

Rider's manual C 400 X

#### Vehicle data/dealership details

Vehicle data	Dealers
Model	Person to
Vehicle Identification Number	Ms/Mr
Colour code	Phone nu
Date of first registration	
Registration number	 Dealership pany starr

Dealership details
Person to contact in Service department
Ms/Mr
Phone number
Dealership address/phone number (com- pany 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 this Rider's Manual

Please read this Rider's Manual carefully before starting to use your new BMW. It contains important information on how to operate the controls and how to make the best possible use of all your BMW's technical features. In addition, it contains information on maintenance and care to help you maintain your vehicle's reliability and safety, as well as its value.

This record of the maintenance work you have had performed on

your vehicle is a precondition for generous treatment of goodwill claims.

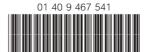
If the time comes to sell your BMW, please remember to hand over this Rider's Manual to the new owner. It is an important part of the vehicle.

#### Suggestions and criticism

If you have questions concerning your vehicle, your authorised BMW Motorrad dealer will gladly provide advice and assistance.

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

BMW Motorrad.



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#### Overview

Chapter 2 of this Rider's Manual contains an initial overview of your Scooter. Chapter 12 documents all the service and maintenance tasks that have been carried out. This record of the maintenance work you have had performed on your vehicle is a precondition for generous treatment of goodwill claims. If you sell your Scooter some day, please also remember to hand ever the Didarle Manual it

hand over the Rider's Manual; it is an important element of your vehicle.

# 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.
- Indicates the end of an item of information.
  - 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.



Ţ,

NV

OF

Tightening torque.

Technical data.

National-market version.

Optional extras. The vehicles are assembled complete with all the BMW Motorrad optional extras 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.

- EWS Electronic immobiliser.
- DWA Anti-theft alarm (Diebstahlwarnanlage).
- ABS Anti-lock brake system.
- ASC Automatic Stability Control.
- CVT Continuously Variable Transmission. Transmission with continuously variable ratio

#### Equipment

When purchasing your Scooter, you chose a model with individual equipment. This rider's manual describes optional equipment (OE) and selected optional accessories (OA) provided by BMW. Please make allowance for the fact that some equipment specifications may be described that you have not selected. Please note, too, that your vehicle might not be exactly as illustrated in this manual on account of country-specific differences.

If your Scooter contains equipment that is not described in this rider's manual, this equipment will be described in a separate manual.

#### **Technical data**

All dimensions, weights and power outputs in the rider's manual refer to the German standard DIN (Deutsches Institut für Normung e. V.) and comply with its specified tolerances. Technical data and specifications in this rider's manual serve as reference points. The vehiclespecific 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 and signs on the vehicle, 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.

#### Currentness

The high safety and quality level of BMW Scooters is ensured by constant further development in the areas of design, equipment and accessories. Because of this, your vehicle may differ from the information supplied in the rider's manual. Also, mistakes cannot be completely excluded by BMW Motorrad. Please therefore understand that we do not accept any liability for claims arising from incorrect information, drawings and descriptions.

# Additional sources of information

#### **BMW Motorrad Retailer**

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

#### Internet

The rider's manual for your vehicle, operating and installation instructions for any accessories and general information on BMW Motorrad, for example relating to technology, are available at www.bmwmotorrad.com/service.

#### Certificates and operating licences

The certificates for the vehicle and the official operating licences for any accessories are available at www.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. 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

- 1
- Environmental conditions, for example temperature
- The data is only processed in the vehicle itself and is generally non-permanent. The data is not stored beyond the operating period.

Electronic components, for example control units, contain components for storing technical information. Information can be temporarily or permanently stored on the vehicle condition, component loads, incidents or errors. This information is generally used to document the condition of a component, a module, a system or the surrounding area, for example:

- Operating conditions of system components, for example filling levels, tyre pressure
- Malfunctions and faults in important system components, for example light and brakes

- Response of the vehicle in special riding situations, for example engagement of the driving dynamics systems
- Information on incidents resulting in damage to the vehicle

The data is necessary for the provision of control unit 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 onboard 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 commu-

nication 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 end devices

Depending on the equipment, mobile end 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 end device can then be output via the multimedia system. At the same time, specific information is transferred to the mobile end 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. 1

The scope of the possible settings depends on the corresponding app and the operating system of the mobile end 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 end 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.

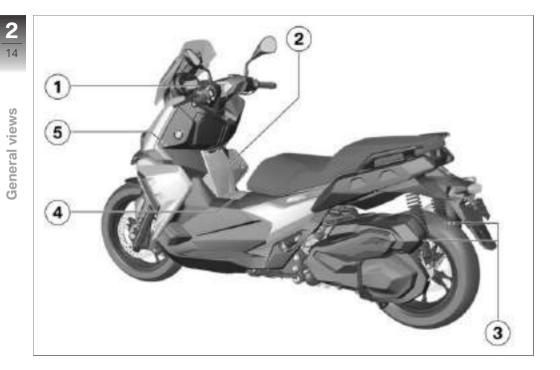
#### Services from other providers When using online services from other providers, these services are subject to the responsibil-

ity 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.

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#### General view, left side

- Brake fluid expansion tank for the rear wheel brake (# 156)
- 2 Under the battery cover: Battery (= 173) Fuses (= 171) Diagnostic connector (= 180)
- 3 Setting the spring preload (➡ 126)
- 4 Fuel filler neck (🗰 137) (🗯 139)
- 5 Coolant expansion tank (under left fairing side panel) (= 157)

16 **General views** 

#### General view, right side

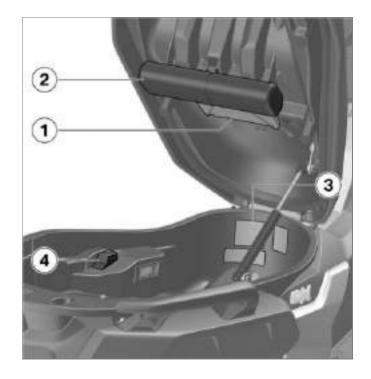
- Brake fluid expansion tank for the front wheel brake (# 155)
- 2 Coolant-level indicator (== 157)
- **3** Type plate (on the right frame tube) Vehicle identification number (on right frame tube)
- 4 Oil filler neck and oil dipstick (# 152)
- 5 Emergency release for motorcycle seat Operating the seat



1

#### Underneath the seat

- Rider's Manual
- **2** Toolkit (🖛 150)
- **3** Payload table Tyre pressure table Note: calibrate ASC **4** Unlocking BMW flexcase (= 91)





# Multifunction switch, left

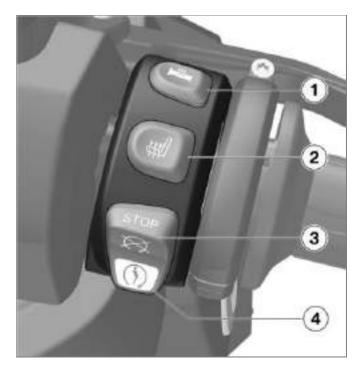
- High-beam headlight and headlight flasher (# 70)
- 2 Hazard warning lights system (# 75)
- 3 Turn indicators (# 75)
- 4 Horn
- MENU rocker switch Select readings. (# 76) Open SETUP. (# 78) Operate TFT display. (# 97)
- 6 Multi-Controller Controls (# 97)
- 7 Day run lights
  - with daytime riding light<sup>OE</sup>

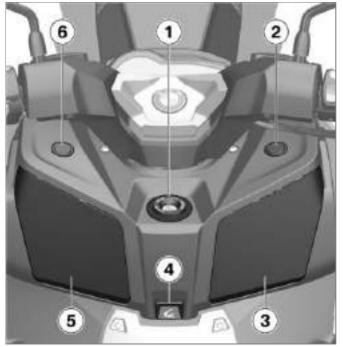
Automatic daytime riding light (# 71).



## Multifunction switch, right

- - with seat heating <sup>OE</sup>
     Using the rider's seat heating (# 88).
     Seat heating
- **3** Emergency off switch (kill switch) (= 69)
- 4 Starter button (# 132)





#### Cockpit

- without Keyless Ride<sup>OE</sup>
- Ignition switch/steering lock
   (# 64)
- 2 Unlocking of right storage compartment (# 90)
- **3** Storage compartment, right (# 90)

Socket (in storage compartment) (# 184)

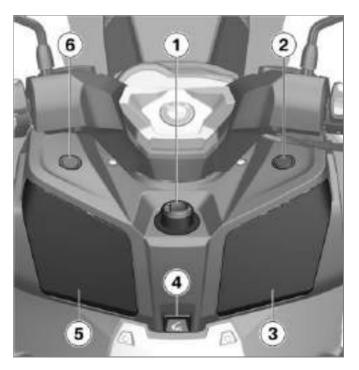
- 4 Unlocking of the seat (<sup>™</sup> 89)
- 5 Storage compartment, left (+ 90)
- 6 Unlocking of the left storage compartment (+ 90)

General views

**2** 

#### Cockpit

- with Keyless Ride OE
- 1 Control module for Keyless Ride (# 65)
- 2 Unlocking of right storage compartment (# 90)
- 3 Storage compartment, right (im 90)
  - Socket (in storage compartment) (🗯 184)
- 4 Unlocking of the seat (# 89)
- 5 Storage compartment, left (+ 90)
- 6 Unlocking of the left storage compartment (+ 90)



**General views** 

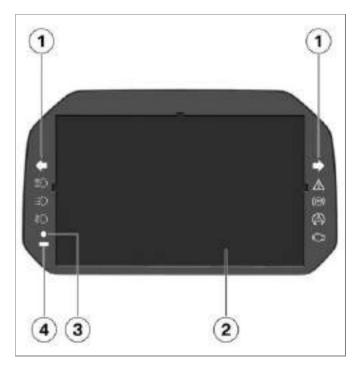


#### Instrument panel

- without Connectivity<sup>OE</sup>
- 1 Speedometer
- 2 Indicator and warning lights
- 3 Multifunction display

#### Instrument cluster with Connectivity

- with Connectivity<sup>OE</sup>
- Indicator and warning lights with Connectivity (# 41)
- **2** TFT display (•• 42) (•• 43)
- 3 Alarm system LED
  - with anti-theft alarm (DWA)<sup>OE</sup>
  - Alarm signal (🗰 121)
  - with Keyless Ride<sup>OE</sup>
     Indicator light for the radiooperated key
     Switching on ignition
     (= 66).
- 4 Photosensor (for adapting the brightness of the instrument lighting)



2

24

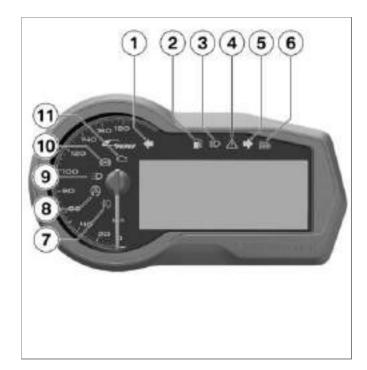
#### **Status indicators**

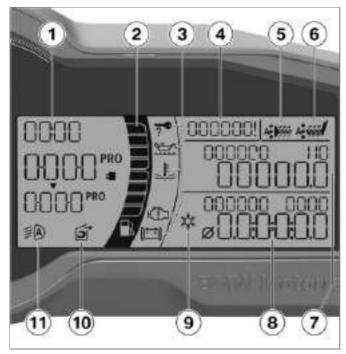
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## Indicator and warning lights

- 1 Turn indicators, left
- 2 Fuel reserve (m 38)
- 3 High-beam headlight
- 4 General warning light (# 28)
- 5 Turn indicators, right
- 6 Alarm system LED (im 121)
- 7 with additional headlight <sup>SA</sup>
  - Auxiliary headlights
- 8 ASC (= 36)
- **9** Day run lights (*i* 71)
- 10 ABS (🗰 36)
- 11 with export to EU markets<sup>NV</sup> Malfunction indicator lamp (\*\* 34)





#### Multifunction display

- 2 Fuel-gauge reading 3
  - Warning symbols (# 28)
- 4 Text field for warnings ( 28)
- 5 Selected heating stage ( 87)
- 6 Selected heating stage (# 88)
- Trip distance recorder 7 (# 77)
  - Service display (# 39)
- 8 On-board computer displays (# 76)
- 9 Outside temperature warning (# 40)
- BMW flexcase (# 91) 10
- 11 Automatic for daytime riding light (# 73)

# Status indicators

3 27



#### Warnings Mode of presentation

Warnings are indicated by the corresponding warning lights.

Warnings that do not have warning lights of their own are indicated by 'general' warning light **1** showing in combination with a text warning at position **2**, such as LAMPF! or a warning symbol **3** in the multifunction display. The 'general' warning light shows red or yellow, depending on the urgency of the warning. If two or more warnings occur at the same time, all the appropriate warning lights and warning symbols appear, text warnings are alternated.

The possible warnings are listed on the following pages.

Warnings, overview Indicator and warning Ights	Display text	Meaning
	is displayed	Outside temperature warning (= 32)
lights up yellow	EWS warning sym- bol is displayed	EWS activated (# 32)
lights up yellow	appears on the display	Radio-operated key out of range (# 32)
lights up red	is displayed	Coolant temperature too high (# 33)
lights up yellow	is displayed	Engine-oil level too low (+ 33)
	OIL CHECK is dis- played	
lights up yellow	is displayed	Engine in emergency-operation mode (== 33)
lights up yellow		Emissions warning (🗯 34)

3	Indicator and warning lights	Display text	Meaning
30	lights up yellow	flashes	Severe fault in the engine control (# 34)
Status indicators	lights up yellow	LAMPR! is dis- played	Rear light or rear turn indicator faulty (🖛 35)
	lights up yellow	LAMPF! is dis- played	Headlight, additional headlight or turn indicator at front faulty (🗯 35)
	lights up yellow	LAMPS! is dis- played	Several front and rear lights faulty (# 35)
	flashes		ABS self-diagnosis not completed (# 36)
	lights up		ABS fault (🗯 36)
	quick-flashes		ASC intervention (= 36)
	slow-flashes		ASC self-diagnosis not completed (# 36)

### Indicator and warning Display text

#### Meaning

Indicator and warning lights	Display text	Meaning	3
lights up		ASC switched off (# 36)	31
lights up		ASC fault (🗯 37)	S
lights up	CAL flashes	ASC calibration not yet completed (# 37)	ndicators
lights up yellow	is displayed	BMW flexcase opened (+ 37)	
	DWALO! appears on the display	Anti-theft alarm battery weak (🗯 37)	Status
lights up yellow	DWALO! appears on the display	Anti-theft alarm battery flat (🗯 38)	
lights up red	is displayed	Insufficient battery charge current (🗯 38)	_
lights up		Fuel down to reserve (🗯 38)	_



## Outside temperature warning



lce crystal symbol is displayed.

Possible cause:

The air temperature measured at the vehicle is lower than 3 °C.

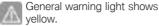
#### 🚹 WARNING

#### Risk of black ice also applicable at over 3 °C

Risk of accident

- Always take extra care when temperatures are low; remember that there is particular danger of black ice forming on bridges and where the road is in shade.
- Ride carefully and think well ahead.

#### **EWS** activated





displayed.

#### Possible cause:

The ignition key being used is not authorised for starting, or communication between ignition key and engine electronics is disrupted.

- Remove any other ignition keys on the keyring.
- Use second ignition key.
- Have the defective ignition key replaced, preferably by an authorised BMW Motorrad dealer.

## Radio-operated key out of range

with Keyless Ride<sup>OE</sup>



General warning light shows yellow.



appears on the display.

#### Possible cause:

Communication between R/C key and engine electronics is disrupted.

- Check the battery in the radiooperated key.
- with Keyless Ride OE
- Replace the battery of the radio-operated key (# 68).
- Use the reserve key to continue your journey.
- with Keyless Ride OE
- Battery of the radio-operated key is flat or the key has been lost (••• 68).
- Remain calm if the warning symbol appears while you are riding. You can continue your journey; the engine will not switch off.
- Have the defective radio-operated key replaced by an au-

Status indicators

thorised BMW Motorrad Re-

#### Coolant temperature too high



tailer

General warning light shows red

Temperature symbol is displayed.

#### ATTENTION

#### Riding with overheated enaine

Engine damage

 Compliance with the information set out below is essential <

Possible cause:

The coolant level is too low.

- Checking coolant level ( 157).
- If the coolant level is too low:
- Have the cooling system checked by a specialist

workshop, preferably an authorised BMW Motorrad Retailer

Possible cause:

The coolant or engine oil temperature is too high.

- If possible, ride in the part-load range to cool down the engine.
- If the coolant or engine oil temperature is frequently too high, have the fault rectified as soon as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Engine-oil level too low



General warning light shows vellow.

Oil level symbol is displayed.

OIL CHECK is displayed.

Possible cause

The electronic oil-level sensor has registered an excessively low oil level. Check the engine oil level using the oil dipstick at the next refuelling stop:

• Checking engine oil level ( 152).

If the oil level is too low.

Topping up the engine oil.

#### Engine in emergencyoperation mode



General warning light shows vellow.



Engine symbol 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 diaanosed a fault. The engine is in emergency-operation mode.

- You can continue to ride, but bear in mind that the usual engine performance might not be available
- » The malfunction indicator lamp lights up as well if pollutant emissions exceed the threshold values.
- » 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 Retailer

#### **Emissions warning**



The malfunction indicator lamp lights up vellow.

Possible cause:

The engine control unit has diagnosed a fault.

- Have the fault rectified by a specialist workshop at the next opportunity, preferably an authorised BMW Motorrad Retailer.
- » You can continue riding; pollutant emissions are higher than the threshold values.

#### Severe fault in the engine control



General warning light shows vellow.

The engine symbol flashes. KC



#### 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 (e.g. overheating). The engine is in emergency-operation mode.

- Avoid high load and rpm ranges if possible.
- » We recommend that you stop ridina.
- » The malfunction indicator lamp lights up as well if pollutant

#### 34

emissions exceed the threshold values.

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

# Rear light or rear turn indicator faulty

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General warning light shows yellow.

LAMPR! is displayed. Possible cause:

LED rear light faulty.

• The LED rear light must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Possible cause:

Rear turn indicator faulty.

• The LED turn indicator must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Headlight, additional headlight or turn indicator at front faulty

General warning light shows yellow.

LAMPF! is displayed. Possible cause:

LED headlight faulty.

• The LED headlight must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Possible cause:

- without daytime riding light<sup>OE</sup>
   LED side light faulty.
- The LED side light must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Possible cause:

- with daytime riding light OE

LED side light/daytime riding light faulty.

• The LED side light/daytime riding light must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

# Several front and rear lights faulty



General warning light shows yellow.

LAMPS ! is displayed. Possible cause:

Several lights front and rear faulty.

• Please read the fault descriptions listed earlier.

# ABS self-diagnosis not completed

ABS indicator and warning light flashes.

Possible cause:

Self-diagnosis did not complete, so the ABS function is not available. The Scooter must be ridden at a speed of at least 5 km/h in order for ABS self-diagnosis to complete.

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

### ABS fault



ABS indicator and warning light shows.

Possible cause:

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

- Further riding is possible, although allowance must be made for the lack of the ABS function. Take note of the more detailed information on situations that can lead to an ABS fault (= 145).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

## ASC intervention

ASC indicator and warning light flashing quickly. The ASC has detected a degree of instability at the rear wheel and has intervened to reduce torque. The ASC warning light flashes for longer than the ASC intervention lasts. This affords the rider visual feedback on control intervention even after the critical situation has been dealt with.

#### ASC self-diagnosis not completed

ASC indicator and warning light flashing slowly.

Possible cause:

ASC self-diagnosis not completed

The Scooter has to reach a defined minimum speed with the engine running for the wheel speed sensors to be checked:

min 5 km/h

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

### ASC switched off



ASC indicator and warning light shows.

Possible cause

The rider has switched off the ASC

ASC Switching on (# 80).

#### ASC fault

ASC indicator and warning light shows.

Possible cause:

The ASC control unit has detected a fault.

- You can continue to ride Bear in mind that the ASC is not available. Take note of the more detailed information on situations that can lead to an ASC fault (= 146).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### ASC calibration not yet completed

ASC indicator and warning light shows.

CAL flashes.

Possible cause

The ASC calibration has not yet been completed

- Complete the ASC calibration or repeat.
- Calibrate ASC (# 81).
- Cancel ASC calibration: switch ignition off and on.

#### BMW flexcase opened



General warning light shows vellow.



The storage compartment symbol is displayed.

#### Possible cause:

The BMW flexcase is opened.

- Close BMW flexcase.
- Operating the BMW flexcase ( 91).

#### Anti-theft alarm battery weak

with anti-theft alarm (DWA)<sup>OE</sup>

DWALO! appears on the display.

