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 characteristics of the BMW Motorrad ABS?

The BMW Motorrad ABS ensures riding stability on any surface within the limits of riding physics.

From a speed greater than 2.5 mph (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 lean angles increase, acceleration capability is also progressively restricted by the laws of physics. This can result in delayed acceleration when exiting very tight turns.

The system compares the rotation speeds of the front and rear wheels to detect any tendency for the rear wheel to spin or lose traction. If the system registers implausible data for an extended period of time it will switch off the ASC functionality as safety precaution and a display will alert you to an ASC error. A self-diagnosis routine must be completed before the fault memory entry will be displayed.

In the following unusual riding conditions, the BMW Motorrad ASC may possibly switch 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)
- Heating up on auxiliary stand at idle speed or with 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, maintaining the reduction until the front wheel makes contact with the ground again.

BMW Motorrad recommends that you respond to this condition by twisting back the throttle grip somewhat to return to stable dynamic operating 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.

DYNAMIC ENGINE BRAKE 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, set-point 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 6.2 mph (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-up of the throttle grip. This ensures the action 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 the emergency braking is stopped and the throttle grip is still under actuation, the Dynamic Brake Control reduces the engine torque as required by the rider in a controlled manner.

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 HEADLIGHTS

- 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

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GENERAL NOTES

The 'Maintenance' chapter describes work involving the checking and replacement of wear parts that can be performed with a minimum of effort.

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!

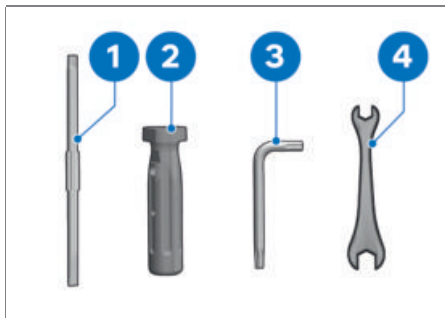
Additional information

If special 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".

Information on additional preventive maintenance and repair procedures is provided in the repair manuals for your motorcycle on DVD, which you can obtain from your authorized BMW Motorrad retailer.

Special tools and thorough specialized knowledge are required to carry out some of the work described here. If you are in doubt, consult a specialist workshop, preferably your authorized BMW Motorrad retailer.

ONBOARD VEHICLE TOOL KIT



- 1 Reversible screwdriver insert
Slotted blade and T25 torx
– Replacing fuses (➡ 105).
- 2 Screwdriver handle
– Topping up the engine oil (➡ 87).
– Using with screwdriver insert
- 3 Torx wrench T30
– Topping up the engine oil (➡ 87).
– Removing the rider's seat (➡ 51).
– Removing passenger seat (➡ 51).
- 4 Open-ended wrench
Key range: 10/13 mm
– Adjusting spring preload at the rear wheel (➡ 60).
– Adjusting mirror arm (➡ 58).

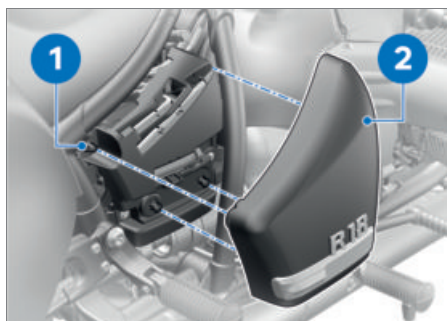
SIDE PANELS

Removing side trim panel

- Park motorcycle. Ensure that the ground is firm and level.



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 motorcycle. Ensure that the ground is firm and level.



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

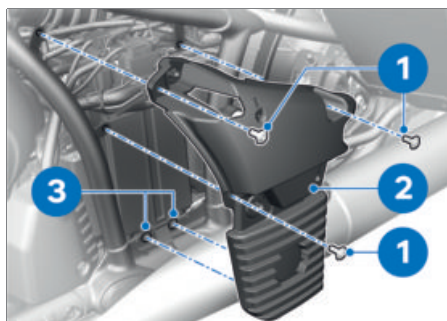


- Insert the side trim panel **2** in the holding pins **1**.

FAIRING BRACKET

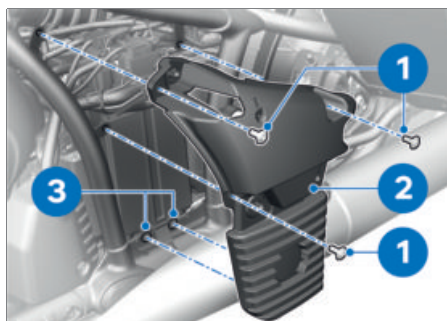
Removing fairing bracket, left

- Removing side trim panel (➡ 84).



- Remove screws **1** from the left fairing support **2**.
- Loosen the left-side fairing support **2** from grommets **3** and remove.

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

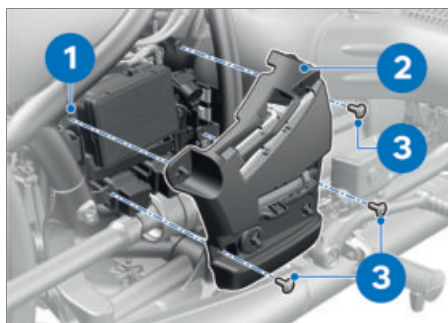
Thread-locking compound: micro-encapsulated

4 lb/ft (5 Nm)

- Installing side trim panel (➡ 85).

