



BMW Motorrad



The Ultimate
Riding Machine

Rider's Manual **C evolution**

Vehicle data/dealership details

Vehicle data

Model

Vehicle Identification Number

Colour code

Date of first registration

Registration number

Dealership details

Person to contact in Service department

Ms/Mr

Phone number

Dealership address/phone number (company stamp)

Welcome to BMW

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

About 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.

Suggestions and criticism

If you have questions concerning your E-Scooter, 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.

01 41 8 563 791



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General instructions

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About this Rider's Manual

Be sure to read this Rider's Manual carefully before starting to use your new E-Scooter. It contains important information on how to operate the controls and how to make the best possible use of all your E-Scooter'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.

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your E-Scooter. All maintenance and repair work on the vehicle is documented in Chapter 13. This record of the maintenance work you have had

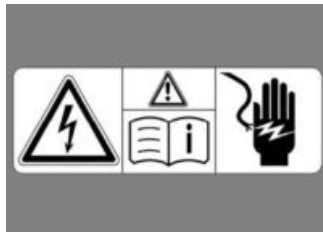
performed on your vehicle is a precondition for generous treatment of goodwill claims.

Sale of the E-Scooter

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

High-voltage system of your E-Scooter

Your E-Scooter is an electric vehicle. The vehicle has a high-voltage system, two components of which are an electrical machine and a high-voltage battery unit.



Warning stickers on vehicle components

Warning stickers on vehicle components draw your attention to the fact that incorrect use of the high-voltage technology or high-voltage components entails the risk of life-threatening injury due to electric shock.

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.

 Tightening torque.

 Technical data.

OE 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.

ABS Anti-lock brake system.

DWA Anti-theft alarm (Diebstahlwarnanlage).

EWS Electronic immobiliser.

IC-CPD (In Cabel Control and Protecting Device) Electronics module between infrastructure and electric vehicle to increase protection level and control the charging procedure.

RBS Regenerative brake system (brake system with energy recovery).

TCA Torque Control Assist.

Equipment

When you ordered your E-Scooter, you chose various items of custom equipment.

This Rider's Manual describes the optional extras (OE) offered by BMW and selected optional accessories (OA). This explains why the manual may also contain descriptions of equipment which you have not ordered. Please note, too, that your vehicle might not be exactly as illustrated in this manual on account of country-specific differences.

If your E-Scooter was supplied with equipment not described in this Rider's Manual, you will find these features described in separate manuals.

Technical data

All dimensions, weights and power ratings stated in the Rider's Manual are quoted to the standards and comply with the tolerance requirements of the Deutsches Institut für Normung e.V. (DIN). Versions for individual countries may differ.

Actuality

The high safety and quality standards of BMW E-Scooters are maintained by constant development work on designs, equipment and accessories. Because of this, your vehicle may differ from the information supplied in the Rider's Manual. Nor can BMW Motorrad entirely rule out errors and omissions. We hope you will appreciate that no claims can be entertained on the basis of the data, illustrations or descriptions in this manual.

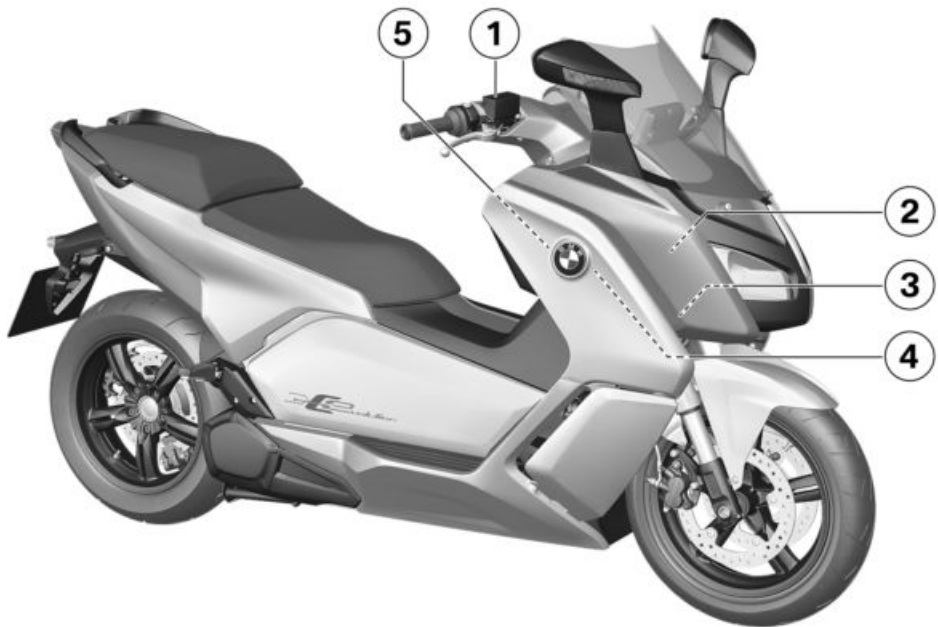
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General view, left side

- 1 Brake-fluid reservoir for the rear-wheel brake (→ 94)
- 2 Helmet compartment (→ 53) (→ 53)
- 3 Spring preload (→ 56)
- 4 Charging socket (→ 64)



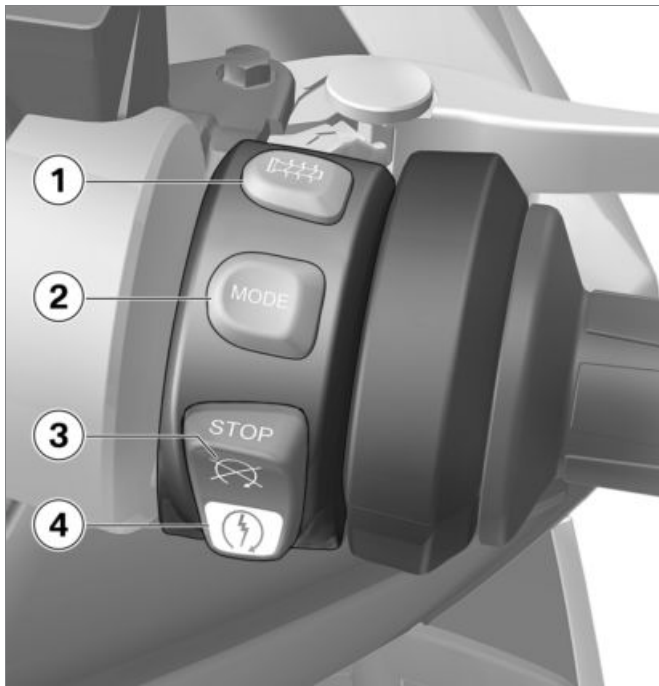
General view, right side

- 1** Brake-fluid reservoir for the front-wheel brake (▮▮▮▮➔ 93)
- 2** Vehicle identification number (VIN) (steering-head bearing, top right)
- 3** Type plate (front panel carrier, inside, right side)
- 4** 12 V battery (behind side panel) (▮▮▮▮➔ 102)
Fuses (behind side panel) (▮▮▮▮➔ 100)
- 5** 12 V socket (right stowage compartment) (▮▮▮▮➔ 106)

Multifunction switch, left

- 1 High-beam headlight and headlight flasher (➡ 48)
- 2 Hazard warning flashers (➡ 50)
- 3 Using reverser (➡ 46).
- 4 Turn indicators (➡ 50)
- 5 Horn
- 6 On-board computer (➡ 41)
- 7 TRIP, operation of the trip-meter (➡ 41)
- 8 daytime driving lights (➡ 48)



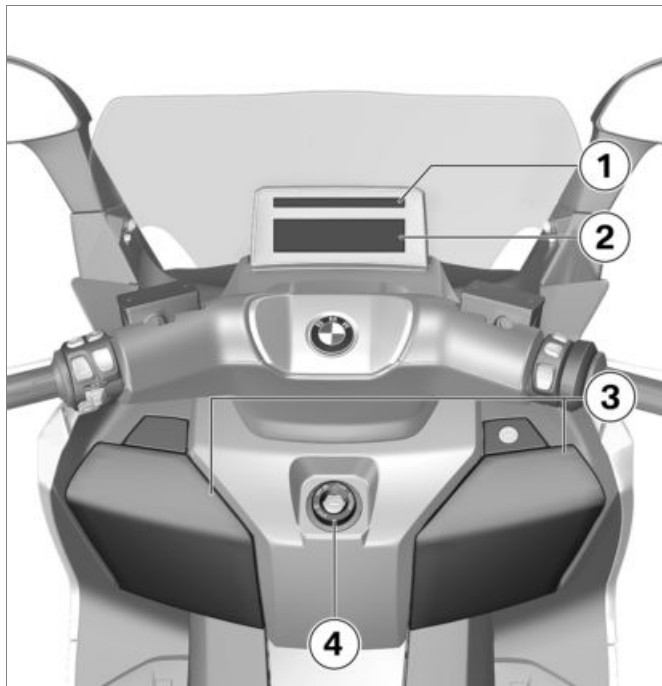


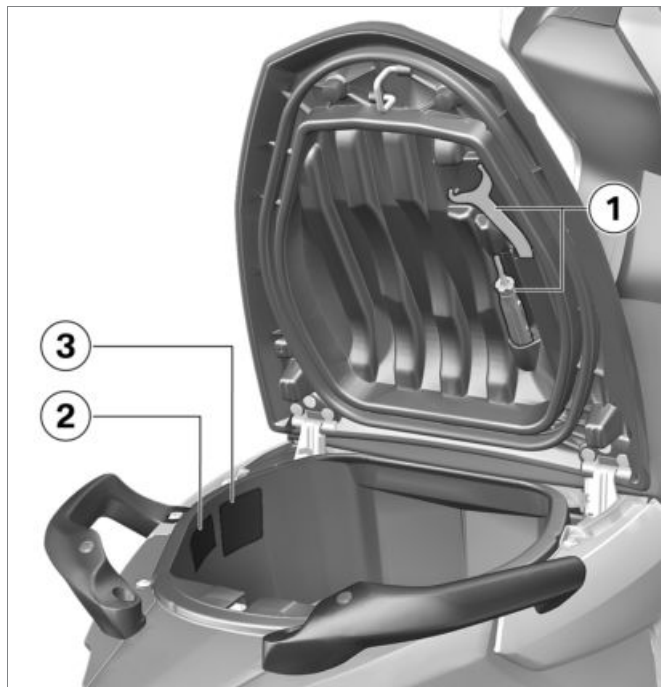
Multifunction switch, right

- 1** – with heated handlebar grips^{OE}
Heated handlebar grips (➡ 51)
- 2** Riding mode (➡ 68)
- 3** Emergency off switch (kill switch) (➡ 51)
- 4** Starter button (➡ 76)

Cockpit

- 1 Warning and telltale lights (➡ 21)
- 2 Multifunction display (➡ 20)
- 3 Stowage compartments (➡ 52)
Charging socket (left) (➡ 106)
12 V socket and Rider's Manual (right stowage compartment) (➡ 106)
- 4 Ignition switch/steering lock (➡ 40)





Underneath the seat

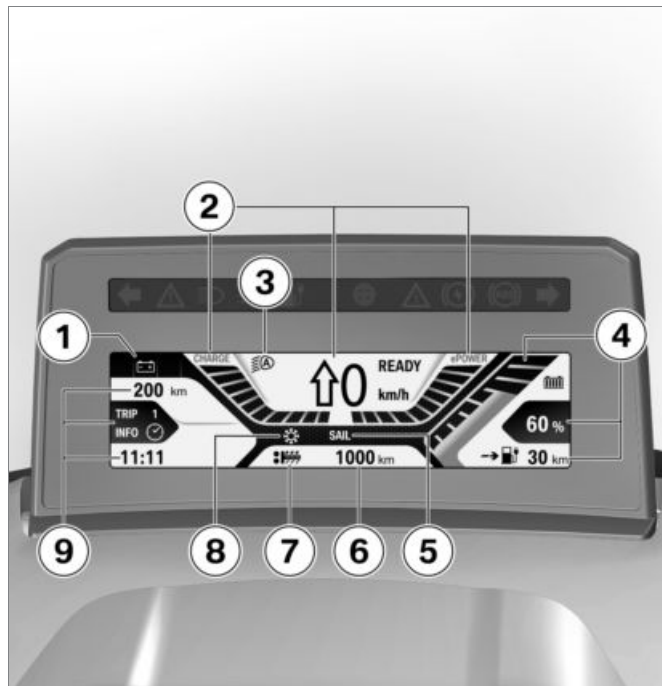
- 1 Toolkit (→ 90)
- 2 Payload table
- 3 Table of tyre pressures