# NOTICE

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

#### Possible cause:

The integral battery in the antitheft alarm has lost a significant proportion of its original capacity. There is no assurance of how long the anti-theft alarm can remain operational if the vehicle battery is disconnected.

 Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

# Anti-theft alarm battery flat

- with anti-theft alarm (DWA) OE



General warning light shows yellow.

DWALO! appears on the display.

## 

This error message shows briefly only after the Pre-Ride-Check completes.◀

Possible cause:

The integral battery in the antitheft alarm has lost its entire original capacity. There is no assurance that the anti-theft alarm will be operational if the vehicle battery is disconnected.

• Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Insufficient battery charge current



General warning light shows red.

Battery symbol is displayed.

## 🚹 WARNING

#### Failure of the vehicle systems

Risk of accident

Do not continue your journey.◀

The battery will not be charged. By continuing to drive on, the vehicle electronics discharge the battery.

Possible cause:

Alternator or alternator drive faulty.

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

#### Fuel down to reserve



The fuel reserve symbol lights up.



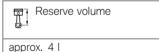
#### Irregular engine operation or engine shutdown due to lack of fuel

Risk of accident, damage to catalytic converter

Do not run the fuel tank dry.◀

Possible cause:

The fuel tank contains no more than the reserve quantity of fuel.



- without Keyless Ride<sup>OE</sup>

- Refuelling (\*\* 137).
- with Keyless Ride OE
- Refuelling (🗰 139).

### Service-due indicator



The SERVT! **1** message and the service date **2** are displayed if the service is due within the month. This reading appears briefly after the Pre-Ride-Check completes.



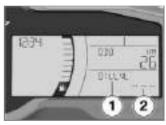
The SERVD! **3** message and the remaining distance **4** are shown and counted down in intervals of 100 kilometres (US model, 100 miles) if the service is due within 1000 kilometres (US model, 700 miles). This reading appears briefly after the Pre-Ride-Check completes.

If service is overdue, the due date or the odometer reading at which service was due is accompanied by the 'General' warning light showing yellow. The SERVD! or SERVT! messages are displayed permanently.

# 

If the service-due indicator appears more than a month before the service date, the current date has to be corrected. This situation can occur if the battery was disconnected.

### Oil level



The oil-level indicator **1** gives you an indication of the engine oil level. You can call up this reading only when the vehicle is at a standstill. Status indicators

The preconditions for the oil level check are as follows:

- Engine at operating temperature.
- Engine idling for at least ten seconds.
- Side stand retracted.
- Scooter standing upright.

The possible displays on items 1 and 2 signify:

OTLIVI, OK: oil level is correct. OTLLVL CHECK: check the oil level the next time you stop for fuel.

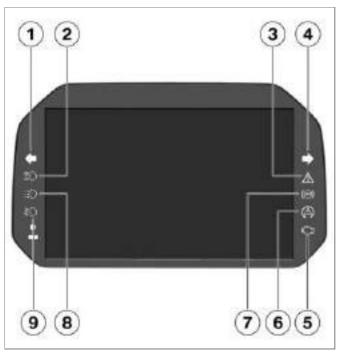
OTLUVU -- -- --: oil level cannot be measured (conditions as stated above not satisfied).



If the oil level is too low. the corresponding warning symbol is displayed.

## Ambient temperature

The temperature display flashes as a warning of potential black ice if the ambient temperature drops to below 3 °C. Regardless of the display settings the display automatically switches over to the temperature display when the ambient temperature drops below this threshold for the first time.



### Indicator and warning lights with Connectivity

- with Connectivity OE
- Turn indicators, left Operating the turn indicators (# 75).
- High-beam headlight (# 70)
- General warning light
   (# 44)
- 4 Turn indicators, right
- 5 with export to EU markets<sup>NV</sup>

Malfunction indicator lamp Emissions warning (# 56)

- 6 ASC (🗰 36)
- 7 ABS (🗰 36)

8

 with daytime riding light<sup>OE</sup>

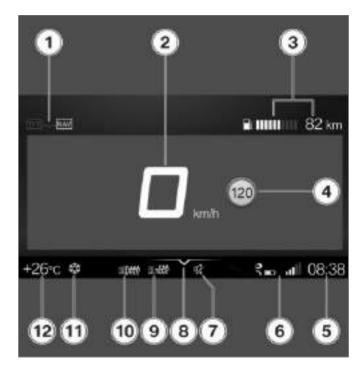
Manual daytime riding light (# 73).

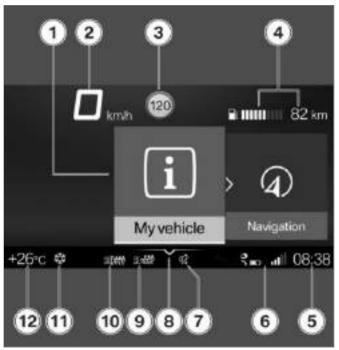
 9 - with additional headlight<sup>SA</sup> Auxiliary headlights Status indicators



# TFT display in Pure view

- with Connectivity<sup>OE</sup>
  - Change of operating focus (+ 101)
- 2 Speedometer
- **3** Rider info status line (101)
- 4 Speed Limit Info (# 103)
- 5 Clock (# 104)
- 6 Connection status (# 107)
- 7 Muting (# 104)
- 8 Operating help
- **9** Selected heating stage for heated grips (**••** 87)
- **10** Selected heating stage for seat heating (••• 88)
- 11 Outside temperature warning (# 51)
- 12 Ambient temperature





# TFT display in the View menu

- with Connectivity OE
- 1 Menu area
- 2 Speedometer
- 3 Speed Limit Info (m 103)
- Rider info status line (# 101)
- 5 Clock
  - Setting the clock (🗯 104).
- Connection status Perform Bluetooth pairing (# 107).
- 7 Muting (•• 104)
- 8 Operating help
- Selected heating stage for heated grips (# 87)
- **10** Selected heating stage for seat heating (# 88)
- 11 Outside temperature warning (# 51)
- 12 Ambient temperature

**3** 

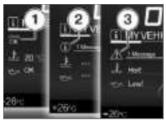
#### Indicator lights with Connectivity

#### Mode of presentation

Warnings are indicated by the corresponding warning lights. Warnings are displayed by the general warning lights in conjunction with a dialogue box on the TFT display. The 'general' warning light shows yellow or red, depending on the urgency of the warning.

The status of the 'General' warning light matches the most urgent warning.

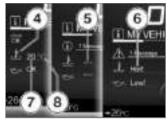
The possible warnings are listed on the following pages.



#### **Check control display**

The messages on the display are shown in different ways. Different colours and symbols are used depending on priority:

- Green CHECK OK 1: no message, optimum value.
- White circle with small "i" 2: information.
- Yellow warning triangle 3: warning message, value not ideal.
- Red warning triangle 3: warning message, critical value



#### Value display

The symbols **4** are shown in different ways. Depending on the evaluation, different colours are used. Instead of numerical values **8** with units **7**, text **6** is always used on the display:

#### Colour of the symbol

- Green: (OK) Current value is ideal.
- Blue: (Cold!) Current temperature is too low.
- Yellow: (Low! /High!) Current value is too low or too high.

- Red: (Hot! /High!) Current temperature or value is too high.
- White: (---) There is no valid value. Dashes 5 are displayed instead of the value.

## 

The assessment of some values is only possible from a certain journey duration or speed. If a measured value is still not being displayed because the conditions for measurement have not been met, dashes are displayed instead as a placeholder. If there are no valid measured values, there will be no assessment in the form of a coloured symbol.◄



#### Check control dialogue box

Messages are given in the form of a check control dialogue box **1**.

- If there are multiple check control messages of equal priority, the messages alternate in the order in which they occurred until they are acknowledged.
- If symbol 2 is actively displayed, it can be acknowledged by tilting the multi-controller to the left.
- Check Control messages are attached dynamically to the pages in the Vehicle menu as additional tabs (\*\* 99). As

long as the problem persists, the message can be called up again.

<b>3</b> 46	Warnings, overview Indicator and warning lights	Display text	Meaning
		is displayed	Outside temperature warning (+ 51)
indicators	lights up yellow	Remote key not in range.	Radio-operated key out of range (# 51)
indic	lights up yellow	Remote key bat- tery at 50%.	Replace the battery of the radio-oper- ated key (= 52)
Status		Remote key bat- tery weak.	
St	lights up yellow	is displayed in yel- low	Vehicle voltage too low (# 52)
		Vehicle voltage low.	
	lights up red	is displayed in red	Vehicle voltage critical (+ 52)
		Vehicle voltage critical!	

Indicator and warning lights	Display text	Meaning
lights up yellow	The faulty light source is displayed.	Light source faulty (🗯 53)
	Alarm system battery weak.	Anti-theft alarm battery weak (🗯 54)
lights up yellow	Alarm system battery empty.	Anti-theft alarm battery flat (🗰 54)
	Oil level too low! Check oil level.	Engine-oil level too low (🗯 55)
lights up red	Coolant temper- ature too high!	Coolant temperature too high (= 55)
lights up yellow	Engine!	Emissions warning (🗯 56)
lights up yellow	No communica- tion with en- gine control.	Engine control failed (🗯 56)
lights up yellow	Fault in the en- gine control.	Engine in emergency-operation mode (🗯 56)

3	Indicator and warning lights		Display text		Meaning	
48	$\triangle$	General warning light flashes yellow.	A in	erious fault the engine ontrol!	Severe fault in the engine control (== 56)	
rs				de stand mon- coring faulty.	Side stand monitoring is faulty (+ 57)	
Status indicators	0	flashes			ABS self-diagnosis not completed (= 36)	
	0	ABS indicator and warning light shows.		mited ABS ailability!	ABS fault (🗯 57)	
	0	ABS indicator and warning light shows.	AB AB	8S failure!	ABS failed (🗰 58)	
	A	quick-flashes			ASC intervention (# 36)	
	A	slow-flashes			ASC self-diagnosis not completed (= 36)	
	A	lights up	of	f!	ASC switched off (= 59)	

Indicator and warning lights	Display text	Meaning	3
	Traction con- trol deactiv- ated.	ASC switched off (= 59)	49
lights up	Traction con- trol failure!	ASC fault (🗯 59)	LS
	Engine st. not poss. BMW flexcase open. Close BMW flexcase.	BMW flexcase opened (== 59)	us indicators
	Tank reserve level reached. Ride to the next filling sta- tion.	Fuel down to reserve (🗯 59)	Status
Turn signal indic- ator light flashes green.		Hazard warning lights system is switched on (# 60)	
Turn signal indic- ator light flashes green.			

3	Indicator and warning lights	Display text	Meaning
50		is displayed in white	Service due (🗯 60)
		Service due!	
indicators	lights up yellow	is displayed in yel- low	Service-due date has passed (+ 60)
dic		Service over- due!	
_⊆			

#### Ambient temperature

The ambient temperature is displayed status line of the TFT display.

When the motorcycle is at a standstill, the heat of the engine can falsify the ambient-temperature reading. If the heat of the engine is affecting it too much, dashes are temporarily shown in place of the value.



If the outside temperature falls below the following limit value, there is a risk of black ice.

Limit value for the ambi-ent temperature

approx. 3 °C

Once the temperature has fallen below that value, the ambient temperature display along with a snowflake symbol flashes in the status line on the TFT display.

#### Outside temperature warning



Ice crystal symbol is displayed.

Possible cause:

The air temperature measured at the vehicle is lower than 3 °C.

# WARNING

#### Risk of black ice also applicable at over 3 °C

Risk of accident

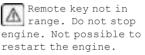
- Always take extra care when temperatures are low: remember that there is particular danger of black ice forming on bridges and where the road is in shade.
- Ride carefully and think well ahead.

#### Radio-operated key out of range

- with Keyless Ride OE



General warning light shows vellow.



#### Possible cause:

Communication between R/C key and engine electronics is disrupted.

- Check the battery in the radiooperated key.
- with Keyless Ride<sup>OE</sup>
- Replace the battery of the radio-operated key (# 68).
- · Use the reserve key to continue your journey.
- with Keyless Ride<sup>OE</sup>
- Battery of the radio-operated key is flat or the key has been lost (# 68).

- If a check control dialogue box appears during the journey, remain calm. You can continue your journey; the engine will not switch off.
- Have the defective radio-operated key replaced by an authorised BMW Motorrad Retailer.

#### Replace the battery of the radio-operated key

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	u	n.		и

General warning light shows vellow.



Remote key battery at 50%. No functional impairment.



Remote key battery weak. Limited central

locking function. Change batterv.

Possible cause:

- The integral battery in the radio-operated key has lost a significant proportion of its original capacity. There is no assurance of how long the R/C key can remain operational.
- with Kevless Ride<sup>OE</sup>
- Replace the battery of the radio-operated key (# 68).

#### Vehicle voltage too low



General warning light shows vellow.

is displayed in yellow.



Vehicle voltage low. Switch off unnecessary consumers.

# WARNING

Failure of the vehicle systems Risk of accident

Do not continue vour journev.

The battery will not be charged. By continuing to drive on, the vehicle electronics discharge the batterv.

# NOTICE

The fuse for the alternator regulator can blow if the 12 V battery is installed incorrectly or if the terminals are swapped (e.g. when using a starting aid).

Possible cause:

Alternator or alternator drive faulty.

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

### Vehicle voltage critical



General warning light shows red

Status



is displayed in red.



Vehicle voltage critical! Consumers have been switched off. Check battery condition.

# WARNING

#### Failure of the vehicle svstems

Risk of accident

Do not continue your journey.

The battery will not be charged. By continuing to drive on, the vehicle electronics discharge the batterv.

## NOTICE

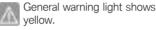
The fuse for the alternator requlator can blow if the 12 V battery is installed incorrectly or if the terminals are swapped (e.g. when using a starting aid).

Possible cause:

Alternator or alternator drive faulty.

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

#### Light source faulty



The faulty light source is displayed:



High beam faulty!



Front left turn indicator faulty! Or Front right turn indicator faultv!

Low-beam headlight faultv!



Front side light faultv!

with davtime riding light OE



Davtime riding light faultv!⊲



Tail light faulty!



Brake light faultv!



Rear left turn indicator faulty! Or Rear right turn indicator faulty!

- Have it checked by a specialist workshop.

3

53

# **3**

# WARNING

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

Safety risk

 Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible.

Possible cause:

Several lights front and rear faulty.

• Please read the fault descriptions listed earlier.

# Anti-theft alarm battery weak

- with anti-theft alarm (DWA)<sup>OE</sup>

Alarm system battery weak. No restrictions. Make an appointment at a specialist workshop.

### 

This error message shows briefly only after the Pre-Ride-Check completes.◄

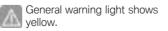
#### Possible cause:

The integral battery in the antitheft alarm has lost a significant proportion of its original capacity. There is no assurance of how long the anti-theft alarm can remain operational if the vehicle battery is disconnected.

• Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

# Anti-theft alarm battery flat

- with anti-theft alarm (DWA)<sup>OE</sup>



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

# 

This error message shows briefly only after the Pre-Ride-Check completes.◀

#### Possible cause:

The integral battery in the antitheft alarm has lost a significant proportion of its original capacity. There is no assurance of how long the anti-theft alarm can remain operational if the vehicle battery is disconnected.

• Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer.

Status indicators

#### **Electronic oil-level check**

The electronic oil-level check assesses the oil level in the engine with OK or Low!

The preconditions for the electronic oil-level check are as follows:

- Engine at operating temperature.
- Engine idling for at least ten seconds.
- Side stand folded in.
- Motorcycle standing upright on a smooth, level surface.

If these conditions are not met, it is not possible to measure the oil level. Dashes will appear on the display instead of a reading.

#### Engine-oil level too low

Oil level too low! Check oil level. Possible cause:

The electronic oil-level sensor has registered an excessively low oil level. Check the engine oil level using the oil dipstick at the next refuelling stop:

- Checking engine oil level (# 152).
- If the oil level is too low:
- Topping up the engine oil.

# Coolant temperature too high



General warning light shows red.

Coolant temperature too high! Check coolant level. Continue under part. load to cool down.

# 

Riding with overheated engine Engine damage

 Compliance with the information set out below is essential.

Possible cause:

The coolant level is too low.

 Checking coolant level (# 157).

If the coolant level is too low:

• Have the cooling system checked by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Possible cause:

The coolant or engine oil temperature is too high.

- If possible, ride in the part-load range to cool down the engine.
- If the coolant or engine oil temperature is frequently too high, have the fault rectified as soon as possible by a specialist

workshop, preferably an authorised BMW Motorrad Retailer

#### **Emissions warning**



The malfunction indicator lamp lights up yellow.



Engine! Have it checked by a specialist workshop.

#### Possible cause:

The engine control unit has diagnosed a fault.

- Have the fault rectified by a specialist workshop at the next opportunity, preferably an authorised BMW Motorrad Retailer.
- » You can continue riding; pollutant emissions are higher than the threshold values.

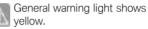
### **Engine control failed**



General warning light shows vellow.

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

#### Engine in emergencyoperation mode



Fault in the engine 🚇 control. Riding at mod. speed pos. Ride carefully to next specialist workshop.

# WARNING

Unusual ride characteristics when engine running in emergency-operation mode Risk of accident

 Avoid accelerating sharply and overtaking.

Possible cause:

The engine control unit has diagnosed a fault. In exceptional cases, the engine stops and refuses to start. Otherwise, the enaine runs in emergency operating mode

- You can continue to ride, but bear in mind that the usual engine performance might not be available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Severe fault in the engine control



General warning light flashes vellow.



Serious fault in the engine control! Riding at mod. speed pos.

**3** 

ABS indicator and warning light flashes.

**ABS self-diagnosis not** 

#### Possible cause:

completed

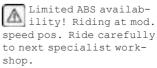
Self-diagnosis did not complete, so the ABS function is not available. The Scooter must be ridden at a speed of at least 5 km/h in order for ABS self-diagnosis to complete.

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

#### ABS fault



ABS indicator and warning light shows.



Engine damage possible. Have checked by workshop.

# 🚹 WARNING

# Engine damage when running in emergency-operation mode

Risk of accident

- Ride slowly, avoid accelerating sharply and overtaking.
- If possible, have the vehicle picked up and have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Possible cause:

The engine control unit has diagnosed a fault which may cause severe secondary faults (e.g. overheating). The engine is in emergency-operation mode.

- Avoid high load and rpm ranges if possible.
- » We recommend that you stop riding.

- » The malfunction indicator lamp lights up as well if pollutant emissions exceed the threshold values.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

# Side stand monitoring is faulty

Side stand monitoring faulty. To avoid breakdown do not stop engine. Have checked by spec. workshp.

#### Possible cause:

The side-stand switch or its wiring are damaged.

 Seek the advice of a specialist workshop, preferably an authorised BMW Motorrad Retailer. Possible cause

The ABS control unit has detected a fault. The ABS function is restricted.

- You can continue to ride. Take note of the more detailed information on certain situations that can lead to an ABS fault message (= 145).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### **ABS** failed

ABS indicator and warning light shows.



ABS failure! Riding 🚇 at mod. speed pos. Ride carefully to next specialist workshop.

Possible cause:

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

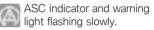
- Further riding is possible, although allowance must be made for the lack of the ABS function. Take note of the more detailed information on situations that can lead to an ABS fault (m 145).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### ASC intervention

ASC indicator and warning light flashing guickly. The ASC has detected a degree of instability at the rear wheel and has intervened to reduce torque. The ASC warning light flashes for longer than the ASC intervention lasts. This affords

the rider visual feedback on control intervention even after the critical situation has been dealt with.

#### ASC self-diagnosis not completed



Possible cause:

ASC self-diagnosis not Д. completed

The Scooter has to reach a defined minimum speed with the engine running for the wheel speed sensors to be checked.

min 5 km/h

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

3

58

#### ASC switched off



ASC indicator and warning liaht shows.

#### - with Connectivity OE



#### - with Connectivity<sup>OE</sup>



Traction control deactivated.

Possible cause:

The rider has switched off the ASC system.

ASC Switching on (# 80).

### ASC fault



ASC indicator and warning light shows.



Traction control failure! Riding

at mod. speed pos. Ride carefully to next specialist workshop.

Possible cause

The ASC control unit has detected a fault

- You can continue to ride. Bear in mind that the ASC is not available. Take note of the more detailed information on situations that can lead to an ASC fault (= 146).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### BMW flexcase opened



Engine st. not poss. BMW flexcase open. Close BMW flexcase.

Possible cause:

The BMW flexcase is opened.

- Close BMW flexcase.
- Operating the BMW flexcase ( 91).

#### Fuel down to reserve



Tank reserve level reached. Ride to the next filling station.



#### Irregular engine operation or engine shutdown due to lack of fuel

Risk of accident, damage to catalytic converter

Do not run the fuel tank drv.