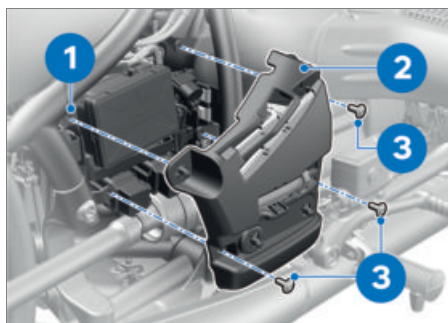
Removing fairing bracket, right

- Removing side trim panel (➡ 84).



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

Installing fairing bracket, right



- Insert 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 (➔ 85).

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 (➔ 86).
- 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

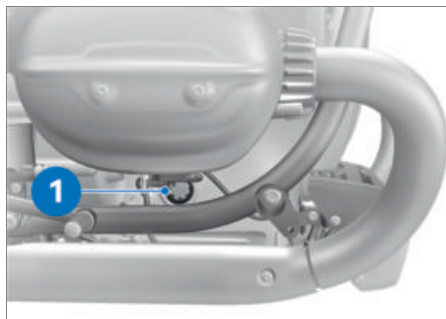
Misinterpretation of the oil filling quantity, as the oil level is temperature-dependent (the higher the temperature, the higher the oil level)

Engine damage

- Only check the oil level after a longer journey or when the engine is warm.

- Switch off engine at operating temperature.

- Hold the vehicle upright, making sure that the ground is firm and level.
- Wait five minutes to allow oil to drain into the oil pan.



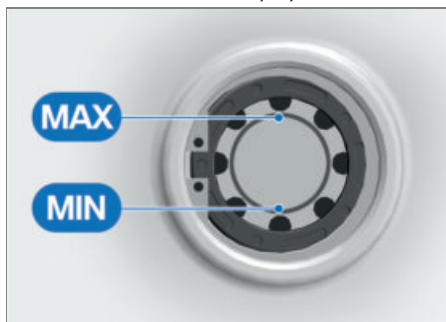
ATTENTION

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 (➡ 87).

If the oil level is above the **MAX** mark:

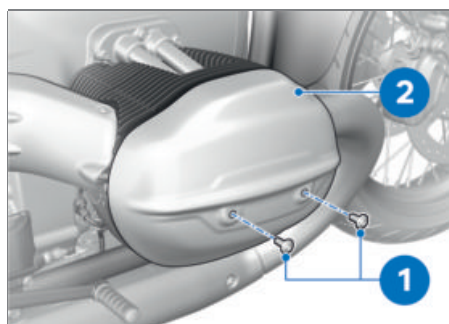
- Have the oil level corrected at a specialist workshop, preferably an authorized BMW Motorrad retailer.



BMW Motorrad recommends occasionally checking the motor oil after a journey of at least 31 mi (50 km) in order to reduce the environmental impact.

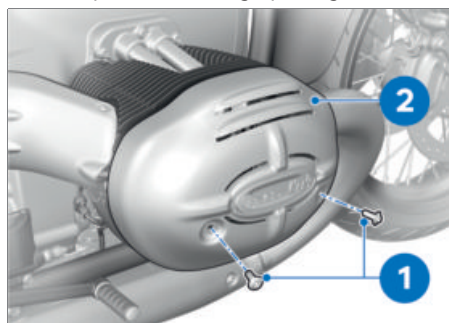
Topping up the engine oil

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

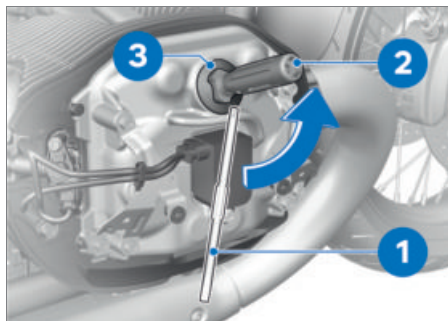


- Remove screws 1 using the onboard vehicle tool kit and take off the cover 2.

– 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

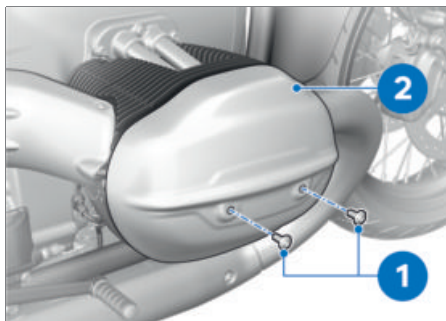
- Always make sure that the oil level is correct.
- Slowly and gradually fill the engine oil to the target level.



Engine oil refilling quantity

max 0.5 quarts (max 0.5 l) (Difference between **MIN** and **MAX**)

- Checking the engine oil level (► 86).
- Install the cap **3**.



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

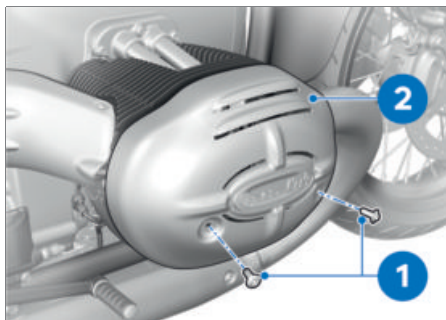


Cylinder head cover on cylinder head

M6

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

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:

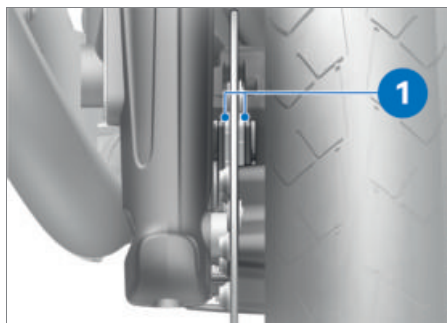


ATTENTION

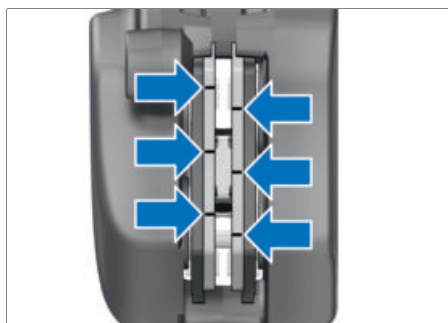
Improper working on the brake system

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 motorcycle. Ensure that the ground is firm and level.