Status indicators

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Multifunction display

- 1 Warnings (➡ 27)
- 2 Drive gauge (➡ 67)
- 3 Automatic daytime riding light (➡ 48)
- 4 Charge-status indicator (➡ 69)
- 5 Riding mode (➡ 68)
- 6 Total distance
- 7 – with heated handlebar grips^{OE}
- Heated handlebar grips (➡ 51)
- 8 Outside temperature warning
- 9 Top: distance information and Setup menu (➡ 44)
Bottom: On-board computer (➡ 41)

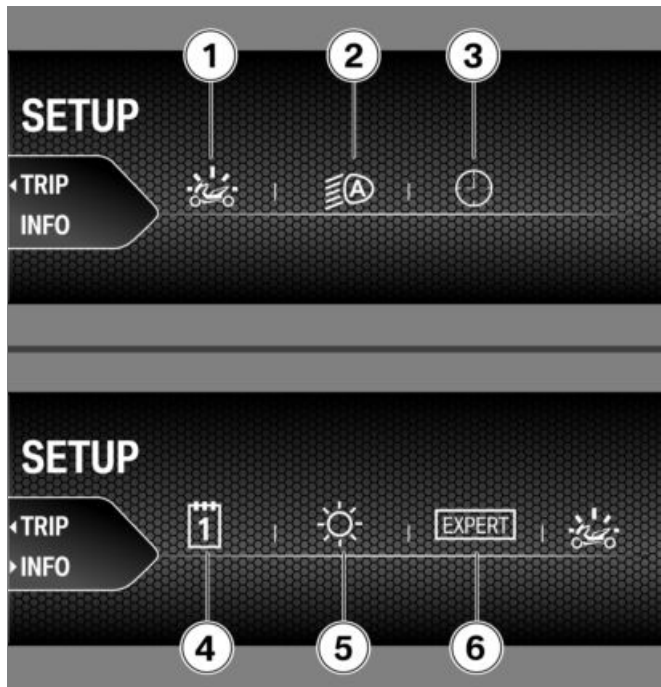




Warning and telltale lights

- 1** Telltale light for left turn indicators (➡ 50)
- 2** General warning light (➡ 27)
- 3** High-beam headlight (➡ 48)
- 4** Daytime riding light (➡ 48)
- 5** Reserve (flashes yellow during charging and shows green when high-voltage battery unit is fully charged)
- 6** – with alarm system (DWA)^{OE}
DWA (➡ 42)
Photosensor (➡ 44)
- 7** Insulation fault (shows yellow) (➡ 32)
High-voltage safety connector not connected (shows red) (➡ 32)

- 8** RBS ( 33)
TCA ( 33)
- 9** ABS ( 33)
- 10** Telltale light for right turn indicators ( 50)



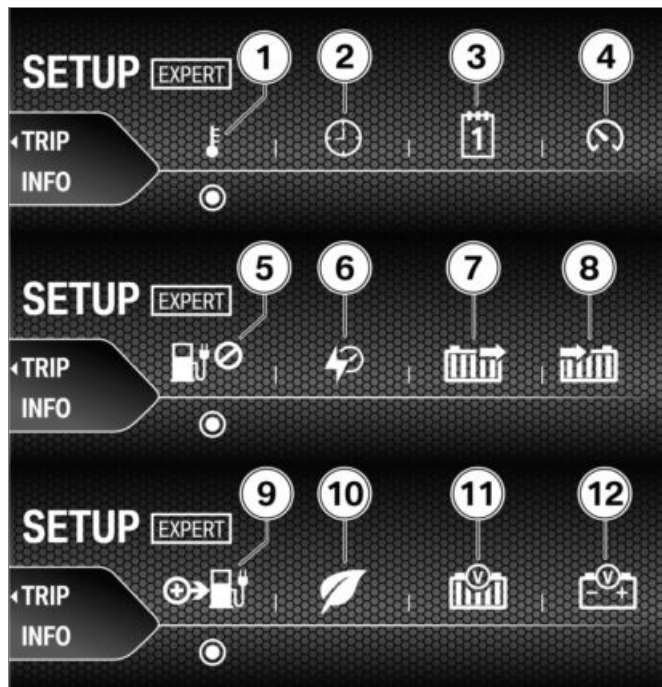
Setup menu

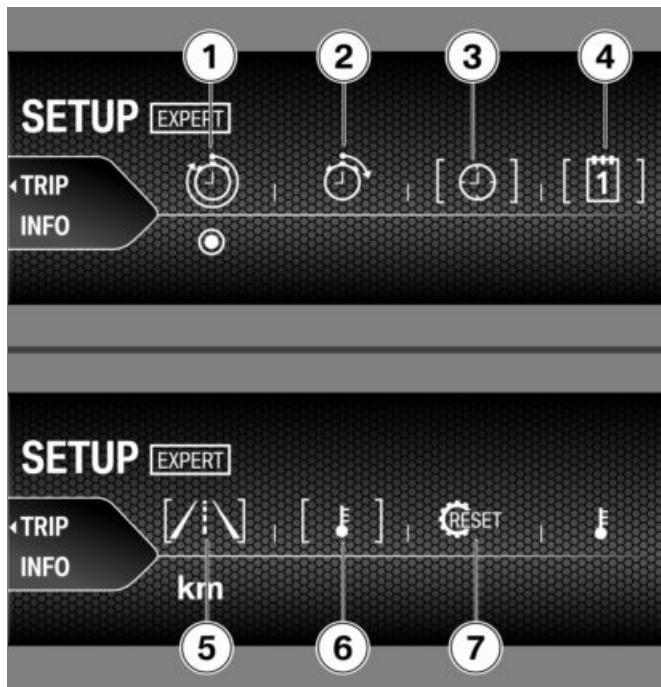
- 1** – with alarm system (DWA)^{OE}
Using anti-theft alarm (➡ 42).
- 2** Using automatic daytime riding light (➡ 48).
- 3** Setting time (➡ 43).
- 4** Setting the date (➡ 43).
- 5** Adjust the display brightness (➡ 44).
- 6** Calling up Expert menu (➡ 44).

Expert menu (part 1)

You can switch certain functions on/off and change formats/units of measure in the Expert menu.

- 1 Ambient temperature
- 2 Time
- 3 Date
- 4 Average speed
- 5 Average consumption
- 6 Current consumption
- 7 Overall consumption
- 8 Energy recovery
- 9 Extended range
- 10 Ecology points
- 11 High voltage level
- 12 On-board voltage

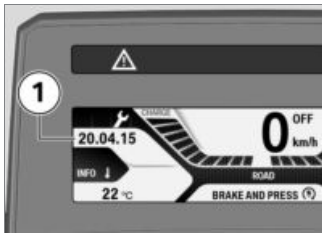




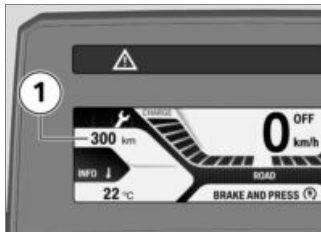
Expert menu (part 2)

- 1 Operating hours
- 2 Time riding at speed of at least 10 km/h
- 3 Clock format
- 4 Date format
- 5 Unit for distance
- 6 Unit for temperature
- 7 Reset
(Restore the factory defaults)

Service-due indicator



If the next service is due in less than one month, the date for the next service **1** is shown briefly after the Pre-Ride-Check completes. In this example the reading means "April 20, 2015".



If the vehicle covers long distances in the course of the year, under certain circumstances it might be necessary to have it serviced at a date in advance of the forecast due date. When the countdown distance to the odometer reading at which a service is due drops below 1000 km, the distance is counted down in steps of 100 km **1** and is shown 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 warning symbol for service shows along with the 'general' warning light. The service symbol remains permanently visible in accordance with priority.



NOTICE

If the service-due indicator appears more than a month before the service date, the date saved in the instrument cluster must be adjusted. This situation can occur if the 12 V battery was disconnected. ◀

Ambient temperature



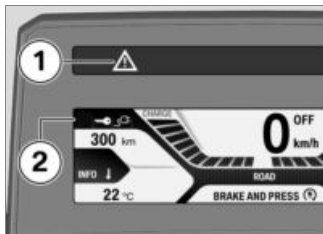
If ambient temperature drops below 3 °C the temperature reading in the multifunction display flashes to draw your attention to the risk of black ice forming. The display automat-

ically switches from any other mode to the temperature reading when the temperature drops below this threshold for the first time.

Warnings

Mode of presentation

Warnings are indicated by the corresponding warning lights.



Warnings for which there is no dedicated warning light are indicated by 'General' warning light **1** showing in combination with up to three warning symbols at po-

sition **2** appearing in succession from right to left. These warning symbols appear in their order of priority. The highest priority is on the right. The 'general' warning light shows red or yellow, depending on the urgency of the warning.

If multiple warnings are active at the same time the three highest-priority warnings are shown.

The possible warnings are listed on the next pages.

Warnings, overview

Warning and telltale lights

Warning symbols in the display

Meaning

	lights up yellow		appears on the display	Electronic immobiliser active (➡ 31)
	lights up red		appears on the display	Serious fault in high-voltage battery unit (➡ 31)
	lights up yellow		appears on the display	Fault in high-voltage battery unit (➡ 31)
	lights up red		appears on the display	Charging cable connected with operational readiness switched on (➡ 31)
	lights up yellow		appears on the display	Electric drive in emergency operating mode (➡ 32)
	lights up red		appears on the display	Fault in electric drive (➡ 32)
	lights up yellow			Insulation fault in the high-voltage section (➡ 32)
	lights up red			High-voltage safety connector not connected (➡ 32)

Warning and telltale lights

Warning symbols in the display

Meaning

	appears on the display		RBS/TCA fault (→ 33)
	flashes		TCA self-diagnosis not completed (→ 33)
	lights up yellow		appears on the display TCA fault (→ 33)
	flashes		ABS self-diagnosis not completed (→ 33)
	lights up		ABS fault (→ 33)
	lights up yellow		appears on the display Front light failure (→ 34)
	lights up yellow		appears on the display Rear light failure (→ 34)
	lights up yellow		appears on the display Failure of front light and rear light (→ 34)

Warning and telltale lights		Warning symbols in the display	Meaning
		 appears on the display	Ambient temperature (▮▮▮➡ 35)
		 appears on the display	Anti-theft alarm battery weak (▮▮▮➡ 35)
 lights up yellow		 appears on the display	Anti-theft alarm battery flat (▮▮➡ 35)
 lights up red		 appears on the display	Insufficient battery charge current (▮▮➡ 36)
		 appears on the display	On-board system voltage low (▮▮▮➡ 36)
 lights up yellow		 appears on the display	On-board system voltage critical (▮▮▮➡ 36)
 briefly shows yellow		 appears on the display	Service overdue (▮▮▮➡ 36)

Electronic immobiliser active



lights up yellow.



appears on the display.

Possible cause:

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

- Remove all other vehicle keys from the same ring as the key used for the vehicle.
- Use the reserve key.
- Have the defective key replaced, preferably by an authorised BMW Motorrad dealer.

Serious fault in high-voltage battery unit



lights up red.



appears on the display.

Possible cause:

There is a serious fault in the high-voltage battery unit. The high-voltage system of the E-Scooter will be switched off. Charging is no longer possible. The high-voltage battery unit of the E-Scooter is possibly faulty.

- Do not continue your journey.
- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Fault in high-voltage battery unit



lights up yellow.



appears on the display.

Possible cause:

There is a fault in the high-voltage battery unit.

- You can continue to ride, but bear in mind that the usual battery performance might not be available.
- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Charging cable connected with operational readiness switched on



lights up red.



appears on the display.

Possible cause:

The charging cable has been connected with operational readiness switched on. Ride enabling is not possible.

- Operational readiness has to be switched off before charging can start or be resumed.
- Switch off operational readiness (→ 40).

Electric drive in emergency operating mode



lights up yellow.



appears on the display.



WARNING

Unusual ride characteristics when electric drive running in emergency-operation mode.

Risk of accident

- Adapt your style of riding accordingly.
- Avoid accelerating sharply and overtaking.◀

Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Fault in electric drive



lights up red.



appears on the display.

Do not continue your journey. Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Insulation fault in the high-voltage section



lights up yellow.

Possible cause:

An insulation fault has been detected. A high-voltage cable has suffered damage.

- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

High-voltage safety connector not connected



lights up red.

Possible cause:

The high-voltage safety connector has been disconnected and the high-voltage system is deactivated.

- Note the following:



NOTICE

Only an authorised BMW Motorrad dealer is permitted to disconnect the high-voltage safety connector.◀

RBS/TCA fault



appears on the display.

Possible cause:

The motor control unit has detected a fault. Energy recovery by deceleration of the vehicle is only conditionally available.

- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

TCA self-diagnosis not completed



flashes.

Possible cause:

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

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

TCA fault



lights up yellow.



appears on the display.

Possible cause:

The TCA is not available. The rear wheel might spin under acceleration and energy recovery by deceleration of the vehicle is not available.

- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

ABS self-diagnosis not completed



flashes.

Possible cause:

Self-diagnosis did not complete, so the ABS function is not available. The E-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



lights up.

Possible cause:

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

- You can continue to ride the vehicle, but make due provision for the fact that the ABS function is not available. Bear in mind the more detailed in-

formation on situations that can lead to an ABS fault (▮▮▮ 85).

- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Front light failure



lights up yellow.



appears on the display.



WARNING

Failure of lights on the vehicle adds to possibility of other road users overlooking the vehicle.

Safety risk

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

Possible cause:

Low-beam or high-beam headlight defective.

- Replacing bulbs for low-beam and high-beam headlight (▮▮▮ 97).

Possible cause:

Parking light defective.

- Have the bulb for the side light replaced by an authorised BMW Motorrad dealer.

Possible cause:

LED flashing turn indicator defective.

- Replacing LED turn indicators (▮▮▮ 99).

Rear light failure



lights up yellow.



appears on the display.

Possible cause:

LED rear light is defective.

- Replacing LED rear light (▮▮▮ 99).

Possible cause:

LED flashing turn indicator defective.

- Replacing LED turn indicators (▮▮▮ 99).

Failure of front light and rear light



lights up yellow.



appears on the display.

Possible cause:

The rear light and the headlight bulb are defective.

- Replacing bulbs for low-beam and high-beam headlight (▮▮▮ 97).

- Have the bulb for the side light replaced by an authorised BMW Motorrad dealer.
- Replacing LED rear light (►► 99).

Possible cause:

LED flashing turn indicator defective.

- Replacing LED turn indicators (►► 99).

Ambient temperature



appears on the display.

Possible cause:

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



WARNING

Risk of black ice forming at temperatures above 3 °C, even though no ambient-temperature warning is issued.

Risk of accident due to icy surface.

- 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.

Anti-theft alarm battery weak

– with alarm system (DWA)^{OE}



appears on the display.



NOTICE

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

Possible cause:

The integral battery in the anti-theft 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 12 V battery is disconnected.

- Consult an authorised BMW Motorrad dealer.

Anti-theft alarm battery flat

– with alarm system (DWA)^{OE}



lights up yellow.



appears on the display.



NOTICE

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

Possible cause:

The integral battery in the anti-theft alarm has lost its entire original capacity. There is no assurance that the anti-theft alarm will be operational if the 12 V battery is disconnected.

- Consult an authorised BMW Motorrad dealer.

Insufficient battery charge current



lights up red.



appears on the display.



WARNING

Non-availability of various systems such as lights, electrical machine or ABS on account of discharged battery.

Risk of accident

- Do not continue your journey. ◀

The 12 V battery is not charging.

Possible cause:

There is a fault in the DC/DC transformer.

- Consult an authorised BMW Motorrad dealer.

On-board system voltage low



appears on the display.

Possible cause:

Too many consumers switched on.

- Charge the 12 V battery (→ 103).

If the 12 V battery no longer charges fully:

- Consult an authorised BMW Motorrad dealer.

On-board system voltage critical



lights up yellow.



appears on the display.

The 12 V battery no longer has enough capacity to supply all the consumers.

Possible cause:

Too many consumers switched on.

- Charge the 12 V battery (→ 103).

If the 12 V battery no longer charges fully:

- Consult an authorised BMW Motorrad dealer.

Service overdue



shows yellow briefly after the Pre-Ride-Check.



appears on the display.

Possible cause:

A necessary service has not been carried out.

- Have the service carried out as soon as possible by an authorised BMW Motorrad dealer.

Operation

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Emergency off switch (kill switch)	51
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Tyres	53
Rear seat	53

Ignition switch/steering lock

Keys

You receive 2 vehicle keys.

– with topcase^{OA}

If you wish you can arrange to have the topcase fitted with a lock that can be opened with the same key. Consult an authorised BMW Motorrad dealer.

Switching on operational readiness



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

- » Side lights and all function circuits are switched on.
- » Pre-Ride-Check is performed. (➡ 73)
- » ABS self-diagnosis is in progress. (➡ 74)
- » TCA self-diagnosis is in progress. (➡ 74)
- » Vehicle is ready for operation.

Switching off operational readiness



- Turn the vehicle key to position **1**.
- » Light is switched off, side lights remain on for a short time.

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

Lock the handlebars

Turn the handlebars all the way to left.



- Turn the key to position **1**, while moving the handlebars slightly.
- » Operational readiness OFF.
- » Handlebars are locked.
- » Key can be removed.

Reading

Select display

- Switch on operational readiness (►► 40).



- Short-press button **1** to select the reading in panel **2**.

The following values can be displayed:

- Tripmeter 1 (Trip 1)
- Tripmeter 2 (Trip 2)
- The automatic tripmeter (Trip A) resets automatically when 6 hours elapse after operational readiness is switched off.

– Setup menu (Setup)



- Short-press button **1** to select the reading in panel **2**. The average values you can reset are as follows:
 - Average consumption
 - Range extension
 - Overall consumption
 - Overall energy recovery
 - Time riding at speed of at least 10 km/h
 - Operating hours
 - Average speed
 - Ecology points

Resetting tripmeter

- Switch on operational readiness (►► 40).
- Select a tripmeter.



- Short-press button **1** to select the tripmeter you want.
- Hold down button **1** until the tripmeter reading in panel **2** has reset.

Resetting the average values

- Switch on operational readiness (►► 40).



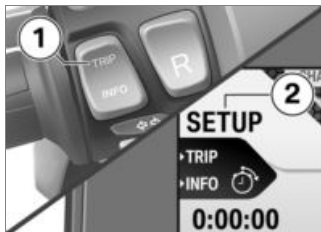
- Repeatedly short-press button **1** until the reading shows the value you want.
- Hold down button **1** until the reading in panel **2** has reset.

Setup menu

Entering Setup menu

The Setup menu is available only when the vehicle is at a standstill.

- Switch on operational readiness (▮▮▮▮ 40).



- To enter the Setup menu, repeatedly short-press button **1** until Setup appears in panel **2**.
- Long-press button **1** to call up the Setup menu.
 - » Process completed.
- Long-press button **1** to exit the Setup menu.

Using anti-theft alarm

– with alarm system (DWA)^{OE}

- Switch on operational readiness (▮▮▮▮ 40).
- Entering Setup menu (▮▮▮▮ 42).



- Repeatedly short-press button **1** until symbol **2** for the anti-theft alarm appears.
- Short-press button **3** to switch on the anti-theft alarm.
 - » Option indicator **4** is high-lighted.
 - » When you switch off operational readiness, the DWA status indicator light at the top of the display flashes.
- Short-press button **3** to switch off the anti-theft alarm.
 - » Option indicator **4** is not high-lighted.

Setting time

- Switch on operational readiness (➡ 40).
- Entering Setup menu (➡ 42).



- Repeatedly short-press button **1** until the clock symbol appears.
- Hold down button **2** until the first number you want to change in the time **3** is underscored.
- Short-press button **2** to set the number.
- Hold down button **2** until the next number is underscored.

- Short-press button **2** to set this number as well.
- Press and hold down button **2** until the underscore disappears.
 - » This completes the process.
 - » The settings you made are accepted.

Setting the date



NOTICE

You can change the date format in the Expert menu.◀

- Switch on operational readiness (➡ 40).
- Entering Setup menu (➡ 42).



- In the Setup menu, repeatedly short-press button **1** until the calendar symbol appears.
- Hold down button **2** until the first number you want to change in the date **3** is underscored.
- Short-press button **2** to set the number.
- Hold down button **2** until the next number is underscored.
- Press and hold down button **2** until the underscore disappears.
 - » This completes the process.

» The settings you made are accepted.

Adjusting display brightness

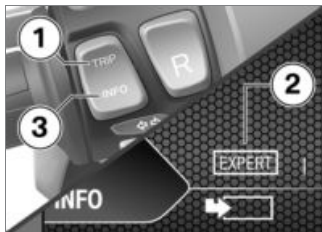
- Switch on operational readiness (➡ 40).
- Entering Setup menu (➡ 42).



- Repeatedly short-press button **1** until desired symbol **2** is selected.
- Use button **3** to adjust display brightness.

Calling up Expert menu

- Make sure the ground is level and firm and place the E-Scooter on its stand.
- Entering Setup menu (➡ 42).



- Repeatedly short-press button **1** until symbol **2** is selected.
- Long-press button **3**.
- Long-press button **1** to return to the Setup menu.

Expert menu

Function description

You can switch certain functions on and off and change formats and units of measure in the Expert menu.

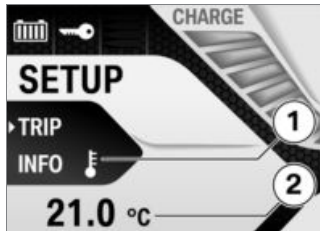
All the parameters you set in the Expert menu have effects on the multifunction display.

The Expert function is special. You can use it to reset all the parameters you have changed to their factory default settings.

Selecting information types

The following is an example illustrating how to use the Expert menu to view general information in the multifunction display.

- Switch on operational readiness (➡ 40).
- Entering Setup menu (➡ 42).
- Calling up Expert menu (➡ 44).



- Repeatedly short-press button **1** until the information type you want **2** appears; in this example the information type is ambient temperature.
- Short-press button **3** to select this information type.
- » Option indicator **4** is highlighted.

The selected item of information appears at position **1** and the corresponding value at position **2**.

- There are 14 information types that can be selected in the Expert menu for viewing in this part of the display:
 - Ambient temperature
 - Time and date
 - Average speed
 - Average consumption
 - Current consumption
 - Overall consumption
 - Overall energy recovery
 - Extended range

- Ecology points
- High voltage level
- On-board electrics voltage level
- Operating hours
- Time riding at speed of at least 10 km/h

Setting format and unit

- Switch on operational readiness (➡ 40).
- Entering Setup menu (➡ 42).
- Calling up Expert menu (➡ 44).
- » The Expert menu enables you to change formats and units; these changes affect the multifunction display as shown in this example.



- Repeatedly short-press button **1** until the information type you want **2** appears; in this example the information type is distance.
- Short-press button **3** to select and make changes to this information type. The following formats and units can be set
 - Clock format
 - Date format
 - Distance
 - Temperature
- » The unit can be changed from km to mi. at position **4**.

Restoring factory defaults

- This function resets all parameters to their factory default settings, in other words to their as-delivered condition.
- Entering Setup menu (▢ 42).
- Calling up Expert menu (▢ 44).



- Repeatedly short-press button **1** until symbol **2** is selected.
- Press and hold down button **3**.



NOTICE

The reset process is aborted if you release the INFO button be-

fore the RESET bar is completely full.◀

» As soon as symbol **4** is full the Expert menu is exited and the start-up animation runs through.

Reverser

Using reverser



WARNING

Less perceptibility of electric propulsion.

Risk of accident

- When you use electric propulsion, you must always bear in mind that the absence of engine noise means that pedestrians and other road users might not be aware of your approach on your E-Scooter.
- Exercise special care and attention when riding.◀

- Switch on driving readiness (→ 76).



- Press and hold down button **1** for the entire duration of the parking procedure.



- Enabling is indicated in the multifunction display at position **1** by an arrow pointing down and at position **2** by a letter R.
- Gently turn the electronic throttle grip and reverse-park the vehicle.

	Walking speed
E-Scooter reverses at no more than walking speed.	
3 km/h	

Lights

Low-beam headlight and sidelights

The side lights switch on automatically as soon as the E-Scooter is ready for operation. The side lights then remain on for a short time.



NOTICE

The side lights place a strain on the 12 V battery. Do not switch on operational readiness for longer than absolutely necessary. ◀

The low-beam headlight switches on automatically as soon as the E-Scooter is ready to ride.

