BMW
MOTORRAD

RIDER'S MANUAL

G 310 GS

MAKE LIFE A RIDE

Vehicle data

Model

Vehicle Identification Number

Colour code

Date of first registration

Registration number

Dealership details

Person to contact in Service department

Ms/Mr

Phone number

Dealership address/phone number (company stamp)

WELCOME TO BMW

We congratulate you on your choice of a vehicle from BMW Motorrad and welcome you to the community of BMW riders. Familiarise yourself with your new vehicle so that you can ride it safely and confidently in all traffic situations.

About these operating instructions

Read these operating instructions carefully before starting to use your new BMW. They contain important information on how to operate the controls and how to make the best possible use of all your BMW's technical features.

In addition, they contain information on maintenance and care to help you maintain your vehicle's reliability and safety, as well as its value.

If the time comes to sell your BMW, please remember to hand over these operating instructions to the new owner. They are an important part of the vehicle.

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

BMW Motorrad.

GENERAL INSTRUCTIONS

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4 GENERAL INSTRUCTIONS

QUICK & EASY REFERENCE

Chapter 2 of these operating instructions will provide you with an initial overview of your motorcycle. All maintenance and servicing work on the motorcycle is documented in the "Service" section. The record of the maintenance work you have had performed on your vehicle is a precondition for generous treatment of goodwill claims. When the time comes to sell your BMW, please remember to hand over this Rider's Manual; it is an important part of the motorcycle.

ABBREVIATIONS AND SYMBOLS

CAUTION Low-risk hazard. Non-avoidance can lead to slight or moderate injury.

WARNING Medium-risk hazard. Non-avoidance can lead to fatal or severe injury.

DANGER High-risk hazard. Non-avoidance leads to fatal or severe injury.

ATTENTION Special notes and precautionary measures. Non-compliance can lead to damage to the vehicle or accessory and, consequently, to voiding of the warranty.

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

- • Instruction.
- » Result of an activity.
- Reference to a page with more detailed information.
- ◁ Indicates the end of a passage relating to specific accessories or items of equipment.
- Tightening torque.
- Technical data.
- ABS Anti-lock brake system.
- NV National-market version.
- OE Optional equipment. The vehicles are assembled complete with all the BMW Motorrad optional equipment originally ordered.

OA Optional accessories. You can obtain BMW Motorrad optional accessories through your authorised BMW Motorrad dealer; optional accessories have to be retrofitted to the vehicle.

EQUIPMENT

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

TECHNICAL DATA

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

CURRENCY

The high safety and quality standards of BMW motorcycles are maintained by constant development work on designs, equipment and accessories. Because of this,

your motorcycle may differ from the information supplied in the Rider's Manual. Nor can BMW Motorrad entirely rule out errors and omissions. We hope you will appreciate that no claims can be entertained on the basis of the data, illustrations or descriptions in these operating instructions.

ADDITIONAL SOURCES OF INFORMATION

Authorised BMW Motorrad retailer

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

Internet

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

CERTIFICATES AND OPERATING LICENCES

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

DATA MEMORY

General

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

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

Personal reference

Each vehicle is identified with a clear vehicle identification number. Depending on the country, the vehicle identification number, the number plate and

the corresponding authorities can be referenced to ascertain the vehicle owner. There are also other ways to use data obtained from the vehicle to trace the rider or vehicle owner, for example using the ConnectedDrive user account.

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

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

Legal requirements for the disclosure of data
As part of its legal responsibilities, the manufacturer of the vehicle is obligated to make its stored data available to the relevant authorities. This data is provided in the required scope in individual cases, for example to clarify a criminal offence.

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In the context of applicable laws, public agencies are entitled in individual cases to read out data from the vehicle themselves.

Operating data in the vehicle
Control units process data to operate the vehicle.
This includes, for example:
– Status reports of the vehicle and its individual components, for example wheel revolutions, wheel speed, deceleration
– Environmental conditions, for example temperature
– Operating conditions of system components, for example filling levels, tyre pressure
– Malfunctions and faults in important system components, for example light and brakes
– Response of the vehicle in special riding situations, for example engagement of the driving dynamics systems
– Information on incidents resulting in damage to the vehicle

The data is only processed in the vehicle itself and is generally non-permanent. The data is not stored beyond the operating period.
Electronic components, for example control units, contain components for storing technical information. Information can be temporarily or permanently stored on the vehicle condition, component loads, incidents or errors.
This information is generally used to document the condition of a component, a module, a system or the surrounding area, for example:

The data is necessary for the provision of control unit functions. Furthermore, the data is used to detect and rectify malfunctions and to enable the vehicle manufacturer to optimise vehicle functions.
The vast majority of this data is non-permanent and is only processed in the vehicle itself. Only a small amount of the data is stored in incident or fault memories as required by events.
If services are accessed, for example repairs, service processes, warranty cases and quality assurance measures, this technical information can be read out of the vehicle together with the vehicle identification number.

The information can be read out by a BMW Motorrad retailer or another qualified service partner or specialist workshop. The legally stipulated socket for on-board diagnosis (OBD) in the vehicle is used to read out the data. The data is obtained, processed and used by the relevant parts of the retailer network. The data is used to document the technical conditions of the vehicle, to help with error localization, to comply with warranty obligations and to improve quality.
In addition, the manufacturer has various product monitoring obligations arising from product liability legislation. To meet these obligations, the vehicle manufacturer requires technical data from the vehicle. The data from the vehicle can also be used to check warranty claims from the customer. Error and incident memories in the vehicle can be reset during servicing or repair work by a BMW Motorrad retailer or another qualified service partner or specialist workshop.

Data input and data transfer in the vehicle

General

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

If required, data can be entered in the entertainment and communication system of the vehicle, for example using a smartphone.
Depending on the individual equipment, this includes:
– Multimedia data, such as music for playback
– Contacts data for use in connection with a communication system or an integrated navigation system
– Entered destinations
– Data on the use of internet services. This data can be stored locally in the vehicle or is located on a device that is connected to the vehicle, for example smartphone, USB stick, MP3 player. If this data is stored in the vehicle, the

data can be deleted at any time.

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

Incorporation of mobile devices

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

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

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

Services

General

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

Services of the vehicle manufacturer

For online services of the vehicle manufacturer, the individual functions are described at suitable points, for example rider's manual, website of the manufacturer. At the same time, information is also provided on the relevant data protection law. Personal data may be used to provide online services. Data is exchanged using a secure connection, for example with the IT systems provided by the vehicle manufacturer. Obtaining, processing and using personal data outside of

the normal provision of services requires legal permission, contractual agreement or consent. It is also possible to have the entire data connection activated or deactivated. Statutory functions are excluded from this.

Services from other providers

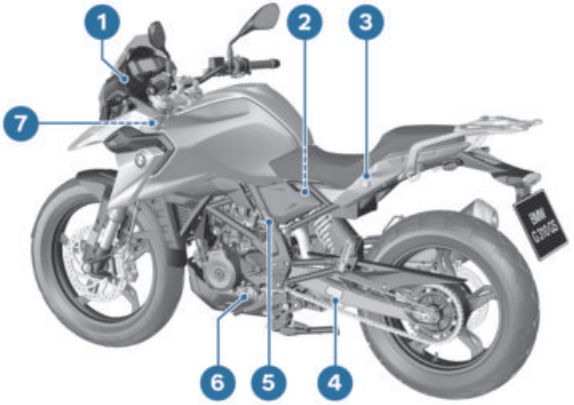
When using online services from other providers, these services are subject to the responsibility and the data protection and operating conditions of the individual provider. The vehicle manufacturer has no influence on the content that is exchanged in this instance. Information on the type, scope and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

GENERAL VIEWS

02

14 GENERAL VIEWS

GENERAL VIEW, LEFT SIDE

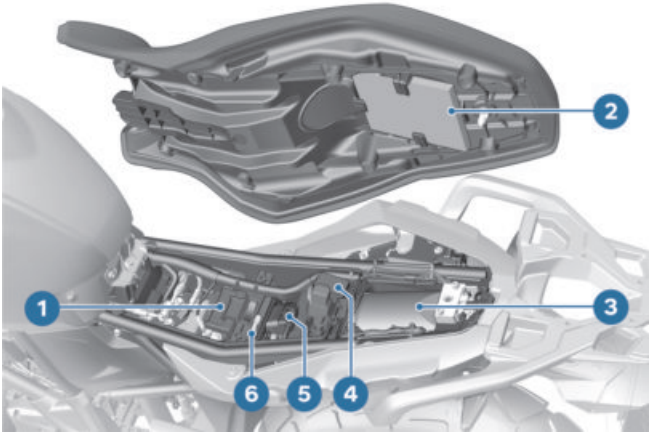


1 –with extra socket[OA]
Power socket (➠ 107)
2 Adjusting ring for spring preload (behind the frame panel) (➠ 45)
3 Seat lock (➠ 40)
4 Chain settings (➠ 94)
5 Type plate
6 Engine oil level indicator (➠ 74)
7 Tyre pressure table (on left fork leg) (➠ 83)

GENERAL VIEW, RIGHT SIDE

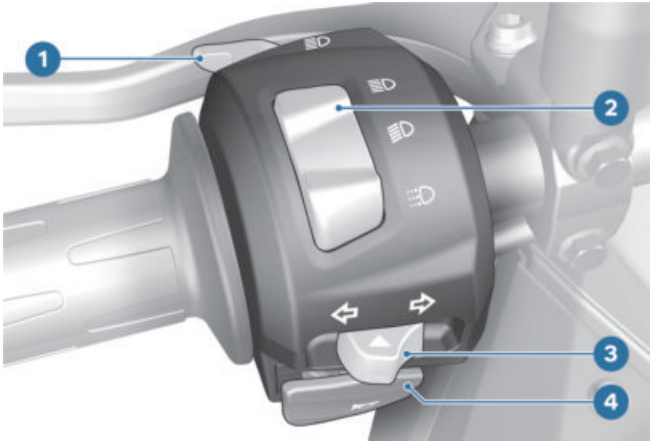
1 Fuel filler neck (➠ 59)
2 Brake-fluid reservoir, front (➠ 78)
3 Vehicle Identification Number
4 Coolant expansion tank (➠ 82)
5 Oil filler opening (➠ 75)
6 Rear brake-fluid tank (behind side panel) (➠ 79)
7 Luggage carrier (➠ 50)

UNDERNEATH THE SEAT



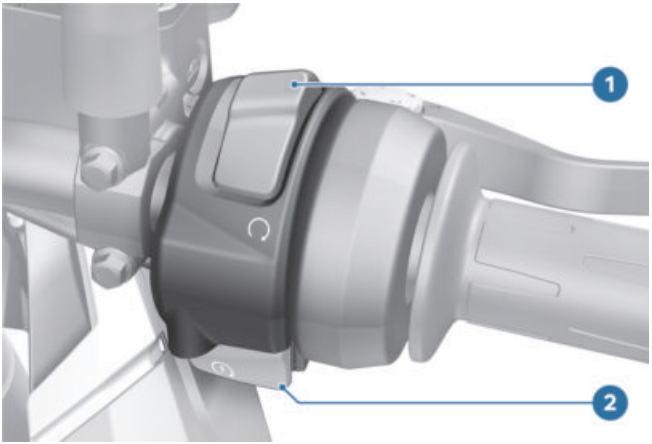
1 Battery (➠ 97)
2 Operating instructions (➠ 4)
3 Toolkit (➠ 72)
4 Fuses (➠ 101)
5 Diagnostic connector (➠ 102)
6 Gripping clamp

MULTIFUNCTION SWITCH, LEFT



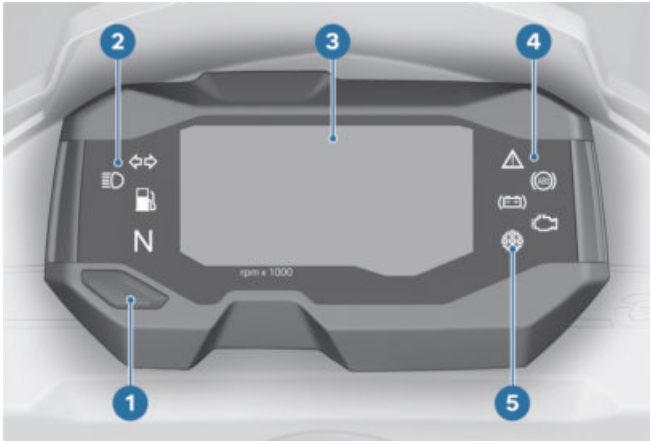
1 Headlight flasher (➠ 37)
2 Rocker switch, lights (➠ 36)
3 Turn indicators (➠ 37)
4 Horn

MULTIFUNCTION SWITCH, RIGHT



1 Emergency-off switch (kill switch) (➠ 35)
2 Starter button (➠ 35)

INSTRUMENT CLUSTER



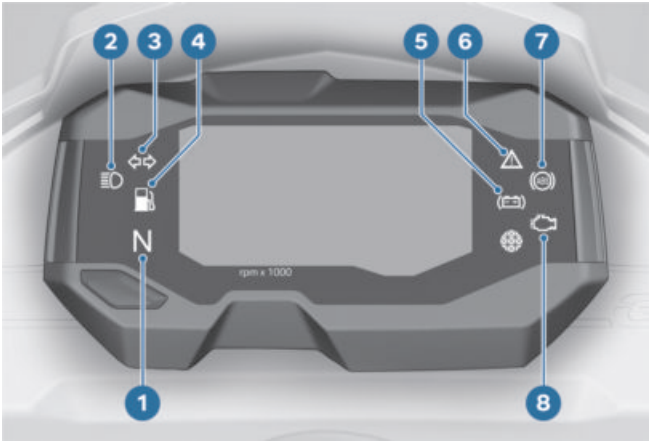
1 Button (➠ 38)
2 Indicator lights (➠ 22)
3 Multifunction display (➠ 23)
4 Warning lights (➠ 22)
5 Photosensor for the brightness control in the multifunction display
rpm redline warning (➠ 56)

STATUS INDICATORS

03

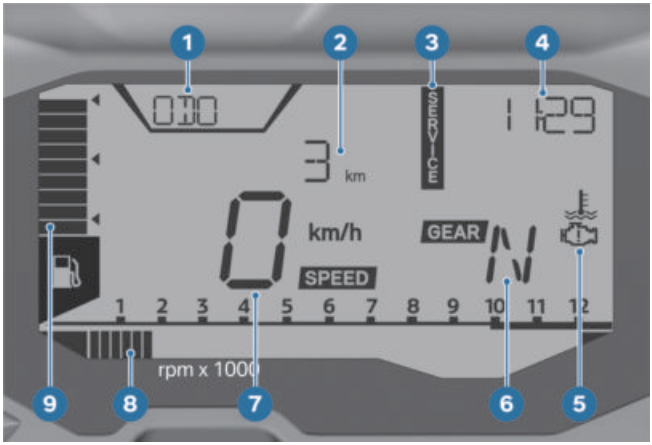
22 STATUS INDICATORS

WARNING AND INDICATOR LIGHTS



1 Neutral indicator light
2 High beam indicator light (➠ 36)
3 Turn signal indicator light (➠ 37)
4 Fuel reserve indicator light (➠ 29)
5 Warning light for vehicle voltage (➠ 26)
6 General warning light (➠ 24)
7 ABS warning light (➠ 28)
8 Warning light, drive malfunction (➠ 27)

MULTIFUNCTION DISPLAY



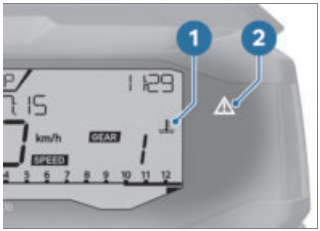
1 On-board computer (➠ 38)
2 Display area for values
3 Service display (➠ 29)
4 Clock (➠ 39)
5 Warning symbols (➠ 24)
6 Gear; "N" indicates neutral
7 Speed
8 Engine speed (➠ 31)
9 Fuel level (➠ 29)

24 STATUS INDICATORS

WARNING INDICATORS

Mode of presentation

Warnings are indicated by the corresponding warning lights. If two or more warnings occur at the same time, all the appropriate warning lights and warning symbols appear. The possible warnings are listed on the next pages.