Possible cause:

The fuel tank contains no more than the reserve quantity of fuel.

Reserve volume Î

approx. 4

- without Keyless Ride<sup>OE</sup>
- Refuelling (= 137).
- with Keyless Ride<sup>OE</sup>
- Refuelling (= 139).

#### Hazard warning lights system is switched on



Turn signal indicator light flashes green.



Turn signal indicator light flashes green.

Possible cause:

The driver has switched on the hazard warning lights system.

 Operating hazard warning flashers (= 75).

#### Service-due indicator



If service is overdue, the due date or the odometer reading at which service was due is accompanied by the 'General' warning light showing yellow.

If the service is overdue, a yellow CC message is displayed. Exclamation marks also draw attention to the displays for service. service appointment and remaining distance in the MY VEHICLE

and SERVICE REQUIREMENTS. menu screens.

# NOTICE

If the service-due indicator appears more than a month before the service date, the current date has to be corrected. This situation can occur if the battery was disconnected.

### Service due



is displayed in white.

Service due! Have service carried out by authorised BMW Motorrad Retailer. Possible cause:

Service is due because of the driving performance or the date.

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

- » The operational and road safety of the motorcycle remain intact
- » The motorcycle's value is maintained as best as possible.

#### Service-due date has passed



General warning light shows vellow.



is displayed in yellow.

Service overdue! Have service carried out by authorised BMW Motorrad Retailer.

Possible cause:

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

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

- » The operational and road safety of the motorcycle remain intact.
- » The motorcycle's value is maintained as best as possible.

Status indicators



### Operation

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#### Ignition switch/steering lock

64

#### Ignition key

You receive two ignition keys.

- with topcase Light OA

If required, the topcase can also be operated with the same ignition key. Consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Lock the handlebars

• Turn the handlebars all the way to left.



- Turn the ignition key to position **3** and move the handlebars slightly in the process.
- » Ignition, lights and all function circuits are switched off.
- » Handlebars are locked.
- » You can pull off the ignition key.

#### Switching on ignition



- Turn the ignition key to position **ON**.
- » Parking lights and all function circuits switched on.
- » Engine can be started.
- » Pre-Ride-Check is performed. (# 132)
- » ABS self-diagnosis is in progress. (# 133)
- » ASC self-diagnosis is in progress. (i 133)

#### Switching off ignition



- Turn the ignition key to position **OFF**.
- » Light is switched off, side light and lighting of the rear storage compartment continue to light up for a short time.
- » Handlebars not locked.
- » You can pull off the ignition key.

### Ignition with Keyless Ride

- with Keyless Ride OE

#### Keys

## 

The telltale light for the radiooperated key flashes while the search for the radio-operated key is in progress.

The telltale light goes out as soon as the radio-operated key or the emergency key is found. The telltale light goes out briefly if the search times out without the radio-operated key or the emergency key being found.◄

You receive one radio-operated key and one emergency key. Please note the information about the electronic immobiliser (EWS) if a key is lost or mislaid (# 67). Ignition, fuel filler cap and antitheft alarm system all work with the radio-operated key. Seat lock and topcase can be locked and unlocked manually.

# 

If the range of the radio-operated key is exceeded (e.g. in the topcase) the vehicle cannot be started.

If the radio-operated key is still missing, the ignition is switched off after approx. 1.5 minutes in order to save the battery.

Do not store the radio-operated key in the luggage compartment. In some circumstances, the signal of the radio-operated key cannot be received by the aerial, and the seat can no longer be opened.

It is advisable to keep the radiooperated key on your person (e.g. in a jacket pocket) and to



have the emergency key with you as an alternative.◄

- Range of the Keyless
  - Ride radio-operated key

- with Keyless Ride<sup>OE</sup>

approx. 1 m⊲

#### Lock the handlebars Requirement

The handlebars are turned towards the left. Radio-operated key is within range.



Press and hold down button 1.

- » The steering lock engages with an audible click
- » Ignition, lights and all function circuits switched off.
- To unlock the steering lock. briefly press button 1.

#### Switching on ignition Requirement

Radio-operated key is within range.



 There are two ways of activating the ignition.

#### Version 1:

- Briefly press button 1.
- » Side lights and all function circuits are switched on.
- with daytime riding light<sup>OE</sup>
- » Davtime riding light is switched on <1
- » Pre-Ride-Check is performed. (- 132)
- » ABS self-diagnosis is in proaress. (= 133)
- » ASC self-diagnosis is in proaress. (== 133)

#### Version 2:

- Steering lock is engaged; press and hold down button 1.
- » The steering lock disengages.
- » Parking lights and all function circuits switched on.
- with daytime riding light<sup>OE</sup>
- » Daytime riding light is switched on.<1
- » Pre-Ride-Check is performed. ( 132)

on the multifunction display with 4 67

Always keep the spare key separate from the radio-operated kev.

the key symbol.

If you mislay a radio-operated key vou can have the key in question barred by your authorised BMW Motorrad Retailer In order to have a key barred you must bring along all the other keys belonaina to the motorcycle. The engine cannot be started by a barred radio-operated key. but a radio-operated key that has been barred can subsequently be reactivated

You can obtain emergency/extra keys only through an authorised BMW Motorrad Retailer. The radio-operated keys are part of an integrated security system, so the dealer is under an obligation to check the legitimacy of all ap-

» ABS self-diagnosis is in progress. (# 133)

» ASC self-diagnosis is in proaress. (# 133)

#### Switching off ignition Requirement

Radio-operated key is within range.



 There are two ways of deactivating the ignition.

#### Version 1:

- Briefly press button 1.
- » Light is switched off.
- » Handlebars (steering lock) are not locked.

#### Version 2:

- Turn the handlebars all the way to left.
- Press and hold down button 1.
- » Light is switched off.
- » The steering lock engages.

#### Electronic immobiliser FWS

The on-hoard electronics access the data saved in the radio-operated key via a ring aerial in the wireless lock. The ignition is not enabled for starting until the enaine control unit has recognised the radio-operated key as "authorised" for your motorcycle.

# NOTICE

A spare key attached to the same ring as the radio-operated key used to start the engine could impair the electronics function, in which case the enabling signal for starting is not issued. The warning is displayed



plications for replacement/extra keys.

#### Battery of the radiooperated key is flat or the key has been lost



- Please consult the information on the electronic immobiliser (EWS) if a key is lost or mislaid.
- If you happen to lose or mislay the radio-operated key while on a journey, you can start the vehicle with the emergency key.
- If the battery of the radio-operated key is flat, the motorcycle

can be started by touching the battery cover with the radio-operated key.

 Hold the emergency key 1 or the flat radio-operated key 2 against the battery cover at the same height as the antenna 3.

## 

The emergency key or the flat radio-operated key must be placed **next to** the battery cover.◄

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

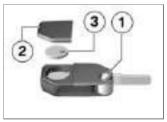
30 s

- » Pre-Ride-Check is performed.
- Key has been recognised.
- Engine can be started.
- Starting the engine (🗰 132).

# Replace the battery of the radio-operated key

If the radio-operated key does not react when you short-press or long-press a button:

- The battery in the radio-operated key is not at full capacity.
- » KEYLO! is displayed in the multifunction display.
- » Change the battery.



- Press button 1.
- » Key bit flips out.
- Push up battery cover 2.
- Remove the battery **3**.

• Dispose of the old battery in accordance with all applicable laws and regulations; do not attempt to dispose of batteries as domestic waste.

## **F** ATTENTION

#### Unsuitable or incorrectly inserted batteries

Component damage

- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, always make sure polarity is correct.◄
- Insert the new battery with the positive terminal up.

Battery type

for Keyless Ride-radio-operated key

CR 2032

- Remove the battery 2.
- » Red LED on the instrument panel flashes.
- » The radio-operated key is ready for use again.

# Emergency off switch (kill switch)



1 Emergency off switch (kill switch)

### 🏠 WARNING

Operation of the kill switch while riding

Risk of fall due to rear wheel locking

 Do not operate the kill switch when riding.

The emergency off switch is a kill switch for switching off the engine quickly and easily.



- a Engine switched off
- **b** Normal operating position (run)



# Lights Low-beam headlight and sidelights

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

After the ignition is switched off, the side light remains on for a short time.

### 

The side lights place a strain on the battery. Do not switch the ignition on for longer than absolutely necessary.◄

The low-beam headlight switches on automatically when the engine is switched on.

 with daytime riding light<sup>OE</sup>
 In daytime, the daytime riding light can be switched on as an alternative to the low-beam headlight. (•• 71)

#### High-beam headlight and headlight flasher



- Push switch **1** forward to switch on the high-beam headlight.
- Pull switch **1** back to operate the headlight flasher.

#### Parking lights

• Switch off the ignition.



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

# Day run lights

with daytime riding light<sup>OE</sup>

### Automatic or manual daytime riding light

The daytime riding light is switched on and off either automatically or manually. You can switch the automatic function for the daytime riding light on or off in SETUP.

#### **Recommended setting:**

 SETUP A DRL ON (A DRL: automatic daytime riding light)

You can switch the automatic function for the daytime riding light off temporarily by pressing the button. Pressing the button for the daytime riding light has no effect on the setting in SETUP.

 with Connectivity<sup>OE</sup>
 The daytime riding light is switched on and off either automatically or manually.
 You can switch the automatic function for the daytime riding light on or off in the Vehicle settings menu.

#### **Recommended setting:**

- Auto. dayt. rid. light is switched on.

You can switch the automatic function for the daytime riding light off temporarily by pressing the button. Pressing the button for the daytime riding light has no effect on the setting in the Vehicle settings menu.

### Automatic daytime riding light

#### 🛕 WARNING

#### The automatic daytime riding light does not replace the personal assessment of the light conditions

Risk of accident

• Switch off the automatic daytime riding light in poor light conditions.◄ • Starting the engine (🗯 132).

### 

The changeover between daytime riding light and lowbeam headlight including front side lights can be effected automatically.◄

- The symbol for automatic daytime riding light is displayed.
- » If the symbol for automatic daytime riding light is not displayed, the SETUP A DRL OFF setting is selected.
- Proceed as follows in order to switch the daytime riding light to automatic:



- Briefly press the top part **1** of the MENU rocker button repeatedly until SETUP ENTER **3** appears on the display.
- Press and hold the top part **1** of the MENU rocker button to start SETUP.
- » SETUP ASC appears on the display.



- Briefly press the top part 1 of the MENU rocker button repeatedly until the SETUP A DRL 3 menu item appears on the display.
- Press the bottom part **2** of the MENU rocker button briefly to toggle between ON and OFF.
- » SETUP A DRL ON appears on the display.
- Press and hold the top part **1** of the MENU rocker button.
- » SETUP ENTER appears on the display.

The symbol for automatic daytime riding light is displayed.

- with Connectivity<sup>OE</sup>
- In the Settings, Vehicle settings, Lights menu, switch on the Auto. dayt. rid. light function.

The indicator light for the automatic daytime riding light lights up.

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

Operation

#### Manual operation of the light when the automatic system is switched on Requirement

Automatic daytime riding light is switched on



- Press button 1 (e.g. when riding into a tunnel, if the automatic daytime riding light reacts slowly due to the ambient briahtness).
- » Automatic daytime riding light is switched off.

- » The low-beam headlight and the front side light are switched on
- Press button 1 again.
- » Automatic daytime riding light is reactivated.
- » The davtime riding light is switched on again once the required ambient brightness is reached
- » The low-beam headlight and the backlighting of the instrument cluster are switched off.



The indicator light for the davtime riding light shows if the daytime riding light is active.

#### Manual daytime riding light Requirement

Automatic for daytime riding light must be switched off.

### WARNING

#### Switching on the davtime riding light in the dark.

Risk of accident

- Do not use the daytime ridina light in the dark.
- Starting the engine (# 132).



- Briefly press the top part 1 of the MENU rocker button repeatedly until SETUP ENTER 3 appears on the display.
- Press and hold the top part 1 of the MENU rocker button to start SETUP.



» SETUP ASC appears on the display.



- Briefly press the top part 1 of the MENU rocker button repeatedly until the SETUP A DRL 3 menu item appears on the display.
- Press the bottom part 2 of the MENU rocker button briefly to toggle between ON and OFF.
- » SETUP A DRL OFF appears on the display.
- Press and hold the top part **1** of the MENU rocker button.

- with Connectivity OE
- In the Settings, Vehicle settings, Lights menu, switch off the Auto. dayt. rid. light function.⊲



• Press button **1** to switch on the daytime riding light.

#### 

**ON** 

By comparison with the lowbeam headlight, the daytime running light makes the vehicle more visible to oncoming traffic. This improves daytime visibility. » The low-beam headlight and the front side lights are switched off.

The indicator light for the daytime riding light shows if the daytime riding light is active.

• In the dark or in tunnels: Press button **1** again to switch off the daytime riding light and switch on the low-beam headlight and front side light.

#### 

If the high-beam headlight is switched on while the daytime riding light is on, the daytime riding light is switched off after approx. 2 seconds and the high-beam headlight, low-beam headlight and front side light are switched on.

If the high beam headlight is switched off again, the daytime running light is not automatically reactivated, but must be switched on again if required.

Operation

# Hazard warning lights system

#### Operating hazard warning flashers

• Switch on the ignition.

#### 

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

#### 

The indicator function replaces the hazard warning lights function while the indicator button is pressed once operating readiness is switched on. The hazard warning lights function becomes active again once the indicator button is released.◄



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

#### **Turn indicators**

#### Operating the turn indicators

• Switch on the ignition.



- Press button **1** to the left to switch on the left turn indicator.
- Press button **1** to the right to switch on the right turn indicator.
- Operate button **1** in the centre position to switch off the turn indicator.

#### 

The turn indicators are cancelled automatically after the defined riding time and distance. The defined time and distance can be set by an authorised BMW Motorrad dealer.◄ Δ



» Factory setting:

- Riding time = 10 s

Distance travelled = 200 m

#### **Comfort turn indicator**



 Speed over 100 km/h: after flashing five times

If button **1** is pressed to the right or left slightly longer, the turn indicators only switch off automatically once the speed-dependent distance covered is reached.

#### Multifunction display Select the display at the top

• Switch on the ignition.

If button **1** has been pressed to the right or left, the turn indicators are automatically switched off under the following circumstances:

- Speed below 30 km/h: after 50 m distance covered
- Speed between 30 km/h and 100 km/h: after a speed-dependent distance covered or in case of acceleration



- Press the top part **1** of the MENU rocker button briefly to select the display in area **3**. The following values can be displayed:
- Odometer ODO
- Trip distance 1 TRIP 1
- Trip distance 2 TRIP 2
- Automatic trip distance: TRIP A, is automatically reset if a minimum of five hours have passed or the date has changed since the ignition was switched off.
- Call up the settings menu: SETUP ENTER (is only dis-

# Operation

played when the Scooter is stationary)

### Select on-board computer display

• Switch on the ignition.



 Press the bottom part 2 of the MENU rocker button briefly to select the on-board computer display in area 4.

#### 

If the fuel reserve has been reached, the RANGE display

always appears after the ignition is switched on.◄

The following values can be displayed:

- Range RANGE
- Average consumption CONS 1
- Average consumption CONS 2
- Current consumption CONS C
- Oil level OILLVL
- Outside temperature EXTEMP
- Coolant temperature ENGTMP
- Average speed SPEED Ø
- Battery voltage VOLTGE
- Riding time RDTIME
- Date DATE

### Resetting trip distance recorder

- Switch on the ignition.
- Select the trip recorder.
- » The trip recorder desired is displayed.



- Operation
- Press and hold the top part **1** of the MENU rocker button until the trip distance recorder **3** is reset.
- » Trip recorder reading = 0.0

### Resetting the average values

- Switch on the ignition.
- Press the bottom part of the MENU rocker button repeatedly until the desired average consumption or the average speed is displayed.



- Press the bottom part **2** of the MENU rocker button until the average value **4** displayed has been reset.
- » Average value = -- -- --

#### Resetting the riding time

- Switch on the ignition.
- Briefly press the bottom part of the MENU rocker button repeatedly until the riding time RDTIME is displayed.



- Press and hold the bottom part **2** of the MENU rocker button until the riding time RDTIME **3** has been reset.
- » Riding time starts at 00:00:00

#### SETUP

#### Selecting SETUP Requirement

The Scooter is at a standstill.



- Briefly press the top part **1** of the MENU rocker button repeatedly until SETUP ENTER **3** is displayed.
- Press and hold the top part **1** of the MENU rocker button to start SETUP.
- » SETUP ASC is displayed.
- Press the top part **1** of the MENU rocker button briefly to select the following parameters in the SETUP:
- Switch ASC on or off ASC OFF/ ASC ON or calibrate ASC ASC CAL

- with anti-theft alarm (DWA)<sup>OE</sup>
- Automatically activate anti-theft alarm function when the ignition is switched off DWA ON or leave the automatic function switched off DWA OFF.⊲
- Set the time CLOCK.
- Set the date DATE.
- Adjust the brightness of the backlighting in the instrument cluster BRIGHT.
- with daytime riding light  $^{\rm OE}$
- Activate automatic daytime riding light A DRL ON or manual daytime riding light A DRL OFF.
- Adjusting the units  $\ensuremath{\mathtt{UNIT}}$  .
- Reset displays RESET.
- Exit setup exit.

#### Quitting SETUP Requirement

There are four options for quitting SETUP.



- Press and hold the top part **1** of the MENU rocker button.
- » SETUP ENTER is displayed.
- Alternatively, briefly press the top part 1 of the MENU rocker button repeatedly until SETUP EXIT is displayed.
- Press and hold the bottom part **2** of the MENU rocker button.
- » SETUP ENTER is displayed.
- Alternatively: switch the ignition off and on again.
- » SETUP ENTER is displayed.
- Alternatively, ride away.

### Speed for operation in SETUP mode

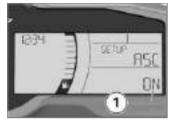
#### max 10 km/h

- » SETUP will be quit when the permissible speed for operation is exceeded.
- » ODO is displayed.
- » All settings will be saved whatever method is used to quit SETUP.

#### Automatic Stability Control (ASC) ASC Switching off Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (🗰 78).
- » SETUP ASC is displayed.



- Press the bottom part of the MENU rocker button briefly to toggle between ASC ON **1** and ASC OFF.
- » SETUP ASC OFF is displayed.



- ASC indicator and warning light shows.
- » ASC is switched off.
- Press and hold the top part of the MENU rocker button to quit SETUP.
- » SETUP ENTER is displayed.

#### ASC Switching off

- with Connectivity OE

#### Requirement

The Scooter is stationary.

- Switch on the ignition.
- Call up menu item Settings, Vehicle settings, ASC, Activate ASC.



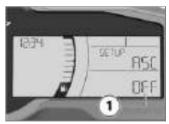
- Switch off ASC. ASC indicator and warning light shows.
- » ASC is switched off.

- Press and hold the top part of the MENU rocker button to quit Settings.
- » Pure view appears on the display.

#### ASC Switching on Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (# 78).
- » SETUP ASC is displayed.



 Press the bottom part of the MENU rocker button briefly to toggle between ASC ON and ASC OFF  $\boldsymbol{1}.$ 

» SETUP ASC ON is displayed. ASC indicator and warning light remains off or flashes until self-diagnosis is completed.

- » ASC is switched on.
- Press and hold the top part of the MENU rocker button to quit SETUP.
- » SETUP ENTER is displayed.
- Alternatively: switch the ignition off and on again.
- » If the ASC indicator and warning light lights up after the ignition has been switched off and on again, there is an ASC fault.

#### **ASC Switching on**

- with Connectivity<sup>OE</sup>

#### Requirement

The Scooter is stationary.

• Switch on the ignition.

• Call up menu item Settings, Vehicle settings, ASC, Activate ASC.



• Switch on ASC.

ASC indicator and warning light remains off or flashes until self-diagnosis is completed.

- » ASC is switched on.
- Press and hold the top part of the MENU rocker button to quit Settings.
- » Pure view appears on the display.

#### Calibrate ASC Requirement

Reduced stability reserves of the ASC control after tyre change.

### 

Calibration means that the control is adapted to the effective tyre radii of the front and rear wheel.

The effective tyre radius depends on the tyre make, tread depth, tyre pressure and load.

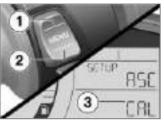
After each tyre change, calibrate the ASC control to adjust to the changed tyre radii.

As tyre wear increases, regularly calibrate the ASC control to maintain an optimum function.◄

- Before calibration, the ignition must be switched off for at least one minute.
- ASC Switching on (# 80).

#### » SETUP ASC ON is displayed.





- Press and hold the bottom part of the MENU rocker button **2** to start calibration.
- » CAL 3 flashes.