- 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

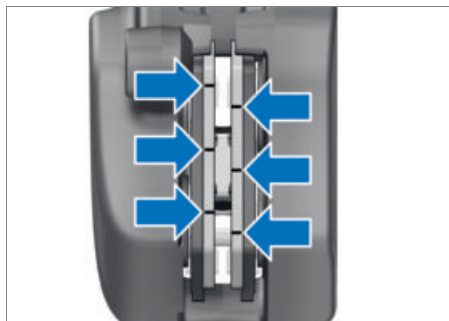
- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.
- Have brake pads renewed at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking rear brake pad thickness

- Park motorcycle. Ensure that the ground is firm and level.



- Conduct a visual inspection of 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.

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



- Align 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 quickly as possible by a specialist workshop, preferably an authorized BMW Motorrad retailer.

Checking the rear brake fluid level

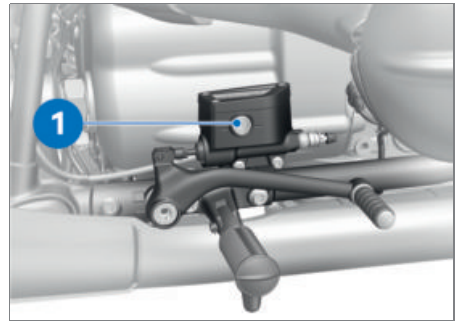
WARNING

Insufficient or contaminated brake fluid in the brake fluid reservoir

Considerably reduced braking power caused by air, dirt or water in the brake system

- Stop riding immediately until fault is rectified.
- Check brake fluid level regularly.
- Make sure that the lid of the brake fluid reservoir is cleaned before opening.
- Make sure that brake fluid is used from a sealed container only.

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



- Read out 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 quickly 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

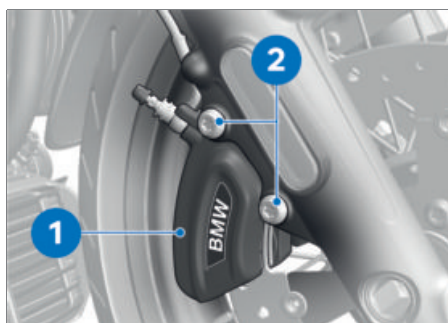
- Place the motorcycle on an auxiliary stand.
- Mounting the rear-wheel stand (→ 86).



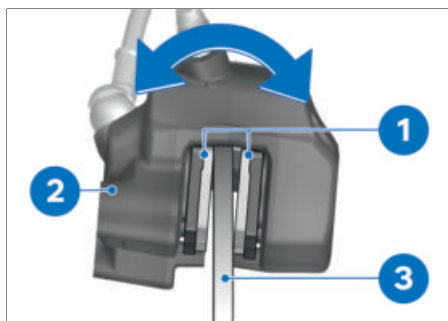
- Slacken clamping bolts on the left **1** and right **2**.
- Raise front of motorcycle until the front wheel can turn freely.
- Attaching front wheel stand (→ 86).



- 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

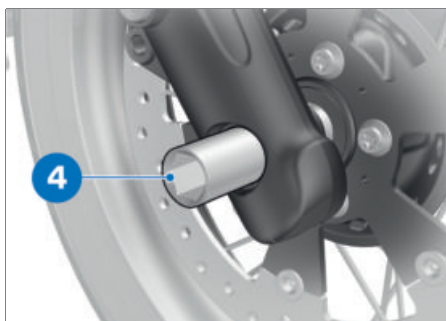
Using hard or sharp-edged objects near the component

Component damage

- Do not scratch components, if necessary tape off or cover.
- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.
- Carefully pull the brake calipers back and outward to remove them from 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 the screw **1**.



- Pull out the quick-release axle **4** 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 **5** 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 tire tread on the spacer bush **5**.



Lubricant

Optimoly TA

- Insert the spacer bushing **5** in the wheel hub on the left side with the seat facing outwards.



ATTENTION

Front wheel installation opposite the running direction

Accident hazard

- Observe running direction arrows on tire or rim.



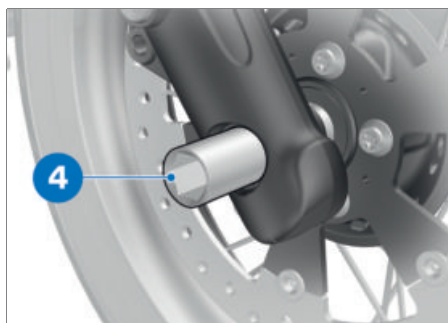
ATTENTION

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 **4**.



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**.