Warnings that do not have warning lights of their own are indicated by a warning symbol **1** appearing in the multifunction display in combination with 'General' warning light **2**. Depending on how urgent the warning is, the general warning light will either light up or flash red or yellow.

Warnings, overview

Indicator and warning lights	Display text	Meaning
 lights up.		Vehicle voltage is too low (➠ 26)
 flashes red.	 is displayed.	Coolant temperature too high (➠ 26)
 lights up yellow.	 is displayed.	Engine in emergency-operation mode (➠ 26)
 lights up yellow.	 flashes.	Engine warning (➠ 27)
 lights up.		Drive malfunction (➠ 27)
 lights up yellow.	 flashes.	Serious drive malfunction (➠ 28)
 flashes.		
 flashes.		ABS self-diagnosis not completed (➠ 28)
 lights up.		ABS fault (➠ 28)
 lights up.		Fuel down to reserve (➠ 29)
 lights up yellow.	SERVICE is displayed constantly.	Service appointment has passed (➠ 29)

Vehicle voltage is too low

 lights up.

WARNING

Failure of the vehicle systems

Risk of accident

- Do not continue your journey.

Possible cause:

Battery is faulty.

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

Coolant temperature too high

 flashes red.

 is displayed.

ATTENTION

Riding with overheated engine

Engine damage

- Compliance with the information set out below is essential.

Possible cause:

The coolant level is too low.

- Check the coolant level (➠ 82).

If the coolant level is too low:

- Top up the coolant (➠ 83).

Possible cause:

The radiator is dirty.

- Clean radiator (➠ 118).

Possible cause:

The fan or fan control is faulty.

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

Possible cause:

The coolant circuit is faulty.

- If possible, allow the engine to cool down.
- Only ride in partial load range.
- If the coolant temperature is often too high, have the fault rectified as soon as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Engine in emergency-operation mode

 lights up yellow.

 is displayed.

WARNING

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

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

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

Engine warning

 lights up yellow.

 flashes.

WARNING

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

Possible cause:
The engine control unit has diagnosed a fault which may cause severe secondary faults. The engine is in emergency-operation mode.
- Avoid high load and rpm ranges if possible.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

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

Drive malfunction

 lights up.

Possible cause:
The engine control unit has diagnosed a fault that affects pollutant emissions and/or reduces power.
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad retailer.

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

Serious drive malfunction

 lights up yellow.

 flashes.

 flashes.

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

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

ABS self-diagnosis not completed

 flashes.

Possible cause:

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

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

ABS fault

 lights up.

Possible cause:
The ABS control unit has detected a fault. The ABS function is not available or the functionality is subject to certain restrictions.
- You can continue to ride the vehicle, but make due provision for the fact that the ABS function is not available or is only conditionally available. Please refer to the more detailed information on situations that may lead to an ABS fault (➠ 67).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably

an authorised BMW Motorrad dealer.

Fuel down to reserve

 lights up.

WARNING

Irregular engine operation or engine shutdown due to lack of fuel

Risk of accident, damage to catalytic converter

• Do not run the fuel tank dry.

Possible cause:

The fuel has all been used up; only the fuel reserve remains.

	Fuel reserve
approx. 1 l	

• Refuelling (➠ 59).

Service appointment has passed

 lights up yellow.

SERVICE is displayed constantly.

Possible cause:

The driving performance or the date indicate that servicing is due.

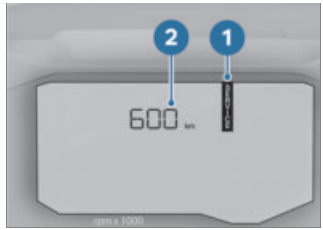
• Have your motorcycle serviced regularly by a specialist workshop, preferably an authorised BMW Motorrad dealer.

» The motorcycle remains operationally safe and is suitably road-safe.

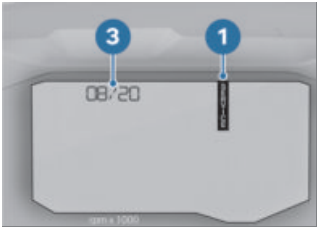
» The value of the motorcycle is preserved to the greatest possible extent.

SERVICE DISPLAY

Remaining distance until service is due and service due date



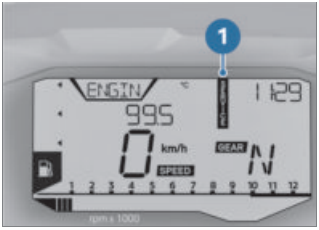
When a service is due within 1000 km, the word SERVICE **1** and countdown distance **2** are displayed and the distance counts down in steps of 100 km. This information appears briefly after the Pre-Ride-Check completes.



When the next service is due within a month, the word SERVICE **1** and service due date **3** are displayed.

When the next service is due on account of both the distance covered and the service due date, the word SERVICE **1**, countdown distance **2** and service due date **3** are displayed.

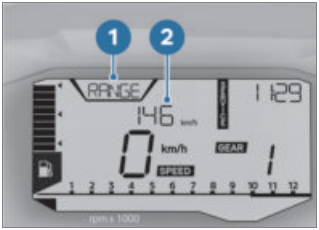
SERVICE displayed constantly



If the service due date has passed or the service distance is exceeded, SERVICE **1** is displayed constantly whenever the vehicle is in use.

FUEL RESERVE

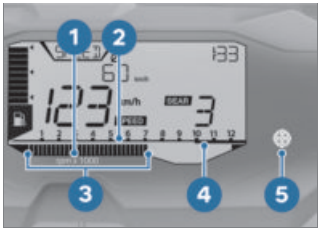
Range



Range readout RANGE **1** indicates how far you can ride **2** with the fuel remaining in the tank. This distance is calculated on the basis of average consumption and the quantity of fuel on board.

– When the motorcycle is propped on its side stand the slight angle of inclination means that the sensor cannot register the fuel level correctly. This is the reason why the range is recalculated only when the side stand is in the retracted position.
– The range reading appears automatically on the multi-function display when fuel is down to the reserve level.
– After a refuelling stop, range is recalculated if the amount of fuel in the tank is greater than the reserve quantity.
– The calculated range is only an approximate figure.

REV. COUNTER



1 Unit for engine speed display:
1000 revolutions per minute
2 Low engine speed range
3 Engine speed display segments
4 High engine speed range
5 rpm redline warning
(➠ 56).

OPERATION

04

IGNITION

Keys

You receive 2 vehicle keys. Ignition switch/steering lock, fuel filler cap lock and seat lock are all operated with the same key.

Engaging steering lock

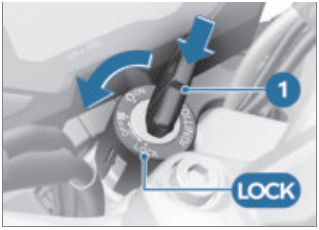
ATTENTION

Handlebars turned in wrong direction when motorcycle propped on side stand

Risk of damage to parts if vehicle topples

- On level ground, always turn the handlebars to the left to set the steering lock.
- In all other cases it is the lie of the ground that determines the direction in which the handlebars should be turned.

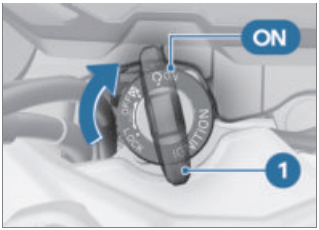
- If the camber of the roadway permits, turn the handlebars all the way to the left.



- Push the ignition key **1** into the steering lock and turn to the **LOCK** position, moving the handlebars slightly as you do this.

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

Switching on ignition

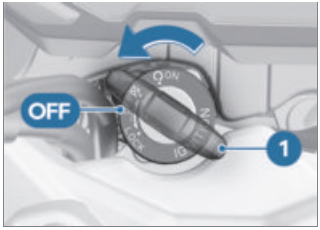


- Insert the ignition key **1** into the ignition steering lock and turn it to the **ON** position.

» Side lights, low-beam headlight and all function circuits are switched on.
» Engine can be started.

» Pre-Ride-Check is performed. (➠ 54)
» ABS self-diagnosis is performed (➠ 55)

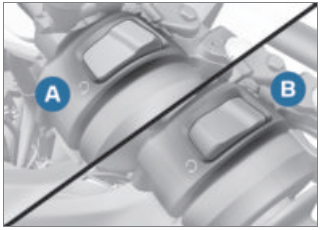
Switching off ignition



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

» Handlebars (steering lock) are not locked.
» Vehicle key can be removed.

Emergency-off switch (kill switch)



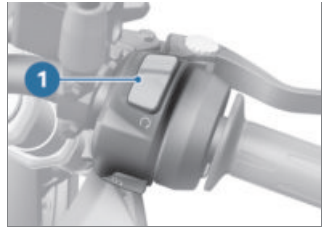
A = Operation mode

B = Emergency-off (engine is switched off)

Emergency-off or operation mode

WARNING

Operation of the kill switch while riding
Risk of fall due to rear wheel locking
- Do not operate the kill switch when riding.



- Push emergency-off switch **1** forward as the easiest way of killing the engine.
- Push emergency-off switch **1** back so that the engine can be started.

LIGHTS

Low-beam headlight and sidelights

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

The low-beam headlight and the side light drain the battery. Do not switch the

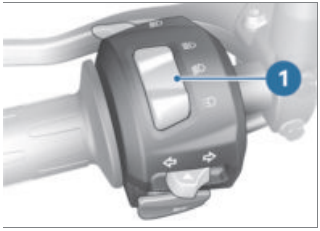
ignition on for longer than absolutely necessary.

The low-beam headlight switches on automatically under the following conditions:
–When the engine is started.
–If the vehicle is pushed while the ignition is on.

When the engine is not running you can switch on the lights by switching on the ignition and either switching on the high-beam headlight or operating the headlight flasher.

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

High-beam headlight, operating



- Push switch **1** forward.
» The high beam is switched on.

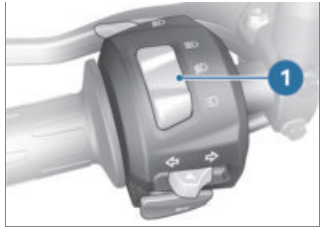
High beam indicator light lights up.
- Move switch **1** to the centre position.
» The blue high beam indicator light goes out.
» The low-beam headlight is switched on.

Using daytime riding light
–with daytime riding light OE

WARNING

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

By comparison with the low-beam headlight, the daytime running light makes the vehicle more visible to oncoming traffic. This improves daytime visibility.



- Push switch **1** back.

» Daytime riding light is switched on.
- Move switch **1** to the centre position.

» The low-beam headlight is switched on.

Headlight flasher, operating

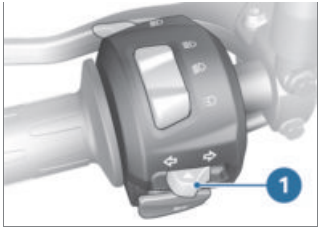
- Press button **1**.

» The high-beam headlight is switched on until you release the button.

TURN INDICATORS

Operating the turn indicators

- Switch on the ignition (➠ 34).



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

» The left turn indicator is switched on.

The turn indicator telltale light flashes.

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

» The right turn indicator is switched on.

The turn indicator telltale light flashes.

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

MULTIFUNCTION DISPLAY

Selecting display

Requirement

The vehicle is at a standstill.

- Switch on the ignition.

» The on-board computer readings appear on the display.

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

Possible displays:

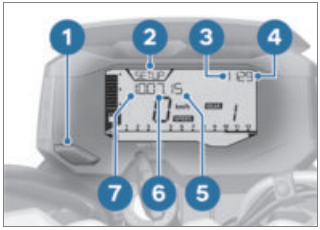
–Total distance travelled: `ODO`
–Trip distance 1: `TRIP1`
–Trip distance 2: `TRIP2`
–Coolant temperature: `ENGIN`
–Range: `RANGE`
–Average fuel consumption: `CONS1`
–Current fuel consumption: `CONSA`
–Average speed: `SPEED`
–Date: `DATE`
–Settings: `SETUP`

DATE AND TIME

Setting clock

- Select the display (➠ 38).

» SETUP **2** is displayed.



- Long-press button **1**.

» Hours number **3** flashes.

- Press button **1** briefly to increase the hour **3**.
- Press and hold button **1** once the desired hour has been set.

» Minutes number **4** flashes.

- Press button **1** briefly to increase the minutes.
- Press and hold button **1** once the desired minute has been set.

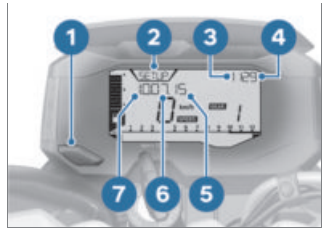
» The time has not yet been saved.