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

High-beam headlight and headlight flasher

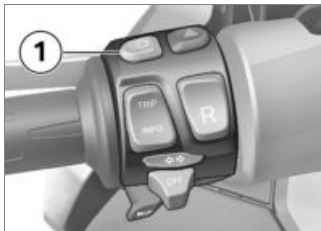
- Switch on operational readiness (▮▮▮▮ 40).



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

Daytime riding light

- Switch on driving readiness (▮▮▮▮ 76).



- Press button **1** to switch on the daytime riding light and switch off the low-beam headlight.



The daytime riding light symbol appears on the display.

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



NOTICE

By comparison with the low-beam headlight, the daytime

running light makes the vehicle more visible to oncoming traffic. This improves daytime visibility.◀

Using automatic daytime riding light



NOTICE

The changeover between daytime running light and low beam headlight including front side lights can be effected automatically.◀

- Switch on operational readiness (▮▮▮▮ 40).
- Entering Setup menu (▮▮▮▮ 42).



WARNING

The automatic riding light control system cannot replace your personal assessment of lighting conditions, particularly in foggy or misty weather.

Safety risk

- Manually switch on the low-beam headlight in poor lighting conditions. ◀
- Repeatedly short-press button **1** until symbol **2** for the automatic daytime riding light appears.

- Short-press button **3** to switch on the automatic daytime riding light.

» Option indicator **4** is highlighted.



appears on the display

» When ambient brightness drops below a certain value, the low-beam headlight is automatically switched on (e. g. in a tunnel). When sufficient ambient brightness is detected, the daytime riding light is switched back on. When the daytime riding light is active, the daytime riding light symbol is displayed in the multifunction display.

- Short-press button **3** to switch off the automatic daytime riding light.
- » Option indicator **4** is not highlighted.

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

If you press the button for the daytime riding light, the daytime riding light is switched off and the low-beam headlight and front side lights are switched on (e. g. when you ride into a tunnel, and the response of the automatic daytime riding light to the change in ambient brightness is delayed). If you press the button again the daytime riding light is reactivated, in other words the daytime riding light is switched on again when ambient light is bright enough.

Parking lights

- Switch off operational readiness (▶ 40).



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

Turn indicators

Operating the turn indicators

- Switch on operational readiness (▬▬▬▬▶ 40).



- Push button **1** to the left to switch on the left turn indicators.
- Push button **1** to the right to switch on the right turn indicators.
- Centre button **1** to cancel the turn indicators.



Turn-indicator cancellation

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

Hazard warning flashers

Operating hazard warning flashers

- Switch on operational readiness (▬▬▬▬▶ 40).



NOTICE

The hazard warning flashers place a strain on the 12 V battery. Do not use the hazard warning flashers for longer than absolutely necessary.◀



NOTICE

If you press a turn-indicator button while operational readiness is switched on, the turn-indicator function is activated instead of the hazard warning flashers and remains active until you release the button. The hazard warning flashers recommence flashing as soon as the button is released.◀



- Press button **1** to switch on the hazard warning flashers.
- » Operational readiness can be switched off.

- Switch on operational readiness and press button **1** again to switch off the hazard warning flashers.

Emergency off switch (kill switch)



- 1** Emergency off switch (kill switch)

Emergency off switch **1** is a kill switch for switching off the electrical machine quickly.



- A** Electrical machine OFF
B E-Scooter ready for operation

Heated handlebar grips

– with heated handlebar grips^{OE}

Operating the heated handlebar grips



NOTICE

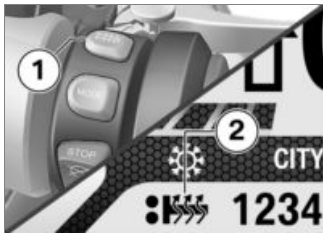
Heated grips consume a lot of energy and reduce range. Use the heated grips only when really necessary.◀

- Switch on driving readiness (III 76).



NOTICE

The heated-grip function is available only when the E-Scooter is ready to ride. ◀



- Repeatedly press button **1** until desired heating stage **2** appears on the display.

The handlebar grips have two-stage heating.



1st heating stage: 50 % heating power

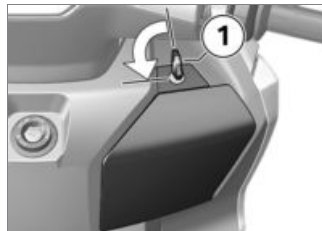


2nd heating stage: 100 % heating power

- » Stage 2 is for heating the grips quickly: it is advisable to switch back to stage 1 as soon as the grips are warm.
- In order to switch off the heated handlebar grips, repeatedly press button **1** until the heated handlebar grip symbol **2** is no longer shown on the display.

Stowage compartments

Front stowage compartment



- To open the right stowage compartment, turn vehicle key **1** counter-clockwise and press down.
- To close the right stowage compartment, push the lid into the latch and turn vehicle key **1** clockwise.
- The key can be removed in both positions.

Rear stowage compartment

- Open the rear seat.



- Position the helmet as shown in the illustration.
- Close the rear seat.

Tyres

Checking tyre pressure



WARNING

Incorrect tyre pressure.

Impaired handling characteristics of the Scooter. Shorter useful tyre life.

- Always check that the tyre pressures are correct. ◀



WARNING

Tendency of valve inserts installed vertically top open by themselves at high riding speeds.

Sudden loss of tyre pressure.

- Install valve caps fitted with rubber sealing rings and tighten firmly. ◀
- Check tyre pressures against the data below.



Tyre pressure, front

2.5 bar (Tyre cold)



Tyre pressure, rear

2.5 bar (One-up, tyre cold)

2.9 bar (two-up and/or with luggage, tyre cold)

If tyre pressure is too low:

- Correct tyre pressure.

Rear seat

Opening/closing rear seat



- Turn vehicle key **1** clockwise.
- Fully open rear seat **2**.
- To close, press the rear of the seat down until it latches shut.

**NOTICE**

Be careful not to leave the vehicle key inside the helmet compartment, because without the key the rear seat can no longer be opened.

It is advisable not to remove the vehicle key until the rear seat has been closed, or alternatively to have the second vehicle key with you.◀

» The rear seat is correctly latched.

Adjustment

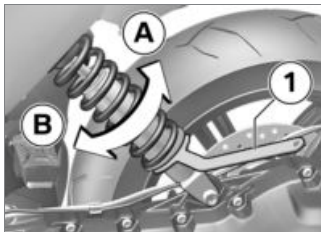
Spring preload	56
Brakes	56
Mirrors	57
Headlight	57

Spring preload Adjustment

It is essential to set spring preload of the rear suspension to suit the load carried by the E-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 spring strut

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



- If you want to increase spring preload, use hook wrench **1** (on-board toolkit) to turn the adjusting ring in direction **A** as indicated by the arrow.
- If you want to reduce spring preload, use hook wrench **1** (on-board toolkit) to turn the adjusting ring in direction **B** as indicated by the arrow.



Basic setting of spring preload, rear

Spring strut with spring tension fully relieved (One-up riding without luggage)



Basic setting of spring preload, rear

Preloaded to 4 of 7 clicks
(Two-up riding and luggage)

Brakes

Adjusting brake lever

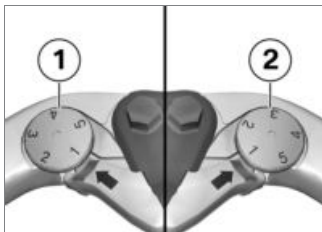


WARNING

Adjusting the handbrake lever while riding.

Risk of accident

- Do not attempt to adjust the handbrake lever unless the Scooter is at a standstill. ◀



- Turn adjusting screw **1** of the left brake lever or adjusting screw **2** of the right brake lever to the desired position.



NOTICE

The adjusting screw is easier to turn if you push the brake lever forward. ◀

- » Adjustment options:
 - From position 1: largest span between handlebar grip and brake lever
 - To position 5: smallest span between handlebar grip and brake lever

Mirrors

Adjusting mirrors



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

Headlight

Headlight beam throw and spring preload

Headlight beam throw is generally kept constant when spring preload is adjusted to suit load. Consult a specialist workshop, preferably an authorised BMW Motorrad dealer, if you are

unsure whether the headlight beam-throw setting is correct.

BMW ePOWER

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Principle

The vehicle can be operated without any emissions whatsoever on account of its electric drive.

The special high-voltage battery unit supplies energy to the electrical machine.

In all riding situations, including for example pullaway and acceleration, and also at higher speeds, the torque electrical machine provides dynamic riding characteristics.

The high-voltage battery unit is recharged with a charging cable, for example while the vehicle is parked, or while on the move by energy recovery.

Charging at special power supplies is particularly fast. But it is also possible to recharge at ordinary household sockets for example in private houses.

Energy recovery

The high-voltage battery unit is partly recharged by energy recovery while the vehicle is on the move. Energy recovery ensures that very little energy is lost by braking. When the vehicle decelerates the electrical machine acts as a generator, converting kinetic energy partly or completely into electricity. This partly recharges the high-voltage battery unit, helping to maximise range. There are several ways in which recharging can take place while the vehicle is on the move:

- Throttle-twistgrip position closed / coasting
- When the E-Scooter brakes

In the instrument cluster, the marker is in the CHARGE part of the gauge. It is important to think well ahead and reduce speed in good time in order to make the

best possible use of the vehicle's energy recovery capability.

General instructions



NOTICE

Do not leave the E-Scooter out of use for a lengthy period with the high-voltage battery unit in a low state of charge.

Before leaving the vehicle out of use for a lengthy period, check the charge status indicator and make sure that the high-voltage battery unit is fully charged. Connect the E-Scooter at a suitable charging location with a charging station during the out-of-use period. Make sure that charging can take place. Check the state of charge at regular intervals. Excessive discharge will damage the high-voltage battery unit. ◀



NOTICE

Recharge the high-voltage battery unit when the range is down to 30 km, as otherwise the performance of the electric drive could drop off perceptibly.◀



DANGER

Handling of electrical current not in compliance with correct procedure.

Injury or damage to property, e.g. by electric shock or fire.

- Comply with the safety regulations.◀



ATTENTION

No check of charging equipment prior to initial use.

Damage to property and overloading of the electricity supply system.

- Before charging for the first time, have your charging equipment checked at the place of use by a duly trained and qualified electrical specialist.◀



CAUTION

Non-compliance with the instructions posted at the charging station.

Injury or damage to property, e.g. by electric shock or fire.

- Comply with the instructions posted at the charging station.◀



ATTENTION

Charging equipment in poor condition.

Risk of fire, e.g. due to worn contacts or damage.

- Use only charging equipment that is in perfect condition.◀



DANGER

Cleaning of charging socket not in compliance with correct procedure.

Injury or damage to property, e.g. by electric shock or fire.

- Have cleaning undertaken only by appropriately trained persons.◀

Repair



NOTICE

Opening the charging-cable components causes irreparable damage and voids the warranty. Only the manufacturer can undertake repair work on the charging cable or replace components (plug, connector or Incable Modul).◀

What to do after an accident

DANGER

Touching high-voltage cables after an accident.

Danger to life due to electric shock hazard.

- After an accident, do not touch high-voltage components, for example the orange-coloured high-voltage cables, or parts in contact with exposed high-voltage cables. ◀

CAUTION

Fluid escaping from the high-voltage battery.

Risk of caustic burns

- Do not touch fluid escaping from the high-voltage battery. ◀

If you and your vehicle are involved in an accident, the following additional safety precau-

tions apply in relation to the high-voltage system:

- Secure the scene of the accident.
- Immediately notify rescue workers, police or fire service that they are dealing with a vehicle with high-voltage system.
- Switch off operational readiness.
- Do not inhale gases escaping from the vehicle; if necessary, remain a safe distance from the vehicle.

Charging cable

DANGER

Use of unapproved charging cable.

Injury or damage to property, e.g. by cable fire.

- Use only approved charging cables and charging stations for recharging.
- Service will provide information on approved cables on request. ◀



ATTENTION

Use of the charging cable not in compliance with correct procedure.

Damage to property, e.g. due to cable fire.

- Use the charging cable only for recharging the E-Scooter.
- Do not attempt to extend the charging cable by connecting other cables or adapters. ◀



DANGER

Use of damaged charging cable.

Injury or damage to property, e.g. by electric shock or fire.