96

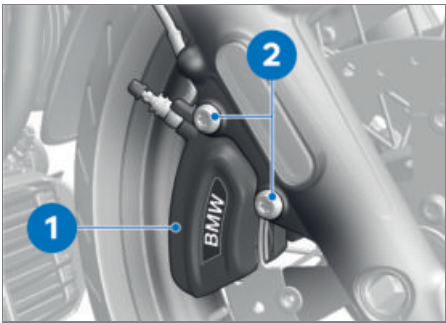
MAINTENANCE

- Remove front wheel stand and firmly compress front forks. Do not actuate hand-brake lever at the same time.
- Attaching front wheel stand (🔧 86).



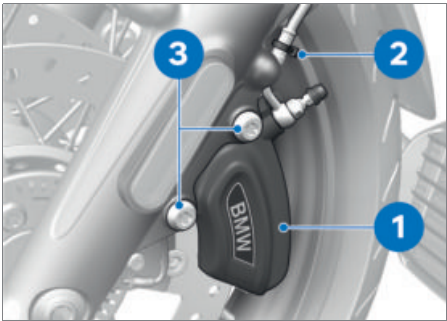
- Install screw 1. Brace quick-release axle on the right side at the same time.

 Screw on quick-release axle
M20 x 1.5 - 8.8
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
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, continuing until the brake pads are making contact with the discs.
- Remove the adhesive tape from the wheel rim.
- Remove the front-wheel stand.



- Tighten the clamping bolts on left **1** and right **2** to the appropriate torque.



Clamping bolts in the axle adapter

Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time

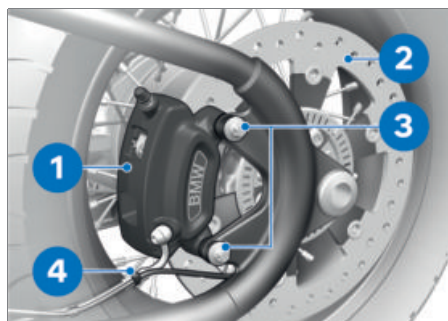
M8 x 35 - 8.8

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.
- Engage first gear.
- Removing softbags (► 53).
- Mounting the rear-wheel stand (► 86).
- Removing the silencer (► 99).
- 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

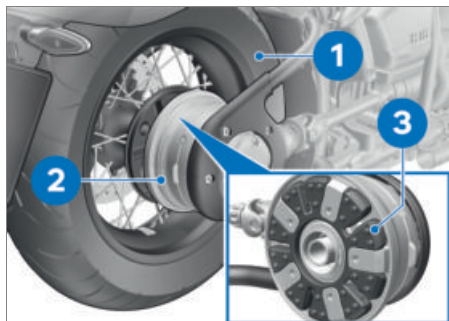
Using hard or sharp-edged objects near the component

Component damage

- Do not scratch components, if necessary tape off or cover.
- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.
- Loosen the brake caliper **1** from the brake disc **2** and put aside.



- Remove screw **2**.
- Remove quick-release axle **4**, let sensor holder **3** hang on the cable.
- Remove the bush **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 shock absorber rubber **3** and replace 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.

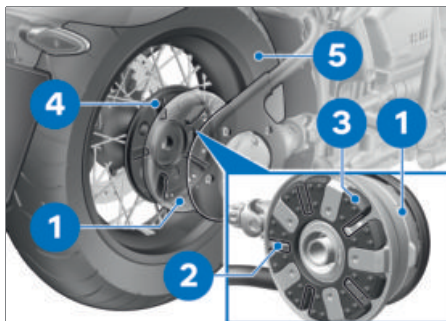


ATTENTION

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.



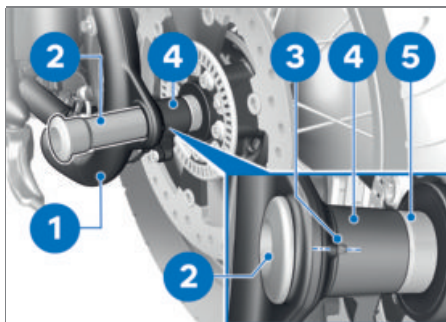
- Lightly lubricate the jerk damper rubber **3**.



Installation aid

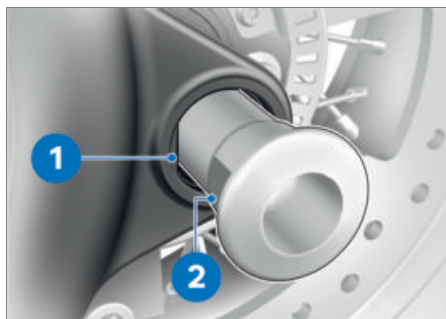
Silicone spray

- 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**.

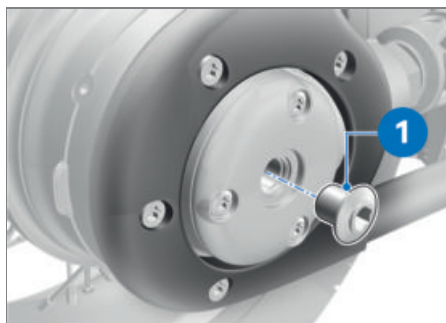


- Install the bush **5**.

- Attach the sensor holder **4** and quick-release axle **2**.
- Align the identification markings **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.

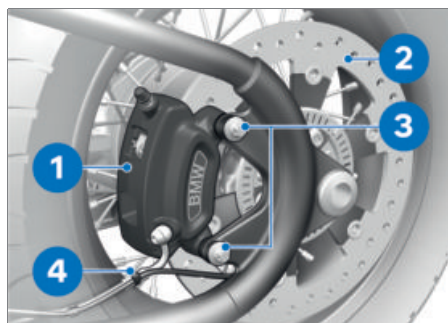


- Install the screw **1**.