ASC indicator and warning light lights up.

- » Rocker buttons MENU **1** and **2** have no function.
- » You must switch the ignition off and on again to quit the menu point.
- » Calibration is started and expects the Scooter to be ridden.

#### TTENTION

# ASC is not available until calibration is completed

Risk of falling

- Use a smooth and level stretch of straight road with good grip for the calibration procedure.
- Ride straight ahead and at a steady speed in the following speed range for six seconds.

Speed range for ASC

The Scooter must be ridden straight ahead in a specific speed range:

30...50 km/h

- ASC is being calibrated.
   ASC indicator and warning light goes out.
- » ODO is displayed.
- » ASC calibration is completed.

» The journey can now be continued.

#### calibrate ASC

- with Connectivity<sup>OE</sup>

#### Requirement

Reduced stability reserves of the ASC control after a tyre change.

#### 

Calibration means that the control is adapted to the effective tyre radii of the front and rear wheel.

The effective tyre radius depends on the tyre make, tread depth, tyre pressure and load.

After each tyre change, calibrate the ASC control to adjust to the changed tyre radii.

As tyre wear increases, regularly calibrate the ASC control to maintain an optimum function.◀

Operation

- Before calibration, the ignition must be switched off for at least 1 minute.
- with Connectivity<sup>OE</sup>
- ASC Switching on (# 81).
- » ASC is activated.



- Call up Start ASC calibration and start calibration.
- » The calibration has been started and expects the Scooter to be driven.



e driven. ASC indicator and warning light lights up. » It is only possible to exit the menu item by switching the ignition off and on.

#### **ATTENTION**

#### ASC is not available until calibration is completed

Risk of falling

- Use a smooth and level stretch of straight road with good grip for the calibration procedure.
- Ride straight ahead and stay within the following speed range for 6 seconds, riding as smoothly as possible.

Speed range for ASC calibration

The Scooter must be ridden straight ahead in a specific speed range:

30...50 km/h

» ASC is being calibrated.



ASC indicator and warning light goes out.

Operation

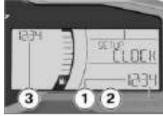
- » ASC calibration is complete.
- » The journey can now be continued.

#### Date and time

#### Setting the clock Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (# 78).
- » SETUP CLOCK is displayed.



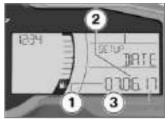
- Press and hold the bottom part of the MENU rocker button to set the hours.
- » The hours 1 flash.
- Press the top part of the MENU rocker button briefly to advance the hours.
- Press the bottom part of the MENU rocker button briefly to go back an hour.
- Press and hold the bottom part of the MENU rocker button once the desired hour has been set.
- » The minutes 2 flash.

- Press the top part of the MENU rocker button briefly to advance the minutes.
- Press the bottom part of the MENU rocker button briefly to go back a minute.
- Press and hold the bottom part of the MENU rocker button once the desired minute has been set.
- » The minutes 2 stop flashing.
- Checking the setting on the time display **3**.
- » This completes the process.
- Press and hold the top part of the MENU rocker button.
- » SETUP ENTER is displayed.

#### Setting the date Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (# 78).
- » SETUP DATE is displayed.



- Press and hold the bottom part of the MENU rocker button.
- » Day 1 flashes.
- Press the top part of the MENU rocker button briefly to advance the day.
- Press the bottom part of the MENU rocker button briefly to go back one day.
- Press the bottom part of the MENU rocker button and hold once the desired day has been set.
- » Month 2 flashes.

- Press the top part of the MENU rocker button briefly to advance the month.
- Press the bottom part of the MENU rocker button briefly to go back one month.
- Press the bottom part of the MENU rocker button and hold once the desired month has been set.
- » Year 3 flashes.
- Press the top part of the MENU rocker button briefly to advance the year.
- Press the bottom part of the MENU rocker button briefly to go back one year.
- Press the bottom part of the MENU rocker button and hold once the desired year has been set.
- » Year 3 no longer flashes.
- » This completes the process.
- Press and hold the top part of the MENU rocker button.
- » SETUP ENTER is displayed.

## General settings in the multifunction display

#### Adjusting the brightness of the backlighting in the instrument cluster Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (🗰 78).
- Briefly press the top part of the MENU rocker button repeatedly until SETUP BRIGHT is displayed.



- Briefly press the bottom part **2** of the MENU rocker button repeatedly until the desired brightness of the backlighting is set.
- Press and hold the top part **1** of the MENU rocker button to quit SETUP.
- » SETUP ENTER is displayed.

#### Adjusting the units Requirement

The Scooter is at a standstill.

- Switch on the ignition.
- Selecting SETUP (# 78).

Operation

- Briefly press the top part of the MENU rocker button repeatedly until SETUP UNIT ENTER is displayed.
- Press and hold the bottom part of the MENU rocker button to activate SETUP UNIT.
- » SETUP UNIT SPEED is displayed.
- Press the top part **1** of the MENU rocker button briefly to select the following parameters in the SETUP UNIT:
- Change speed indicator unit between KMH and MPH
- Change distance recorder unit between KM and MI
- Reset speed indicator and distance recorder units to factory setting.



- Press the bottom part 2 of the MENU rocker button briefly until the desired unit 3 is set on the speed indicator or the distance recorder.
- Briefly press the top part 1 of the MENU rocker button repeatedly until SETUP UNIT EXIT is displayed if you wish to complete adjustment.
- Press and hold the bottom part 2 of the MENU rocker button to quit SETUP UNIT.
- » SETUP RESET is displayed.



- Briefly press the top part 1 of the MENU rocker button repeatedly until SETUP UNIT RESET is displayed if you wish to reset the units to the factory setting.
- Press and hold the bottom part **2** of the MENU rocker button until the RESET **3** display flashes.
- » Units have been reset to the factory setting.
- » SETUP UNIT EXIT is displayed.
- Press and hold the bottom part 2 of the MENU rocker button to quit SETUP UNIT.

» SETUP RESET is displayed.

#### **Resetting SETUP**

- Switch on the ignition.
- Selecting SETUP (# 78).
- Briefly press the top part of the MENU rocker button repeatedly until SETUP RESET is displayed.



 Press and hold the bottom part 2 of the MENU rocker button until SETUP has been reset.

#### NOTICE

Date and time can also be reset to a default value by using the SETTLE RESET function

- » A time of 12:00 is displayed.
- Press and hold the top part 1 of the MENU rocker button to quit SETUP.
- » SETUP ENTER is displayed.

#### Heated handlebar grips

- with heated grips OE

#### Operating the heated handlebar grips

Start the engine.

#### NOTICE

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



Operation

Δ

87

 Repeatedly press button 1 until the heating stage you want to use is displayed.

The grips can be heated to three levels. Stage three is for heating the grips quickly: it is advisable to switch back to stage one or two as soon as the grips are warm. The following displays are available:



100% heating power



approx. 60% heating power





approx. 30% heating power

- with Connectivity<sup>OE</sup>



 Repeatedly press button 1 until the heating stage you want to use is displayed.

The grips can be heated to three levels. Stage three is for heating the grips quickly: it is advisable to switch back to stage one or two as soon as the grips are warm. The following displays are available: 100% heating power

approx. 60% heating power

approx. 30% heating power

#### Seat heating

- with seat heating OE

#### Using the rider's seat heating

• Start the engine.



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



• Repeatedly press button **1** until the heating stage you want to use is displayed.

The rider's seat can be heated in three stages. Stage three is intended to quickly heat up the seat, subsequently switch to the second or first stage. The following displays are available:



100% heating power



approx. 60% heating power



#### approx. 30% heating power

- with Connectivity<sup>OE</sup>



 Repeatedly press button 1 until the heating stage you want to use is displayed.

The rider's seat can be heated in three stages. Stage three is intended to quickly heat up the seat, subsequently switch to the second or first stage. The following displays are available:



100% heating power



approx. 60% heating power

approx. 30% heating power

#### Seat

#### Operating the seat

• Switch on the ignition.



- Press button 1.
- » Seat is unlocked.

#### - without Keyless Ride<sup>OE</sup>



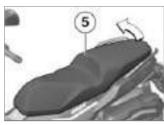
• The seat can also be unlocked without switching on the ignition. To do this, insert the ignition key **3** in the lock **4** on the right side trim panel and turn clockwise.

» Seat is unlocked.

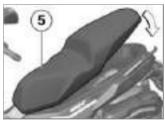
- **4**
- with Keyless Ride OE



- The seat can also be unlocked without switching on the ignition. To do this, insert the extended radio-operated key 3 in the lock 4 on the right side trim panel and turn clockwise.
- » Seat is unlocked.



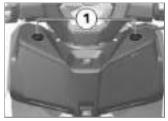
• Raise and fully open the seat **5** at the rear.



• To close, press the rear of the seat **5** down until it latches shut.

#### Stowage compartments Using the front storage compartments

without Keyless Ride<sup>OE</sup>



- To open a storage compartment, press the corresponding button **1**.
- To close a storage compartment, push the corresponding flap into the lock.

#### 

The storage compartments cannot be locked.◄<

Operation

### Using the front storage compartments

- with Keyless Ride<sup>OE</sup>
- Switch on the ignition.



- To open a storage compartment, press the corresponding button **1**.
- To close a storage compartment, push the corresponding flap into the lock.
- After switching off the ignition, both storage compartments are locked after an after-running period.

After-running period for opening the storage compartments

10 s⊲

### Operating the BMW flexcase

• Operating the seat (🗰 89).

#### 

The stowage compartment light switches on when switching on the ignition.

After switching off the ignition the stowage compartment light remains illuminated briefly.



- Pull release lever 1 forwards to increase the size of the storage compartment, for example to accommodate a motorcycle helmet.
- » The floor 2 will lower.
- » The vehicle cannot be started while the floor is lowered.
- When the ignition is switched on, the storage compartment symbol is displayed.

with Connectivity
 When the ignition is

witched on, Engine st. not poss. BMW flexcase

# 92

Operation

open. Close BMW flexcase. appears on the display.



• The BMW flexcase provides space for an integral helmet.

Payload of the flexcase

max 5 kg

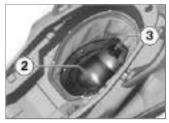


• A jet helmet can be stowed in the front portion of the storage compartment as shown.

Payload of the front storage compartment

max 3 kg

Close seat.



- To continue the journey, open the seat.
- Empty luggage compartment.
- Pull the lever **3** up to raise the floor 2 until it engages in the locked position.



When the ignition is switched on, the storage compartment symbol goes out.

» - with Connectivity When the ignition is switched on, Engine st. not poss. BMW flexcase open. Close BMW flexcase. disappears from the display.

- Close seat.
- » The journey can now be continued.

Operation



#### TFT display

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#### General instructions Warnings

#### 

#### Using a smartphone during the journey or while the engine is running

Risk of accident

- Always observe the relevant road traffic regulations.
- Do not use the smartphone during the journey (apart from applications that do not require operation, e.g. making telephone calls with the hands-free system).

### Distraction from the road and loss of control

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

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

#### **Connectivity functions**

Connectivity functions include media, telephony and navigation. Connectivity functions can be used if the TFT display is connected to a mobile end device and helmet (# 107). For more information on the Connectivity functions go to **bmw-motorrad.com** 

#### 

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

#### 

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

#### BMW Motorrad Connected App

The BMW Motorrad Connected App contains usage and vehicle information. For some functions, such as navigation, the app must be installed on the mobile end device and connected to the TFT display. The app is used to start route guidance and adjust the navigation.

#### 

On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Con-

nected App must be opened before use.◀

#### fore use.◄ Actuality

The TFT display may be updated after the publication date. Because of this, your Scooter may differ from the information supplied in the Rider's Manual. Upto-date information is available at: **bmw-motorrad.com** 

#### Principle Controls



All contents of the display are operated using the multi-controller **1** and the MENU **2** rocker button.

Depending on the context, the following functions are possible.

#### Multi-controller functions Turn the multi-controller upwards:

- Move the cursor upwards in lists.
- Adjust settings.
- Increase volume.

### Turn the multi-controller downwards:

- Move the cursor downwards in lists.
- Adjust settings.
- Decrease volume.

### Tilt the multi-controller to the left:

- Activate the function in accordance with the operation feedback.
- Activate the function to the left or back.
- Go back to the View menu after settings.
- In the View menu, change up a level.
- In the My Vehicle menu: advance one menu screen.

### Tilt the multi-controller to the right:

 Activate the function in accordance with the operation feedback.



- Confirm selection.
- Confirm settings.
- Advance a menu step.
- Scroll to the right in lists.
- In the My Vehicle menu: advance one menu screen.

#### MENU rocker button functions

#### NOTICE

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

#### Briefly push MENU up:

- In the View menu, change up a level.
- In the Pure view: change the display for rider info status line.

#### Press and hold the top part of the MENU rocker button:

- In the View menu: call up Pure view.
- In Pure view: change operating focus to the Navigator.

#### Briefly push MENU down:

- Change down a level.
- No function if the lowest hierarchical level has been reached.

#### Hold MENU down:

- Change back to the last menu after a previous menu change by holding up the MENU rocker button.

#### **Operating instructions in** the main menu



Operating instructions show whether interactions are possible. and which ones.



### What the operating instructions mean:

- Operating instruction **1**: the left end has been reached.
- Operating instruction 2: it is possible to scroll to the right.
- Operating instruction 3: it is possible to scroll down.
- Operating instruction 4: it is possible to scroll to the left.
- Operating instruction **5**: the right end has been reached.

### Operating instructions in submenus

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



### Meaning of the operating instructions:

 Operating instruction 1: The current display is located in a hierarchical menu. A submenu level is shown with a symbol. Two symbols indicate two or more submenu levels. The colour of the symbol changes depending on whether you can return to a higher level.

- Operating instruction 2: An additional submenu level can be called up.
- Operating instruction 3: There are more entries than can be displayed.

#### **Display Pure view**

• Press and hold the top part of the MENU rocker button.

#### 5 100

#### Switching functions on and off



Section adaptation ly Or Soc time automatically

Some menu items have a check box in front of them. The check box shows whether the function is on or off. Action symbols after the menu items show what will be switched by tilting the multicontroller briefly to the right.

#### Examples for switching on and off:

- Symbol 1 shows that the function is switched on.
- Symbol 2 shows that the function is switched off.

- Symbol 3 shows that the function can be switched off
- Symbol 4 shows that the function can be switched on

#### Call up the menu



- Display Pure view (# 99).
- Briefly push button 2 down. The following menus can be called up:
- My vehicle
- Navigation
- Media
- Telephone
- Settings

- Repeatedly press the multicontroller 1 briefly to the right until the desired menu item is highlighted.
- Briefly push button 2 down.

#### NOTICE

The Settings menu can only be called up when the vehicle is stationary.

#### Move the cursor in lists



- Call up the menu (== 100).
- To move the cursor down in lists, turn the multi-controller 1

» Using the navigation system. 5 101

Switch display for rider info status line Requirement

( 188)

The vehicle is at a standstill. The Pure view is displayed.

- Switching on ignition (# 64).
- » All the information necessary for riding on public roads is presented in the TFT display by the on-board computer. The information can be displayed on the top status line.
- Select content of the rider info. status line (= 102).

#### down until the desired entry is highlighted.

 To move the cursor up in lists. turn the multi-controller 1 up until the desired entry is highliahted.

#### **Confirm selection**



- Select the desired entry.
- Briefly press the multi-controller 1 to the right.

#### Call up the last menu used

 In Pure view: press and hold the MENU rocker button.

» The last menu used is called up. The last entry highlighted is selected

#### Change of operating focus

If the Navigator is connected, it is possible to switch between operation of the Navigator and the TFT display.

#### Change the operating focus

- with navigation system OA
- Installing navigation device ( 187).
- Display Pure view (# 99).
- Press and hold the top part of the MENU rocker button.
- » Operating focus switches to the Navigator or TFT display. The active device is marked on the left-hand side of the top status line. Operating actions relate to the active device until the operating focus is changed again.



- Press and hold button 1 to display the Pure view.
- Briefly press button 1 to select the value in the top status line 2.

The following values can be displayed:

- Odometer Total
- Trip distance 1 Current
- Trip distance 2 Current
- Current consumption Consumption



Average consumption 1



Average consumption 2

ď	Riding	time
---	--------	------

Riding time 2 d'



Break 1

Break 2



Average speed 1

Average speed 2



Fuel gauge.



#### Select content of the rider info status line

- Call up the Settings. Display, Status line content menu.
- Switch on the desired displays.
- » It is possible to switch between the selected displays in the rider info. status line. If no displays are selected, only the range will be displayed.

#### Adjust settings



 Select and confirm the desired settings menu.

# **FFT** display

- ssis the 103
  - TFT display

- Turn the multi-controller **1** downwards until the desired setting is highlighted.
- If there are operating instructions, tilt the multi-controller **1** to the right.
- If there are no operating instructions, tilt the multi-controller **1** to the left.
- » The setting is saved.

#### Switching Speed Limit Info on or off Requirement

Vehicle is connected to the Navigator or a compatible mobile end device. The BMW Motorrad Connected App is installed on the mobile end device.

- Speed Limit Info displays the maximum speed currently permitted.
- Call up the Settings, Display menu.

• Switch Speed Limit Info on or off.

#### Pure and Urban views Pure view



In the Pure view, all important information for riding on public roads is provided.

The speed indicator **1** displays the current driving speed. Press the top of the rocker button MENU briefly to display the range instead of the fuel gauge **2**.

The range readout **2** indicates how far you can ride with the fuel

remaining in the tank. This distance is calculated on the basis of average consumption and the quantity of fuel on board.

- When the 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 is shown together with a warning once the fuel reserve has been reached.
- After a refuelling stop, range is recalculated if the amount of fuel in the tank is greater than the reserve quantity.
- The calculated range is only an approximate figure.



#### **Urban view**

# 

The Urban view also displays the engine speed with a numerical display **1** and a bar display **2** as additional information. This can be called up via the main menu.

**General settings** 

#### Adjust the volume

- Connect rider's and passenger's helmet (••• 108).
- Increase volume: turn the multi-controller upwards.

- Decrease volume: turn the multi-controller downwards.
- Mute: turn the multi-controller all the way down.

#### Setting the date

- Switching on ignition (# 64).
- Call up the Settings, System settings, Date and time, Set date menu.
- Adjust Day, Month and Year.
- Confirm setting.

#### Set date format

- Call up the Settings, System settings, Date and time, Date format Menu.
- Select the desired setting.
- Confirm setting.

#### Setting the clock

• Switching on ignition (# 64).

#### 🛕 WARNING

Adjusting the clock while riding Risk of accident

- Set the clock only when the motorcycle is stationary.
- Call up the Settings, System settings, Date and time, Set time menu.
- Adjust Hour and Minute.

#### Setting time format



#### Adjusting the clock while riding

Risk of accident

- Set the clock only when the motorcycle is stationary.
- Call up the Settings, System settings, Date and time, Time format Menu.
- Select the desired setting.
- Confirm setting.

### Switching GPS synchronisation on or off

- Call up the Settings, System settings, Date and time menu.
- Switch GPS synchronisation on or off.
- » The time is taken from the Navigator if the relevant option in the Navigator is activated.

#### Setting units of measurement

- Call up the Settings, System settings, Units menu. The following units of measure-
- ment can be set: – Distance covered
- Pressure
- Temperature
- Speed
- Consumption

#### Setting the language

• Call up the Settings, System settings, Language menu.

The following languages can be set:

- Chinese
- German
- English
- Spanish
- French
- Italian
- Dutch
- Portuguese
- Russian
- Ukrainian

#### Adjusting brightness

- Call up the Settings, Display, Brightness menu.
- Adjusting display brightness.

#### Resetting all settings

- All the settings in the Settings menu can be reset to the factory settings.
- Call up the Settings menu.
- Select Reset all and confirm. The settings in the following menus are reset:
- Vehicle settings
- System settings
- Connections
- Display
- Information
- » Existing Bluetooth connections are not deleted.

## On-board computer with Connectivity

- with Connectivity OE

### Calling up the on-board computer

• Call up the My vehicle menu.

• Scroll to the right until the ON-BOARD COMPUTER menu screen is displayed.

#### Resetting on-board computer

- Calling up the on-board computer (I 105).
- Press down the MENU rocker button.
- Select Reset all values Or Reset individual val. and confirm.

The following values can be reset:

- Break
- Journey
- Current (TRIP 1)
- -Av. spee.
- Av. consump.

### Calling up the trip computer

• Calling up the on-board computer (••• 105).

• Scroll to the right until the TRIP COMPUT. menu screen is displayed.

#### **Resetting trip computer**

- Calling up the trip computer (# 106).
- Press down the MENU rocker button.
- Select Reset automatically Or Reset all and confirm.
- » If Reset automatically is selected, the journey computer is automatically reset if a minimum of six hours have passed and the date has changed since the ignition was switched off.