- Set the date (➠ 39).

Setting date

Requirement

The clock has been set.



- Press button **1** briefly to increase the date **7**.
- Press and hold button **1** once the desired date has been set.

» Month **6** flashes.

- Press button **1** briefly to increase the month **6**.
- Press and hold button **1** once the desired month has been set.

» Year **5** flashes.

- Press button **1** briefly to increase the year.
- Press and hold button **1** once the desired year has been set.

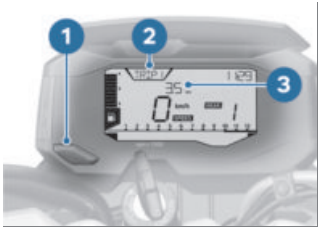
» The time and date settings have been saved.

RESETTING TRIP DISTANCE

- Select the display (➠ 38).

» The trip distance **2** to be reset has been selected.

– TRIP1 or TRIP2 appears on the display.



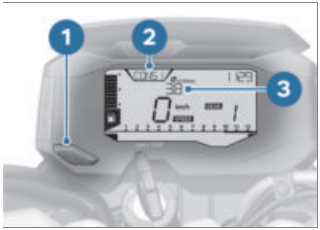
- Press button **1** and hold it down until value **3** is reset.

RESETTING THE AVERAGE VALUES

- Select the display (➠ 38).

» The average value **2** to be reset has been selected.

– CONSI or SPEED appears on the display.

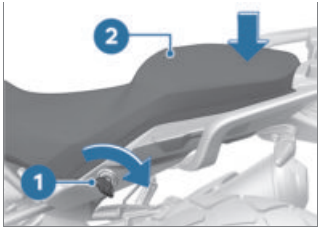


- Press button **1** and hold it down until value **3** is reset.

SEAT

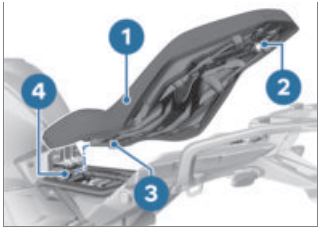
Removing seat

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



- Press down on the rear part of seat **2** to relieve the strain on the lock and at the same time unlock the seat lock by turning ignition key **1** clockwise.
- Lift the seat at the rear and remove.
- Lay the seat on a clean surface.

Installing seat



- Engage seat **1** with mount **3** centred in battery tray **4**.
- Position detent pin **2** and push it into the lock.

ADJUSTMENT

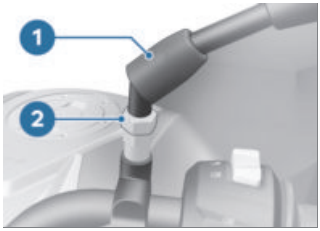
05

MIRRORS

Adjusting mirrors

- Turn the mirror to the desired position.

Adjusting mirror arm



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

Right mirror (lock nut) to adapter
22 Nm (Left-hand thread)

Left mirror (lock nut) to adapter
22 Nm

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

HEADLIGHT

Adjusting headlight for driving on left/driving on right

This motorcycle has a symmetric-beam low-beam headlight. If the motorcycle is ridden in a country where the opposite rule of the road applies, its symmetric low-beam headlight means that no measures are necessary to prevent the headlight beam from dazzling oncoming traffic.

Headlight beam throw and spring preload

Headlight beam throw is generally kept constant when spring preload is adjusted to suit load. Headlight beam throw is set correctly ex-works.

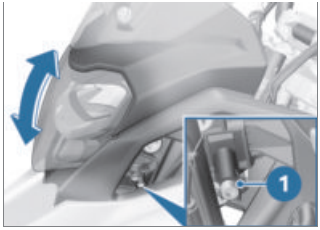
If there are doubts about the correct headlight beam throw, have the setting checked by a specialist work-

shop, preferably an authorised BMW Motorrad dealer.

Adjusting headlight beam throw

Requirement

Even with spring preload correctly adjusted, oncoming traffic is dazzled if the motorcycle is heavily loaded.



- Loosen bolt **1**.
- Swivel the headlight to adjust beam throw.
- Tighten screw **1** while holding the headlight so that it cannot move out of position.

When the motorcycle is again ridden with a lower load:

- Have the basic settings of the headlight restored by a specialist workshop, best of all by a BMW Motorrad dealer.

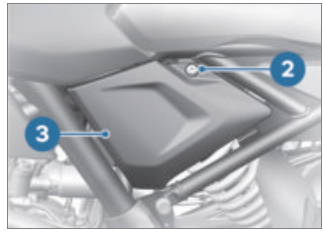
SPRING PRELOAD

Adjustment

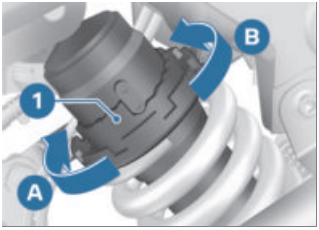
Spring preload has to be adjusted to suit the weight of rider, passenger and luggage. Increase spring preload for heavier riders, decrease spring preload for lighter riders.

Adjusting spring preload for rear wheel

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

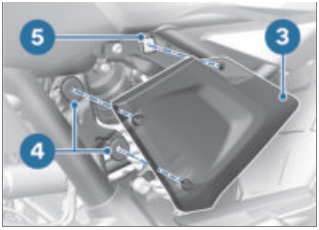


- Remove screw **2**.
- Pull frame panel **3** out of the grommets and remove it.

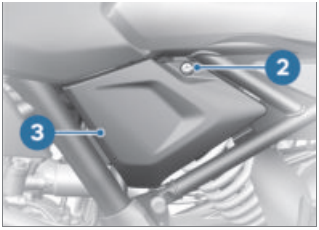


- To increase spring preload, use the appropriate tool from the on-board toolkit to turn adjusting ring **1** in arrow direction **A**.
- To reduce spring preload, use the appropriate tool from the on-board toolkit to turn adjusting ring **1** in arrow direction **B**.

Basic setting of spring preload, rear
Stage 1 (One-up riding without luggage)
Stage 5 (One-up with luggage)
Stage 10 (Two-up and with luggage)



- Engage frame panel **3** in grommets **4**.
- Align frame panel **3** with flat nut **5**.



- Install frame panel **3** with screw **2**.

BRAKES

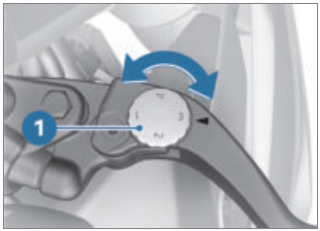
Adjusting handbrake lever

WARNING

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

WARNING

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



- Applying light pressure from behind, turn adjusting screw **1** to the desired position.

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

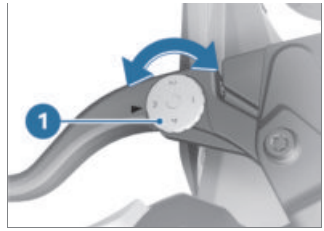
» Adjustment options:
– From position 1: narrowest span between handlebar grip and handbrake lever
– To position 4: widest span between handlebar grip and handbrake lever

CLUTCH

Adjusting clutch lever

WARNING

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



- Applying light pressure from behind, turn adjusting screw **1** to the desired position.

The adjusting screw can be turned more easily if the clutch lever is pushed forward.

» Adjustment options:
– From position 1: narrowest span between handlebar grip and clutch lever
– To position 4: widest span between handlebar grip and clutch lever

RIDING

06

SAFETY INSTRUCTIONS

Rider's equipment

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

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

WARNING

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

Loading

WARNING

Handling adversely affected by overloading and imbalanced loads
Risk of falling
- Do not exceed the permissible gross weight and be sure to comply with the instructions on loading.

- Set spring preload to suit total weight.

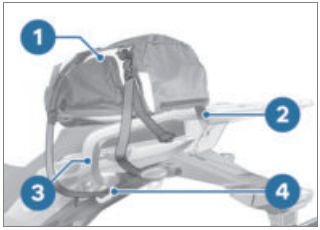
–with topcase OA
- Note the maximum permissible payload and maximum permissible speed, see also the section entitled "Accessories" (➠ 109).

Payload of topcase
max 5 kg◁

–with topcase Light OA
- Note the maximum permissible payload and maximum permissible speed, see also the section entitled "Accessories" (➠ 111).

Payload of topcase
max 3 kg◁

- Make sure that the weight is uniformly distributed between right and left.
- Stow heavy items at the bottom.



- Lash luggage **1** securely.
- Pass retaining straps **2** through eyes **4** of luggage carrier **3** and tighten.

Speed

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

– Incorrect adjustment of the spring system
– Imbalanced load
– Loose clothing
– Insufficient tyre pressure
– Poor tyre tread
– Etc.

Top speed

DANGER

Maximum speed of the motorcycle is higher than the permissible maximum rated speed of the tyres

Risk of accident due to tyre damage at high speed

- Comply with the tyre-specific speed restrictions.

Risk of poisoning

Exhaust fumes contain carbon monoxide, which is colourless and odourless but highly toxic.

WARNING

Exhaust gases adversely affecting health

Risk of asphyxiation

- Do not inhale exhaust fumes.
- Do not run the engine in an enclosed space.

WARNING

Inhalation of harmful vapours

Health hazard

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

Risk of burn injury

CAUTION

Engine and exhaust system become very hot when the vehicle is in use
Risk of burn injury
- When you park the vehicle make sure that no-one and no objects can come into contact with the hot engine and exhaust system.

Catalytic converter
If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.
For this reason, observe the following points:
– Do not run the fuel tank dry.
– Do not remove the spark plug connector while the engine is running.
– Stop the engine immediately if it misfires.
– Use only unleaded fuel.
– Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in catalytic converter
Damage to catalytic converter
- Note the points listed for protection of the catalytic converter.

Risk of overheating

ATTENTION

Engine running for prolonged period with vehicle at standstill
Overheating due to insufficient cooling; in extreme cases vehicle fire
- Do not allow the engine to idle unnecessarily.
- Ride away immediately after starting the engine.

Tampering

ATTENTION

Tampering with the motorcycle (e.g. engine management ECU, throttle valves, clutch)
Damage to the affected parts, failure of safety-relevant functions, voiding of warranty
- Do not tamper with the vehicle in any way that could result in tuned performance.

REGULAR CHECK

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

Always before riding off
- Checking function of brakes (➠ 76).
- Check that the lights and signalling equipment function.
- Checking clutch function (➠ 81).
- Checking tyre tread depth (➠ 84).
- Checking tyre pressure (➠ 83).
- Check that the luggage is secure.

Every 3rd refuelling stop
- Check the engine oil level (➠ 74).
- Check the brake pad thickness, front brakes (➠ 76).
- Check the brake pad thickness, rear brakes (➠ 77).
- Check the brake-fluid level, front brakes (➠ 78).
- Check the brake-fluid level, rear brakes (➠ 79).
- Check the coolant level (➠ 82).
- Lubricating chain (➠ 94).
- Check the chain tension (➠ 94).

STARTING

Starting engine
- Switch on the ignition.

» Pre-Ride-Check is performed. (➠ 54)

» ABS self-diagnosis is performed (➠ 55)
- Select neutral.

N Idle mode indicator light lights up.

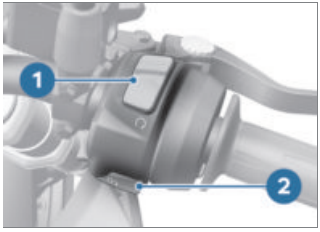
N Idle mode appears on the display.
- Alternatively: with the transmission in gear, pull the clutch lever.

You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch

itself off if you start it with the gearbox in neutral and then engage a gear before retracting the side stand.

Keep throttle grip closed or turn it only slightly.

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



- Set the emergency-off switch **1** to Operation.

Switch is in operation mode.

- Press the starter button **2**.

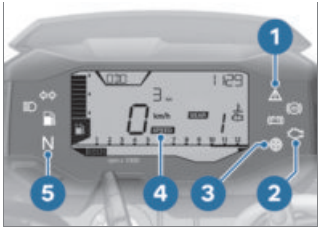
The engine starts.

» Consult the troubleshooting chart below if the engine refuses to start. (➠ 124)

Pre-Ride-Check

The instrument cluster runs a test of the warning and indicator lights and the display when the ignition is switched on. This test is known as the Pre-Ride-Check. The check is aborted if you start the engine before it completes.

Phase 1



"General" warning light **1** lights up red.

The indicator lights **5** light up.

Display **4** shows the most recently active information configuration.

The rpm redline warning **3** lights up.

The warning lights **2** light up.

Phase 2

'General' warning light **1** changes from red to yellow.

Phase 3

The indicator and warning lights and the rpm redline warning go out or assume operational status, as applicable.

The malfunction indicator lamp (MIL) does not go out until 15 seconds have elapsed.

If a service is due, the relevant information is briefly displayed.

If one of the warning or indicator lights **does not** show:

WARNING

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

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

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

Phase 1
» Test of the diagnosis-compatible system components with the vehicle at a standstill.
 flashes.

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

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

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

If an indicator showing an ABS fault appears when ABS self-diagnosis completes:
- You can continue to ride. Bear in mind that the ABS function is not available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

RUNNING IN

Engine
- Until the running-in check, vary the throttle opening and engine-speed range frequently; avoid riding at constant engine rpm for prolonged periods.

- Try to do most of your riding during this initial period on twisting, fairly hilly roads.
- Comply with the rpm limits for running in.

Running-in speed
<6000 min^{-1} (Odometer reading 0...300 km)
No full load (Odometer reading 0...1000 km)

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

Mileage until the running-in check
500...1200 km

Brake pads

New brake pads have to bedded in before they can achieve their optimum frictional force. You can compensate for this initial reduction in braking efficiency by exerting greater pressure on the levers.

WARNING

New brake pads

Longer stopping distance, risk of accident

- Apply the brakes in good time.

Tyres

New tyres have a smooth surface. This must be roughened by riding in a restrained manner at various heel angles until the tyres are run in. Only once the surface has been roughened can the tyres achieve maximum grip.

WARNING

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

Risk of accident

- Ride carefully and avoid extremely sharp inclines.

RPM REDLINE WARNING

Requirement

Vehicle not yet in 6th gear, maximum acceleration required.

- Accelerate.