 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 wheel rim.

WARNING

Brake pads do not contact the brake disc

Risk of accident due to delayed braking effect.

- Before driving off, check that the braking effect kicks in without any delay.
- Engage the brakes repeatedly until the brake pads make contact with the discs.
- Attach the license plate.
- Installing the silencer (►► 100).
- Installing softbags (►► 54).
- Remove the rear-wheel stand.

MUFFLER

Removing the silencer

CAUTION

Hot exhaust system

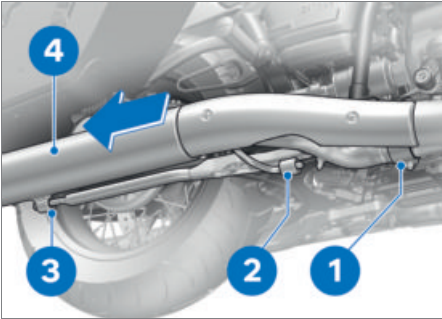
Burn hazard

- 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 (➔ 86).

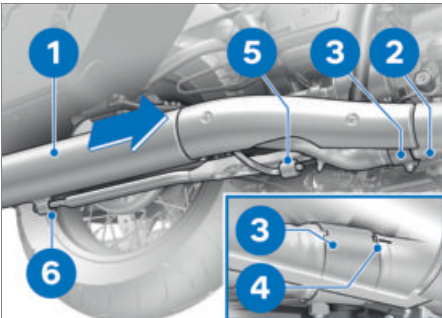


- Loosen circlip **1**.
- Pull the silencer **4** out of bracket **2** and **3** and take off.

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 **5** and **6**.
- Slide the silencer **1** onto the exhaust manifold **2**.
- Align the circlip with recess **3** to the snap-in lug and the mark **4**.
- » Snap-in lug engages in the recess of the circlip.
- Tighten circlip **3**.



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

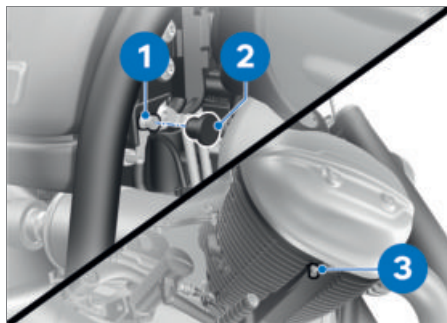
- Use jump leads fitted with fully insulated crocodile clips at both ends.

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 external starting.
- Park the vehicle, making sure that the ground is firm and level.



- 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 jump lead 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 drained battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt 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 jump lead from the ground support point **3** and then from the jump-start terminal **1**.
- Install the protective cap **2**.

BATTERY

Maintenance instructions

Correct battery maintenance combined with proper charging and storage procedures extends the battery's service life, and is also required for warranty claims.

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

- Keep the surface of the battery clean and dry.
- Do not open the battery.
- Do not top up with water.
- Observe the notes on charging on the following pages.
- Do not turn the battery upside down.



ATTENTION

Discharging of the connected battery by the vehicle electronics (e.g. clock)

Total discharge of battery leading to a rejection of warranty claims

- During riding breaks of more than 4 weeks, connect a trickle-charger to the battery.



BMW Motorrad has developed a trickle-charger specially designed for compatibility with the electronics of your motorcycle. Using this charger, you can keep the battery charged during long periods when the motorcycle is not being used without having to disconnect the battery from the motorcycle's onboard systems. Additional information is available at your authorized BMW Motorrad retailer.

Charging 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

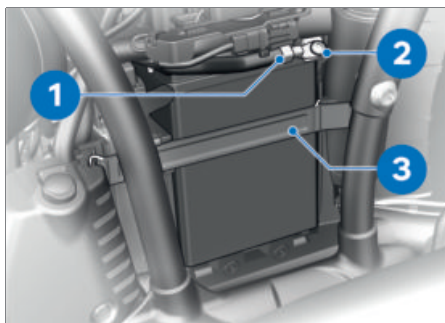
- Charge battery using a suitable charger.
- Comply with operating instructions of charger.
- Once battery is fully charged, disconnect charger's terminal clips from battery terminals.

 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}

- Switch off the anti-theft alarm if necessary.<
- Switching off ignition (➡ 33).
- Removing fairing bracket, left (➡ 85).



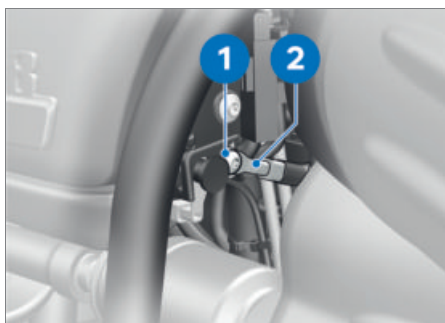
ATTENTION

Incorrect battery disconnection

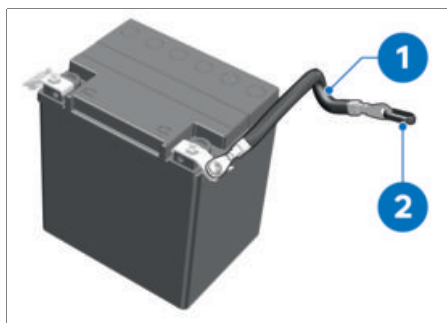
Danger of short circuit

- Follow the disconnection sequence.