#### Bluetooth

### Short-range wireless technology

The Bluetooth function might not be available in certain countries.

Bluetooth is a short-range wireless technology. Bluetooth devices are short-range devices transmitting on the license-free ISM band (Industrial, Scientific, Medical) between 2.402 GHz and 2.480 GHz. They can be operated anywhere in the world without a licence being required. Although Bluetooth is designed to establish and sustain robust connections over short distances. as with every other wireless technology disruptions are possible. Interference can affect connections or connections can sometimes fail. Particularly when multiple devices operate in a Bluetooth network, with wireless technology of this nature it is

<sup>on</sup> 5

not possible to ensure faultfree communications in every situation.

## Possible sources of interference:

- interference zones due to transmission masts and similar
- devices with non-compliant Bluetooth implementations
- proximity of other Bluetoothcompatible devices

#### **Bluetooth coupling**

Two Bluetooth devices must detect each other before they can create a connection with each other. This process of mutual detection is known as "coupling". When two devices have coupled they remember each other, so the Bluetooth coupling process is conducted only once, on initial contact.

#### 

On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Connected App must be opened before use.◄

During the Bluetooth coupling process, the TFT display searches for other Bluetoothcapable devices within its reception area. The conditions that have to be satisfied before the audio system can recognise another device are as follows:

- The Bluetooth function of the device must be activated
- The device must be "visible" to others
- The device must support the A2DP profile
- Other Bluetooth-compatible devices must be OFF (e.g.

mobile phones and navigation systems).

Please consult the operating instructions for your communication system.

#### Perform Bluetooth pairing

- Call up the Settings, Connections menu.
- » Bluetooth connections can be established, managed and deleted in the CONNECTIONS menu. The following Bluetooth connections are displayed:
- Mobile device
- Rider's helmet
- Passenger helm.

The connection status for mobile end devices is displayed.

## Connect mobile end device

 Perform Bluetooth pairing (# 107).

- Activate the mobile end device's Bluetooth function (see mobile end device's operating instructions).
- Select Mobile device and confirm.
- Select PAIRING NEW MOB. DEVICES and confirm.

Mobile end devices are being searched for.

The Bluetooth symbol flashes in the bottom status line during Bluetooth coupling.

Mobile end devices found are displayed.

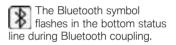
- Select and confirm mobile end device.
- Follow the instructions on the mobile end device.
- Confirm that the code matches.
- » The connection is established and the connection status updated.

- » If the connection is not established, consult the troubleshooting chart in the section entitled "Technical data". (# 197)
- » Depending on the mobile end device, telephone data is transferred to the vehicle automatically.
- » Telephone data (🗰 116)
- » If the telephone book is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (# 198)
- » If the Bluetooth connection is not working as expected, consult the troubleshooting chart in the section entitled "Technical data". (# 197)

#### Connect rider's and passenger's helmet

 Perform Bluetooth pairing (# 107).

- Select Rider's helmet Or Passenger helm. and confirm.
- Make the helmet's communication system visible.
- Select PAIRING NEW HEL-METS OF PAIRING NEW PASS. HELM. and confirm. Helmets are searched for.



Helmets found are displayed.

- Select and confirm helmet.
- » The connection is established and the connection status updated.
- » If the connection is not established, consult the troubleshooting chart in the section entitled "Technical data". (m 197)
- » If the Bluetooth connection is not working as expected, con-

sult the troubleshooting chart in the section entitled "Technical data". (# 197)

#### **Deleting connections**

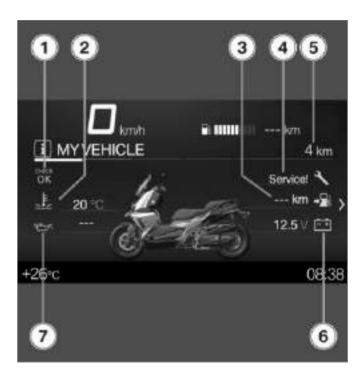
- Call up the Settings, Connections menu.
- $\bullet$  Select Delete connections.
- To delete an individual connection, select the connection and confirm.
- To delete all connections, select Delete all connections and confirm.



**TFT** display

#### My vehicle Start screen

- 1 Check Control display Mode of presentation (+ 44)
- 2 Coolant temperature (m 55)
- 3 Range (🗰 103)
- 4 Service-due indicator (# 60)
- 5 Vehicle mileage/km
- 6 On-board voltage (🗰 173)
- 7 Oil-level check (# 55)



#### **Operating instructions**



- Operating instruction 1: tabs which show how far to the left or right can be scrolled.
- Operating instruction 2: tab which shows the position of the current menu screen.

## Scrolling through menu screens



- Call up the My vehicle menu.
- To scroll to the right, briefly press Multi-Controller **1** to the right.
- To scroll to the left, briefly press Multi-Controller **1** to the left.

The My Vehicle menu contains the following screens:

- MY VEHICLE
- Check Control messages (if any)
- ON-BOARD COMPUTER
- TRIP COMPUT.

- SERVICE REQUIREMENTS
- For more information on tyre pressure and Check Control messages, see the "Displays" section.

#### 

Check control messages are attached dynamically to the My Vehicle menu screen as additional tabs.◄

## On-board computer and trip computer

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



#### Service requirements



If the time remaining to the next service is less than a month or if the next service is due within 1000 km, a white CC message is displayed.

# TFT display

#### Navigation

#### Warnings

### 🚹 WARNING

#### Using a smartphone during the journey or while the engine is running

Risk of accident

- Always observe the relevant road traffic regulations.
- Do not use the smartphone during the journey (apart from applications that do not require operation, e.g. making telephone calls with the hands-free system).◄

#### MARNING

## Distraction from the road and loss of control

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

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

#### Precondition

The vehicle is connected to a compatible mobile end device.

#### Precondition

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

#### 

On some mobile devices, e.g. those with iOS operating systems, the BMW Motorrad Connected App must be opened before use.◄

## Entering destination address

- Connect mobile end device (# 107).
- Call up the BMW Motorrad Connected App and start the route guidance.
- Call up the Navigation menu in the TFT display.
- » Active route guidance is displayed.
- » If the active route guidance is not displayed, consult the troubleshooting chart in the section entitled "Technical data". (# 198)

## Selecting destination from recent destinations

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

## Selecting destination from favourites

- The FAVOURITES menu displays all destinations which have been saved as favourites in the BMW Motorrad Connected app. No new favourites can be added using the TFT display.
- Call up the Navigation, Favourites menu.
- Select and confirm destination.
- Select Start guidance.

#### Entering special destinations

- Special destinations, such as points of interest, can be displayed on the map.
- Call up the Navigation, POIs menu.

The following locations can be selected:

- At current location
- At destination

- Along the route
- Select where the special destinations should be looked for. e.g. the following special destination can be selected:
- Filling station
- Select and confirm the special destination.
- Select Start route guidance and confirm.

#### Setting route criteria

- Call up the Navigation, Route criteria menu. The following criteria can be selected:
- Route type
- Avoid
- Select desired Route type.
- Switch desired Avoid on or off.

The number of avoidances activated is displayed in brackets.

#### Ending route guidance

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

## Switching spoken instructions on or off

- Connect rider's and passenger's helmet (im 108).
- The navigation can be read out by a computer voice. For this purpose, Spoken instructions must be switched on.
- Call up the Navigation, Active route guidance menu.
- Switch Spoken instructions on or off.

## Repeating last spoken instruction

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

#### Media

#### Precondition

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

#### **Control music playback**



• Call up the Media menu.



BMW Motorrad recommends setting the volume on the mobile

end device for media and calls to maximum before setting off.◀

- Adjust the volume (🖛 104).
- Next track: briefly tilt Multi-Controller **1** to the right.
- Last track or start of the current track: briefly tilt Multi-Controller **1** to the left.
- Fast forward: hold Multi-Controller **1** to the right.
- Rewind: hold Multi-Controller **1** to the left.
- Call up the context menu: press the bottom part of the button **2**.

#### 

Depending on the mobile device, the scope of the Connectivity functions may be restricted.◄

- » The following functions can be used in the context menu:
- Start playback Of Pause playback.

- Select the Now playing, All artists, All albums or All tracks category for search and playback.
- Select Playlists.

You can adjust the following settings in the Audio options submenu:

- Switch Shuffle on or off.
- Select Repeat: Off, One (current track) or All.

#### Phone

#### Precondition

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

#### **Telephone calls**

# 0

- Call up the Telephone menu.
- Accept call: tilt Multi-Controller **1** to the right.
- Reject call: tilt Multi-Controller **1** to the left.
- End the call: tilt Multi-Controller **1** to the left.

#### Muting

During active phone calls, the microphone in the helmet can be muted.

## Phone calls with multiple participants

A second call can be accepted while you are on a call. The first phone call is put on hold. The number of active telephone calls is shown in the Telephone menu. It is possible to switch between two phone calls.

#### Telephone data

Depending on the mobile end device, telephone data may be transmitted to the vehicle automatically once the Bluetooth connection has been established (\*\* 107).

Phone book: list of contacts saved on the mobile end device Call list: list of calls with the mobile end device

Favourites: list of favourites saved on the mobile end device

## Display software version

• Call up the Settings, Information, Software version menu.

## Display licence information

• Call up the Settings, Information, Licences menu.

#### Anti-theft alarm

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Activation	118
Alarm function	121
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#### **Overview**

- with anti-theft alarm (DWA) OE

## General information about the anti-theft alarm (DWA)

Any attempt to move the vehicle, change its position, disconnect the vehicle battery or unauthorised starts will activate the alarm. The sensitivity of the system is parameterised so that slight vibrations will not trigger the alarm. Once the system has been activated, any attempt to tamper with the vehicle is indicated acoustically by the siren and visually by all four turn indicators flashing in unison.

You can change some of your DWA alarm system's parameters to suit your personal preferences.

## Conserving power in the vehicle's starter battery

In order to conserve the power of the starter battery and ensure that the vehicle will start, the DWA anti-theft alarm automatically switches off the alarm function a few days after being activated. In most cases, however, the system will remain active for at least 10 days.

#### **Radio interference**

Radio systems or devices transmitting on the same frequency as the remote control of the DWA anti-theft alarm can interfere with operation of the system. If problems of this nature occur, point the remote control toward the vehicle from another direction.

#### Activation

- with anti-theft alarm (DWA) OE

#### **DWA** activating

- Switching on ignition (# 64).
- DWA adjusting (IIII 120).
- without Keyless Ride<sup>OE</sup>
- Switch off the ignition.
- » If the DWA is activated, the DWA is automatically activated after having switched off the ignition.
- » Activation takes approximately 30 seconds to complete.
- » Turn indicators flash twice.
- » Confirmation tone sounds twice (if programmed).
- » Anti-theft alarm is active.

Anti-theft alarm

- with Keyless Ride<sup>OE</sup>



- Switch off the ignition.
- Press button **1** on the radiooperated key once.
- » Activation takes approximately 30 seconds to complete.
- » Turn indicators flash twice.
- » Confirmation tone sounds twice (if programmed).
- » Anti-theft alarm is active.



- Press button **1** again on the radio-operated key during the activation phase to deactivate the motion sensor (e.g. to transport the scooter by train when the severe movements may activate the alarm).
- » Turn indicators flash three times.
- » Confirmation tone sounds three times (if programmed).
- » Motion sensor has been deactivated.

## Activation with Keyless Ride

- with Keyless Ride OE



- ⊔ Anti-theft alarm
- Switch off the ignition.
- Press button **1** on the radiooperated key.
- » Activation takes approximately 30 seconds to complete.
- » Turn indicators flash twice.
- » Confirmation tone sounds twice (if programmed).
- » Anti-theft alarm is active.

#### Motion sensor when motorcycle is to be transported

If you want to transport your motorcycle by train or on a trailer, for example, it is advisable to switch off the motion sensor. If the motion sensor is not switched off the severe movements occurring in transit could trigger the alarm.

## Deactivating the motion sensor

- with Keyless Ride OE



- Press button **1** on the radiooperated key again during the activation phase.
- » Turn indicators flash three times.
- » Confirmation tone sounds three times (if programmed).
- » Motion sensor has been deactivated.

#### DWA adjusting Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (# 78).

 Briefly press the top part of the MENU rocker button repeatedly until SETUP DWA appears on the display.



• Press the bottom part **2** of the MENU rocker button briefly to toggle between DWA ON **3** and DWA OFF.

The following settings are available:

- DWA ON: The DWA anti-theft alarm is active and will be armed automatically when the ignition is switched off.
- DWA OFF: The DWA anti-theft alarm is deactivated.

- Press and hold the top part **1** of the MENU rocker button to quit SETUP.
- » SETUP ENTER appears on the display.
- with Connectivity<sup>OE</sup>
- Switch on the ignition.
- Call up the Settings, Vehicle settings, Alarm system menu.
- » The following settings are available:
- Adapt Warning signal
- Switch Tilt alarm sensor on or off
- Switch Arming tone on or off
- Switch Arm automatically on or off
- » Programming options (im 123)

#### Alarm function

- with anti-theft alarm (DWA) OE

#### Alarm activation

A DWA alarm can be triggered by:

- motion sensor
- an attempt to use an unauthorised vehicle key to switch on the ignition
- disconnection of the DWA from the vehicle battery (DWA battery takes over power supply)

#### Alarm signal

A DWA alarm can be triggered by:

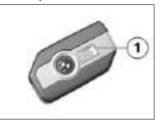
- motion sensor
- an attempt to use an unauthorised vehicle key to switch on the ignition
- disconnection of the DWA antitheft alarm from the motorcycle's battery (DWA internal battery in the anti-theft alarm provides power - alarm tone

only, the turn indicators do not flash)

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

An alarm lasts for approximately 26 seconds. While an alarm is in progress an alarm tone sounds and the turn indicators flash. The type of alarm tone can be set by an authorised BMW Motorrad Retailer.

#### - with Keyless Ride OE



The activated alarm can be aborted at any time by pressing the **1** button on the radio-operated key, without deactivating the anti-theft alarm.

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

## Light signals issued by the DWA LED:

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

#### Reason for an alarm

Once you have deactivated the alarm function, the DWA LED indicates the reason for potential alarm activation for one minute:

- Flashes once: motion sensor: motorcycle was tilted towards the front/rear.
- Flashes twice: motion sensor: motorcycle was tilted towards the side.

- Flashes three times: the ignition was switched on using an authorised remote key.
- Flashes four times: the alarm system was disconnected from the vehicle battery.

#### Deactivation

with anti-theft alarm (DWA)<sup>OE</sup>

## Deactivating the alarm function

• Switch on using an authorised ignition key.

6

#### - with Keyless Ride OE



• Press button **1** on the radiooperated key once.

#### 

The alarm function is reactivated after 30 seconds if "activation after ignition off" has been selected if the alarm function is deactivated using the radio-operated key and the ignition is not then switched on. ◄

- » Turn indicators flash once.
- » Alarm tone sounds once (if so programmed).
- » Alarm function is deactivated.

#### Programming

- with anti-theft alarm (DWA)<sup>OE</sup>

#### **Programming options**

The alarm system can be adapted to your particular needs in the following respects by your authorised BMW Motorrad Retailer:

- Confirmation alarm tone after having activated/deactivated the DWA in addition to flashing turn indicators.
- Rising and falling or intermittent alarm tone.
- with Connectivity<sup>OE</sup> The DWA can be adjusted in the Settings, Vehicle settings, Alarm system menu.

#### **Default settings**

The anti-theft alarm ships with the following default settings:

- Confirmation alarm tone after having activated/deactivated the DWA: no.
- Alarm tone: intermittent.

6

Anti-theft alarm



#### Adjustment

Mirrors	126
Headlight	126
Spring preload	126

#### 7 Adjusting mirrors



• Pivot the mirror to the correct position by pressing gently at the edge.

#### Headlight Headlight adjustment for right- or left-hand traffic

This vehicle is equipped with a symmetrical low-beam headlight. When riding in countries which drive on the other side of the road to that of the Scooter's country of registration, no further measures are required.

## Headlight beam throw and spring preload

The headlight beam throw generally remains constant by adjustment of the spring preload to the load status.

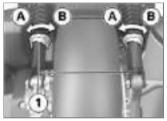
If you are in doubt as to the correct headlight beam throw setting, consult a specialist workshop, preferably an authorised BMW Motorrad Retailer.

#### Spring preload Adjustment

It is essential to set spring preload of the rear wheel to suit the load carried by the Scooter. Increase spring preload when the vehicle is heavily loaded and reduce spring preload accordingly when the vehicle is lightly loaded.

## Adjusting spring preload for rear wheel

• Make sure the ground is level and firm and place the Scooter on its stand.



- To increase the spring preload, turn the adjustment rings **1** in direction of arrow **A** using the toolkit.
- To reduce the spring preload, turn the adjustment rings **1** in direction of arrow **B** using the toolkit.

Basic setting of the rear spring preload

Level 1 (filled up, with driver's weight 85 kg)

Level 1 (One-up without luggage)

Level 3 (One-up with luggage)

Level 5 (Two-up with luggage)

• Make sure that the same values are set on both spring struts.

Adjustment

#### Riding

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tion	141

Riding

#### Safety information Rider's equipment

- Do not ride without the correct clothing:
- Helmet
- Suit
- Gloves
- Boots

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

#### Loading

#### A 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.  $\blacktriangleleft$ 

- Adjust the setting of the spring preload to the total weight.
- Note the maximum permissible payload of the luggage carrier.

	Payload of luggage car- rier
<u>6</u>	rier

max 9 kg

• Note the maximum permissible payload of the topcase.

T Pa	ayload	of	topcase
------	--------	----	---------

max 5 kg

#### Speed

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

- Setting the spring system
- Imbalanced load
- Loose clothing
- Insufficient tyre pressure
- Poor tyre tread

#### **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.◄

#### **Risk of burn injury**

#### A 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.

The following guidelines must be observed:

- Do not run the fuel tank dry.
- Do not operate the engine over a longer period of time with the speed limiter activated.

- Stop the engine immediately if it misfires.
- Use only unleaded fuel.
- Comply with all specified maintenance intervals.

#### 

## Unburned fuel in catalytic converter

Damage to catalytic converter

 Note the points listed for protection of the catalytic converter.◄

#### **Risk of overheating**

#### **ET** 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

#### 

#### Tampering with the Scooter (e.g. engine control unit, throttle valves, clutch)

Damage to the affected parts, failure of safety-relevant functions. Damage due to tampering is not covered by the warranty.

• Do not tamper with the vehicle in any way that could result in tuned performance.◀

#### **Comply with checklist**

• At regular intervals, use the checklist below to check your motorcycle.



#### Requirement Always before riding off:

- Check operation of the brake system.
- Check operation of the lights and signalling equipment.
- Checking tyre tread depth (# 159).
- Check that topcase and luggage are securely fastened.

#### Requirement Every 3rd refuelling stop:

- Adjusting spring preload for rear wheel (# 126).
- Checking engine oil level (# 152).
- Checking front brake pad thickness (# 153).
- Checking rear brake pad thickness (# 154).
- Checking the brake fluid level of the front wheel brake (# 155).

- Checking brake-fluid level, rear brakes (= 156).
- Checking coolant level (# 157).

#### Starting

#### Starting the engine

- Switch on the ignition.
- » Pre-Ride-Check is performed.
   (# 132)
- » ABS self-diagnosis is in progress. (# 133)
- » ASC self-diagnosis is in progress. (# 133)
- Actuate the brake.

#### 

The vehicle cannot be started while the side stand is extended. Extending the side stand while the engine is running kills the engine.◄



- Press the starter button 1.
- » The engine starts.

#### Pre-Ride-Check

The instrument cluster runs a test of the instrument dials and the warning and indicator lights when the ignition is switched on: this is the so-called "Pre-Ride-Check". The test is aborted if you start the engine before it completes.

#### Phase 1

The needle of the speed indicator is moved to the end stop. The warning and indicator lights are switched on.

#### Phase 2

The needle of the speed indicator is returned to the starting position. The activated warning and indicator lights are switched off.

If the needle did not move or if a warning light or indicator light did not show:



#### 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 is performed automatically when you switch on the ignition. The Scooter has to move forward a few metres for the wheel speed sensors to be tested.

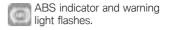
#### Phase 1

» Test of the diagnosis-compatible system components with the vehicle at a standstill. ABS indicator and warning

light flashes.

#### Phase 2

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



## ABS self-diagnosis completed

» The ABS indicator and warning light goes out.

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.

#### ASC self-diagnosis

BMW Motorrad ASC performs self-diagnosis to ensure its operability. Self-diagnosis is performed automatically when you switch on the ignition. 8

#### Phase 1

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

ASC indicator and warning light flashing slowly.