The rpm redline warning **1** lights up when the following engine speed is reached:
>10000 min^{-1}
- Take care not to exceed the following engine speed:

 Maximum engine speed
max 10800 min^{-1}

- Upshift to the next gear.

BRAKES

How can stopping distance be minimised?

Each time the brakes are applied, a load distribution shift takes place with the load shifting forward from the rear to the front wheel. The sharper the motorcycle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking.
In order to achieve the shortest stopping distance, the front wheel brake must be pulled quickly until ABS activates, the pressure point held and the rear wheel brake operated at the same time. This makes the best possible use of the dynamic increase in load at the front wheel. Remember to pull the clutch at the same time.
BMW Motorrad ABS prevents the front wheel from locking. In the "emergency braking situations" that are trained so frequently, braking force is applied as rapidly as possible and with the rider's full force applied to the brake levers; under these circumstances the dynamic shift in load distribution cannot keep pace with the increase in deceleration and the tyres cannot transmit the full braking force to the surface of the road. In the absence of load on the wheel the ABS has to intervene to prevent the front wheel from locking even if the brakes are applied only very lightly. This leads to a reduced braking effect.

Descending mountain passes

WARNING

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

Wet and dirty brakes
Wetness and dirt on the brake discs and the brake pads diminish braking efficiency. Delayed braking action or poor braking efficiency must be reckoned with in the following situations:
– Riding in the rain or through puddles of water
– After the vehicle has been washed
– Riding on salted or gritted roads
– After work has been carried on the brakes, due to traces of oil or grease
– Riding on dirt-covered surfaces or off-road

WARNING

Wetness and dirt result in diminished braking efficiency
Risk of accident
- Apply the brakes lightly while riding to remove wetness and dirt, or dismount and clean the brakes.
- Think ahead and brake in good time until full braking efficiency is restored.

PARKING YOUR MOTORCYCLE

Side stand
- Switch off the engine.
- On a gradient, the motorcycle should always face uphill; select 1st gear.

ATTENTION

Poor ground underneath the stand
Risk of damage to parts if vehicle topples
- Always check that the ground under the stand is level and firm.

- Extend the side stand and prop the motorcycle on the stand.

ATTENTION

Additional weight placing strain on the side stand
Risk of damage to parts if vehicle topples
- Do not sit or lean on the vehicle while it is propped on the side stand.

- If the camber of the roadway permits, turn the handlebars all the way to the left.

REFUELLING

Fuel grade

Requirement

For optimum fuel consumption, fuel has to be sulphur-free or with the lowest sulphur content possible.

ATTENTION

Engine operation with leaded fuel

Damage to catalytic converter

- Do not attempt to run the vehicle on leaded fuel or fuel with metallic additives (e.g. manganese or iron).

ATTENTION

Engine operation with ethanol E85

Damage to engine and fuel supply system

- Do not attempt to run the engine on ethanol E85, i.e. a fuel with an ethanol content of 85 %, or flex fuel.

- Note fuel grade.

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

	Recommended fuel grade
E5 E10	Regular unleaded (maximum 15 % ethanol, E15) 91 ROZ/RON 87 AKI

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

E5

E10

Refuelling

WARNING

Fuel is highly flammable

Risk of fire and explosion

- Do not smoke. Never bring a naked flame near the fuel tank.

ATTENTION

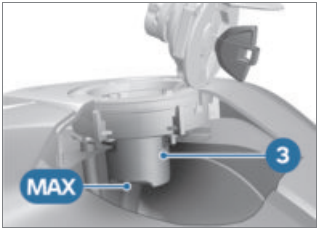
Component damage
Component damage caused by overfilled fuel tank
- Overfilling the fuel tank will cause excess fuel to penetrate the carbon canister and cause component damage.
- Fill the fuel tank up to the lower edge of the filler neck only.

ATTENTION

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

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

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



- Refuel with fuel of the grade stated above; do not fill the tank past the bottom edge of filler neck **3**. When refuelling be aware of the divider in the fuel filler neck and take care, so that fuel cannot escape.

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

the fuel reserve indicator light is switched off.

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

Usable fuel capacity
approx. 11.5 l
Fuel reserve
approx. 1 l

- Unlock the cap of the fuel tank by turning ignition key **1** clockwise in the lock and press the cap down firmly to close.
- Remove the ignition key and close the protective cap.

SECURING MOTORCYCLE FOR TRANSPORTATION

- Make sure that all components that might come into contact with straps used to secure the motorcycle are adequately protected against scratching. Use adhesive tape or soft cloths, for example, for this purpose.

ATTENTION

Vehicle topples to side when being lifted on to stand

Risk of damage to parts if vehicle topples

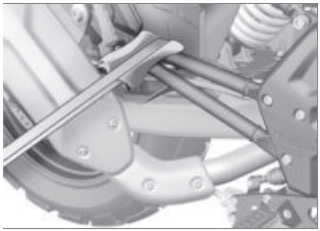
- Secure the vehicle to prevent it toppling, preferably with the assistance of a second person.

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

ATTENTION

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

- At the front, loop a strap over the bottom fork bridge on each side.
- Pull the straps down and tight.



- Secure the rear tensioning straps on both sides on the holders for the rear footrests and tension them.
- Uniformly tighten all the straps.

» The vehicle's springs are compressed.

ENGINEERING DETAILS

07

GENERAL INSTRUCTIONS

To find out more on the subject of engineering go to:
bmw-motorrad.com/technik

ANTILOCK BRAKING SYSTEM

How does ABS work?
The amount of braking force that can be transferred to the road depends on factors that include the coefficient of friction of the road surface. Loose stones, ice and snow or a wet road all have much lower coefficients of friction than a clean, dry asphalt surface. The lower the coefficient of friction, the longer the braking distance. If the rider increases braking pressure to the extent that braking force exceeds the maximum transferable limit, the wheels start to lock and the motorcycle loses its directional stability. A fall is imminent. Before this situation can occur, ABS intervenes and adapts brake pressure to the maximum transferable brake force, so the wheels continue to turn and driving stability is maintained irrespective of the condition of the road surface.

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

Rear wheel lift
Even under severe braking, a high level of tyre grip can mean that the front wheel does not lock up until very late, if at all. Consequently, ABS does not intervene until very late, if at all. Under these circumstances

the rear wheel can lift off the ground, and the outcome can be a highsiding situation in which the motorcycle can flip over.

WARNING

Rear wheel lift due to severe braking
Risk of falling
- When you brake sharply, bear in mind that ABS control cannot always be relied on to prevent the rear wheel from lifting clear of the ground.

What is the design baseline for BMW Motorrad ABS?
Within the limits imposed by physics, the BMW Motorrad ABS ensures directional stability on any surface.

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

The system is not optimised for special requirements that apply under extreme competitive situations off-road or on the track.

Special situations
The speeds of the front and rear wheels are compared as one means of detecting a wheel's incipient tendency to lock. If the system registers implausible values for a lengthy period the ABS function is deactivated for safety reasons and an ABS fault message is issued. Self-diagnosis has to complete before fault messages can be issued.
In addition to problems with the BMW Motorrad ABS, exceptional riding conditions can lead to a fault message being issued.
If a fault message should be triggered due to one of the above-described driving conditions, the ABS function can be re-activated by switching the ignition off and then on again.

Exceptional riding conditions:
– Heating up with the motorcycle on an auxiliary stand, in neutral or with a gear engaged.

–Rear wheel locked by the engine brake for a lengthy period, for example while descending steep gradients.

What significance devolves on regular maintenance?

WARNING

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

Safety reserves
The potentially shorter braking distances which BMW Motorrad ABS permits must not be used as an excuse for careless riding. The system is primarily a means of ensuring a safety margin in genuine emergencies.

WARNING

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

MAINTENANCE

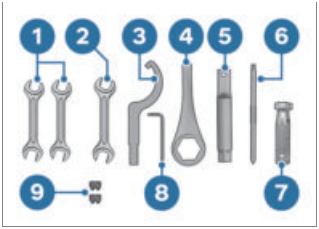
08

GENERAL NOTES

The Maintenance chapter describes straightforward procedures for checking and replacing certain wear parts.
Special tightening torques are listed as applicable. The tightening torques for the threaded fasteners on your motorcycle are listed in the section entitled "Technical data".
Further information on maintenance and repair work is available from your authorised BMW Motorrad retailer in the form of a DVD.

Some of the work requires special tools and a thorough knowledge of the technology involved. If you are in doubt, consult a specialist workshop, preferably your authorised BMW Motorrad retailer.

TOOLKIT



1 Open-ended spanner
Width across flats 12/13
–Adjust the chain tension (➠ 93).

2 Open-ended spanner
Width across flats 10/16
–Adjust the mirror arm (➠ 44).
–Remove the battery (➠ 99).

3 Hook wrench
–Adjust the spring preload for rear wheel (➠ 45).

4 Ring spanner
Width across flats 27
–Remove the rear wheel (➠ 89).
–Adjust the chain tension (➠ 93).

5 Extension for hook wrench and ring spanner

6 Reversible screwdriver blade with cross head

7 Screwdriver handle

8 Allen key
5 mm

8 –Adjust headlight beam throw (➠ 45).

9 Reserve fuses
Miniature fuses, 7.5 A and 15 A
–There are spare fuses in the fuse box.

FRONT-WHEEL STAND

Installing front-wheel stand

ATTENTION

Use of the BMW Motorrad front-wheel stand without accompanying use of centre stand or auxiliary stand
Risk of damage to parts if vehicle topples
- Place the motorcycle on its centre stand or another auxiliary stand before lifting the front wheel with the BMW Motorrad front-wheel stand.

- Place the motorcycle on an auxiliary stand; BMW Motorrad recommends the BMW Motorrad rear-wheel stand.
- Install the rear-wheel stand (➠ 73).

- See the instructions issued with the front-wheel stand for the details of the correct procedure for installation.
- BMW Motorrad offers an auxiliary stand suitable for every vehicle. Your BMW Motorrad retailer will be happy to help you with the selection of a suitable auxiliary stand.

REAR-WHEEL STAND

Installing rear-wheel stand

- The description of how to fit the rear-wheel stand correctly will be found in the instructions for the stand.
- BMW Motorrad offers an auxiliary stand suitable for every

vehicle. Your BMW Motorrad retailer will be happy to help you with the selection of a suitable auxiliary stand.

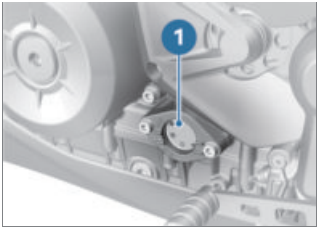
ENGINE OIL

Checking engine oil level

ATTENTION

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

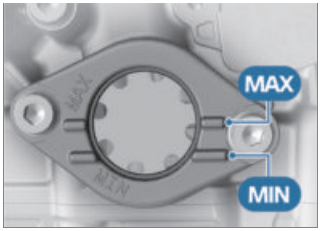
- Place the motorcycle on an auxiliary stand; BMW Motorrad recommends the BMW Motorrad auxiliary stand.
- Alternatively: Hold the motorcycle upright, preferably with the assistance of another person.



ATTENTION

Vehicle toppling sideways
Risk of damage to parts if vehicle topples
- Secure the vehicle, preferably with the assistance of a second person, so that it cannot topple sideways.

- Check the oil level in the display **1**.



Engine oil, specified level
Between **MIN** and **MAX** marks (Engine is at operating temperature, motorcycle is upright)

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

If the oil level is below the minimum mark **MIN**:

- Top up the engine oil (➠ 75).

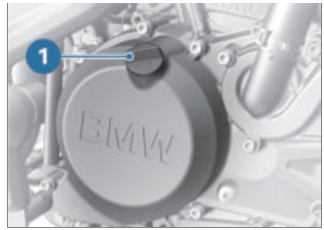
If the oil level is above the maximum mark **MAX**:

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

To protect the environment, BMW Motorrad recommends occasionally checking the engine oil after a journey of at least 50 km.

Topping up engine oil

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Wipe the area around the oil filler opening clean.



- Remove cap **1** of the oil filler opening.

ATTENTION

Use of insufficient engine oil or too much engine oil

Engine damage

- Always make sure that the oil level is correct.

- Top up the engine oil to the specified level.

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

- Check the engine oil level (➠ 74).
- Install cap of oil filler opening **1**.

BRAKE SYSTEM

Checking function of brakes

- Operate the brake lever.

» There is a clearly perceptible pressure point.

- Press the footbrake lever.

» There is a clearly perceptible pressure point.

If pressure points are not clearly perceptible:

ATTENTION

Work on brake system not in compliance with correct procedure

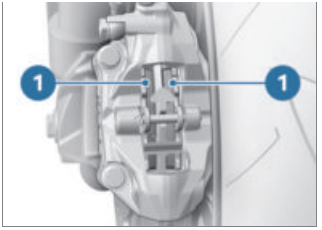
Risk to operational reliability of the brake system

- Have all work on the brake system undertaken by trained and qualified specialists.

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

Checking brake pad thickness, front brakes

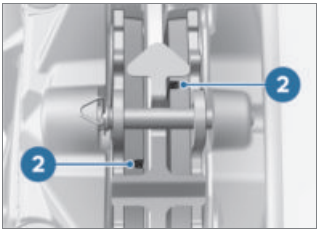
- Make sure the ground is level and firm and place the motorcycle on its stand.



- Turn the handlebars all the way to the right.

» Looking from the rear, you can see brake pads **1**.

- Visually inspect the brake pads to ascertain their thickness.



- Note wear marks **2**.

	Brake-pad wear limit, front
min 1.0 mm (Friction pad only, without backing plate. The wear indicators (grooves) must be clearly visible.)	

If the wear indicating marks are no longer visible:

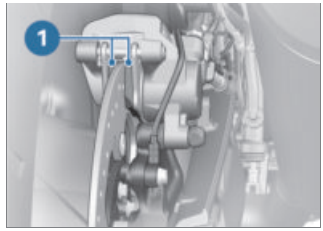
WARNING

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

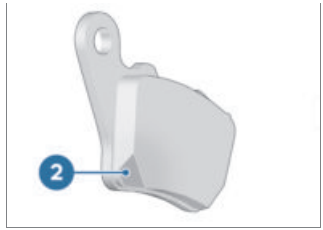
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad retailer.
- BMW Motorrad recommends installing only genuine brake pads from BMW Motorrad.

Checking brake pad thickness, rear brakes

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



- Visually inspect the brake pads to ascertain their thickness. Viewing direction: from the rear toward brake pads **1**.