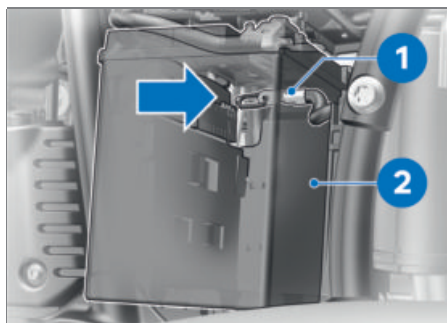
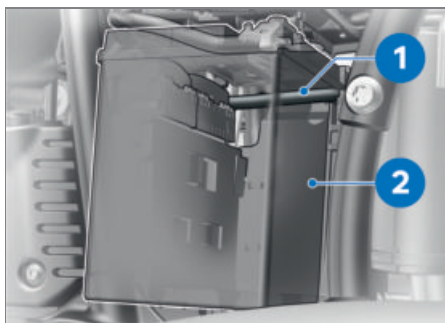
- Remove the negative battery cable **1** with the screw **2**.
- Remove the retaining strap **3**.



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



- 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.

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

Installing the 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.



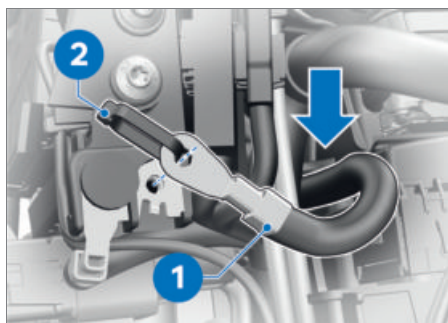
ATTENTION

Battery makes contact with the silencer during removal/installation

Component damage

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

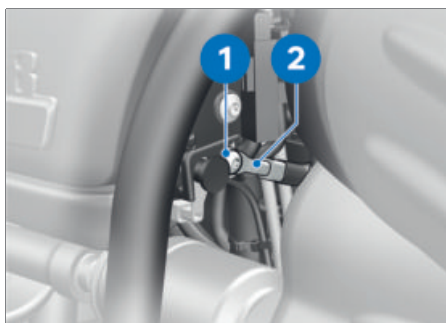
- Slide in the battery **2** with the adapter cable for the positive terminal **1** facing forward.
- Route the adapter cable for the positive terminal **1** as closely as possible to the opening (**arrow**).



- 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**.



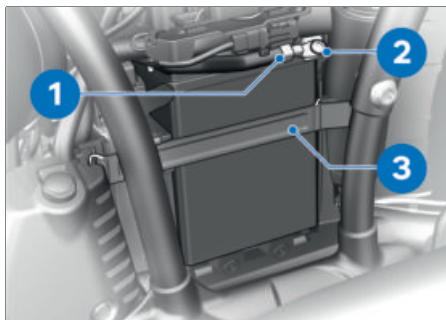
- Slide in the battery completely; when doing so, pay attention to the routing of the adapter cable for the positive terminal **1**.
- The adapter cable for the positive terminal **1** must be routed between the battery and battery carrier in the recess **2**.
- Do not crush the adapter cable for the 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 (► 85).
- with anti-theft alarm system (DWA)^{OE}
 - Switch on the anti-theft alarm system if necessary.
 - Setting the clock (► 41).
 - Setting the date (► 41).<

FUSES

Replacing fuses

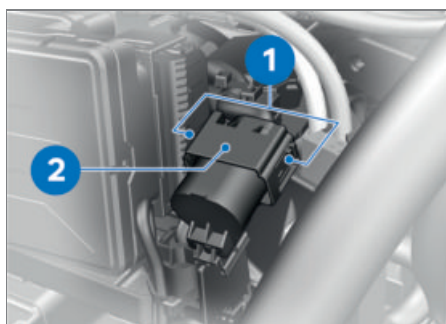


ATTENTION

Bypassing defective fuses

Risk of short circuit and fire

- Do not bypass defective fuses.
- Replace defective fuses with new fuses.
- Switching off ignition (➡ 33).
- Park the vehicle, making sure that the ground is firm and level.
- Removing fairing bracket, right (➡ 85).



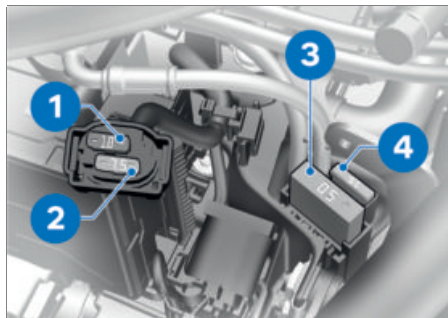
- Press lock **1** on both sides.
- Pull off the fuse box **2**.



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 assignment (➡ 105)
- Insert the fuse box **2**. Make sure that the lock **1** engages on both sides.
- Installing fairing bracket, right (➡ 86).