- Do not use a damaged charging cable.
- Immediately remove a damaged charging cable (housing or cable) from service.◀



NOTICE

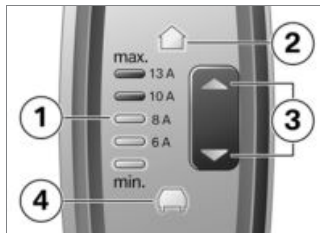
Always fit the protective cap to the on-vehicle connector to keep out moisture and dirt.◀

Use a standard charging cable, Mode3 charging cable or permanently installed cable of a charging station to charge the vehicle's high-voltage battery unit. The charging cable can be stowed in the rear stowage compartment.

Standard charging cable

You can use the standard charging cable to charge by connecting to a household socket with protective earth. Connected to a household socket as power sup-

ply, charging is with alternating current.



- 1: Charging current
- 2: Monitoring of the wall socket for incorrect wiring and connection to protective earth
- 3: Adjustment for charging current
- 4: Monitoring of the protective earth and communication with the E-Scooter

– with Mode3-charging cable^{OA}

Mode3-charging cable

The Mode3 charging cable has a special plug for safe charging at the sockets of charging stations accessible to the public. Charging at these charging stations is with alternating current. Charging is faster than at household sockets. Charging stations sometimes have permanently installed Mode3 charging cables.

Charging process

Before charging



DANGER

Non-compliance with the safety information for the electrical outlet.

Injury or damage to property, e.g. by electric shock or fire.

- Comply with the safety instructions for the electricity outlet you are using.◀

**ATTENTION****Charging current not matched to the grid supply.**

Risk of fire, e.g. due to overheating of a domestic power outlet or overloading of the electricity supply system.

- Before using a domestic power outlet other than that regularly used at home, match the charging current to the electricity supply system.◀

**ATTENTION****Setting of the charging current not in compliance with correct procedure.**

Material damage

- Never set the charging current of the standard charging cable to a setting higher than the maximum permissible continuous charging current of the wall socket.◀

**NOTICE**

You can interrupt charging at any time and resume later, for example if other power supply is needed for other consumers in the interim, or if you prefer to avoid a high power draw with several consumers all connected at the same time.◀

**NOTICE**

If interrupted, for example by a temporary power failure, charging resumes automatically as soon as power is restored.◀

**NOTICE**

Charging at extreme ambient temperatures.

Charging is slowed at extreme ambient temperatures in order to protect the high-voltage battery unit.◀

**NOTICE**

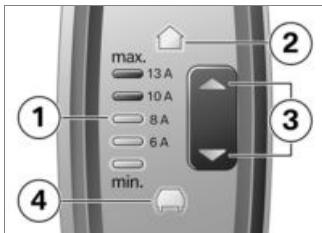
The standard charging cable does not work at temperatures lower than -32 °C. Before charging, place the charging cable where ambient temperature is between -32 °C and +40 °C.◀

Starting charging process

- Switch off operational readiness (🔌 40).
- » The charging process does not start until operational readiness has been switched off. Switching on operational readiness while charging is in progress immediately interrupts the charging process.
- Open the flap on the left.



- Remove charging-socket cover **1**.
- Remove the protective cap from the charging plug.



- As applicable, connect the standard charging cable to the household socket or the

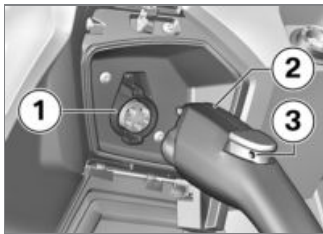
Mode3 charging cable to the charging station. If you are charging at a charging station, follow the instructions posted at the station.

- » The standard charging cable automatically runs all the necessary check steps. Symbol **2** shows green to indicate that the checks completed successfully. If symbol **2** shows red the check was not successful and charging cannot start or it is not permissible to connect the charging cable to the vehicle. The check consists of the following steps:
 - Check for incorrect wiring in the wall socket
 - Check for presence of a protective earth
 - Check of the preconditions for correct charging
 - » Status indicators / fault messages are listed in the section entitled "Technical data". Fault

messages can be reset as follows:

- Disconnect the standard charging cable from the power supply by unplugging it from the wall socket.
- Wait 3 seconds and re-insert the plug.
 - » Critical faults indicating that the standard charging cable is damaged cannot be reset. These faults include:
 - Relay welded (device permanently faulty)
 - Temperature sensor faulty
 - Fault-current test returned a negative result
- Check the maximum permissible continuous charging current rating of the wall socket.
- Before charging for the first time, set the maximum charging current either directly by means of buttons **3** on the standard charging cable, or at the charging station.

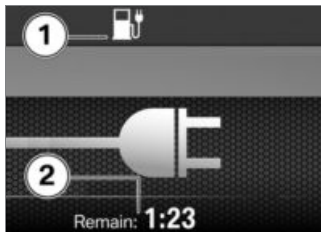
- » Your setting is automatically saved after two seconds. Corresponding charging-current indicator **1** flashes twice in confirmation.



- Connect charging cable **2** to charging socket **1** of the E-Scooter. To do so, line up the charging-cable connector with the socket and push it in until it engages. A security lock can be inserted into hole **3** to protect against tampering.
- » The standard charging cable automatically runs all the necessary check steps. Symbol **4**

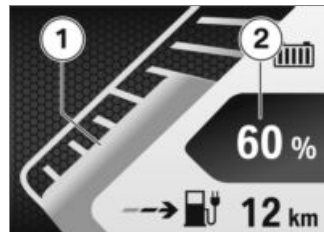
shows green to indicate that the checks completed successfully, and charging commences. If symbol **4** shows red the check did not complete successfully and charging cannot start. The check consists of the following steps:

- Check for presence of a protective earth
- Check of the preconditions for correct charging
- » Status indicators / fault messages are listed in the section entitled "Technical data".



Symbol **1** for charging in progress and the residual charging

time **2** appear on the multifunction display.



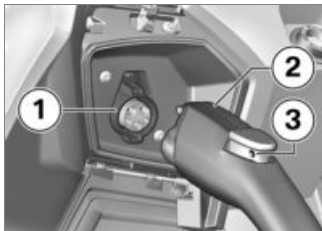
Bar display **1** for charge state appears. Charge state is also shown as a percentage **2**. After a certain time the TFT display switches automatically to energy-saving mode (Stand-by-Modus).

- Short-press the INFO or TRIP button again if you want to recheck charging status.

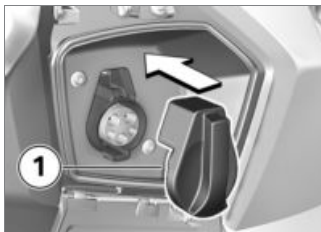
Ending charging process

It is very important to step through the procedure in the

correct sequence when ending the charging process. Unlatch the cable plug before disconnecting. If you are charging at a charging station, end the charging process at the charging station before disconnecting the charging cable.



- If applicable, remove the security lock from hole **3**.
- Press release button **3** and disconnect charging cable **2** from charging socket **1** on the E-Scooter.



- Place charging-socket cover **1** in position.
- As applicable, disconnect the standard charging cable from the household socket or the Mode3 charging cable from the charging station.
- Seat the protective cap on the charging plug.
- Stow the standard charging cable in the rear storage compartment. At a charging station, plug the permanently installed charging cable into the facility provided for the purpose.

Making efficient use of the ePOWER gauge

Energy recovery and energy consumption depend on your style of riding. Make good use of the power gauge to optimise your style of riding.



Energy recovery takes place when the vehicle decelerates (not in SAIL mode) and brakes and is indicated in the CHARGE part **1** of the drive gauge. Energy consumption on the move can be optimised by efficient acceleration and is indicated in

Each part consists of 10 segments, and there are four possible states for each of the two parts:

- Segment not available (segments have red background)
- Segment activated (segments have blue background)
- Segment restricted (segments have grey background)
- Segment not activated (blank)

Setting riding mode

- Switch on operational readiness (▮▮▮▮▮→ 40).

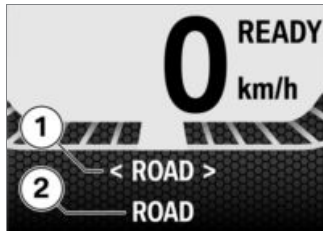


- Repeatedly short-press button **1** until the mode you want is selected.



NOTICE

See the section entitled "Engineering details" for more information on the various ride modes that can be selected. ◀



The first selectable riding mode **1** and currently active riding mode **2** appear.

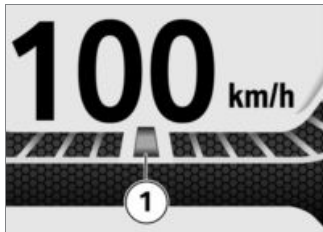
ROAD: Standard mode.

ECO PRO: For riding with acceleration throttled and range optimisation of up to 20 %.

DYNAMIC: For dynamic riding.

SAIL: For rolling along smoothly, without drag from the electrical machine. The vehicle is slowed only by the ride resistors and no energy flows back from

the electrical machine to the high-voltage battery unit.



You can use the SAIL mode only when marker **1** is in the exact centre of the drive gauge.

Range

Range depends on style of riding and the reading represents the distance that can be travelled before the high-voltage battery unit has to be recharged.



Indicator for range tendency **1** on basis of current style of riding:



increasing



constant



decreasing

- The range readout **2** indicates how far you can ride before having to recharge the high-voltage battery unit.

Riding

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Safety instructions

Rider's equipment

Do not ride without the correct clothing! BMW Motorrad recommends always wearing the following rider's equipment:

- Helmet
- Motorcycling jacket and trousers
- Gloves
- Boots

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

Loading



WARNING

Handling adversely affected by overloading and imbalanced loads.

Risk of falling

- Do not exceed the permissible gross weight and be sure to comply with the instructions on loading.◀
- Adjust spring preload and tyre pressures to suit total weight.
 - with luggage carrier^{OA}
- Note the maximum permissible payload of the luggage carrier.



Payload of luggage carrier

max 9 kg◀

- with topcase^{OA}
- Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the case (see also the section entitled "Accessories").◀

Speed

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

- Settings of the spring-strut and shock-absorber system
- Imbalanced load
- Loose clothing
- Insufficient tyre pressure
- Poor tyre tread
- Mounted luggage systems such as a topcase

Tampering



ATTENTION

Tampering with the E-Scooter.

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 E-Scooter.

Always before riding off:

- State of charge of the high-voltage battery unit
- Operation of the brake system
- Operation of the lights and signalling equipment
- Checking tyre tread depth (▮▮▮▮ 96).
- Security of topcase and luggage

Every 10th recharge:

- Adjusting spring preload for spring strut (▮▮▮▮ 56).
- Checking front brake pad thickness (▮▮▮▮ 91).

- Check rear brake pad thickness (▮▮▮▮ 92).
- Check the brake-fluid level, front brakes (▮▮▮▮ 93).
- Checking brake-fluid level, rear brakes (▮▮▮▮ 94).
- Check coolant level (▮▮▮▮ 95).

Starting

Pre-ride check

The instrument cluster runs a test of the display and the warning lights and telltale lights when operational readiness is switched on. This test is known as the Pre-Ride-Check. It consists of 2 phases. The Pre-Ride-Check is aborted as soon as the brake is applied or the starter button pressed.

Phase 1

The 'general' warning light and the symbol for the electrical machine electronics show red.

The 'reserve' light shows yellow.

Phase 2

The 'general' warning light and the symbol for the electrical machine electronics change from red to yellow.

As soon as the sequence of images reaches the end the original display (background and values such as TRIP, INFO etc.) reappears.

The power gauge shows the scale-limit values in both directions (CHARGE and ePOWER).

» If temporary warnings are active the corresponding indicators remain visible for approximately 5 seconds longer.

If a warning light or a telltale light did not show:



WARNING

Faulty warning lights.

No indication of malfunctions.

- Check all the warning and tell-tale lights.◀
- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

ABS self-diagnosis

BMW Motorrad ABS performs self-diagnosis to ensure its operability. Self-diagnosis is performed automatically when you switch on operational readiness.

Phase 1

- » System components are checked while the vehicle is at a standstill.



flashes.

Phase 2

- » System components are checked as the vehicle pulls away.

- ABS self-diagnosis completed. The ABS symbol no longer shows.
- Check all the warning and tell-tale lights.



ABS self-diagnosis not completed

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

If an indicator showing an ABS fault appears when ABS self-diagnosis completes:

- You can continue to ride. Bear in mind that the ABS function is not available or the functionality might be subject to certain restrictions.

- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

TCA self-diagnosis

BMW Motorrad TCA performs self-diagnosis to ensure its operability. Self-diagnosis is performed automatically when you switch on operational readiness.

Phase 1

- » System components are checked while the vehicle is at a standstill.



flashes.

Phase 2

- » System components are checked as the vehicle pulls away.
- TCA self-diagnosis completed. The RBS symbol no longer shows.

- Check all the warning and tell-tale lights.

 TCA self-diagnosis not completed

The TCA function is not available, because self-diagnosis did not complete. (The E-Scooter has to reach a defined minimum speed with the motor running for the wheel sensors to be checked: min 5 km/h)

If an indicator showing a TCA fault appears when TCA self-diagnosis completes:

- You can continue to ride. Bear in mind that the TCA function is not available or the functionality might be subject to certain restrictions.
- Have fault rectified as soon as possible by an authorised BMW Motorrad dealer.

E-Scooter ready for operation

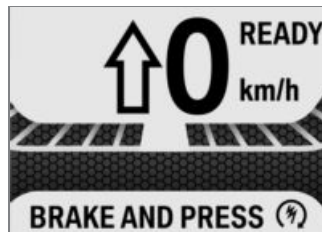
When the Pre-Ride-Check and the ABS self-diagnosis complete, the E-Scooter with all consumers is ready for operation.



NOTICE

To help reduce the strain on the 12 V battery, use electrical consumers only for as long as absolutely necessary and switch off operational readiness when it is not needed.◀

E-Scooter ready to ride



The E-Scooter is ready to ride when you press the starter button with the brake applied. The READY symbol and the arrow show on the display. All systems are operational. If you press the emergency on/off switch the E-Scooter is no longer ready to ride.



NOTICE

Riding at low temperatures. At low ambient temperatures (below 0 °C) the rates at which a

battery can output power and re-charge are reduced on account of the sharp rise in the cells' internal resistance.◀



NOTICE

High-voltage battery unit at elevated temperature when vehicle is stopped.

In exceptional cases it is possible for the high-voltage battery unit to warm up to a high temperature while the vehicle is at a standstill (e.g. in extreme ambient temperatures and direct sunlight). If the high-voltage battery unit overheats the E-Scooter is not operational.◀



NOTICE

High-voltage battery unit at elevated temperature during the ride. Very high temperatures (above 35 °C) shorten the service life of battery cells. If the high-voltage

battery unit overheats while you are riding, drive power is reduced step by step to allow the high-voltage battery unit to cool. The reading shown by the ePOWER indicator in the instrument cluster drops. If the temperature continues to rise stop the vehicle and allow the high-voltage battery unit to cool. If the reading of the power gauge drops to 0 the E-Scooter is no longer ready to ride and the vehicle will come to a stop.◀

Switching on driving readiness

- Switch on operational readiness (➡ 40).
- » Pre-Ride-Check is performed. (➡ 73)
- » ABS self-diagnosis is in progress. (➡ 74)
- » TCA self-diagnosis is in progress. (➡ 74)

- Operate the brake.



- Press starter button 1.



NOTICE

When the side stand is extended the E-Scooter is not ready to ride. Extending the side stand while the E-Scooter is ready to ride ends riding readiness.◀

- » The E-Scooter is drive-ready.
- » Try working through the troubleshooting chart if the E-Scooter is not operationally ready to ride. (➡ 116)

Riding with ePOWER

WARNING

Less perceptibility of electric propulsion.

Risk of accident

- When you use electric propulsion, you must always bear in mind that the absence of engine noise means that pedestrians and other road users might not be aware of your approach on your E-Scooter.
- Exercise special care and attention when riding.◀

Energy recovery by deceleration

The high-voltage battery unit is partly recharged by energy recovery. When the vehicle decelerates the electrical machine acts as a generator, converting kinetic energy to electricity.

Deceleration depends on the riding mode you select, and on the

position of the electronic throttle twistgrip. The less you twist the electronic throttle twistgrip, the sharper the vehicle decelerates. Energy is recovered and the high-voltage battery unit recharges. Deceleration with the electronic throttle twistgrip in the closed position is similar to light braking.

Energy can be recovered when the following conditions are satisfied:

- E-Scooter is on the move.
- Speed is higher than approximately 5 km/h.

Energy cannot be recovered in the following situations:

- The high-voltage battery unit is fully charged.
- The high-voltage battery unit is at a very high or very low temperature. In winter or summer there is a possibility of energy recovery being temporarily

unavailable just after you pull away.

WARNING

Without energy recovery there is no braking effect from the electric drive. The E-Scooter could coast further than usual.

Risk of accident

- Always be prepared to brake.◀

Riding situations for deceleration

Whenever you know that you are about to decelerate as you ride, you can make use of the deceleration phase for energy recovery. The following are typical riding situations suitable for use for this purpose:

- Deceleration on a downgrade
- Deceleration approaching a red traffic light

Avoid late or sharp braking. Instead, make use of the energy recovery function to slow the vehicle.

SAIL

The electric drive enables you to roll without energy consumption and energy recovery. This is the SAIL mode. Thinking ahead as you ride will help reduce energy consumption and extend the vehicle's range. No energy is recovered when the vehicle is rolling in SAIL mode.

It is a good idea to select SAIL mode when you are on a stretch of road that will not require you to brake. The following are typical riding situations suitable for use for this purpose.

Riding situations for SAIL mode

- Rolling on a straight downgrade free of obstructions

- Rolling to a slower speed or stop on a stretch of road free of obstructions

Running in

Brake pads

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



WARNING

New brake pads.

Longer stopping distance. Risk of accident.

- Apply the brakes in good time.◀

Tyres

New tyres have a smooth surface. This must be roughened by riding in a restrained manner at various heel angles until the tyres are run in. 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?

Load distribution shifts dynamically between the front and rear wheels when the vehicle brakes. 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 you apply to the brake lever. This makes the best possible use of the dynamic increase in load at the front wheel. When high braking pressure is applied sharply 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.

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 energy recovery function as well.◀

Wet and dirty brakes

Wetness and dirt on the brake discs and the brake pads diminish braking efficiency.

Delayed braking action or poor braking efficiency must be reckoned with in the following situations:

- Riding in the rain or through puddles of water
- After the vehicle has been washed
- Riding on salted or gritted roads
- After work has been carried on the brakes, due to traces of oil or grease
- Riding on dirt-covered surfaces or off-road



WARNING

Moisture and dirt.

Diminished braking effect.

- 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.◀

E-Scooter Parking

Side stand

- Switch off driving readiness.



ATTENTION

Poor ground underneath the stand.

Risk of damage to parts if vehicle topples.

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

- Extend the side stand and prop the E-Scooter on the stand.
- » Extending the side stand automatically applies the parking brake. It prevents the vehicle from rolling away.



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.◀
- Turn the handlebars all the way to left.

Centre stand

- Switch off driving readiness.



ATTENTION

Poor ground underneath the stand.

Risk of damage to parts if vehicle topples.

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



ATTENTION

Centre stand retracts due to severe 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 E-Scooter on to the stand.

Securing E-Scooter for transportation

- Make sure that all components that might come into contact with straps used to secure the motorcycle are adequately pro-

tected against scratching (e.g. with masking tape).

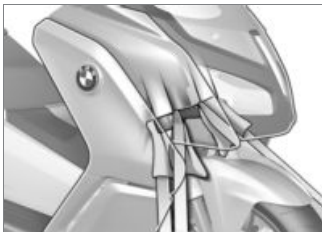


ATTENTION

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 E-Scooter on to the transportation flat and hold it in position: do not place it on the side stand or centre stand.



ATTENTION

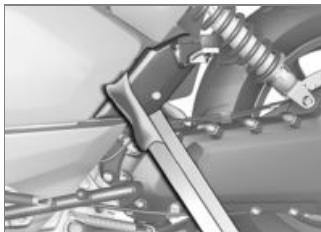
Trapping of components.

Component damage

- Do not trap components such as brake lines or cable legs. ◀
- At the front, loop a strap over the bottom fork bridge on each side and tighten.



- At the rear right, secure the ratchet strap to the retaining plate of the footrest.



- At the rear left, secure the ratchet strap to the retaining plate of the footrest.

- Tighten all the straps uniformly; the suspension of the E-Scooter should be compressed as tightly as possible tightly front and rear.

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Riding mode

Selection

Four riding modes enable the characteristics of the E-Scooter to adapt to the road and traffic conditions and the rider's style of riding:

- ROAD (standard mode)
- SAIL (rolling mode)
- DYNAMIC (sport mode)
- ECO PRO (ecologically optimised mode)

You can switch modes on the move.

Each of these modes produces perceptible differences in the way the E-Scooter behaves. The mode last selected is automatically reactivated after operational readiness has been switched off and then on again.

Changing riding modes affects the following parameters, which are shown accordingly in the CHARGE or ePOWER panels of the drive display:

- Energy recovery by vehicle deceleration (artificial drag torque)
- Energy consumption (acceleration)

ROAD

In ROAD mode, energy recovery by vehicle deceleration is medium and the vehicle has its full acceleration. The ROAD mode is the default mode.

SAIL

In SAIL mode the vehicle rolls along smoothly and without slowing. There is no energy recovery by deceleration of the vehicle. Energy recovery when the brakes are applied remains available.

DYNAMIC

In DYNAMIC mode, energy recovery by vehicle deceleration is maximised. This, in combination with maximised acceleration performance, imparts a dynamic feel to the ride.

ECO PRO

In ECO PRO mode, energy recovery by vehicle deceleration is maximised and acceleration is reduced. This can suffice to optimise range by approximately 10-20 %. The ECO PRO mode is designed for maximum range.

Brake system with BMW Motorrad 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 braking pressure to the extent that braking force exceeds the maximum transferable limit, the wheels start to lock and the vehicle loses its directional stability; a fall is imminent. Before this situation can occur, ABS intervenes and adapts braking pressure to the maximum transferable braking force, so the wheels continue to turn and directional stability is maintained irrespective of the condition of the road surface.

What are the effects of surface irregularities?

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

ing force accordingly to achieve optimum braking.

What is the design baseline for BMW Motorrad ABS?

Within the limits imposed by physics, BMW Motorrad ABS ensures directional stability on any surface. 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-dia-

gnosis 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

- Riding for a lengthy period with the front wheel lifted off the ground (wheelie)
- Rear wheel rotating with the vehicle held stationary by applying the front brake (burn-out)
- Rear wheel locked for a lengthy period, for example while descending off-road

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

What significance devolves on regular maintenance?



WARNING

Brake system not regularly serviced.

Risk of accident

- In order to ensure that the BMW Motorrad ABS is always maintained in optimum condition, it is essential for you to comply strictly with the specified inspection intervals.◀

Reserves for safety

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

Take care when cornering! When you apply the brakes on a corner,

the vehicle's weight and momentum take over and even BMW Motorrad ABS is unable to counteract their effects.

Torque Control Assist (TCA)

The TCA limits torque as a function of rear-wheel slip.

In order to help optimise the rider's control of drive torque, the electrical machine's electronic controller monitors rear wheel speed and reduces drive torque if a plausibility limit is overshoot.

The TCA assists the rider on pullaway in particular and prevents uncontrolled spin of the rear wheel on low-grip road surfaces.

In maximum energy recovery phases, the TCA also slows the vehicle, helping to prevent the rear wheel from locking on slippery surfaces. The function is

similar to that of ABS when the rear brake is applied.

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 work in the repair instructions on DVD for your vehicle, which is available from your authorised BMW Motorrad dealer.



DANGER

Maintenance and repair work not in compliance with correct procedure.

Danger to life due to electric shock hazard.

- Work not described here requires special tools and a thorough knowledge of the technology involved.
- Carry out only the tasks described in this section of the manual. Perform the tasks described only with the ignition switched off. If in doubt, consult your authorised BMW Motorrad dealer.◀



DANGER

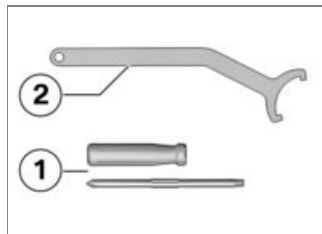
Work on the high-voltage system.

Danger to life

- The vehicle's high-voltage system is a self-contained system. Safety is ensured as long as no work is attempted on the technical components.
- Have all modifications and work on the high-voltage system carried out by an authorised

BMW Motorrad dealer with suitably trained personnel.◀

Standard toolkit



- 1 Reversible screwdriver blade
Phillips PH1 and Torx T25
– Removing body panels.
- 2 Hook wrench
– Adjusting spring preload for spring strut (► 56).