- Note chamfer **2**.

Brake-pad wear limit, rear
min 1.0 mm (Friction lining without carrier plate. The wear marks must be clearly visible.)

If the chamfer is no longer visible:

WARNING

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

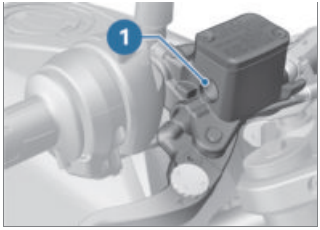
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Checking brake-fluid level, front brakes

WARNING

Not enough brake fluid in brake fluid reservoir, or contaminants in brake fluid
Considerably reduced braking power due to presence of air, contaminants or water in the brake system
- Cease operation of the vehicle immediately and do not ride it until the fault has been rectified.
- Check the brake-fluid levels at regular intervals.
- Always make sure that the lid of the brake fluid reservoir and the area around the lid are cleaned before opening.
- Make sure that only fresh brake fluid from a sealed container is used.

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



- Turn the handlebars to a position in which the brake fluid reservoir is horizontal.
- Check the brake fluid level in inspection glass **1**.

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

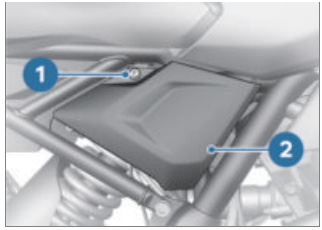
	Brake fluid level, front
Brake fluid, DOT4	
It is not permissible for the brake fluid level to be below the **MIN** mark. (Brake fluid reservoir horizontal)	

If the brake fluid level drops below the permitted level:

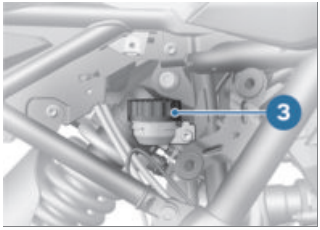
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad retailer.

Checking brake-fluid level, rear brakes

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



- Remove screw **1**.
- Pull frame panel **2** out of the grommets and remove it.



- Check the brake fluid level in brake fluid reservoir **3**.

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

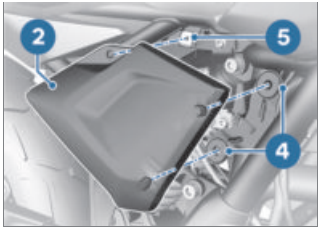
Brake fluid level, rear	
Brake fluid, DOT4	
It is not permissible for the brake fluid level to be below the **MIN** mark. (Brake fluid reservoir horizontal)	

If the brake fluid level drops below the permitted level:

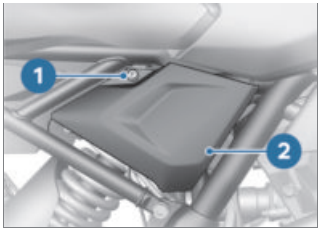
WARNING

Not enough brake fluid in brake fluid reservoir, or contaminants in brake fluid
Considerably reduced braking power due to presence of air, contaminants or water in the brake system
- Cease operation of the vehicle immediately and do not ride it until the fault has been rectified.
- Check the brake-fluid levels at regular intervals.
- Always make sure that the lid of the brake fluid reservoir and the area around the lid are cleaned before opening.
- Make sure that only fresh brake fluid from a sealed container is used.

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



- Engage frame panel **2** in grommets **4**.
- Align frame panel **2** with flat nut **5**.



- Install frame panel **2** with screw **1**.

CLUTCH

Checking clutch function

- Pull the clutch lever.

» The clutch must fully disengage. Signs that the clutch is fully disengaged:

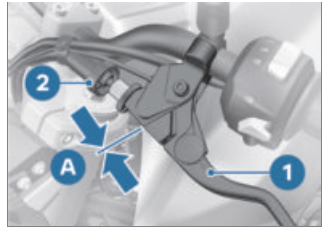
–Easy to change gear

–Easy to switch to idling

If this is not the case, or there is a lack of power transmission after the clutch has engaged:

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

Checking clutch-lever play



- Remove cover **2**.
- Pull clutch lever **1** until resistance is perceptible.
- In this position, measure clutch lever play **A** between the clutch lever fitting and the clutch lever.

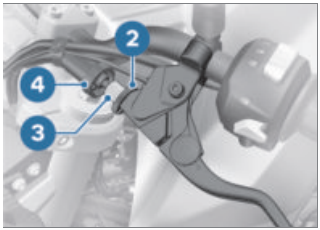
Clutch-lever play
1...2 mm (on the manual controls, handlebars in straight-ahead position, with cold engine)

Clutch-lever play is out of tolerance:

- Adjust the clutch-lever play (➠ 82).

Clutch-lever play is in tolerance:
- Install cover **2**.

Adjusting clutch-lever play



- Disengage cover **4**.
- Slacken knurled nut **2**.
- Pull the clutch cable up slightly to relieve adjusting sleeve **3**.
- To increase clutch-lever play: screw adjusting sleeve **3** into the handlebar fitting.
- To reduce clutch-lever play: back off adjusting sleeve **3** in the handlebar fitting.
- Lock adjusting sleeve **3** with knurled nut **2**.
- Check the clutch-lever play (➠ 81).
- Repeat these steps until clutch lever play is correct.
- Install cover **4**.

COOLANT

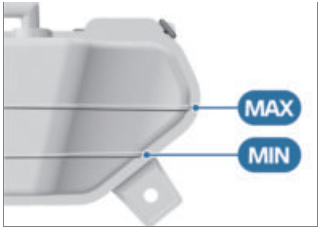
Checking coolant level

Requirement

The engine is cold.

- Hold the motorcycle upright, preferably with the assistance of another person.

- Check the coolant level in the coolant expansion tank **1**. Viewing direction: From in front toward the inside of the right side panel.

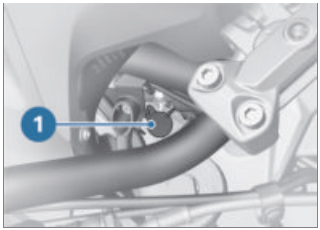


Coolant, specified level
Between **MIN** and **MAX** marks on the expansion tank (Engine is cold, motorcycle is upright)

If the coolant drops below the permitted level:

- Top up the coolant (➠ 83).

Topping up coolant



- Turn the handlebars all the way to the left.
- Open cap **1** of the coolant expansion tank.
- Top up coolant to specified level. Use a funnel with filler adapter or hose.

Coolant full quantity
Antifreeze and corrosion inhibitor
150 ml (Difference between **MIN**- and **MAX**-mark)

- Check the coolant level (➠ 82).

When the coolant reaches the specified level:

- Close the cap of the coolant expansion tank.

TYRES

Checking tyre pressure

WARNING

Incorrect tyre pressure
Impaired handling characteristics of the motorcycle, shorter useful tyre life

- Always check that the tyre pressures are correct.

WARNING

Tendency of valve inserts to open by themselves at high riding speeds
Sudden loss of tyre pressure

- Install valve caps fitted with rubber sealing rings and tighten firmly.

- Make sure the ground is level and firm and place the motorcycle on its stand.
- Check tyre pressures against the data below.

 Tyre pressure, front
1.7 bar (with cold tyre; one-up and two-up)
 Tyre pressure, rear
1.9 bar (with cold tyre; one-up and two-up)

If tyre pressure is too low:
- Correct tyre pressure.

Checking tyre tread depth

WARNING

Riding with badly worn tyres
Risk of accident due to impaired handling
- If applicable, have the tyres changed in good time before they wear to the minimum tread depth permitted by law.

- Place the motorcycle on its stand on firm, even ground.
- Measure the tyre tread depth in the main tread grooves with wear marks.

Wear indicators are built into the main profile grooves on each tyre. The tyre is worn out when the tyre tread has worn down to the level of the marks. The locations of the marks are indicated on the edge of the tyre, e.g. by the letters TI, TWI or by an arrow.

The tyres fitted on the vehicle meet the requirements of the BIS and the requirements of the Central Motor Vehicles Rules (CMVR), 1989.

If the tyre tread is worn to minimum:
- Replace tyre or tyres, as applicable.

WHEEL RIMS

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

WHEELS

Effect of wheel size on ABS

The wheel sizes are very important for the ABS. In particular, the diameter and the width of a vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change to these dimensions, caused for example by a switch to wheels other than the standard installed ones, can seriously affect the performance of the control systems.

The sensor rings are essential for correct wheel speed detection; they too must match the motorcycle's control systems and consequently cannot be replaced.

If you decide that you would like to fit non-standard wheels to your motorcycle, it is very important to consult a specialist workshop beforehand, preferably an authorised BMW Motorrad retailer. In some cases, the data programmed into the control units can be changed to suit the new wheel sizes.

Removing front wheel

- Place the motorcycle on an auxiliary stand. BMW Motorrad recommends you use the BMW Motorrad rear-wheel stand.
- Install the rear-wheel stand (➠ 73).
- Lift the front of the motorcycle until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Install the front-wheel stand (➠ 73).

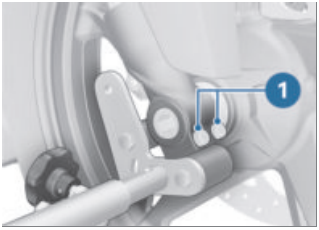
ATTENTION

Unwanted inward movement of the brake pads

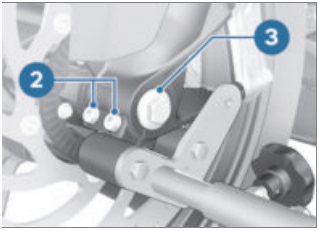
Component damage on attempt to install the brake caliper or because brake pads have to be forced apart

- Do not operate the brake with the brake disc removed.

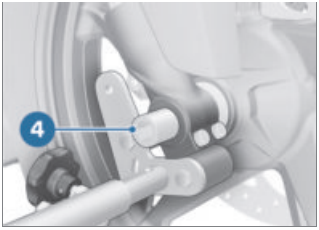
- Push apart the brake pads a little.



- Loosen clamping bolts **1**.



- Remove screw **3**.
- Loosen clamping bolts **2**.
- Press quick-release axle slightly toward the inside, so as to be better able to grip it on the right-hand side.



- Withdraw quick-release axle **4**, support the front wheel when doing this.

ATTENTION

Removal of front wheel not in compliance with correct procedure

Damage to wheel speed sensor

- Note the wheel-speed sensor when rolling out the front wheel.

- Set down front wheel and roll forwards out of the front suspension. In this process, take care not to damage the wheel speed sensor.

- Remove spacer bush **5** from the wheel hub.

Installing front wheel

WARNING

Use of a non-standard wheel
Malfunctions in ABS operation
- See the information on the effect of wheel size on the ABS system at the start of this chapter.

ATTENTION

Tightening threaded fasteners to incorrect tightening torque
Damage, or threaded fasteners work loose
- Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

- Lubricate the friction face of spacer bush **5**.

Lubricant
Optimoly TA

- Insert spacer bush **5**, turned with the collar facing out, into the wheel hub on the left-hand side.

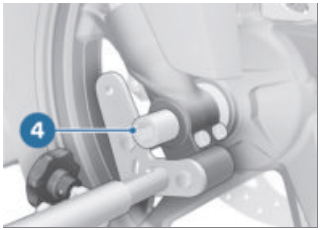
ATTENTION

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

ATTENTION

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

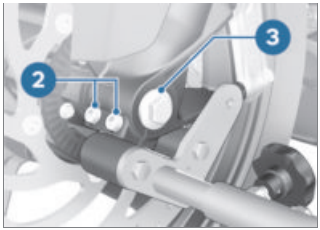
- Roll the front wheel into position between the front forks. In this process, take care not to damage the wheel speed sensor.



- Lubricate quick-release axle **4**.

Lubricant
Optimoly TA

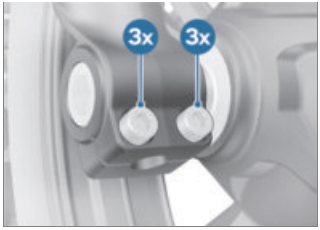
- Lift the front wheel slightly and install quick-release axle **4**.
- Remove front-wheel stand and firmly compress front forks several times. Do not operate the brake lever in this process.
- Install the front-wheel stand (➠ 73).



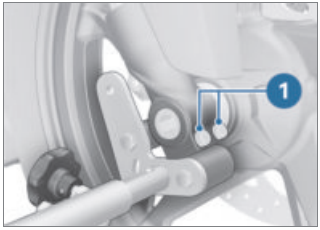
- Install screw **3** and tighten to specified torque. Counter-hold quick-release axle on the right-hand side.

Screw in front-wheel quick-release axle
50 Nm

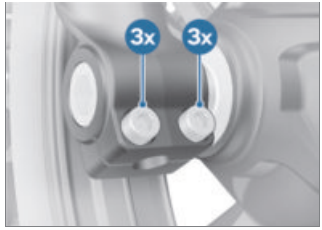
- Tighten clamping bolts **2** to the specified tightening torque.



Clamping screws in axle holder
Tightening sequence: Tighten screws six times in alternate sequence
19 Nm



- Tighten clamping bolts **1** to the specified tightening torque.



Clamping screws in axle holder
Tightening sequence: Tighten screws six times in alternate sequence
19 Nm

- Remove the front-wheel stand.

WARNING

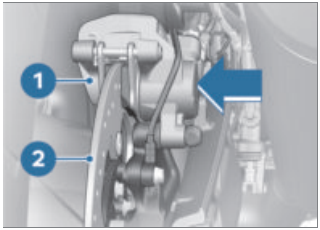
Brake pads not lying against the brake disc
Risk of accident due to delayed braking effect.
- Before driving, check that the brakes respond without delay.

- Operate the brake several times until the brake pads are bedded.

Removing rear wheel

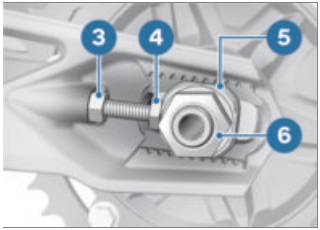
- Lift the motorcycle, preferably with a BMW Motorrad rear-wheel stand.

- Install the rear-wheel stand (➠ 73).
- Slip wooden chocks or similar under the rear wheel to prevent it from dropping out after the quick-release axle has been removed.