Fuse assignment



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

Loosening the diagnostic socket



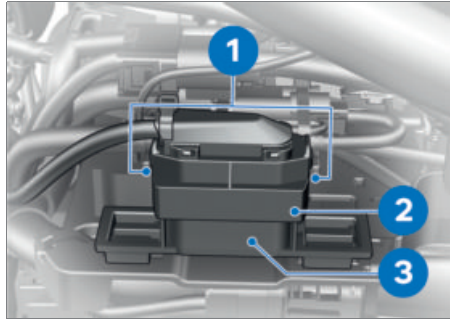
CAUTION

Incorrect procedure when disconnecting the diagnostic socket for onboard diagnosis

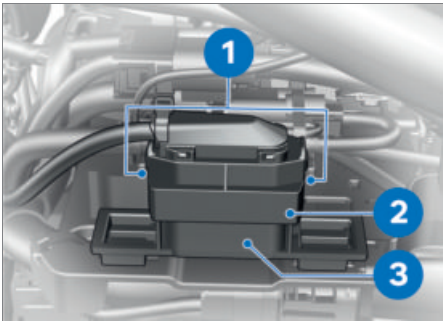
Vehicle experiences malfunctions

- 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 (➡ 85).



- Insert the diagnostic socket **2** into the bracket **3**.
 - » The locks **1** engage.
- Installing fairing bracket, left (➡ 85).



- Press locking mechanisms **1**.
- Loosen the diagnostic socket **2** from the bracket **3**.
 - » The interface for the diagnosis and information system can be connected to the diagnostic socket **2**.

Fastening the diagnostic socket

- Disconnect the interface for the diagnosis and information system.

ACCESSORIES

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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, operation 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 legal requirements for any modifications. The vehicle shall not violate road traffic licensing regulations applicable in your own country.

Your BMW Motorrad retailer offers you expert advice when choosing genuine BMW parts, accessories and other products. More information on the topic of accessories is available at:

bmw-motorrad.com/equipment

ONBOARD POWER SOCKETS

Notes on using onboard power sockets:

Automatic shut-off

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 switched on before electrical devices connected to the onboard power sockets can be operated. To reduce loads on the electrical system, the onboard power sockets are switched off no more than 15 minutes after the ignition is switched off.

Cable routing

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

- Cables must not impede the driver.
- Cables must not restrict the steering angle and handling performance.
- 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 (► 64).
- 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 windscreens.

You can find all optional accessories from BMW Motorrad on our website:

bmw-motorrad.com.

CARE

10

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CARE PRODUCTS

BMW Motorrad recommends that you use cleaning and care products available at your authorized BMW Motorrad retailer. BMW Motorrad 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 dirt off of the fork tubes. Make sure that the vehicle is washed frequently, especially during the winter months. To remove road salt, clean the motorcycle with cold water immediately after every trip.

 WARNING**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.

Trim panel components

Clean trim panel components with water and BMW Motorrad cleaning agent.

Headlight diffuser and turn indicator glass made of plastic

Clean off dirt and insects with a soft sponge and plenty of water.



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



Clean with water and sponge only.



Do not use chemical cleaning agents.

Chrome

Carefully clean chrome parts with plenty of water and BMW Motorrad Care Products motorcycle cleaner. This is required particularly in the event of exposure to 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.

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.

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

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BMW Motorrad retailer can provide you with more detailed information.

- Clean the motorcycle.
- Removing the battery (▮▮▮ 102).
- 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 the battery (▮▮▮ 103).
- Observe checklist (▮▮▮ 65).

TECHNICAL DATA

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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 grade (☛ 70).
Battery is drained.	Charging a connected battery (☛ 102).
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.

SCREW CONNECTIONS

Front wheel	Value	Valid
Brake caliper on telescopic forks		
M10 x 40 - 10.9	41 lb/ft (56 Nm)	
Clamping bolts in the axle adapter		
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)	
Screwing the softbag to the rear frame		
M8 x 45 micro-encapsulated	14 lb/ft (19 Nm)	

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TECHNICAL DATA

Frame	Value	Valid
Support for side cover on frame		
M5 x 14 micro-encapsulated	4 lb/ft (5 Nm)	

FUEL

Recommended fuel quality	Premium unleaded (91) (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 FT-P75

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 ^{±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

REAR-WHEEL DRIVE	
Type of final drive	Cardan shaft drive with bevel gears
Type of rear-wheel guide	Steel double armed swinging arm
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. 220 lbs (100 kg) Rotate hexagon head counterclockwise as far as it will go, then 12 rotations clockwise, One-up with vehicle load approx. 264 lbs (120 kg) Rotate hexagon head counterclockwise as far as it will go, then 24 rotations clockwise, Two-up mode with vehicle load approx. 396 (180 kg)

BRAKES

Front wheel	
Type of front wheel brake	Two-rotor disk brake, diameter 11.8 in (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 11.8 in (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 or on the Internet at bmw-motorrad.com/service .
Speed category of front/rear tires	H, minimum requirement: 130 mph (210 km/h)

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TECHNICAL DATA

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	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	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 source

Bulb for parking light	LED
Bulbs for low-beam headlight	LED
Bulb for high-beam headlight	LED
Bulb for taillight/brake light	LED
Bulbs for flashing turn indicators	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)

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TECHNICAL DATA

PERFORMANCE DATA

Maximum speed	112 mph (180 km/h)
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SERVICE

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REPORTING SAFETY DEFECTS

If you think that your motorcycle has a fault which may cause an accident, injury or death, you must inform the NHTSA (National Highway Traffic Safety Administration) immediately and BMW of North America, LLC.

If the NHTSA receives other similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, the NHTSA may order the manufacturer to perform a recall and remedy campaign. However, the NHTSA cannot become involved in individual problems between you, your authorized BMW Motorrad retailer, or BMW of North America, LLC.

You can contact the NHTSA by calling the Vehicle Safety Hotline on 1-888-327-4236 (Teletypewriter TTY for the hearing impaired: 1-800-424-9153) for free, by visiting the website at [http:// www.safercar.gov](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](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 to you 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 optimal condition, BMW Motorrad advises that you observe the recommended maintenance intervals for your motorcycle.