#### Phase 2

» Drive off test of the system components with diagnostic capability.

**(**A)

ASC indicator and warning light flashing slowly.

## ASC self-diagnosis completed

- » The ASC symbol no longer shows.
- Check all the warning and indicator lights.

ASC self-diagnosis not T completed

The Scooter has to reach a defined minimum speed with the engine running for the wheel speed sensors to be checked:

min 5 km/h

If an indicator showing an ASC fault appears when ASC selfdiagnosis completes:

- You can continue to ride. Bear in mind that the ASC is not available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.
- » If the ASC is making adjustments where not required, too often or too early, the troubleshooting chart can help further. (= 199)

#### Riding

At engine speeds below approx. 1500 rpm, the centrifugal clutch remains open; the Scooter is in idle. If the engine speed is increased, the clutch closes and the Scooter drives off.

In the speed range between approx. 50 km/h and approx. 120 km/h the engine accelerates, with the throttle valve fully opened, with gently increasing speed in the range of the maximum torque. The change in speed is achieved by the CVT. There is therefore minimal change in the engine noise in this speed range. Speeds above approx. 120 km/h

are achieved by increasing the engine speed.

#### Running in

#### Engine

- Up to the running-in check, ride in frequently changing load ranges.
- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding high-speed main roads and highways if possible.
- Have the running-in check carried out after 500 - 1200 km.

#### Brake pads

New brake pads have to be run in before they can achieve their optimum friction levels. The reduced braking effect can be compensated for by greater pressure on the brake lever.



#### 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. This running in procedure is essential if the tyres are to achieve maximum grip.

#### 🚹 WARNING

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

Risk of accident

 Ride carefully and avoid extremely sharp inclines.

#### Brakes How can stopping distance be minimised?

Each time the brakes are applied. a load distribution shift takes place with the load shifting forward from the rear to the front wheel. The sharper the vehicle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking. To optimise stopping distance. apply the front brakes rapidly and keep on increasing the force vou apply to the brake lever. This makes the best possible use of the dynamic increase in load at the front wheel In the "panic 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;

8

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. Under these circumstances, the front wheel would lock up.

BMW Mo

BMW Motorrad ABS prevents the front wheels from locking.

#### Panic braking

If the vehicle decelerates sharply above 50 km/h, the brake light will flash rapidly to warn road users behind the vehicle. If the vehicle decelerates to below 15 km/h, the hazard warning lights come on. When the speed increases to above 20 km/h, the hazard warning lights are switched off again automatically. Descending mountain passes

#### 🚹 WARNING

## Braking only 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.
- When riding on dirty roadways.

#### 

#### 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.◄

#### Park Scooter

#### Side stand

• Switch off the engine.

8

## Riding

#### 

## 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 Scooter on the stand.

#### **F** 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.

#### **Centre stand**

• Switch off the engine.

#### 

## Poor ground underneath the stand

Risk of damage to parts if vehicle topples

 Always check that the ground under the stand is level and firm.

#### **ATTENTION**

#### Centre stand folds in due to sharp movements

Risk of damage to parts if vehicle topples

- Do not lean or sit on the vehicle with the centre stand extended.
- Extend the centre stand and lift the Scooter on to the stand.

#### Refuelling

- without Keyless Ride<sup>OE</sup>

#### 

#### Fuel is highly flammable

Risk of fire and explosion

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

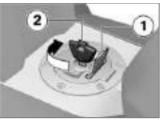
#### **ATTENTION**

## 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 Scooter on its centre stand.

Riding



- Open the protective cap **1**.
- Using the ignition key **2**, turn the fuel filler cap clockwise to unlock and open.



#### 🚹 WARNING

#### Escape of fuel due to heatinduced expansion if fuel tank is overfilled

Risk of falling

Do not overfill the fuel tank.◄

#### 

## Engine operation with leaded fuel

Damage to catalytic converter

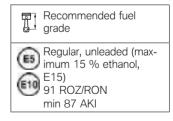
• Do not attempt to run the vehicle on leaded fuel or fuel

with metallic additives (e.g. manganese or iron).◄

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

#### 

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.



Fuel tank capacity

#### approx. 12.8 l

Reserve volume

#### approx. 4 l

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



## E10

- Close the fuel filler cap **2** by pressing firmly.
- Remove the ignition key and close the protective cap.

#### Refuelling

- with Keyless Ride OE

#### Requirement

The steering lock is disengaged.

#### 🚹 WARNING

#### Fuel is highly flammable

Risk of fire and explosion

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

#### 🚹 WARNING

Escape of fuel due to heatinduced expansion if fuel tank is overfilled

Risk of falling

Do not overfill the fuel tank.◄

#### **ATTENTION**

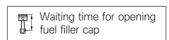
Wetting of plastic surfaces by fuel

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 centre stand.
- with Keyless Ride<sup>OE</sup>
- Switching off ignition (# 67).

### 

The fuel filler cap can be opened within the defined waiting time after the ignition has been switched off, without the radio-operated key being within range.◄



2 min

- » There are two variant ways of opening the fuel filler cap:
- Within the waiting time.

Riding



Riding

After the waiting time has expired.

#### Version 1

- with Keyless Ride OE

#### Requirement

Within the after-running period



- Slowly pull tab **1** on the fuel filler cap up.
- » Fuel filler cap unlocks.
- Fully open the fuel filler cap.

#### Version 2

with Keyless Ride<sup>OE</sup>

#### Requirement

After the waiting time has expired

- Bring the radio-operated key into range.
- Slowly pull tab **1** up and then release again.
- » The indicator light for the radio-operated key flashes while the search for the radiooperated key is in progress.
- Slowly pull tab **1** on the fuel filler cap up again.
- » Fuel filler cap unlocks.
- Fully open the fuel filler cap.



• Refuel with fuel of the grade stated above; do not fill the tank past the bottom edge of the filler neck.

#### 

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.◄

Fuel tank capacity

approx. 12.8 l

Reserve volume

approx. 4 l

- Pull tab on the fuel filler cap up.
- Push down firmly on the fuel filler cap.
- » The fuel filler cap engages with an audible click.
- » The fuel filler cap locks automatically when the waiting time expires.
- » The engaged fuel filler cap locks immediately when you secure the steering lock or switch on the ignition.

## Securing the vehicle for transportation

- Make sure that all components that might come into contact with tensioning straps used to secure the motorcycle are adequately protected against scratching, e.g. using adhesive tape or soft cloths.

#### **ET** 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 vehicle onto the transportation surface; do not place it on the side stand or centre stand.





Trapping of components Component damage

- Do not trap components such as brake lines or cable legs.
- At the front, loop a strap diagonally over the bottom fork



bridge on each side and ten-

- Make sure that you do not apply pressure to the brake lines.
- Protect the front-wheel cover with soft cloths.

Riding



- Loop the tensioning straps at the rear around the rear grab handles and tension.
- Tighten all the straps uniformly; the vehicle's suspension should be compressed as tightly as possible front and rear.

## **Engineering details**

General instructions144Anti-lock brake system (ABS)144Automatic Stability Control146

#### **General instructions**

To find out more about engineering, go to:

#### bmw-motorrad.com/technology

# Anti-lock brake system (ABS)

#### 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 brake pressure to the extent that brake force exceeds the maximum transferable limit, the wheels start to lock and the Scooter loses its riding 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 riding 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 reduces braking force to ensure that riding stability is maintained when the wheels regain road contact. At this instant the BMW Motorrad ABS assumes an extremely low coefficient of friction (gravel, ice, snow), so that the wheels will continue to rotate under all imaginable circumstances, because this is the precondition for ensuring riding 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**

Where there is a high level of adhesion between the tyres and road, the front wheel is only blocked very late or not at all even when the brakes are applied forcefully. Accordingly, the ABS control must be applied very late or not at all. In this case, the rear wheel can lift off the ground, which can cause the Scooter to roll 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.

# How is the BMW Motorrad ABS designed?

BMW Motorrad ABS ensures driving stability on any surface within the possibilities of the physics of riding. 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. **Exceptional riding conditions** 

- Rear wheel rotating with the vehicle held stationary by applying the front brake (burnout).
- Sustained slipping of the rear wheel on a slippery surface, e.g. when slowing down with

the braking effect of the engine.

If a fault message is issued on account of exceptional riding conditions, you can reactivate the ABS function by switching the ignition off and on again.

# What is the role of regular servicing?



# 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

BMW Motorrad ABS may not mislead the rider into a careless riding style because they can rely on shorter stopping distances. It is primarily there to provide a safety reserve for emergency situations.

Take care in bends! Braking in bends is subject to particular laws relating to the physics of riding which even BMW Motorrad ABS cannot evade.

# Automatic Stability Control (ASC)

#### How does ASC work?

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

#### **Special situations**

In accordance with the laws of physics, the ability to accelerate is restricted more and more as the angle of heel increases. Consequently, there can be a perceptible reduction in acceleration out of very tight bends.

The speeds of the front and rear wheels are compared as one means of detecting the rear wheel's incipient tendency to spin or slip sideways. If the system registers implausible values for a lengthy period the ASC function is deactivated for safety reasons and an ASC fault message is issued. Self-diagnosis has to complete before fault messages can be issued. If the front wheel lifts clear of the ground under severe acceleration, the ASC reduces engine torque until the front wheel regains contact with the ground. Under these circumstances, BMW Motorrad recommends rolling the throttle slightly closed so as to restore stability with the least possible delay.

Never turn the throttle grip all the way back suddenly when on slippery road surfaces. Engine braking torque can cause the rear wheel to lock, with a corresponding loss of stability. The BMW Motorrad ASC is unable to control a situation of this nature.

#### Slippery roadway

On very loose surfaces (e.g. sand or snow) ASC control interventions may reduce the driving power at the rear wheel to an extent where the rear wheel no

9

longer rotates sufficiently. In this case, BMW Motorrad recommends to temporarily switch off ASC.

Please note that the rear wheel will spin on loose surfaces and remember to release the throttle grip in due time before reaching firm surfaces.

Then reactivate ASC.

Engineering details



## Maintenance

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## **General instructions**

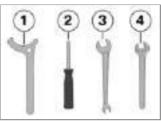
The "Maintenance" chapter describes straightforward procedures for checking and replacing certain wear parts.

Special tightening torques are listed as applicable. The tightening torques for the threaded fasteners on your vehicle are listed in the section entitled "Technical data".

You will find information on more extensive maintenance and repair tasks in the Repair Manual on DVD for your vehicle, which is available from your authorised BMW Motorrad Retailer.

Some of the work calls for 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.

## Standard tool kit



- 1 Hook wrench
  - Adjusting spring preload for rear wheel (# 126).
- 2 Reversible screwdriver blade

Phillips PH1 and Torx T25

- Removing body panels.
- Removing battery cover (# 179).
- **3** Open-ended spanner Width across flats 10/16
  - Removing battery
    - (🗰 177).

- 4 Open-ended spanner Width across flats 14
  - Loosen/secure the mirror.

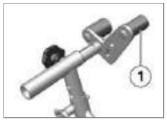
# Front-wheel stand

# Installing the front-wheel stand

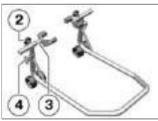
#### Requirement

The basic stand and its accessory parts are available from your BMW Motorrad dealer.

- Make sure the ground is level and firm and place the Scooter on its centre stand.
- Use basic stand with frontwheel adapter.



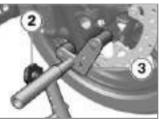
• Install the spacer buffers **1** on the left and right in the position shown.



- Unscrew the mounting bolt **2** on the left and right.
- Push the mountings **3** on the left and right apart until the

front suspension fits between them.

- Use retaining pins **4** on the left and right to set the front-wheel stand to the desired height.
- Centre the front-wheel stand relative to the front wheel and push it against the front axle.



- Align the mountings **3** on the left and right so that the front suspension is securely seated.
- Tighten the mounting bolt **2** on the left and right.



# 

# Centre stand retracts if the vehicle lifted too high

Risk of damage to parts if vehicle topples

- When raising the vehicle, make sure that the centre stand remains on the ground.
- If necessary, adjust the height of the front-wheel stand.◄
- Apply uniform pressure to push the front-wheel stand down and raise the Scooter.
- Make sure the Scooter is standing firmly.



# 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.
- After switching off the engine, wait 1 min until the oil level can be read.
- Make sure the ground is level and firm and place the Scooter, which is at operating temperature, on its centre stand.
- Wipe the area around the oil filler neck clean.

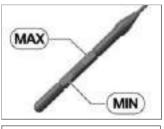


• Remove the oil dipstick 1.



• Clean the measuring range **2** of the oil dipstick with a dry cloth.

- Place the oil dipstick on the oil filler opening, but do not screw it in.
- Remove the oil dipstick and check the oil level.



Engine oil, specified level

between **MIN** and **MAX** marks (Engine at operating temperature, only place the oil dipstick in position, **do not screw in place**.) If the oil level is below the **MIN** mark:

• Top up the engine oil to the specified level.

Engine oil, quantity for

max 0.4 I (Difference between **MIN** and **MAX**)

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

- Have the oil level corrected by a specialist workshop, preferably an authorised BMW Motorrad Retailer.
- Install the oil dipstick and tighten by hand.

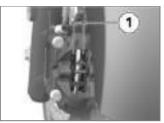
#### Brake system Checking function of brakes

• Operate right brake lever.

- » The pressure point must be clearly perceptible.
- Operate left brake lever.
- » The pressure point must be clearly perceptible.
- If pressure points are not clearly perceptible:
- Have the brakes checked by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

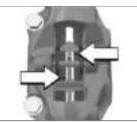
# Checking front brake pad thickness

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



- Visually inspect the brake pads to ascertain their thickness. Turn the handlebars to the right.
- Viewing direction: from the rear toward brake pads **1**.
- Turn the handlebars to the left and check the brake pad thickness on the right-hand side in the same way.

Maintenance



Brake-pad wear limit,

≥1 mm (Friction pad only, without backing plate. Wear marks (grooves) must be clearly visible.)

If the wear indicating marks are no longer clearly visible:

# MARNING

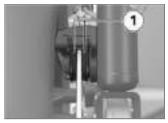
# Brake-pad thickness less than permissible minimum

Diminished braking effect, damage to the brakes

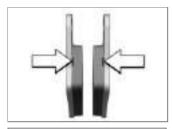
- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad Retailer.
- BMW Motorrad recommends that only genuine brake pads from BMW Motorrad are installed.

# Checking rear brake pad thickness

• Make sure the ground is level and firm and place the Scooter on its stand.



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



Brake-pad wear limit,

min 1 mm (Friction pad only, without backing plate. Groove in the pad material marks the wear limit.)

If the wear marks have been reached:



# 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 that only genuine brake pads from BMW Motorrad are installed.

#### Checking the brake fluid level of the front wheel brake

# MARNING

#### Not enough brake fluid in brake fluid tank

Considerably reduced braking power due to air in the brake system

- Adjust the riding mode immediately until the fault is rectified.
- Check the brake-fluid level at regular intervals.◄
- Make sure the ground is level and firm and place the Scooter on its centre stand.
- Turn the handlebars to a position in which the brake fluid reservoir is horizontal.



• Check the brake fluid level in sight glass **1** of the right brake fluid tank.

Maintenance

# **10**

## NOTICE

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



Brake fluid level, front

#### Brake fluid, DOT4

The brake fluid level must not drop below the **MIN** mark. (Brake-fluid reservoir, horizontal) If the brake fluid level drops below the permitted level:

 Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

### Checking brake-fluid level, rear brakes

# 🚹 WARNING

#### Not enough brake fluid in brake fluid tank

Considerably reduced braking power due to air in the brake system

- Adjust the riding mode immediately until the fault is rectified.
- Check the brake-fluid level at regular intervals.
- Make sure the ground is level and firm and place the Scooter on its centre stand.

• Turn the handlebars to a position in which the brake fluid reservoir is horizontal.



• Check the brake fluid level in sight glass **1** of the left brake fluid tank.

# 

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



Brake fluid level, rear

Brake fluid, DOT4

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

If the brake fluid level drops below the permitted level:

 Have the defect rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad Retailer.

## Coolant

#### **Checking coolant level**

• Make sure the ground is level and firm and place the Scooter on its centre stand.



• Viewing direction: from the front under the front trim panel. Check the coolant level in the coolant expansion tank **1**.



Desired coolant level in the expansion tank

between **MIN** and **MAX** marks (With cold engine)

If the coolant drops below the permitted level:

• Top up the coolant.

## Topping up coolant

• Removing the side panel (# 179).



- Open the cap 1 of the coolant expansion tank and top up coolant to the desired level.
- Checking coolant level ( 157).
- Close the cap 1 of the coolant expansion tank.
- Installing side panel (# 180).

# Tyres

#### Checking tyre pressure



#### Incorrect tyre pressure.

Impaired handling characteristics of the Scooter. Impaired control

response of the ASC and more rapid tyre wear.

 Always check that the tyre pressures are correct.

# WARNING

#### Tendency of valve inserts installed vertically 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 Scooter on its stand.
- Check tyre pressures against the data below.

Tyre pressure, front

2.2 bar (One-up, tyre cold)

Tyre pressure, front

2.4 bar (Two-up mode with loading; tyre cold)



Tyre pressure, rear

2.4 bar (One-up, tyre cold)

2.6 bar (Two-up mode with loading: tyre cold)

If tyre pressure is too low:

Correct tyre pressure.

## Wheel rims and tyres

## Checking rims

- Make sure the ground is level and firm and place the Scooter on its stand.
- Visually inspect the rims for defects.
- Have damaged rims inspected by a specialist workshop and replaced if necessary,

Maintenance

preferably by an authorised BMW Motorrad Retailer.

## 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.
- Make sure the ground is level and firm and place the Scooter on its stand.
- 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.◄

If the tyre tread is worn to minimum:

 Replace tyre or tyres, as applicable.

## Wheels

## Tyre recommendation

For each size of tyre, BMW Motorrad tests and classifies as roadworthy certain makes. BMW Motorrad cannot assess the suitability or provide any guarantee of road safety for other tyres.

BMW Motorrad recommends using only tyres tested by BMW Motorrad.

Detailed information is available from your authorised

BMW Motorrad Retailer or in the internet at:

#### bmw-motorrad.com

# Effect of the wheel sizes on the ABS

The wheel sizes play an essential role with the ABS system. In particular, the diameter and the width of the vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed exworks, can have serious effects on the performance of the control system.

The sensor rings are essential for correct wheel speed detection; they too must match the Scooter's control system and consequently cannot be replaced. If you decide that you would like to fit non-standard wheels to

**10** 160 your Scooter, 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 unit can be changed to suit the new wheel sizes.

# Effect of wheel size on the ASC

The wheel sizes play an essential role with the suspension control system ASC. In particular, the radii of the wheels are stored in the control unit as a basis for all required calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects on the performance of the control systems.

# **ET** ATTENTION

#### Faults of the ASC due to changing tyre radii

ASC intervenes despite good grip

- Check both tyres for wear and check the tyre pressures.
- Always calibrate the ASC after changing a tyre or tyres.
- If ASC interventions are unexpectedly frequent: Re-calibrate the ASC.◄

## **T** ATTENTION

#### Loss of the adaptation values for the tyre radii in the Digital Motor Electronics

Risk of falling

 Always re-calibrate the ASC after every software update.

## **Removing front wheel**



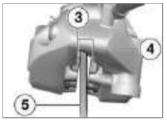
- Mask off the parts of the wheel rim that could be scratched in the process of removing the brake calipers.
- Release the brake line from the holders **1**.

# 

# Unwanted inward movement of the brake pads

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

- Do not operate the brakes with a brake caliper not correctly secured.◄
- Remove bolts **2** of the brake caliper on the left and right.

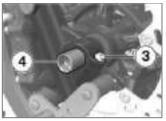


- Force the brake pads **3** slightly apart with rotational movements of the brake caliper **4** against the brake disc **5**.
- Carefully pull the brake calipers back and out until clear of the brake discs.

- Lift the front of the Scooter until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Installing the front-wheel stand (# 150).



- Remove the bolt 1.
- Loosen clamping bolt 2.



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Maintenance

- Loosen clamping bolt 3.
- Press quick-release axle **4** inwards on the left-hand side slightly so that it can be gripped more easily on the right-hand side.
- Remove quick-release axle **4** while supporting the wheel.
- Roll the front wheel forward to remove.



# Installing the front wheel

# WARNING

## Use of a non-standard wheel

Malfunctions in control attempts made by the ABS and ASC

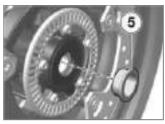
 See the information on the effect of wheel size on the ABS and ASC systems at the start of this chapter.◄

# ATTENTION

#### Tightening threaded fasteners to incorrect tightening torque

Damage, or threaded fasteners work loose

 Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.