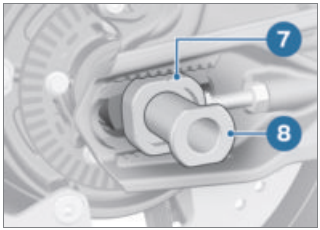


- Press the brake caliper **1** against the brake disc **2**.

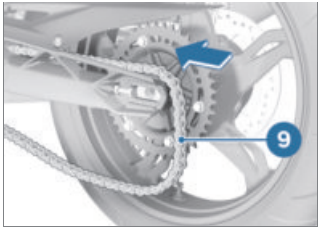
» Brake piston has been pushed back.



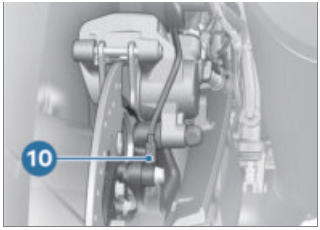
- Remove nut **6**, using the appropriate tool from the onboard toolkit.
- Remove washer.
- Loosen lock nuts **3** on left and right.
- Tighten adjusting screws **4** on left and right.
- Remove chain tensioner **5** and push the quick-release axle to the right as far as it will go.



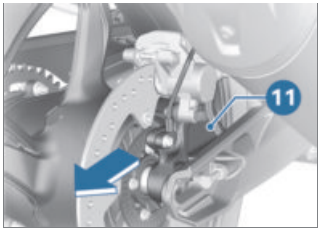
- Remove quick-release axle **8** and remove chain tensioner **7**.



- Roll the rear wheel as far forward as possible and disengage chain **9** from the sprocket.



- When rolling the rear wheel clear of the motorcycle, take care not to damage wheel-speed sensor **10**.



- Roll the rear wheel to the rear and clear of the swinging arm and at the same time pull brake-caliper carrier **11** back far enough to allow the rear wheel to clear it.

The sprocket and the spacer bushes on left and right are loose fits in the wheel. Make sure that these parts are not damaged or get lost on removal.

Installing rear wheel

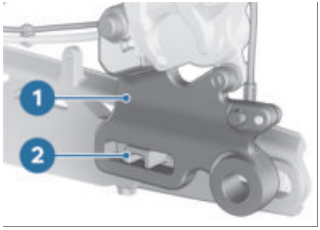
WARNING

Use of a non-standard wheel
Malfunctions in ABS operation
- See the information on the effect of wheel size on the ABS system at the start of this chapter.

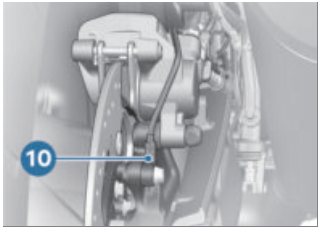
ATTENTION

Tightening threaded fasteners to incorrect tightening torque
Damage, or threaded fasteners work loose
- Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

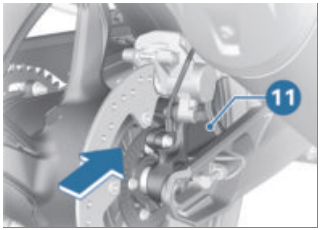
- Roll the rear wheel on the support into the swinging arm as far as necessary to permit the brake-caliper carrier to be inserted.



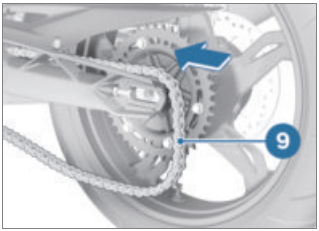
- Set brake-caliper support **1** on guide **2**.



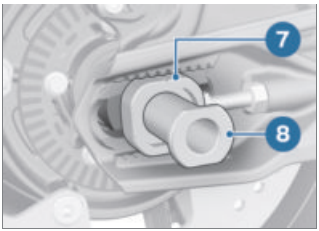
- When rolling the rear wheel into position, take care not to damage wheel-speed sensor **10**.



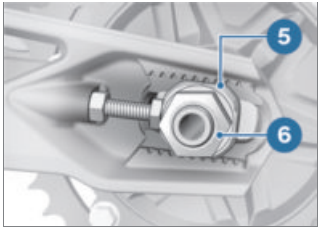
- Roll the rear wheel further into the swinging arm, while pushing brake-caliper carrier **11** forward at the same time.



- Roll the rear wheel as far forward as possible and loop chain **9** over the sprocket.



- Insert quick-release axle **8** and chain tensioner **7** into the swinging arm, brake-caliper support and rear wheel, interlocking the quick-release axle with the chain tensioner.



- Insert left-hand chain tensioner **5**.
- Install nut **6** with its washer, but do not tighten the nut at this point.

WARNING

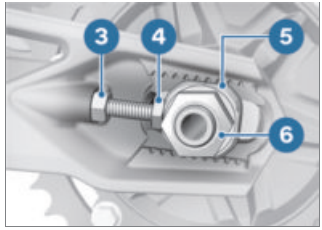
Brake pads not lying against the brake disc
Risk of accident due to delayed braking effect.
- Before driving, check that the brakes respond without delay.

- Operate the brake several times until the brake pads are bedded.
- Adjust the chain tension (➠ 93).

CHAIN

Adjusting chain tension

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



- Slacken nut **6**.
- Loosen lock nuts **3** on left and right.
- Use adjusting screws **4** on left and right to adjust chain tension.
- Check the chain tension (➠ 94).
- Make sure that the notch in the top of chain tensioner **5** is set to the same scale value on left and right.
- Tighten lock nuts **3** on left and right to the specified tightening torque.

Locknut of the final-drive chain tensioning screw
19 Nm

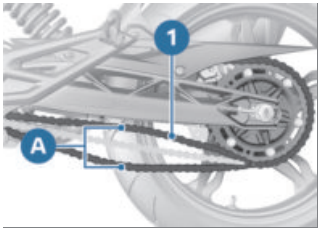
- Tighten nut **6** to the specified tightening torque.

Rear quick-release axle in swinging arm
100 Nm

–Once you have tightened the rear wheel quick-release axle,

complete the following tasks again:
- Check the chain tension (⇒ 94).

Checking chain tension
- Make sure the ground is level and firm and place the motorcycle on its stand.
- Turn the rear wheel until it reaches the position with the lowest amount of chain sag.



- Use a screwdriver to push chain **1** up and down at a point midway between the pinion and sprocket and measure chain sag **A**.

Chain deflection
40...50 mm (Motorcycle with no weight applied, supported on its side stand)

If chain deflection is outside permitted tolerance:
- Adjust the chain tension (⇒ 93).

Lubricating chain

ATTENTION

Inadequate cleaning and lubrication of the drive chain
Accelerated wear
- Clean and lubricate the drive chain at regular intervals.

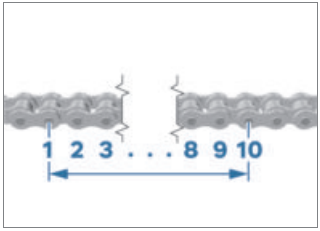
- Lubricate the drive chain every third fuel stop.
- Lubricate the chain more frequently if the motorcycle is ridden in wet, dusty or dirty conditions.
- Switch the ignition off and select neutral.
- Clean the drive chain with a suitable cleaning product, dry it and apply chain lubricant.
- To prolong chain life, BMW Motorrad recommends the use of BMW Motorrad chain lubricant, or:

Lubricant
Chain spray, O-ring compatible

- Wipe off excess lubricant.

Checking chain wear

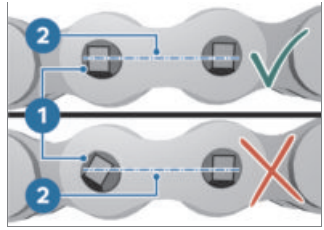
- Engage 1st gear.
- Turn the rear wheel in the normal direction of travel until the chain is tensioned.
- Determine the length of the chain underneath the rear wheel swinging arm above the middle of 10 rivets in 3 different places.



Permissible chain length
max 144.30 mm (measured from the **centre** of 10 rivets, chain pulled taut)

If the chain has stretched to the maximum permissible length:

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



- Check whether a rivet head **1** has twisted out of line.

Rivet heads are parallel to the chain centreline **2**.

- Chain riveting is OK.

If one or more rivet heads have twisted out of line:

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

LIGHTING

Replacing LED light sources

WARNING

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

Safety risk

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

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

CAUTION

JUMP-STARTING

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

ATTENTION

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

ATTENTION

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

ATTENTION

Jump-starting with a voltage greater than 12 V
Damage to the on-board electronics
- Make sure that the battery of the donor vehicle does not exceed a voltage of 12 V.

- When jump-starting the engine, do not disconnect the battery from the on-board electrical system.
- Remove the seat (➠ 40).
- Run the engine of the donor vehicle during jump-starting.
- Begin by connecting one end of the red jump lead to the positive terminal of the discharged battery and the other end to the positive terminal of the donor battery.
- Then connect one end of the black jump lead to the negative terminal of the donor battery, and the other end to the negative terminal of the discharged battery.
- Start the engine of the vehicle with the discharged battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt in order to protect the starter motor and the donor battery.
- Allow both engines to run for a few minutes before disconnecting the jump leads.
- Disconnect the jump lead from the negative terminal first, then disconnect the second lead from the positive terminal.
- Install the seat (➠ 41).

BATTERY

Maintenance instructions

Correct upkeep, recharging and storage will prolong the life of the battery and are essential if warranty claims are to be considered.
Compliance with the points below is important in order to maximise battery life:
- –Keep the surface of the battery clean and dry.
- –Do not open the battery.
- –Do not top up with water.
- –Be sure to read and comply with the instructions for charging the battery on the following pages.
- –Do not turn the battery upside down.

ATTENTION

On-board electronics (e.g. clock) draining connected battery
Battery is deep-discharged; this voids the guarantee
- Connect a float charger to the battery if the motorcycle is to remain out of use for more than four weeks.

Recharging connected battery

ATTENTION

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

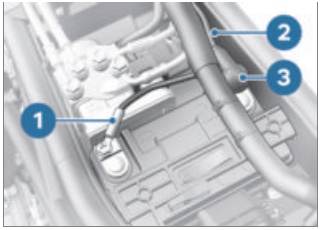
- Disconnecting battery from motorcycle (➠ 98).

Recharging disconnected battery
- Disconnecting battery from motorcycle (➠ 98).
- Charge the battery using a suitable charger.
- Comply with the operating instructions of the charger.
- Once the battery is fully charged, disconnect the charger's terminal clips from the battery terminals.

The battery has to be recharged at regular intervals in the course of a lengthy period of disuse. See the instructions for caring for your battery. Always fully recharge the battery before restoring it to use.

- Connecting battery to motorcycle (➠ 99).

Disconnecting battery from motorcycle
- Make sure the ground is level and firm and place the motorcycle on its stand.
- Remove the seat (➠ 40).



ATTENTION

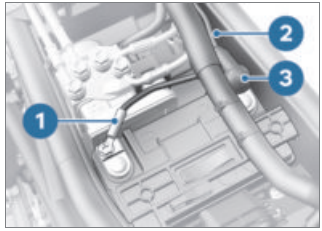
Battery not disconnected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.

- Disconnect negative battery cable **1** first.
- Then push protective cap **3** aside and disconnect positive battery cable **2**.

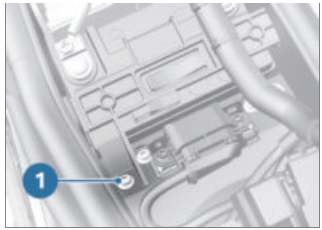
Connecting battery to motorcycle



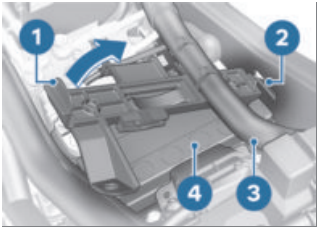
- First connect positive battery cable **2** and cover it with protective cap **3**.
- Then connect negative battery cable **1**.
- Install the seat (➠ 41).

Removing battery

- Remove the seat (➠ 40).
- Disconnecting battery from motorcycle (➠ 98).



- Remove screw **1**.



- Unhook retainer **1** on the left and swing it up.
- On the right, disengage the retainer from battery tray **2**.

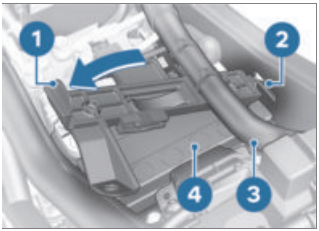
» The retainer is now attached only to vehicle wiring harness **3**.

- Push holder **1** complete with wiring harness **3** to the right out of the way.

» The battery can now be removed.

- Lift battery **4** up and out. Work it back and forth slightly if it is difficult to remove.

Installing battery



- Insert battery **4** into the battery compartment, positive terminal on the right in the forward direction of travel.
- Engage the holder on the right in battery tray **2**.
- Swing holder **1** down and engage it on the left.

» Wiring harness **3** is in the initial position.

- Install screw **1**.
- Connecting battery to motorcycle (➠ 99).
- Install the seat (➠ 41).

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

- Set the clock (➠ 39).
- Set the date (➠ 39).

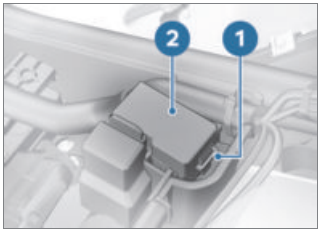
FUSES

Replacing fuses

ATTENTION

Jumpering of blown fuses
Risk of short-circuit and fire
- Never attempt to jumper a blown fuse.
- Always replace a defective fuse with a new fuse of the same amperage.

- Switch off the ignition (➠ 35).
- Make sure the ground is level and firm and place the motorcycle on its stand.
- Remove the seat (➠ 40).



- Press latch **1**.
- Open fuse box **2**.
- Consult the fuse assignment diagram below and, using the gripping clamp, replace the defective fuse.

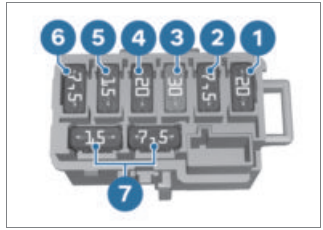
» Fuse assignment (➠ 101)

- Close fuse box **2**. Make sure that lock **1** engages.

If fuse defects recur frequently have the electric circuits checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

- Install the seat (➠ 41).