Brake system

Checking function of brakes

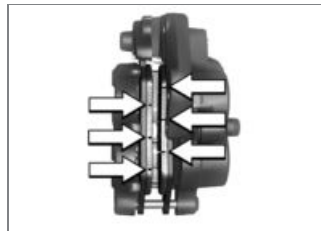
- Pull the right brake lever.
 - » There is a clearly perceptible pressure point.
 - Pull the left brake lever.
 - » There is a clearly perceptible pressure point.
 - To test the parking brake, extend the side stand and try to push the E-Scooter forward and back.
 - » E-Scooter cannot be moved.
- If a clear pressure point is not perceptible or if the Scooter can be pushed in either direction:
- Have the brakes checked by an authorised BMW Motorrad dealer.

Checking front brake pad thickness

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



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



 Brake-pad wear limit, front

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

If the wear indicating marks are no longer clearly visible:

 **WARNING**

Brake-pad thickness less than permissible minimum.

Diminished braking effect. Damage to the brakes.

- In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.◀
- Have the brake pads replaced by an authorised BMW Motorrad dealer.

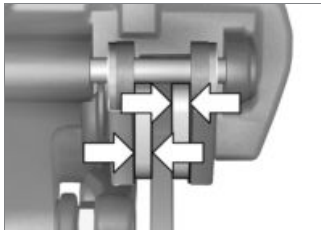
Check rear brake pad thickness

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



- Visually inspect the brake pads to ascertain their thickness.

Viewing direction: from the bottom right toward brake pads **1**.



Brake-pad wear limit,
rear

min 1.0 mm (Friction pad only,
without backing plate.)

If the brake pads are worn past the minimum permissible thickness:



ATTENTION

**Parked vehicle rolls away
due to lack of braking power**

if brake pads are worn past their minimum permissible thickness

Risk of damage to parts if vehicle topples despite extended side stand

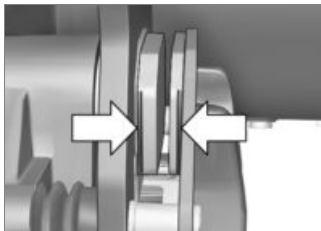
- Have the brake pads of the parking brake replaced before they wear to their minimum permissible thickness.◀
- Have the brake pads replaced by an authorised BMW Motorrad dealer.

Checking brake-pad thickness, parking brake

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



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



Brake-pad wear limit of parking brake

min 1.0 mm

If the wear indicating marks are no longer visible:



WARNING

Brake-pad thickness less than permissible minimum.

Diminished braking effect. Damage to the brakes.

- In order to ensure the dependability of the brake system, do not permit the brake pads to

wear past the minimum permissible thickness.◀

- Have the brake pads replaced by an authorised BMW Motorrad dealer.

Check the brake-fluid level, front brakes



WARNING

Not enough brake fluid in brake fluid reservoir.

Considerably reduced braking power due to air in the brake system.

- Check the brake-fluid level at regular intervals.◀
- Make sure the ground is level and firm and place the E-Scooter on its centre stand.



- Check the brake fluid level in sight glass **1** of the right brake-fluid reservoir.



NOTICE

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



Brake fluid level, front

Brake fluid, DOT4

It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal)

If the brake fluid level drops below the permitted level:

- Have the fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Checking brake-fluid level, rear brakes



WARNING

Not enough brake fluid in brake fluid reservoir.

Considerably reduced braking power due to air in the brake system.

- Check the brake-fluid level at regular intervals.◀
- Make sure the ground is level and firm and place the E-Scooter on its centre stand.



- Check the brake fluid level in sight glass **1** of the left brake-fluid reservoir.



NOTICE

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



Brake fluid level, rear

Brake fluid, DOT4

It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal)

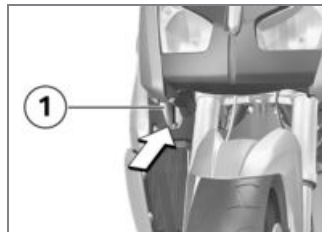
If the brake fluid level drops below the permitted level:

- Have the fault rectified as soon as possible by an authorised BMW Motorrad dealer.

Coolant

Check coolant level

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



- Check coolant level **1** by visual inspection. Viewing direction: On the left from in front, between front suspension and radiator cowl.



Specified coolant level in expansion pipe

Between MIN and MAX marks (cooling circuit cold)

- The side panel can be removed to facilitate visual inspection.
 - Removing side panel (➡ 101).
- If the coolant drops below the permitted level:
- Have the coolant topped up as soon as possible by an authorised BMW Motorrad dealer.

Rims and tyres

Checking rims

- Make sure the ground is level and firm and place the E-Scooter on its stand.
- Visually inspect the rims for defects.
- Have damaged rims checked and, if necessary, replaced by an authorised BMW Motorrad dealer.

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 E-Scooter on its stand.
- Measure the tyre tread depth in the main tread grooves with wear marks.



NOTICE

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.

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.

You can obtain detailed information on the Internet at

www.bmw-motorrad.com

or from your authorised BMW Motorrad dealer.

Lighting

Replacing bulbs for low-beam and high-beam headlight

- Switch off operational readiness.
- Removing side panel (►► 101).

- Remove the right side panel to replace the bulb for the low-beam headlight.
- Remove the left side panel to replace the bulb for the high-beam headlight.



- Disengage cover **1** to replace the bulb for the high-beam headlight; disengage cover **2** to replace the bulb for the low-beam headlight.



- Disconnect plug **1**.



- Disengage spring clip **1** from the latches and swing it up.
- Remove bulb **2**.

- Replace the defective bulb.



Bulbs for the low-beam headlight

H7 / 12 V / 55 W



Bulb for high-beam headlight

H7 / 12 V / 55 W

- Hold the bulb by the base only, in order to keep the glass free of foreign matter.



- Insert bulb **1**, making sure that tab **2** is correctly seated.

- Engage spring retainer **3** in the catches.



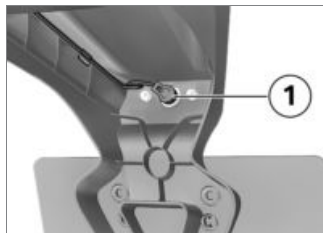
- Connect plug **1**.



- Install cover **1** or cover **2**, as applicable.
- Installing side panel (➡ 102).

Replacing number-plate light

- Switch off operational readiness.



- Pull number-plate light bulb **1** out of the light housing.



- Remove the bulb from the socket.
- Replace the defective bulb.

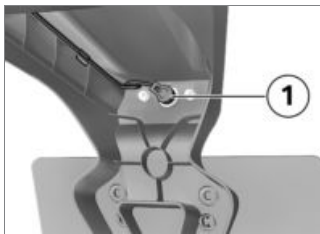
 Bulb for number-plate light

W5W / 12 V / 5 W

- Use a clean, dry cloth to hold the new bulb in order to keep the glass free of foreign matter.



- Insert the bulb into the socket.



- Insert number plate light **1** into the light housing.

Replacing daytime riding light

The daytime riding light can be replaced only as a complete unit.

- Consult an authorised BMW Motorrad dealer.

Replacing LED turn indicators

The front and rear LED turn indicators can be replaced only as a complete unit.

- Consult an authorised BMW Motorrad dealer.

Replacing LED rear light

The LED rear light can be replaced only as a complete unit.

- Consult an authorised BMW Motorrad dealer.

Fuses

Removing fuse

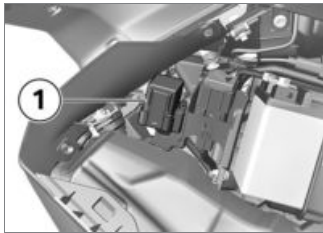


ATTENTION

Jumpering of blown fuses.

Risk of short-circuit and fire.

- Always replace a defective fuse with a new fuse of the same amperage.◀
- Switch off operational readiness.
- Remove the right side panel.



- Open fuse box **1** by pushing the latches apart, lift off the

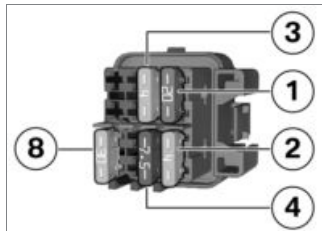
fuse cover and remove the blown fuse.



NOTICE

If fuses blow frequently have the electric circuits checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

Installing fuse



- Replace the defective fuse with a fuse of the correct amperage rating.



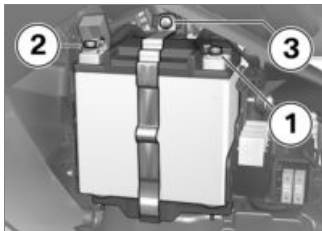
NOTICE

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.◀

- Close the fuse cover.
- » The latch engages with an audible click.
- Installing side panel (➡ 102).

Installing 12 V battery

- Slip the 12 V battery into the battery holder.



- Position the retainer on the 12 V battery.
- Install screw 3.



ATTENTION

Battery not connected in accordance with correct procedure.

Risk of short-circuit

- Always proceed in compliance with the specified installation sequence.◀
- Hold the positive battery cable in position and install screw 2.
- Hold the negative battery cable in position and install screw 1.

- Installing side panel (▶▶ 102).

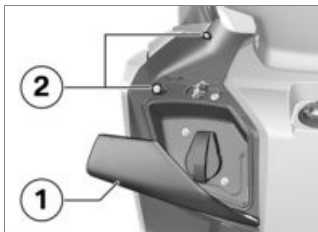
Body panels

Removing side panel

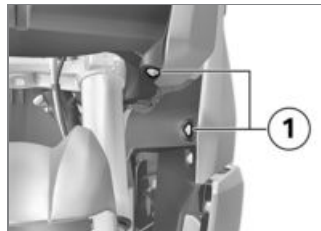


NOTICE

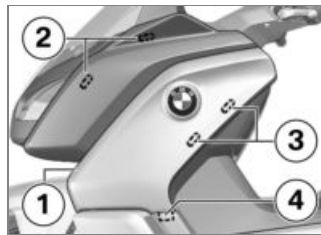
The procedure for the left side panel is described here, but the description applies by analogy to the right side panel as well.◀



- Open flap 1.
- Remove screws 2.



- Remove screws 1.



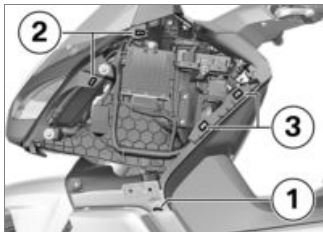
- Disengage side panel 1 from locators 2 and 3.
- Slightly raise the side panel at position 4 and remove.

Installing side panel

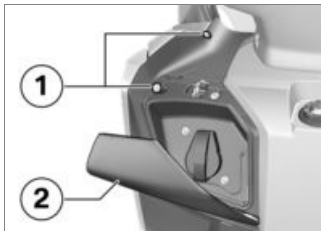


NOTICE

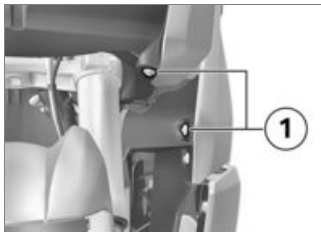
The procedure for the left side panel is described here, but the description applies by analogy to the right side panel as well. ◀



- Seat the side panel in mount **1**.
- Tilt the side panel up and push it into locators **2** and **3**.



- Install screws **1**.
- Close lid **2**.



- Install screws **1**.

Battery

General instructions

Correct upkeep, recharging and storage will prolong the life of the 12 V battery and are essential if warranty claims are to be considered.

Compliance with the points below is important in order to maximise the life of the 12 V battery:

- Keep the surface of the battery clean and dry.
- Always comply with the notes set out below when charging the 12 V battery:



ATTENTION

On-board electronics (e.g. clock) draining connected 12 V battery.

12 V battery is deep-discharged; this voids the guarantee.

- Connect a float charger to the 12 V battery if the vehicle is

to remain out of use for more than four weeks.◀



ATTENTION

Charging connected 12 V battery via the battery terminals.

Damage to the on-board electronics.

- Disconnect the 12 V battery at the battery terminals before charging.◀



ATTENTION

Recharging a completely discharged 12 V battery via the 12 V power socket.

Damage to the on-board electronics.