• If required, slip spacer bush **5** into the wheel hub on the left-hand side.



• Lift the front wheel, install quick-release axle **4**.

## **ATTENTION**

# Front wheel installed wrong way round

Risk of accident

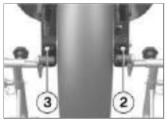
- Note direction-of-rotation arrows on tyre or rim.◄
- Roll the front wheel into position between the front forks.



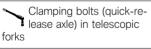
• Install screw **1** and tighten to specified torque. Counter-hold quick-release axle on the right-hand side.

# Bolt in quick-release axle at front

#### 32 Nm

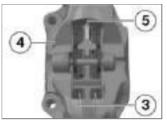


• Tighten clamping bolts **3** and **2** to the specified torque.



#### 19 Nm

• Removing the front-wheel stand.



- Position the brake caliper 4 on the brake disc, ensuring that the brake disc 5 is installed between the brake pads 3.
- Install brake caliper on the other side in the same way.



- Insert bolts **2** on the left and right until the screw head is touching, but **do not tighten**.
- Operate the brake several times until the brake pads are bedded, fix brake lever with rubber band.
- Tighten bolts **2** on the left and right to the specified torque.

Brake caliper on fork leg

32 Nm

- Secure brake line in the holders **1**.
- Release the brake lever.

Maintenance

 Retighten bolts 2 on the left and right to the specified torque.

Brake caliper on fork leg

#### 32 Nm

• Remove the adhesive tape from the wheel rim.

# Note on removing the rear wheel

To remove the rear wheel, steps are required that demand specialist knowledge, and in some cases special tools are required. If you are in doubt as to whether you would be able to complete this work, contact a specialist workshop, preferably a BMW Motorrad Retailer.

#### **Removing rear wheel**

# CAUTION

#### Hot engine and/or hot exhaust system

Risk of burn injury

- Allow engine and exhaust system to cool before starting work.
- Make sure the ground is level and firm and place the Scooter on its centre stand.



- Remove the bolt 1.
- Lift the trim for the silencer 2.



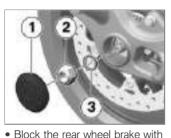
• Push trim for silencer **2** to the rear and remove.



- Unscrew bolt 3 of the clamp 4.
- Remove bolts **5** with the washers.

Maintenance

• Pull off and remove the silencer **6** from the exhaust manifold.



a rubber band

move.

bush 3.

wheel brake.

The rear wheel cannot turn.Carefully lever up lid 1 and re-

Remove nut 2 and spacer

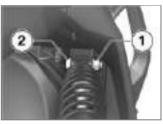
Remove rubber band from rear

- 1
- Remove the bolts 1.
- Raise the rear-wheel cover 2.



- Loosen the brake hose from the bracket **3**.
- Remove bolt **4** and loosen the bracket for brake hose **5**.

- Push brake caliper **6** against the brake disc.
- » The brake piston is pushed backwards.
- Remove the bolts 7.
- Pull the brake caliper **6** up and off the brake disc and hang on the side.



• Loosen the nut **1** of the upper spring strut bolted connection while holding bolt **2** in place with an offset screwdriver.





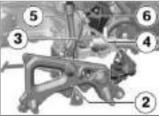
- Remove bolt 3.
- Swivel spring strut **4** backwards.



• Loosen rear wheel swinging arm **2**, making sure that cable **3** for wheel speed sensor is not damaged.



• Remove the bolts 1.



• Guide cable **3** for wheel speed sensor and brake hose **4** 

- between oil filler neck **5** and rear-wheel cover **6**.
- » Cable 3 is not tensioned.
- Take off rear wheel swinging arm **2**.



- Remove the spacer bush 1.
- Pull the rear wheel **2** off the output shaft and remove.

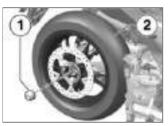
## Installing the rear wheel



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.



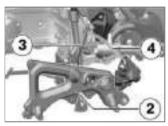
• Lubricate the gearing of the output shaft.

Dubricant

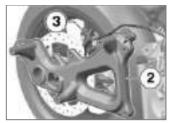
#### Staburags NBU 30 PTM

» Do not apply lubricant to the thread of the output shaft.

- Push rear wheel **2** onto the output shaft and rotate until it engages with the gearing.
- Install spacer bush 1.



 Thread rear wheel swinging arm 2 with cable 3 for wheel speed sensor and brake hose 4 back into position.



 Position the rear wheel swinging arm 2, making sure that the cable 3 for the wheel speed sensor is routed correctly. Maintenance

10

Maintenance



• Install bolts **1** and tighten to the specified torque.

Right swinging arm on drivetrain swinging arm

38 Nm



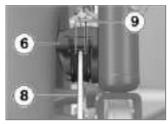
- Swivel the spring strut **4** forwards and place in position.
- Install bolt **3** and tighten to the specified torque.
  - Spring strut on swinging arm

38 Nm



• Hold bolt **2** in place with an offset screwdriver and tighten nut **1** to specified torque.

Spring strut to frame
38 Nm



 Place brake caliper 6 on brake disc while ensuring that brake disc 8 is installed between brake pads 9.



- Position brake caliper **6**, install screws **7** and tighten to specified torque.
  - Rear brake caliper on rear wheel swinging arm

Thread-locking compound: Micro-encapsulated

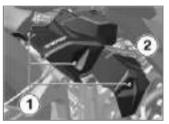
32 Nm

• Position holder for brake hose **5**, install bolt **4** and tighten to specified torque.

-	Brake hose bracket on
ר	swinging arm

#### 8 Nm

• Secure brake hose in holder 3.



- Position rear-wheel cover 2.
- Install screws 1.

Maintenance



- Operate rear wheel brake several times so that the brake pads are bedded and block using a rubber band.
- » The rear wheel cannot turn.
- Install spacer bush 3.
- Install nut **2** and tighten to torque.

Rear wheel on output shaft

Thread-locking compound: mechanical

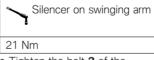
115 Nm

• Install lid 1.

• Remove rubber band from rear wheel brake.



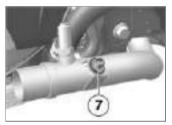
- Insert and position the silencer **6** on the exhaust manifold.
- Install bolts **5** with washers and tighten to the specified torque.



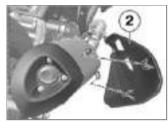
• Tighten the bolt **3** of the clamp **4** to the specified torque.







• Position bush 7 if necessary.



• Hook in the trim for the silencer **2** on the holders.



- Position the trim for the silencer **2**.
- Install bolt 1.

#### Fuses

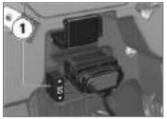
#### Removing the fuse Requirement

The fuses are located under the battery compartment cover on the legshield.

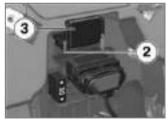
## 

#### **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.
- Removing battery cover (# 179).

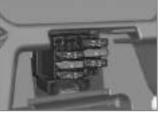


• To remove the main fuse, pull the fuse **1** out of the fuse carrier.



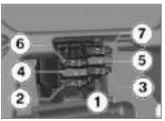
• To remove the fuses from slots 2 to 7, press locks **2** and remove lid **3** from the fuse box.

Maintenance



• Pull the affected fuse out of the fuse box.

#### Installing a fuse



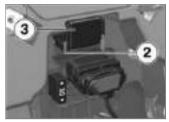
• Replace faulty fuses from the fuse box with a fuse with the required current level.

# 

The fuse assignments and fuse amperage ratings specified for your motorcycle are listed in the section entitled "Technical data". The figures in the graphic correspond to the fuse numbers.

## 

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



- Install lid 3.
- » The locks 2 engage audibly.



• Replace faulty main fuse **1** with a fuse with the required current level.

# Maintenance

# Main fuse

#### 30 A (Voltage regulator)

• Fitting battery cover (🗰 179).

# Light source

## LED light source

As all lights on the Scooter are equipped with LED technology, no light sources can be renewed individually.

 Consult an authorised BMW Motorrad Retailer.

# 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
- 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.

## Jump-starting



# Excessive current when jump-starting the Scooter

Cable fire or damage to the vehicle electronics

• Do not jump-start the Scooter using the socket; only use the battery terminals.

# **T**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.◄



Jump-starting with a voltage greater than 12 V



Damage to the on-board electronics

- Make sure that the battery of the donor vehicle has a voltage rating of 12 V.
- Make sure the ground is level and firm and place the Scooter on its stand.
- Removing battery cover (# 179).
- Removing the battery holder (# 176).
- Begin by connecting one end of the red jump lead to the positive terminal of your own vehicle and the other end to the positive terminal of the second vehicle.
- Connect one end of the black jump lead to the negative terminal of your own vehicle and the other end to the ground point or the negative terminal of the second vehicle.

• Run the engine of the donor vehicle during jump-starting.

# 

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

- 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 from the positive terminal.
- Installing the battery holder (# 178).
- Fitting battery cover (🗰 179).

# Recharging connected battery

# 

#### 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.◄

## **ATTENTION**

#### Recharging a fully discharged battery via the power socket or extra socket

Damage to the vehicle electronics

 If a battery has discharged to the extent that it is completely flat (battery voltage less than 12 V, indicator lights and multifunction display remain off when the ignition is switched on) always charge the **discon**nected battery with the charger connected directly to the battery terminals.◄

• Use only the socket in the right-hand storage compartment to charge the connected battery.

# **ATTENTION**

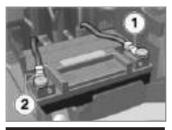
#### Commercially available battery chargers connected to the on-board power socket

Damage to charger and to frame and suspension electronics

- Use only chargers approved by BMW Motorrad.◄
- Comply with the operating instructions of the charger.

# Recharging disconnected battery

 Removing battery cover (# 179).  Removing the battery holder (# 176).



# 

Battery not disconnected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.
- First, disconnect the negative battery cable **1**.
- Then, disconnect the positive battery cable **2**.

- 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.◄





# **T** ATTENTION

#### Battery not connected in accordance with correct procedure

Risk of short-circuit

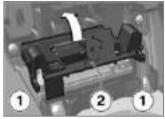
- Always proceed in compliance with specified installation sequence.
- First connect the positive battery cable **2**.
- Then connect the negative battery cable **1**.
- Installing the battery holder (# 178).
- Fitting battery cover (🗯 179).

# Removing the battery holder



- Push in the locks 1.
- Loosen diagnostic connector **2** from bracket **3** and hang on the side.

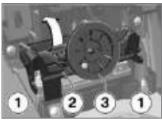
- without Keyless Ride<sup>OE</sup>



- Press locks **1** on left and right and fold up battery holder **2**.
- Unhook battery holder **2** at the rear of the battery compartment and remove.⊲

Maintenance

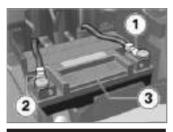
- with Keyless Ride<sup>OE</sup>



- Press locks **1** on left and right and fold up battery holder **2**.
- Unhook battery holder 1 at the rear of the battery compartment, pull out with audio frequency aerial 3 and put aside.

## **Removing battery**

- Switch off the ignition.
- If applicable, switch off the antitheft alarm.
- Removing battery cover (# 179).
- Removing the battery holder (# 176).



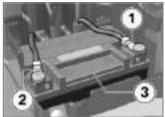
## **ATTENTION**

#### Battery not disconnected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.
- First disconnect battery negative lead **1**.
- Then disconnect the battery positive lead **2**.
- Remove the battery **3** from the battery compartment.

## Installing battery



• Place the battery **3** in the battery compartment, positive terminal on the left side.

# 

#### Battery not connected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with specified installation sequence.
- First install the positive battery cable **2**.

Maintenance

# **10** 178

- Then install the negative battery cable **1**.
- Installing the battery holder (# 178).
- Fitting battery cover (🗰 179).
- Setting the clock (# 83).
- Setting the date (🗰 84).

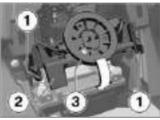
# Installing the battery holder

- without Keyless Ride OE

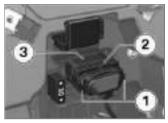


 Place the battery holder 2 in position and hook onto the rear of the battery compartment.

- Fold down the battery holder 2 and at the same time push in locks 1 until they engage.
- with Keyless Ride OE



- Place the battery holder 2 in position with audio frequency aerial 3 and hook onto the rear of the battery compartment.
- Fold down the battery holder **2** and at the same time push in locks **1** until they engage.⊲

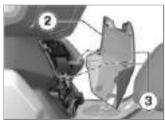


- Insert diagnostic connector 2 in bracket 3.
- » The locks 1 engage.

# Trim panel components Removing battery cover



• Remove the bolts 1.



• Raise the edges of the battery cover **2** slightly.

• Pull the mounting clips **3** of the battery cover **2** out of the fixtures.

### Fitting battery cover



- Check that all mounting clips **3** are fitted on the battery cover **2**.
- Hook the battery cover **2** into place at the bottom and press the mounting clips **3** evenly into the fixtures.



• Fit bolts 1.

### Removing the side panel



• Remove the screws **1** for the fairing side panel.

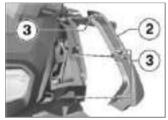
# Maintenance

10

# **10**180

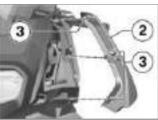
# 

The steps described here for the left fairing side panel also apply for the right-hand side.◄



- Raise the edges of the fairing side panel **2** slightly.
- Pull the mounting clips **3** of the fairing side panel **2** as evenly as possibly out of the fixtures.

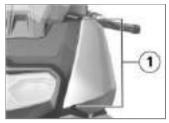
### Installing side panel



- Check that all mounting clips **3** on the fairing side panel **2** are installed.
- Fit the fairing side panel **2** and press the mounting clips **3** evenly into the fixtures.

# 

The steps described here for the left fairing side panel also apply for the right-hand side.◄



• Fit the screws **1** for the fairing side panel.

# **Diagnostic connector**

# Disengaging diagnostic connector

### Requirement

The diagnostic connector is located under the battery compartment cover on the legshield.

• Removing battery cover (# 179).



- Push in the locks 1.
- Remove diagnostic connector **2** from bracket **3**.
- » The interface to the diagnosis and information system can be connected to the diagnostic connector 2.

# Installing the diagnostic connector

• Disconnect the interface for the diagnosis and information system.



- Insert diagnostic connector 2 in bracket 3.
- » The locks 1 engage.
- Fitting battery cover (🗰 179).



Maintenance

# Accessories

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### **General instructions**

### 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.

Parts and accessory products of BMW have been thoroughly tested to establish that they are safe, functional and suitable. Consequently, BMW accepts product liability. BMW accepts no liability whatsoever for parts and accessories that it has not approved.

Whenever you are planning modifications, comply with all the legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country. Your 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/ accessories

### **Power socket**

Information on using the socket:

# Connection of electrical devices

 Electrical devices connected to the motorcycle's socket can only be used when the ignition is switched on.

#### Cable routing

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

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

#### Automatic switch-off

- The socket is automatically switched off during the starting operation.
- The power supply to the sockets is switched off no more than 15 minutes after the ignition is switched off, in order to prevent overloading of the onboard electrics. Low-wattage electrical accessories might not be recognised by the vehicle's electronics. In such cases, power sockets are switched off very shortly after the ignition is turned off.
- The power socket is switched off if the battery voltage is too low to maintain the vehicle's starting capability.
- The power socket is also switched off when the maximum load capability as stated in the technical data is exceeded.

### Topcase

- with topcase Light<sup>OA</sup>

### **Opening topcase**



• Turn the key in the topcase lock **1** to the OPEN position.



Push topcase lock forwards.
 » Topcase handle 2 springs open.



- Pull the release lever behind the cover **3** backwards.
- » The lid of the topcase opens.

Accessories



Accessories

# Open the topcase lid. Closing topcase



- Make sure that the topcase handle **2** is folded out.
- Close the topcase lid and push into the lock. Check that nothing is trapped between the lid and the case.
- Close the topcase handle 2.
- If necessary, turn the key in the topcase lock to the CLOSE position and remove the key from the lock.

### Removing the topcase



• Turn the key in the topcase lock **1** to position OPEN.



- Push topcase lock forwards.
- » Topcase handle 2 springs open.



- Turn the key in the topcase lock to position RELEASE.
- Pull release lever **4** backwards, at the same time lift the top-case by the carry handle.
- Lift the topcase to the rear from the topcase carrier.

### Installing topcase



- Make sure that the topcase handle **2** is folded out and that the key in the topcase lock is in the RELEASE position.
- Insert the topcase at the front in the topcase carrier.
- Pull release lever **4** backwards, at the same time insert the topcase at the rear into the topcase carrier.
- Close the topcase handle 2.
- If necessary, turn the key in the topcase lock to the CLOSE position and remove the key from the lock.

### Maximum payload

Note the maximum payload stated on the label inside the topcase.

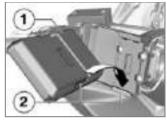
Contact your authorised BMW Motorrad Retailer if you cannot find your combination of vehicle and topcase on the label. The values for the combination described here are as follows:

Payload of topcase

max 5 kg

### Navigation system Installing navigation device

- with navigation system OA



• Place navigation device **1** in mounting **2**.



- Swivel navigation device **1** forwards and press the top edge into latch mechanism **3**.
- » Navigation device engages.

Accessories

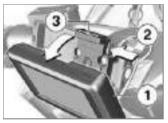


 Check that the navigation device is secure in the cradle.
 The rad participation

» The red marking for unlocking is not visible.

# Removing navigation device

- with navigation system OA



- Press unlocking 2.
- » The red mark **3** indicates unlocking.
- Remove navigation device 1.

# Using the navigation system.

# 

The description below is based on the BMW Motorrad Navigator V and the BMW Motorrad Navigator VI. The BMW Motorrad Navigator IV does not support all the options described here.◄

# 

Only the latest version of the BMW Motorrad communication system is supported. A software update of the BMW Motorrad communication system may be necessary. If this is the case, consult your authorised BMW Motorrad dealer.◄

If the BMW Motorrad Navigator is installed and the operating focus is switched to the Navigator (# 101), some of its functions can be operated directly from the handlebars.



The navigation system is operated via the multi-controller **1** and the MENU rocker button **2**.

# Turn the multi-controller 1 up and down

On the compass and Mediaplayer page: increase or decrease the volume of a BMW Motorrad communication system connected via Bluetooth. In the BMW special menu: select menu items. Switch between the Navigator's main pages:

- Map view
- Compass
- Mediaplayer
- BMW special menu
- My Motorcycle page

# Hold the multi-controller 1 to the left and right

Activate certain functions on the Navigator display. An arrow to the right or to the left above the corresponding button area on the display indicates a function that can be activated in this way.



Long-push to the right to activate this function.



Long-push to the left to activate this function.

# Press down MENU rocker button 2

Switch the operating focus to Pure view.

In detail, the following functions can be controlled:

#### Map view

- Turn up: Enlarge map section (Zoom in).
- Turn down: Reduce map section ( Zoom out).

### Compass page

 Turning increases or decreases the volume of a BMW Motorrad communication system connected via Bluetooth.

### BMW special menu

 Speak: Repeat most recent navigation announcement.

- Waypoint: Save current location as a favourite.
- Home: Starts navigation to home address (greyed if no home address has been defined).
- Mute: Switch automatic navigation announcements off or on (off: a crossed-out lips symbol appears in the top line of the display). "Speak" will still activate navigation announcements. All other acoustic outputs remain switched on.
- Switch off display: Deactivate the display.
- Dial home number: Dials the home phone number saved in the Navigator (not shown unless a telephone is connected).
- Diversion: Activates the diversion function (not shown unless a route is active).
- Skip: Skips the next waypoint (not shown unless the route has waypoints).



#### My Motorcycle

- Turn: Changes the number of data shown.
- Touch a data field on the display to open the menu for selecting data.
- The values available fr selection depend on the optional extras installed on the vehicle.

## 

The Mediaplayer function is only available when a Bluetooth device complying with the A2DP standard is used, for example a BMW Motorrad communication system.◄

### Mediaplayer

- Long-push to the left: Play preceding track.
- Long-push to the right: Play next track.
- Turning increases or decreases the volume of a

BMW Motorrad communication system connected via Bluetooth.

# Care

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Care



# **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.

# 

#### 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.

# 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 vehicle immediately after it has been exposed to strong sunlight and do not wash it in the sun.

Make sure that the vehicle is washed frequently, especially during the winter months. To remove road salt, clean the Scooter with cold water immediately after the end of the journey.

# 🚹 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.

# 

# Effect of road salt intensified by warm water

Corrosion

Use only cold water to wash off road salt.