Fuse assignment



Fuse 1
20 A (Engine control unit)
Fuse 2
7.5 A (Heated grips, instrument cluster, ABS pressure modulator, engine control unit, starter relay)
Fuse 3
30 A (Main fuse)
Fuse 4
20 A (ABS pressure modulator)

Fuse 5
15 A (Lighting, horn)
Fuse 6
7.5 A (Instrument cluster, diagnosis)

–Reserve fuses **7**
–There are another 3 spare fuses (7.5 A, 20 A, 30 A) in the fuse box.

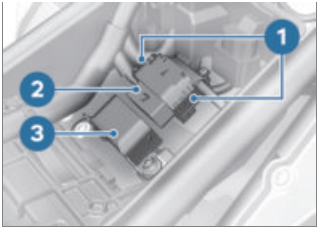
DIAGNOSTIC CONNECTOR

Disengaging diagnostic socket

CAUTION

Incorrect procedure followed when loosening the diagnostic connector for the on-board diagnosis
Motorcycle experiences malfunctions
- Only have the diagnostic connector loosened by a specialist workshop or other authorised persons during your next BMW Service appointment.
- Have the work performed by appropriately trained staff.
- Refer to the vehicle manufacturer specifications.

- Remove the seat (➠ 40).

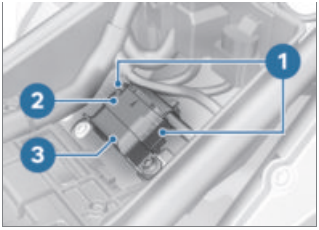


- Push in locks **1**.
- Disengage diagnostic socket **2** from holder **3**.

» The interface to the diagnosis and information system can be connected to the diagnostic connector **2**.

Securing diagnostic socket

- Disconnect the interface for the diagnosis and information system.



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

» The locks **1** engage.

- Install the seat (➠ 41).

ACCESSORIES

09

GENERAL NOTES

CAUTION

Use of other-make products
Safety risk
- BMW Motorrad cannot examine or test each product of outside origin to ensure that it can be used on or in connection with BMW vehicles without constituting a safety hazard. Country-specific official authorisation does not suffice as assurance. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW vehicles and, consequently, they are not sufficient in some circumstances.
- Use only parts and accessories approved by BMW for your vehicle.

BMW has conducted extensive testing of the parts and accessory products to establish that they are safe, functional and suitable. Consequently, BMW accepts responsibility for the products. BMW accepts no liability whatsoever for parts and accessories that it has not approved.

All modifications must be in compliance with legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country.
Your authorised BMW Motorrad retailer can offer expert advice on the choice of genuine BMW parts, accessories and other products.
To find out more about accessories go to:
bmw-motorrad.com/equipment

HEATED HANDLEBAR GRIPS

–with heated grips OA

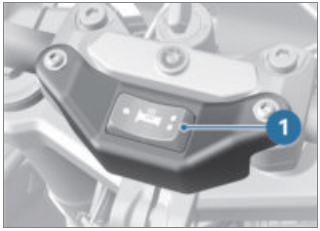
Operating the heated handlebar grips
- Start the engine.

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

The increase in power consumption caused by having the heated handlebar grips switched on can drain the battery if you are riding at low engine speeds.

The handlebar grips have two-stage heating. Stage two is for heating the grips quickly: it is advisable to switch

to stage one as soon as the grips are warm.



- Press the rocker switch **1** on the side with two dots to switch on the high heater output setting.
- Press the rocker switch **1** on the side with one dot to switch on the low heater output setting.
- Centre the rocker switch **1** to switch the heating system off.

POWER SOCKET

–with extra socket OA

Connection of electrical devices

–You can start using electrical devices connected to the motorcycle's sockets only when the ignition is switched on.

Cable routing

–The cables from the power sockets to the auxiliary devices must be routed in such a way that they do not impede the rider.

–The cable routing should not restrict the steering angle or obstruct handling.

–The cables must not be trapped.

TOPCASE

Installing topcase

–with topcase OA

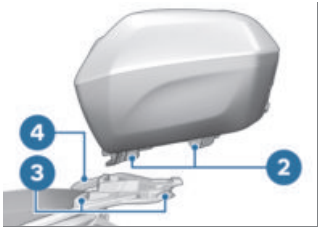
WARNING

Topcase not properly secured

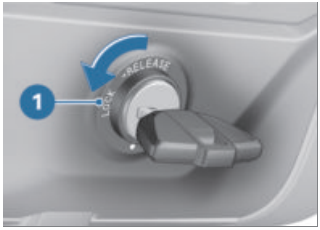
Driving safety is impaired

- The topcase must not wobble and must be secured free from play.

- Pull carry handle **1** up as far as it will go.

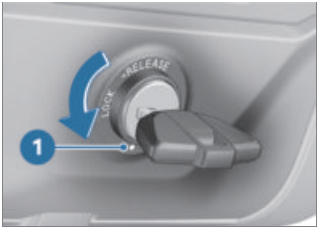


- Hook the topcase into luggage carrier **4**. Make sure that hooks **2** are securely seated in corresponding keepers **3**.
- Push carry handle **1** down until it engages.



- Turn the key in the topcase lock to position **1** and remove the key.

Opening topcase
–with topcase OA



- Turn the key in the topcase lock to position **1**.

- Push lock barrel **1** forward.
» Release lever **2** pops up.
- Pull the release lever all the way up.
» The lid of the topcase opens.

Closing topcase
–with topcase OA

- Pull release lever **1** up as far as it will go.
- Close the lid of the topcase and hold it down. Check that nothing is trapped between the lid and the case.

The topcase can also be closed when the lock is in the LOCK position. In this case, make sure that the key is not left inside the topcase.

- Push release lever **1** down until it engages.
- Turn the key in the topcase lock to the **LOCK** position and remove the key from the lock.

Removing topcase
–with topcase OA

- Turn the key in the topcase lock to position **1**.

» The handle pops out.

- Pull carry handle **1** up as far as it will go.
- Lift the topcase at the rear and remove it from the luggage carrier.

Maximum payload and maximum permissible speed
Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the topcase.

Contact your authorised BMW Motorrad dealer if you cannot find your combination of vehicle and topcase on the label.
The values for the combination described here are as follows:

Maximum speed for riding with a loaded topcase
–with topcase OA or –with topcase Light OA
max 130 km/h◁

Payload of topcase
max 5 kg

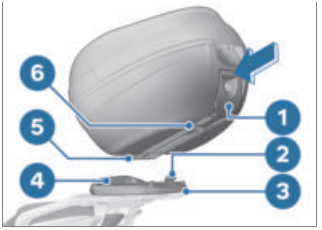
LIGHT TOPCASE

Installing Light topcase
–with topcase Light OA

WARNING

Topcase not properly secured
Driving safety is impaired
- The topcase must not wobble and must be secured free from play.

- Turn the key until it is vertical in the lock.

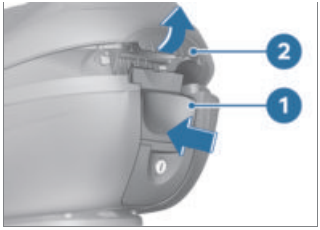


- Insert base **5** into slot **4**.
- Position mount **6** on hook **2**.
- Make sure that release lever **1** engages and that the topcase is securely connected to adapter **3**.
- To lock the release lever, turn the key until it is horizontal in the lock and pull it out.

Opening Light topcase
–with topcase Light OA

- Turn the key until it is vertical in the lock.

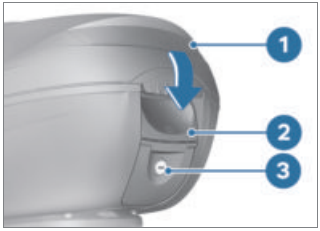
The release levers are locked when the key is in the horizontal position.



- Push release lever **1** in the direction of the arrow.
- Open topcase lid **2**.

Closing Light topcase
–with topcase Light[OA]

- Turn the key until it is vertical in the lock.

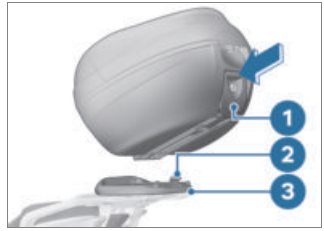


- Close topcase lid **1**. Check that nothing is trapped between lid and case and that release lever **2** engages.
- Turn the key in topcase lock **3** to the horizontal position and remove the key.

» The release levers are locked. You can neither open the topcase nor remove it from the adapter.

Removing Light topcase
–with topcase Light[OA]

- Turn the key until it is vertical in the lock.



- Push release lever **1** in the direction of the arrow.
- Lift the topcase at the rear and remove it from **2** of adapter **3**.

Maximum payload and maximum speed
–with topcase Light[OA]
Note the maximum payload and the maximum permissible speed.

Maximum speed for riding with a loaded topcase
–with topcase[OA] or –with topcase Light[OA]
max 130 km/h◁

 Payload of topcase
max 3 kg

CARE

10

CARE PRODUCTS

BMW Motorrad recommends that you use the cleaning and care products you can obtain from your authorised BMW Motorrad retailer. The substances in BMW Care Products have been tested in laboratories and in practice; they provide optimised care and protection for the materials used in your vehicle.

ATTENTION

Use of unsuitable cleaning and care products

Damage to vehicle parts

- Do not use solvents such as cellulose thinners, cold cleaners, fuel or the like, and do not use cleaning products that contain alcohol.

ATTENTION

Use of strongly acidic or strongly alkaline cleaning agents

Damage to vehicle parts

- Dilute in accordance with the dilution ratio stated on the packaging of the cleaning agent.
- Do not use strongly acidic or strongly alkaline cleaning agents.

WASHING THE VEHICLE

BMW Motorrad recommends that you use BMW insect remover to soften and wash off insects and stubborn dirt on painted parts prior to washing the motorcycle.

To prevent stains, do not wash the motorcycle immediately after it has been exposed to strong sunlight and do not wash it in the sun.

Remove dirt from the fork legs at regular intervals. Make sure that the vehicle is washed frequently, especially during the winter months.

To remove road salt, clean the motorcycle with cold water immediately after every trip.

WARNING

Wet brake discs and brake pads after vehicle wash, after riding through water and in rainy conditions
Diminished braking effect, risk of accident
- Apply the brakes in good time to allow the friction and heat to dry the brake discs and brake pads.

ATTENTION

Effect of road salt intensified by warm water
Corrosion
- Use only cold water to wash off road salt.

ATTENTION

Damage due to high water pressure from high pressure cleaners or steam cleaners
Corrosion or short circuit, damage to labels, seals, hydraulic brake system, electrical system and the motorcycle seat
- Exercise restraint when using a steam jet or high pressure cleaning equipment.

The case and topcase do not have any surface coating. The following care steps will ensure the best-possible appearance:
Remove road salt and corrosive deposits immediately at the end of the journey with cold water.

CLEANING EASILY DAMAGED COMPONENTS

Plastics

ATTENTION

Use of unsuitable cleaning agents
Damage to plastic surfaces
- Do not use cleaning agents that contain alcohol, solvents or abrasives.
- Do not use insect-remover pads or cleaning pads with hard, scouring surfaces.

Trim panel components
Clean trim panel components with water and BMW Motorrad solvent cleaner.

Windscreen and lenses made of plastic
Remove dirt and insects with a soft sponge and plenty of water.

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

Clean with water and sponge only.

Do not use any chemical cleaning agents.

Light topcase
–with topcase Light OA

ATTENTION

Use of unsuitable cleaning and care products
Damage to the surface
- Clean the surface using only water and a microfibre cloth.

Chrome
Carefully clean chrome sections with a generous amount of water and motorcycle cleaner from the care series BMW Motorrad Care Products. This applies especially where road salt has been in use.
For an additional treatment, use BMW Motorrad metal polish.

Radiator

ATTENTION

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

- Clean radiator regularly. Use a hose with low water pressure, for example, to do this.

» This prevents the engine from overheating due to insufficient cooling.

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

ATTENTION

Application of silicone sprays to rubber seals
Damage to the rubber seals
- Do not use silicone sprays or care products that contain silicon.

CARE OF PAINTWORK

The long-term effects of materials that are damaging to paint can be prevented by regular vehicle washes, particularly if your vehicle is ridden in areas susceptible to high levels of air pollution or natural contamina-

tion, for example tree resin or pollen.
Particularly aggressive materials, however, should be removed immediately, otherwise changes to or discolouration of the paint can result. These include, for example, spilled fuel, oil, grease, brake fluid or bird excrement. For this, we recommend BMW Motorrad solvent cleaner followed by BMW Motorrad gloss polish for preservation.
Contamination of the paint surface can be seen particularly clearly after a vehicle wash. These areas should be cleaned immediately using benzine or spirit, applied with a clean cloth or cotton pad. BMW Motorrad recommends that tar spots be removed using BMW tar remover. The paint should then be preserved in these areas.

VEHICLE PRESERVATION

If water no longer rolls off the paint, the paint must be preserved.
For paint preservation, BMW Motorrad recommends the use of BMW Motorrad gloss polish or agents containing carnauba wax or synthetic wax.

LAYING UP THE MOTORCYCLE

- Clean the motorcycle.
- Refuel the motorcycle.

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

- Remove the battery (➠ 99).
- Spray the clutch-lever and brake-lever pivots and the centre-stand and side-stand pivot mounts with a suitable lubricant.
- Coat bright metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).
- Stand the motorcycle in a dry room in such a way that there is no load on either wheel (preferably using the front-wheel and rear-wheel stands from BMW Motorrad).

RESTORING MOTORCYCLE TO USE

- Remove the protective wax coating.
- Clean the motorcycle.
- Install the battery (➠ 100).
- Comply with checklist (➠ 53).

TECHNICAL DATA

11

TROUBLESHOOTING CHART

The engine doesn't start.

Possible cause	Rectification
Side stand extended and gear engaged	Retract the side stand.
Kill switch activated	Set emergency-off switch to operation mode (➠ 35).
Gear engaged and clutch not disengaged	Operate the clutch or put the transmission into idle so that the idle mode indicator light lights up.
No fuel in tank	Refuelling (➠ 59).
Battery flat	Recharging disconnected battery (➠ 98).