Have all 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 high annual mileage, 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	
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 Oil change (including engine and bevel gears)
 - 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 annually 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

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 pre-delivery check

performed

on _____

Stamp, signature

BMW running-in check

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

BMW Motorrad Service

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear bevel gears

Changing gear oil

Changing front brake fluid

Changing brake fluid, rear

Yes

No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Yes

No

Engine oil change with filter

☐☐

Replacing air cleaner element

☐☐

Checking valve clearance

☐☐

Replacing all spark plugs

☐☐

Oil change in rear 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

BMW Motorrad Service

- Engine oil change with filter
- Replacing air cleaner element
- Checking valve clearance
- Replacing all spark plugs
- Oil change in rear bevel gears
- Changing gear oil
- Changing front brake fluid
- Changing brake fluid, rear

Yes	No
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Yes

No

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear 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

BMW Motorrad Service

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear bevel gears

Changing gear oil

Changing front brake fluid

Changing brake fluid, rear

Yes

No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Yes No

- Engine oil change with filter
- Replacing air cleaner element
- Checking valve clearance
- Replacing all spark plugs
- Oil change in rear bevel gears
- Changing gear oil
- Changing front brake fluid
- Changing brake fluid, rear

☐	☐
☐	☐
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☐	☐
☐	☐
☐	☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear bevel gears

Changing gear oil

Changing front brake fluid

Changing brake fluid, rear

Yes

No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Yes

No

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear 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

BMW Motorrad Service

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear bevel gears

Changing gear oil

Changing front brake fluid

Changing brake fluid, rear

Yes

No

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Notes

Stamp, signature

BMW Motorrad Service

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Work performed

BMW Motorrad Service

Yes

No

Engine oil change with filter

Replacing air cleaner element

Checking valve clearance

Replacing all spark plugs

Oil change in rear 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.

[illegible]

CERTIFICATE FOR ELECTRONIC IMMOBILIZER
CERTIFICATE FOR KEYLESS RIDE

151
152

FCC Approval

Ring aerial in the ignition switch



To verify the authorization of the ignition key, the electronic immobilizer exchanges information with the ignition key via the ring aerial.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. ◀

Approbation de la FCC

Antenne annulaire présente dans le commutateur d'allumage



Pour vérifier l'autorisation de la clé de contact, le système d'immobilisation électronique échange des informations avec la clé de contact via l'antenne annulaire.

Le présent dispositif est conforme à la partie 15 des règles de la FCC. Son utilisation est soumise aux deux conditions suivantes :

- (1) Le dispositif ne doit pas produire d'interférences nuisibles, et
- (2) le dispositif doit pouvoir accepter toutes les interférences extérieures, y compris celles qui pourraient provoquer une activation inopportune.



Toute modification qui n'aurait pas été approuvée expressément par l'organisme responsable de l'homologation peut annuler l'autorisation accordée à l'utilisateur pour utiliser le dispositif. ◀

Certifications

BMW Keyless Ride ID Device



USA, Canada:

Product name: BMW Keyless Ride ID
Device FCC ID: YGOHUF5750
IC: 4008C-HUF5750



Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canada:

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

USA:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Argentina:

CNC COMISIÓN NACIONAL
DE COMUNICACIONES
H-17115

Declaration Of Conformity

We declare under our responsibility that the product

BMW Keyless Ride ID Device (Model: HUF5750)

complies with the appropriate essential requirements of the article 3 of the R&TIE and the other relevant provisions, when used for its intended purpose. Applied Standards:

1. Health and safety requirements contained in article 3 (1) a)
 - EN 60950-1:2006+A11:2009+A1:2010+A12:2011; Information technology equipment-Safety
2. Protection requirements with respect to electromagnetic compatibility article 3 (1) b)
 - EN 301 489-1 (V1.9.2, 09/2011), Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services;
Part 1: Common technical requirements
 - EN 301 489-3 (V1.4.1, 08/2002) Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for short range devices (SRD) operating on frequencies between 9 kHz and 40 GHz
3. Means of the efficient use of the radio frequency spectrum article 3 (2)
 - EN 300 220-1 & -2 (V2.4.1, 05/2012), electromagnetic compatibility and radio spectrum matters (ERM); Short range devices (SRD); Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW;
Part 1: Technical characteristics and test methods.
Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TIE directive

The product is labeled with the CE marking:



Velbert, October 15th, 2013

A handwritten signature in black ink, appearing to read 'Benjamin A. Müller', is written over a horizontal line.

Benjamin A. Müller

Product Development Systems
Car Access and Immobilization - Electronics
Huf Hülsbeck & Fürst GmbH & Co. KG
Steege Straße 17, D-42551 Velbert

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The descriptions and illustrations in this manual may vary from your own motorcycle's actual equipment, depending upon its equipment level and accessories as well as your specific national version. No claims will be entertained as a result of such discrepancies.

Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.

The right to modify designs, equipment and accessories is reserved.

Errors and omissions excepted.

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Original Rider's Manual, printed in Germany.



WARNING

Harmful substances

Operating, servicing and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates and lead, which are known to the State of California to be carcinogenic or detrimental to childbirth or reproduction.

- To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.
- For more information visit:
www.P65Warnings.ca.gov/passenger-vehicle

Important data for refueling:

Fuel	
Recommended fuel quality	Premium unleaded (91) (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

BMW recommends **ADVANTEC**
ORIGINAL BMW ENGINE OIL