# **T** 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.

## Cleaning easily damaged components Plastics

# **ET** 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.

### Body panels

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

#### Plastic windscreens and headlight lens

Remove dirt and insects with a soft sponge and generous amounts of water.

# 

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

Clean the radiator regularly to prevent overheating of the engine due to inadequate cooling. For example, use a garden hose with low water pressure.

# **T**ATTENTION

### Bending of radiator fins

Damage to radiator fins

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

### 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

### Care of paintwork

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

tion,BMW Motorrad recommends the use of BMW Motorrad gloss polish or agents containing carnauba wax or synthetic wax.

# Lay up the Scooter

- Clean the Scooter.
- Fully refuel the Scooter.
- Removing battery (🗯 177).
- Spray the brake-lever, centrestand and side-stand pivot mounts with a suitable lubricant.

- Coat bright metal and chromeplated parts with an acid-free grease (e.g. Vaseline).
- Stand the Scooter in a dry room in such a way that there is no load on either wheel.

# Put Scooter into operation

- Remove the protective wax coating.
- Clean the Scooter.
- Installing battery (🗯 177).
- Comply with checklist (== 131).

# **Technical data**

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# **Troubleshooting chart**

Engine does not start or is difficult to start.

Possible cause	Rectification
Side stand extended	Retract the side stand.
Starting without operating the brakes	When starting, operate a brake lever.
BMW flexcase open	Close BMW flexcase.
No fuel in tank	Refuel.
Battery flat	Recharging battery (🗯 175).

The Bluetooth connection is not established.

Possible cause	Rectification
Necessary steps for Bluetooth coupling have not been carried out.	Check the necessary steps for Bluetooth coupling in the operating instructions for the communica- tion system.
Communication system is not automatically con- nected, even though Bluetooth coupling has taken place.	Switch off the helmet's communication system and reconnect it after a minute or two.
Too many Bluetooth devices are saved on the helmet.	All Bluetooth coupling entries on the helmet are deleted (see the communication system operating instructions).
There are other vehicles with Bluetooth-capable devices in the vicinity.	Avoid simultaneous Bluetooth coupling with several vehicles.
Bluetooth connection is interrupted.	
Possible cause	Rectification
The Bluetooth connection to the mobile end device is interrupted.	Switch off energy saving mode.
The Bluetooth connection to the helmet is inter- rupted.	Switch off the helmet's communication system and reconnect it after a minute or two.
The volume in the helmet cannot be adjusted.	Switch off the helmet's communication system and reconnect it after a minute or two.



The telephone book is not displayed in the TFT display.

# Possible cause Rectification The phone book was not transmitted to the vehicle. Confirm transmission of the phone data (# 116) when Bluetooth coupling with the mobile end device. Active route guideness is not displayed in the TET displayed.

Active route guidance is not displayed in the TFT display.

Possible cause	Rectification
Navigation from the BMW Motorrad Connec- ted App was not transmitted.	The BMW Motorrad Connected App is opened on the connected mobile end device prior to depar- ture.
The route guidance cannot be started.	Secure the mobile device's data connection and check the map data on the mobile end device.

ASC is making adjustments where not required, too often, or too early.	
Possible cause	Rectification
Tyres changed and tyre radii changed	Calibrate ASC (🗯 81).
Insufficient tyre pressure front or rear; tyre pres- sure or load has changed	Checking tyre pressure (🗰 158).
No drive on very loose surfaces (e.g. sand or snow)	Switch off ASC to overcome extremely poor sur- face conditions (# 79).
Loss of adaptation values for the tyre radii in the Digital Motor Electronics after software update	Calibrate ASC (# 81).



# Screw connections

Brakes	Value	Valid
Brake caliper on fork leg		
M8 x 50 - 10.9	32 Nm	
Rear brake caliper on rear wheel swinging arm		
M8 x 30 - 10.9, Replace screw Micro-encapsulated	32 Nm	
Brake hose bracket on swinging arm		
M6 x 12	8 Nm	
Front wheel	Value	Valid
Bolt in quick-release axle at front		
M12 x 20	32 Nm	
Clamping bolts (quick-release axle) in telescopic forks		
M8 x 30	19 Nm	

Rear wheel	Value	Valid
Rear wheel on output shaft		
M16, Replace nut mechanical	115 Nm	2
Right swinging arm on drivetrain swinging arm		
M10 x 50	38 Nm	
Spring strut on swinging arm		
M10 x 50	38 Nm	
Spring strut to frame		
M10 x 50	38 Nm	
Exhaust system	Value	Valid
Silencer on swinging arm		
M8 x 50	21 Nm	
Rear silencer on exhaust mani- fold		
Clamp, M8 x 40	25 Nm	

13	Fuel		
<b>13</b> 202	Recommended fuel grade	<ul> <li>Regular, unleaded (maximum 15 % ethanol, E15)</li> <li>91 ROZ/RON min 87 AKI</li> </ul>	
_	Fuel tank capacity	approx. 12.8 I	
l data	Reserve volume	approx. 4 I	
cal d	Fuel consumption	3.51 l/100 km, following world-wide harmonised motorcycle test cycle (WMTC)	

Engine oil, capacity	approx. 1.8 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	max 0.4 I, Difference between MIN and MAX



# Engine

Location of engine number	Crankcase, left next to the oil filter
Engine type	A85A03M0
Engine design	One cylinder, four-stroke
Displacement	350 cm <sup>3</sup>
Cylinder bore	80 mm
Piston stroke	69.6 mm
Compression ratio	11.5 : 1
Nominal output	25 kW, at engine speed: 7500 min-1
Torque	35 Nm, at engine speed: 6000 min <sup>-1</sup>
Maximum engine speed	max 9400 min <sup>-1</sup>
Idle speed	1450 <sup>±50</sup> min <sup>-1</sup> , Engine at regular operating temperature
Exhaust emissions standard	Euro 4

Clutch type Centrifu	
	igal clutch
Transmission	
Gearbox type CVT (C	ontinuously Variable Transmission)
Rear-wheel drive       Type of final drive     Spur get	ear unit
Gear ratio of the final drive 8.71	

Frame at front, steering head

Type plate location

# Chassis and suspension

Type of front suspension	Telescopic forks
Spring travel, front	110 mm, on the front wheel
Type of rear suspension	Drivetrain swinging arm with screwed on auxiliary swinging arm
Design of the rear-wheel suspension	Two directly steered spring struts with adjustable spring preload
Spring travel at rear wheel	112 mm, at rear wheel

# Brakes

Front wheel		
Type of front brake	Twin disc brake, rigid, diameter 265 mm, 4-piston fixed caliper	
Brake-pad material, front	Organic material	
Brake disc thickness, front	5.0 mm, when new 4.5 mm, Wear limit	

3	Rear wheel	
206	Type of rear brake	Single-disc brake, diameter 265 mm, 1-piston floating calliper
	Brake-pad material, rear	Sintered metal
	Brake disc thickness, rear	5.0 mm, when new 4.5 mm, Wear limit

# Wheels and tyres

Recommended tyre sets	An overview of currently approved tyres is avail- able from your authorised BMW Motorrad Retailer or on the Internet at bmw-motorrad.com.
Speed category, front/rear tyres	S
Front wheel	
Front wheel type	Aluminium cast wheel
Front wheel rim size	3.50" x 15"
Tyre designation, front	120/70-15
Load index, front tyre	56
Permissible front-wheel imbalance	max 5 g

Rear wheel	
Rear-wheel type	Aluminium cast wheel
Rear wheel rim size	4.25" x 14"
Tyre designation, rear	150/70-14
Load index, rear tyre	66
Permissible rear-wheel imbalance	max 5 g
Tyre pressure	
Tyre pressure, front	2.2 bar, One-up, tyre cold 2.4 bar, Two-up mode with loading; tyre cold
Tyre pressure, rear	2.4 bar, One-up, tyre cold 2.6 bar, Two-up mode with loading; tyre cold

208	Electrical rating of on-board socket		
	Battery		
	Battery type		
g	Battery rated voltage		
data	Battery rated capacity	1	
	Spark plugs		
echnical	Spark plugs, manufacturer and designation		
chi	Light source		
Te	Bulbs for the low-beam headlight		
-	Bulb for high-beam headlight		
	Bulb for parking light		
	- with daytime riding light <sup>OE</sup>		
	Bulbs for flashing turn indicators, front		

Electrical rating of on-board socket	max 5 A, Socket in storage compartment, front right
Battery	
Battery type	AGM
Battery rated voltage	12 V
Battery rated capacity	9 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8J-9E
Light source	
Bulbs for the low-beam headlight	LED
Bulb for high-beam headlight	LED
Bulb for parking light	LED
<ul> <li>with daytime riding light<sup>OE</sup></li> </ul>	LED ring light
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	LED
Bulb for tail light/brake light	LED
Light source for the number plate light	Integrated in rear light

Fuses	
Main fuse	30 A, Voltage regulator
Fuse 1	Not used
Fuse 2	7.5 A, Diagnostic socket, ignition lock, Keyless Ride, anti-theft alarm
Fuse 3	7.5 A, Multifunction switch left, rear light, helmet compartment lighting, storage compartment lock, function satellite
Fuse 4	4 A, Brake light switch
Fuse 5	4 A, Fuel pump relay
Fuse 6	7.5 A, Fan relay
Fuse 7	7.5 A, Ignition coil, fuel injector, tank vent valve



# Anti-theft alarm

– with anti-theft alarm (DWA)<sup>OE</sup>

Activation time on arming	approx. 30 s
Alarm duration	approx. 26 s
Activation time between two alarms	15 s
Battery type (for control unit)	CR 123 A

# **Keyless Ride**

- with Keyless Ride<sup>OE</sup>

Range of the Keyless Ride radio-operated key	
– with Keyless Ride <sup>OE</sup>	approx. 1 m
Battery type (for Keyless Ride-radio-operated key)	
– with Keyless Ride <sup>OE</sup>	CR 2032

# Dimensions

Length of motorcycle	2210 mm, over number-plate carrier	
Height of motorcycle	min 1305 mm, over windscreen at DIN unladen weight	
Width of motorcycle	835 mm, with mirrors	
Front-seat height	775 mm, Without rider, at DIN unladen weight	
Rider's inside-leg arc, heel to heel	1760 mm, Without rider, at DIN unladen weight	

# Weights

Vehicle kerb weight	204 kg, DIN unladen weight, ready for road, 90 % load of fuel, without optional extras (OE)	
Permissible wheel load, front	max 160 kg	
Permissible wheel load, rear	max 280 kg 405 kg	
Permissible gross weight		
Maximum payload	201 kg	



	Riding specifications		
	Top speed	139 km/h	
212			

## Service

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### **BMW Motorrad Service**

BMW Motorrad has an extensive network of dealerships in place to look after you and your Scooter in more than 100 countries. Authorised BMW Motorrad Retailers have the technical information and the technical know-how to carry out reliably all maintenance and repair work on your BMW Scooter.

You can locate your nearest authorised BMW Motorrad Retailer by visiting our website:

#### bmw-motorrad.com



#### Maintenance and repair work not in compliance with correct procedure

Risk of accident due to subsequent damage

 BMW Motorrad recommends you have all the associated work on your Scooter carried out by a specialist workshop, preferably an authorised BMW Motorrad Retailer.◄

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

the warranty period has expired, evidence of regular maintenance is essential.

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.

If 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.

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

If you have a new BMW motorcycle, you are protected by various of the BMW Motorrad mobility services in the event of a breakdown (e.g. BMW breakdown assistance, breakdown recovery, vehicle transport). Find out from your authorised BMW Motorrad Retailer which mobility services are offered.

# Maintenance work

## **BMW pre-delivery check**

Your authorised BMW Motorrad Retailer conducts the BMW predelivery check before handing over the vehicle to you.

## **BMW Running-in Check**

The BMW running-in check must be carried out between 500 km and 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.

For riders with a high mileage it may be necessary to have a service before the specified deadline. In this case, a corresponding maximum mileage is entered in the service confirmation. If this mileage is reached before the next service deadline, the service must be brought forward.

The scope of maintenance work required for your vehicle can be found in the following maintenance schedule: 14

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	500-1 200 km 300-750 mis	10 000 km 6 000 mls	20 000 km 12 000 mis	30 000 km 18 000 mls	40 000 km 24 000 mis	50 000 km 30 000 mls	60 000 km 36 000 mis	70 000 km 42 000 mis	80 000 km 48 000 mis	90 000 km 54 000 mis	100 000 km 60 000 mls	12 months	24 months
1	x												
2		x	x	x	x	x	x	x	x	x	x	Xª	
3		x	x	x	х	x	x	x	x	x	х	Xª	
4		х	x	x	x	x	x	x	х	x	x		
(5)		x	x	x	x	x	x	x	x	x	x		
5 6 7 8			x		х		x		x		x		
1			x		x		x		x		x		
8			x		х		x		х		x		
9			х		x		x		x		x		
10			х		x		x		x		x		
11 12					x				x				
12												Xb	Xb

# Maintenance schedule

- 1 BMW running-in check (including oil change)
- 2 BMW Service standard scope
- **3** Engine-oil change, with filter
- 4 Clean/check filter for CVT
- 5 Replace air filter element
- 6 Replace CVT belt with rollers, check sliding block and replace if necessary
- 7 Replace all spark plugs
- 8 Check valve clearance
- **9** Replace mounting for rubber mounts
- **10** Oil change in the telescopic forks
- 11 Check the clutch (clutch removed)
- 12 Change brake fluid, entire system
- annually or every 10000 km (whichever comes first)

<sup>b</sup> for the first time after one year, then every two years





# **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.

- Check state of charge of the battery
- Performing vehicle test with BMW Motorrad diagnostic system
- Visual inspection of the brake lines, brake hoses and connections
- Check brake-fluid level, front/rear brakes
- Check front brake pads and brake discs for wear
- Check rear brake pads and brake disc for wear
- Check steering-head bearing
- Check coolant level
- Check throttle cable for play
- Check tyre pressure and tread depth
- Check lights and signalling system
- Function test, engine start suppression
- Final inspection and check for road safety
- Set service date and remaining distance
- Confirm BMW service in on-board literature

BMW pre-delivery check carried out	BMW Running-in Check carried out	1 2'
at	at at km <u>Next service</u> at the latest at or, when reached earlier at km	Service
Stamp, signature	Stamp, signature	

BMW Service	Work performed	Yes N
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service at the latest	Replacing CVT belt Renewing all spark plugs	
at	Checking valve clearance Replacing fixture for rubber mount	
or, when reached earlier at km	Check clutch (clutch removed) Change brake fluid in entire system	
	Notes	

BMW Service	Work performed	Vec Ne	221
carried out	BMW Service	Yes No	
at at km Mext service at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service	Replacing CVT belt Renewing all spark plugs	
at the latest at	Checking valve clearance	
or, when reached earlier	Replacing fixture for rubber mount Check clutch (clutch removed)	
at km	Change brake fluid in entire system	
	Notes	

BMW Service	Work performed	Yes No	14 223
carried out	BMW Service		
at at km at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service	Replacing CVT belt Renewing all spark plugs	
at the latest at	Checking valve clearance	
or, when reached earlier	Replacing fixture for rubber mount Check clutch (clutch removed)	
at km	Change brake fluid in entire system	
	Notes	

BMW Service	Work performed	Yes No	225
carried out	BMW Service		
at at km At the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service at the latest	Replacing CVT belt Renewing all spark plugs Checking valve clearance	
at or, when reached earlier at km	Replacing fixture for rubber mount Check clutch (clutch removed)	
	Change brake fluid in entire system	
	Notes	
Stamp, signature		

BMW Service	Work performed	Yes No	1 <b>4</b> 227
carried out	BMW Service		
atat km <u>Next service</u> at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service at the latest	Replacing CVT belt Renewing all spark plugs	
at the latest	Checking valve clearance	
or, when reached earlier at km	<ul> <li>Replacing fixture for rubber mount Check clutch (clutch removed)</li> </ul>	
	Change brake fluid in entire system	
	Notes	

BMW Service	Work performed	Yes No	14 229
carried out	BMW Service		
at at km at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service carried out	Work performed	Yes No
	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
<u>Next service</u> at the latest	Replacing CVT belt Renewing all spark plugs	
at the latest	Checking valve clearance	
or, when reached earlier at km	Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system	
	Notes	
Stamp, signature		

BMW Service	Work performed	Yes No	1 <b>4</b> 231
carried out	BMW Service		
at at km at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service	Replacing CVT belt	
at the latest	Renewing all spark plugs Checking valve clearance	
at or, when reached earlier	Replacing fixture for rubber mount	
at km	Check clutch (clutch removed) Change brake fluid in entire system	
	Notes	
Stamp, signature		

BMW Service	Work performed	Yes No	14 233
carried out	BMW Service		
at at km at the latest at or, when reached earlier at km	Oil change, engine, with filter Renewing air cleaner insert Replacing CVT belt Renewing all spark plugs Checking valve clearance Replacing fixture for rubber mount Check clutch (clutch removed) Change brake fluid in entire system		Service
	Notes		
Stamp, signature			

BMW Service	Work performed	Yes No
carried out	BMW Service	
at at km	Oil change, engine, with filter Renewing air cleaner insert	
Next service	Replacing CVT belt Renewing all spark plugs	
at the latest at	Checking valve clearance	
or, when reached earlier	Replacing fixture for rubber mount Check clutch (clutch removed)	
at km	Change brake fluid in entire system	
	Notes	

# **Service confirmations**

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

Work performed	at km	Date

14	Work performed	at km	Date
236			
200			
Ð			
Service			
Se			

# Appendix

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# **FCC** Approval

# Ring aerial in the ignition switch



To verify the authorization of the ignition key, the electronic immobilizer exchanges information with the ignition key via the ring aerial. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

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

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

# Approbation de la FCC

### Antenne annulaire présente dans le commutateur d'allumage



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

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

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

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

## Certifications

# **BMW Keyless Ride ID Device**



## USA. Canada

Product name: BMW Keyless Ride ID Device ECC ID: YGOHUE5750 IC: 4008C-HUF5750

#### Canada

Operation is subject to the following two conditions.

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

## USA-

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

(1) This device may not cause harmful interference. and

(2) this device must accept any interference received, including interference that may cause undesired operation.

/	î	

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

# **Declaration Of Conformity**

We declare under our responsibility that the product

## BMW Keyless Ride ID Device (Model: HUF5750)

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

1. Health and safety requirements contained in article 3 (1) a)

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

Part 1: Technical characteristics and test methods.

Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TIE directive

The product is labeted wilh the CE marking:

Velbert, October 15<sup>th</sup>, 2013

Benjamin A. Müller

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

# **Declaration of Conformity**

#### Radio equipment TFT instrument cluster

For all Countries without EU

#### **Technical information**

BT operating frq. Range: 2402 – 2480 MHz BT version: 4.2 (no BTLE) BT output power: < 4 dBm WLAN operating frq. Range: 2412 – 2462 MHz WLAN standards: IEEE 802.11 b/g/n WLAN output power: < 20 dBm

#### Manufacturer and Address

Manufacturer: Robert Bosch Car Multimedia GmbH Adress: Robert Bosch Str. 200, 31139 Hildesheim, GERMANY

#### Turkey

Robert Bosch Car Multimedia GmbH, ICC6.5in tipi telsiz sisteminin 2014/53/EU nolu yönetmeliğe uygun olduğunu beyan eder. AB Uygunluk Beyanı'nın tam metni, aşağıdaki internet adresinden görülebilir: http://cert.boschcarmultimedia.net

#### Brazil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

#### Canada

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause interference, and
 (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Mexico

La operación de este equipo está sujeta a las siguientes dos condiciones:

(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y

(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

#### Taiwan, Republic of

根據 NCC 低功率電波輻射性電機管理辦法 規定: 第十二條

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率 或變更原設計之特性及功能。

#### 第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合 法通信;經發現有干擾現象時,應立即停用,並改 善至無干擾時方得繼續使用。

前項合法通信,

指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫 療用電波輻射性電機設備之干擾。

## Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้

มีความสอดคล้องตามข้อกำหนดของ กทช.

(This telecommunication equipments is in compliance with NTC requirements)

### **United States (USA)**

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

 this device may not cause interference, and
 this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Α

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Details described or illustrated in this booklet may differ from the vehicle's actual specification as purchased, the accessories fitted or the national-market specification. No claims will be entertained as a result of such discrepancies.

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

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Fuel	
Recommended fuel grade	Regular, unleaded (maximum 15 % ethanol, E15) 91 ROZ/RON min 87 AKI
Fuel tank capacity	approx. 12.8 l
Reserve volume	approx. 4 l
Tyre pressure	
Tyre pressure, front	2.2 bar, One-up, tyre cold
	2.4 bar, Two-up mode with loading; tyre cold
Tyre pressure, rear	2.4 bar, One-up, tyre cold
	2.6 bar, Two-up mode with loading; tyre cold

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

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