SCREW CONNECTIONS

Front wheel	Value	Valid
Screw in front-wheel quick-release axle		
M12 x 20	50 Nm	
Clamping screws in axle holder		
M8 x 30	**Tightening sequence: Tighten screws six times in alternate sequence**	
	19 Nm	

Rear wheel	Value	Valid
Locknut of the final-drive chain tensioning screw		
M8	19 Nm	
Rear quick-release axle in swinging arm		
M18 x 1.5	100 Nm	

Mirrors	Value	Valid
Right mirror (lock nut) to adapter		
M10 x 1.25	Left-hand thread, 22 Nm	
Left mirror (lock nut) to adapter		
M10 x 1.25	22 Nm	

FUEL

Recommended fuel grade	E5 Regular unleaded (maximum 15 % ethanol, E15) E10 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 11.5 l
Fuel reserve	approx. 1 l
Fuel consumption	3.3 l/100 km, according to WMTC
CO2 emission	77 g/km, according to WMTC
Exhaust emissions standard	Euro 5

ENGINE OIL

Engine oil, capacity	approx. 1.65 l, with filter change
Specification	SAE 5W-40, API SJ / JASO MA2, Additives (e.g. molybdenum-based) are not permissible because they can attack coated components of the engine, BMW Motorrad recommends BMW Motorrad ADVANTEC Ultimate oil.
Engine oil, quantity for topping up	0.18 l, Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

ENGINE

Engine number location	Crankcase, bottom right
Engine type	A82A03B
Engine design	Water-cooled 1-cylinder 4-stroke engine with four valves operated via rocker arms, two overhead camshafts and counterbalance shaft
Displacement	313 cm^3
Cylinder bore	80 mm
Piston stroke	62.1 mm
Compression ratio	10.9:1
Nominal capacity	25 kW, at engine speed: 9250 min^{-1}
Torque	28 Nm, at engine speed: 7250 min^{-1}
Maximum engine speed	max 10800 min^{-1}
Idle speed	$1600^{\pm 100}$ min^{-1}, Engine at regular operating temperature

CLUTCH

Clutch type	Multi-plate oil-bath clutch
Clutch-lever play	1...2 mm, on the manual controls, handlebars in straight-ahead position, with cold engine

TRANSMISSION	
Type of transmission	Claw-shift 6-speed gearbox, integrated into engine block
Gearbox transmission ratios	3.083, Primary transmission ratio 1:3.000, 1st gear 1:2.063, 2nd gear 1:1.588, 3rd gear 1:1.286, 4th gear 1:1.095, 5th gear 1:0.955, 6th gear

FINAL DRIVE	
Type of final drive	Chain drive
Chain deflection	40...50 mm, Motorcycle with no weight applied, supported on its side stand
Permissible chain length	max 144.30 mm, measured from the **centre** of 10 rivets, chain pulled taut
Final drive, number of teeth (Pinion / sprocket)	16/40
Secondary transmission ratio	2.500

FRAME	
Frame type	Tubular spaceframe
Type plate location	Frame, left
Position of the vehicle identification number	Frame, front right at steering head

CHASSIS AND SUSPENSION

Front wheel	
Type of front suspension	Upside-down telescopic fork
Spring travel, front	180 mm, at wheel
Rear wheel	
Type of rear suspension	Two-arm aluminium swing arm
Spring travel, rear	180 mm, at wheel

BRAKES

Front wheel	
Type of front brake	Single-disc brake, 4-piston radial brake caliper
Brake-pad material, front	Sintered metal
Brake disc thickness, front	5.0 mm, when new min 4.5 mm, Wear limit
Rear wheel	
Type of rear brake	1-piston floating caliper
Brake-pad material, rear	Organic material
Brake disc thickness, rear	4.5 mm, when new min 4 mm, Wear limit

WHEELS AND TYRES

Recommended tyre combinations	Your authorised BMW Motorrad retailer will be happy to supply an up-to-date list of the approved wheel/tyre combinations, or you can check the information posted on the internet at **bmw-motorrad.com/service**.
Speed category, front/rear tyres	h, required at least: 210 km/h

Front wheel	
Front-wheel type	Aluminium cast wheel
Front-wheel rim size	2.50" x 19"
Tyre designation, front	110/80 R 19
Load index, front tyre	min. 59
Permissible front-wheel imbalance	max 5 g
Rear wheel	
Rear-wheel type	Aluminium cast wheel
Rear wheel rim size	4.0" x 17"
Tyre designation, rear	150/70 R 17
Load index, rear tyre	min. 69
Permissible rear-wheel imbalance	max 5 g
Tyre pressure	
Tyre pressure, front	1.7 bar, with cold tyre; one-up and two-up
Tyre pressure, rear	1.9 bar, with cold tyre; one-up and two-up

ELECTRICAL SYSTEM

Fuses	
Fuse 1	20 A, Engine control unit
Fuse 2	7.5 A, Heated grips, instrument cluster, ABS pressure modulator, engine control unit, starter relay
Fuse 3	30 A, Main fuse
Fuse 4	20 A, ABS pressure modulator
Fuse 5	15 A, Lighting, horn
Fuse 6	7.5 A, Instrument cluster, diagnosis

Battery	
Battery type	AGM
Battery rated voltage	12 V
Battery rated capacity	8 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8J-9E
Lighting	
Bulb for low-beam and high-beam headlight	LED
Bulb for parking light	LED
Bulb for tail light/brake light	LED
Light source for the number plate light	LED
Bulbs for turn indicators	LED
Bulb for auxiliary headlight	LED

DIMENSIONS	
Length of motorcycle	2075 mm, over number-plate carrier
Height of motorcycle	1315 mm, over mirrors, at DIN unladen weight
	1230 mm, without mirrors, at DIN unladen weight
Width of motorcycle	880 mm, with mirrors 860 mm, without mounted parts
Height of rider's seat	835 mm, Without rider, at DIN unladen weight
Rider's inside-leg arc, heel to heel	1870 mm, Without rider, at DIN unladen weight

WEIGHTS	
Vehicle kerb weight	175 kg, DIN unladen weight, ready for road, 90 % load of fuel, without optional equipment (OE)
Wheel load, front, at unladen weight	82 kg
Permissible wheel load, front	max 120 kg
Wheel load, rear, at unladen weight	90 kg
Permissible wheel load, rear	max 225 kg
Permissible gross vehicle weight	345 kg
Maximum payload	175.5 kg

PERFORMANCE FIGURES	
Top speed	143 km/h

ACCESSORIES	
Maximum speed for riding with a loaded topcase	
–with topcase [OA] or –with topcase Light [OA]	max 130 km/h
Payload of topcase	max 5 kg

SERVICE

12

REPORTING SAFETY-RELEVANT DEFECTS

–with Canada export[NV]

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

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

You can contact the NHTSA by calling the Vehicle Safety hotline on 1–888–327–4236 (teletypewriter TTY for the hearing impaired: 1–800–424–9153) for free, by visiting the website at http:// www.safercar.gov or by writing to Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. Further information on vehicle safety is available at http:// www.safercar.gov.

Canadian customers who wish to report a safety-related defect to Transport Canada, Defect Investigations and Recalls can call the toll-free hotline 1–800–333–0510. You can also obtain other information about motor vehicle safety from http:// www.tc.gc.ca/ roadsafety.

BMW MOTORRAD SERVICE

BMW Motorrad has an extensive network of dealerships in place to look after you and your motorcycle in more than 100 countries. Authorised BMW Motorrad retailers have the technical information and the technical expertise to carry out reliably all maintenance and repair work on your BMW.
You can locate the nearest authorised BMW Motorrad retailer by visiting our website: **bmw-motorrad.com**

WARNING

Maintenance and repair work not in compliance with correct procedure
Risk of accident due to consequential damage
- BMW Motorrad recommends having work of this nature carried out on the vehicle by a specialist workshop, preferably an authorised BMW Motorrad dealer.

In order to help ensure that your BMW is always in optimum condition, BMW Motorrad recommends compliance with the maintenance intervals specified for your motorcycle.
Have all maintenance and repair work carried out confirmed in the "Service" chapter in this manual. Evidence of regular maintenance is essential for generous treatment of claims submitted after the warranty period has expired.

Your authorised BMW Motorrad retailer can provide information on BMW services and the work undertaken as part of each service.

BMW MOTORRAD SERVICE HISTORY

Entries
Maintenance work that has been carried out is entered in the proof of maintenance. The entries are like a Service Booklet and provide proof of regular maintenance.
When an entry is made in the electronic service booklet of the vehicle, service-relevant data is saved in the central IT systems of BMW AG, Munich, Germany.
If there is a change in vehicle owner, the data saved in the electronic service booklet

can also be viewed by the new vehicle owner. A BMW Motorrad retailer or a specialist workshop can also view data that is stored in the electronic service booklet.

Objection
The vehicle owner can object to entries being made by the BMW Motorrad retailer or a specialist workshop in the electronic service booklet along with the corresponding storage of data in the vehicle and transfer of data to the vehicle manufacturer for the period of time that they are the vehicle owner. In this instance, no entry is made in the electronic service booklet of the vehicle.

BMW MOTORRAD MOBILITY SERVICES

As the owner of a new BMW motorcycle, in the event of a breakdown you can benefit from the protection afforded by the various BMW Motorrad mobility services (e.g. BMW Mobile Service, breakdown service, vehicle recovery service).
Your authorised BMW Motorrad dealer will be happy provide information about the mobility services available to you.

MAINTENANCE WORK

BMW pre-delivery check
Your authorised BMW Motorrad dealer conducts the BMW pre-delivery check before handing over the vehicle to you.

BMW Running-in check

 Mileage until the running-in check
500...1200 km

BMW Service
The BMW Service is carried out once a year; the extent of servicing can vary, depending on the age of the vehicle and the distance it has covered. Your authorised BMW Motorrad dealer confirms that the service work has been carried out and enters the date when the next service will be due.
Riders who cover long distances in a year might have to bring in their vehicles for service before the next scheduled date. It is to allow for these cases that a maximum odometer reading is entered as well in the confirmation of service. Servicing has to be brought forward if this odo-

meter reading is reached before the next scheduled date for the service.
The service-due indicator in the multifunction display reminds you about one month or 1000 km in advance when the time for a service is approaching, on the basis of the programmed values.

To find out more about service go to:
bmw-motorrad.com/service

The maintenance tasks necessary for your vehicle are set out in the maintenance schedule below:

MAINTENANCE SCHEDULE

	500 - 1200 km 300 - 750 mls	10 000 km 6 000 mls	20 000 km 12 000 mls	30 000 km 18 000 mls	40 000 km 24 000 mls	50 000 km 30 000 mls	60 000 km 36 000 mls	70 000 km 42 000 mls	80 000 km 48 000 mls	90 000 km 54 000 mls	100 000 km 60 000 mls	12 months	24 months	48 months
①	x													
②												x		
③		x	x	x	x	x	x	x	x	x	x	x[a]		
④			x		x		x		x		x			
⑤			x		x		x		x		x			
⑥			x		x		x		x		x			
⑦			x		x		x		x		x			
⑧					x				x					x[c]
⑨					x				x					x[c]
⑩												x[b]	x[b]	

1 BMW running-in check (including oil change)
2 Standard BMW service
3 Engine-oil change, with filter
4 Replace air filter element
5 Replace spark plug
6 Check valve clearance
7 Oil change in the telescopic forks
8 Replace fuel filters and fuel hoses
9 Replace intake silencer hoses for the cylinder head and tank vent valve
10 Change brake fluid, entire system

[a] annually or every 10000 km (whichever comes first)
[b] for the first time after one year, then every 2 years
[c] every 40000 km or every 4 years (whichever comes first)

MAINTENANCE CONFIRMATIONS

BMW Service standard scope

The repair tasks in the BMW Service standard scope are listed below. The actual scope of maintenance work applicable for your vehicle may vary.

–Performing vehicle test with BMW Motorrad diagnosis system
–Checking coolant level
–Checking/adjusting clutch play
–Check throttle cable for play
–Checking front brake pads and brake discs for wear
–Checking rear brake pads and brake disc for wear
–Visual inspection of the brake lines, brake hoses and connections
–Checking tyre pressure and tread depth
–Checking and lubricating the chain drive
–Checking brake-fluid level, front wheel brake
–Checking brake-fluid level, rear wheel brake
–Checking steering-head bearing
–Lubricating side stand
–Check lighting and signalling system
–Function test, engine start suppression
–Final inspection and check for road safety
–Setting service-due date and countdown distance with BMW Motorrad diagnosis system
–Checking battery state of charge
–Confirming BMW service in on-board literature

BMW pre-delivery check
carried out

at_____

_____
Stamp, signature

BMW Running-in Check
carried out

at_____
Odometer reading_____

Next service
at the latest
at_____
or, when reached earlier
Odometer reading_____

_____
Stamp, signature

BMW Service
carried out

at_____
Odometer reading_____

Next service
at the latest
at_____
or, when reached earlier
Odometer reading_____

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Checking valve clearance	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Renewing all spark plugs	☐	☐
Replacing fuel filters and fuel hoses (at maintenance)	☐	☐
Replace hoses from intake silencer to cylinder head and tank vent valve (at maintenance)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Stamp, signature

BMW Service
carried out

at_____
Odometer reading_____

Next service
at the latest
at_____
or, when reached earlier
Odometer reading_____

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Checking valve clearance	☐	☐
Renewing air cleaner insert	☐	☐
Oil change in telescopic front forks	☐	☐
Renewing all spark plugs	☐	☐
Replacing fuel filters and fuel hoses (at maintenance)	☐	☐
Replace hoses from intake silencer to cylinder head and tank vent valve (at maintenance)	☐	☐
Change brake fluid in entire system	☐	☐

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SERVICE CONFIRMATIONS

The table is used to verify maintenance and repair work as well as installed optional accessories and purchased special promotions.

Work performed	Odometer reading	Date

Work performed	Odometer reading	Date

Details described or illustrated in this booklet may differ from the vehicle's actual specification as purchased, the accessories fitted or the national-market specification. No claims will be entertained as a result of such discrepancies.
Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.
The right to modify designs, equipment and accessories is reserved.
Errors and omissions excepted.

Original rider's manual, printed in Germany.

Important data for refuelling:

Fuel	
Recommended fuel grade	E5 / E10 Regular unleaded (maximum 15 % ethanol, E15) 91 ROZ/RON 87 AKI
Usable fuel capacity	approx. 11.5 l
Fuel reserve	approx. 1 l
Tyre pressure	
Tyre pressure, front	1.7 bar, with cold tyre; one-up and two-up
Tyre pressure, rear	1.9 bar, with cold tyre; one-up and two-up

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

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Order No.: 01 40 9 830 701
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