- If a 12 V battery has discharged to the extent that it is completely flat (battery voltage less than 9 V, status-indicator lights and multifunction display

remain off when the ignition is switched on) **it has to be disconnected from the on-board circuits** and re-charged with the charger connected directly to the battery posts.◀

Charging 12 V battery

The E-Scooter is neither drive-ready nor operationally ready. Check whether the 12 V battery is flat:

- Switch on operational readiness (▢ 40).
 - » Note the multifunction display:
 - If you switch on operational readiness and the multifunction display fails to light up, the battery is completely flat. The 12 V battery will have to be disconnected from the on-board circuits and charged with the battery charger connected directly to the battery terminals.
 - If the multifunction display switches on, the 12 V battery

is not completely flat. The 12 V battery can remain connected to the on-board circuits and can be recharged via the 12 V power socket.

- Switch off operational readiness (▢ 40).
- Removing side panel (▢ 101).
- Charge the 12 V battery using a suitable charger. In this process, comply with the operating instructions of the charger.



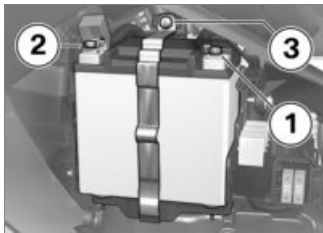
NOTICE

The 12 V battery has to be recharged at regular intervals in the course of a lengthy period of disuse. See the instructions for caring for your 12 V battery. Always fully recharge the 12 V battery before restoring it to use.◀

- Installing side panel (▢ 102).

Replacing 12 V battery

- with alarm system (DWA)^{OE}
- If applicable, switch off the anti-theft alarm.◀
- Switch off operational readiness.
- Removing side panel (➡ 101).

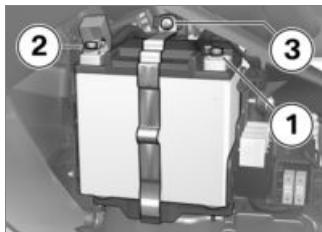


ATTENTION

Battery not disconnected in accordance with correct procedure.

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.◀
- Disconnect the negative battery cable and remove screw **1**.
- Disconnect the positive battery cable and remove screw **2**.
- Remove screw **3** and remove the retainer.
- Remove the 12 V battery from the battery holder.
- Slip the 12 V battery into the battery holder.



- Position the retainer on the 12 V battery.

- Install screw **3**.



ATTENTION

Battery not connected in accordance with correct procedure.

Risk of short-circuit

- Always proceed in compliance with the specified installation sequence.◀
- Hold the positive battery cable in position and install screw **2**.
- Hold the negative battery cable in position and install screw **1**.
- Installing side panel (➡ 102).

Accessories

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General instructions

BMW Motorrad recommends the use of parts and accessories for your vehicle that are approved by BMW for this purpose.

Genuine BMW parts and accessories and other products which BMW has approved can be obtained from your authorised BMW Motorrad dealer, together with expert advice on their installation and use.

These parts and products have been tested by BMW for safety, function and suitability. BMW accepts product liability for them. Conversely, BMW is unable to accept any liability whatsoever for parts and accessories which it has not approved.



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. ◀

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.

Power sockets

Notes on use of 12 V sockets:

Operating electrical accessories

Battery capacity is not monitored while 12 V sockets are in use. Running add-on devices for a lengthy period without the high-voltage battery unit supplying power can completely drain the 12 V battery. Under these circumstances there is no guarantee that the E-Scooter will start.

Cable routing

The cables from 12 V sockets to the auxiliary devices must be routed in such a way that they

- Do not impede the rider
- Do not restrict the steering angle or obstruct handling
- Cannot be trapped

Topcase

Opening topcase

– with topcase^{OA}



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



- Push the topcase lock forward.
» Topcase handle **2** pops up.



- Pull the release lever behind cover **3** to the rear.
» The lid of the topcase opens.
- Open the topcase lid.

Closing topcase

– with topcase^{OA}



- Make sure that topcase handle **2** is extended.
- Close the topcase lid and push it down until it latches shut. Check that nothing is trapped between the lid and the case.
- Close topcase handle **2**.
- If applicable, turn the key in the topcase lock to the CLOSE position and remove the key from the lock.

Removing the topcase

– with topcase^{OA}



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



- Push the topcase lock forward.

» Topcase handle **2** pops up.



- Turn the key to the RELEASE position in the topcase lock.
- Pull release lever **4** to the rear and at the same time lift the topcase slightly by means of the carry handle.
- Work the topcase to the rear to remove it from the topcase carrier.

Installing topcase

– with topcase^{OA}



- Make sure that topcase handle **2** is extended and that the key in the topcase lock is in the RELEASE position.
- Seat the topcase in the topcase carrier at the front.
- Pull release lever **4** back; at the same time seat the rear of the topcase in the topcase carrier.
- Close topcase handle **2**.
- If applicable, turn the key in the topcase lock to the CLOSE position and remove the key from the lock.

Maximum payload and maximum permissible speed

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

Contact your authorised BMW Motorrad dealer if you cannot find your combination of vehicle and topcase on the label.

The values for the combination described here are as follows:

 Maximum permissible speed for riding with topcase fitted to the vehicle
– with topcase ^{OA}
max 130 km/h<

 Payload of topcase
– with topcase ^{OA}

 Payload of topcase
max 5 kg<

Care

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Restore the E-Scooter to use.....	114

Care products

BMW Motorrad recommends that you use the cleaning and care products you can obtain from your authorised BMW Motorrad dealer.

The substances in BMW CareProducts have been tested in laboratories and in practice; they provide optimised care and protection for the materials used in your vehicle.



ATTENTION

Use of unsuitable cleaning and care products.

Damage to vehicle parts.

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

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 E-Scooter with cold water immediately after every trip.



WARNING

Wet brake discs and brake pads after vehicle wash, after riding through water and in rainy conditions.

Diminished braking effect.

- Apply the brakes in good time to allow the friction and heat to dry the brake discs and brake pads.◀



ATTENTION

Effect of road salt intensified by warm water.

Corrosion

- Use only cold water to wash off road salt.◀



ATTENTION

Damage due to high water pressure from high pressure cleaners or steam cleaners.

Corrosion or short-circuit, damage to seals, to the hydraulic brake system, to the electrics and the seat.

- Do not use a steam jet or high-pressure cleaning equipment.◀

Cleaning easily damaged components

Plastics



ATTENTION

Use of unsuitable cleaning agents.

Damage to plastic surfaces.

- Do not use cleaning agents that contain alcohol, solvents or abrasives.
- Do not use insect-remover pads or cleaning pads with hard, scouring surfaces.◀

Body panels

Clean the trim panels with water and BMW plastic care emulsion.

Windscreens and lens made of plastic

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



NOTICE

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

Chrome

Use plenty of water and BMW shampoo to clean chrome, particularly if it has been exposed to road salt. Use chrome polish for additional treatment.

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.◀

Paint care

Washing the vehicle regularly will help counteract the long-term effects of substances that damage the paint, especially if your vehicle is ridden in areas with high air pollution or natural sources of dirt, for example tree resin or pollen.

Remove particularly aggressive substances immediately, however, as otherwise the paint can be affected or become discoloured. Substances of this nature include oil, grease, brake fluid and bird droppings. We recommend BMW vehicle polish or BMW paint cleaner for this purpose.

Marks on the paintwork are particularly easy to see after the vehicle has been washed. Remove stains of this kind immediately, using cleaning-grade benzene or petroleum spirit on a clean cloth or ball of cotton wool.

BMW Motorrad recommends using BMW tar remover for removing specks of tar. Remember to wax the parts treated in this way.

Lay up the E-Scooter



NOTICE

Do not leave the vehicle out of use for a lengthy period with the high-voltage battery unit in a low state of charge. Before leaving the vehicle out of use for a lengthy period, check the charge status indicator and make sure that the high-voltage battery unit is fully charged.◀



NOTICE

Check the state of charge at regular intervals. Otherwise, excessive discharge can damage the high-voltage battery unit.◀



NOTICE

Do not leave the vehicle out of use for longer than 14 days with electric range down to less than 10 km. If it is to be out of use for up to three months, if possible leave the vehicle connected to a suitable electricity supply or with the high-voltage battery unit almost fully charged.◀

- Clean the E-Scooter.
- Start the charging process (▮▮▮▮ 64).
- Removing 12 V battery (▮▮▮▮ 104).
- Spray the brake-lever, centre-stand and side-stand pivot mounts with a suitable lubricant.
- Coat bright metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).

- Stand the E-Scooter in a dry room in such a way that there is no load on either wheel.

Protective wax coating

BMW Motorrad recommends applying only BMW car wax or products containing carnauba wax or synthetic wax.

It is time to rewax the paintwork when water "puddles" on the surface, instead of forming beads.

Restore the E-Scooter to use

- Remove the protective wax coating.
- Clean the E-Scooter.
- Installing 12 V battery (▮▮▮▮ 104).
- Comply with checklist (▮▮▮▮ 73).

Technical data

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Troubleshooting chart

Riding readiness cannot be switched on:

Possible cause	Rectification
Side stand extended	Retract the side stand.
Starting without brake application	Operate a brake lever when starting.
12 V battery flat	Charge the 12 V battery (▮▮▮▮▶ 103).

Threaded fasteners

Front wheel	FR	Valid
Clamping screws (quick-release axle) in telescopic forks		
M6 x 30	Tighten screws six times in alternate sequence	
	8 Nm	
Brake caliper to fork leg		
M8 x 32 - 10.9	28 Nm	
Rear wheel	FR	Valid
Rear wheel to output shaft		
M10 x 1.25 x 40	Tighten in diagonally opposite sequence	
	60 Nm	

Status indicators for the charging cable (house symbol / current reading / car symbol) and what they mean

shows green / shows green / off	E-Scooter not connected
shows green / shows green / shows green	E-Scooter connected and ready for charging
off / off / shows red after 3 seconds	E-Scooter with degassing lead-acid batteries
off / off / shows red	Short-circuit between communication line and protective earth
shows red / off / off	No protective earth or fault in the building's wiring
off / off / flashes red	A fault current has occurred
all LEDs quick-flashing red	Charging cable damaged and not ready for charging
shows green / flashes green / shows green	E-Scooter connected, temperature in excess of 55 °C, E-Scooter charging proceeding at reduced charging current of 6 A
shows red / all LEDs show red / off	Temperature in excess of 65 °C, E-Scooter is no longer being charged
off / flashes red / off	Temperature sensor, battery fault, fault-current test negative, temperature is below -32 °C

Drive

Location of engine number	Electric motor top, centre
Engine type	JA0P07A
Engine design	Electrical machine, permanently excited synchronous machine with surface magnets, internal rotor
Power rating	11 kW, Steady-state power 35 kW, short-term
Torque	72 Nm
Maximum engine speed	max 9200 min ⁻¹

Transmission

Gearbox type	Planetary gears
--------------	-----------------

Rear-wheel drive

Type of final drive	Propulsion-unit/swinging-arm assembly toothed-belt drive and planetary gears
---------------------	--

Running gear

Type of front suspension	Upside-down telescopic fork
Spring travel, front	120 mm, At wheel
Type of rear suspension	Single-arm cast light-alloy swinging arm with cam-adjustable rear wheel axle
Type of rear suspension	Direct-pivot spring strut with adjustable spring preload
Spring travel, rear	115 mm, At wheel

Brakes

Type of front brake	Hydraulically actuated twin-disc brake with 2-piston floating calipers
Brake-pad material, front	Sintered metal
Brake disc thickness, front	min 4.5 mm, Wear limit
Type of rear brake	Hydraulically actuated disc brake with 2-piston floating caliper, Brake for riding Bowden-cable-actuated disc brake with 1-piston floating caliper, Parking brake
Brake-pad material, rear	Organic material
Brake disc thickness, rear	min 4.5 mm, Wear limit

Wheels and tyres

Recommended tyre sets	Your authorised BMW Motorrad dealer will be happy to supply an up-to-date list of the approved wheel/tyre combinations, or you can check the information posted on the bmw-motorrad.com website.
Speed category, front/rear tyres	M, required at least: 130 km/h
Tyre tread depth, front and rear	min 1.6 mm, Wear limit, for Germany only Country-specific legal requirements, Wear limit, outside Germany
Front wheel	
Front wheel type	Aluminium cast wheel
Front wheel rim size	3.50" x 15"
Tyre designation, front	120/70 R15
Load index, front tyre	min. 56
Permissible front-wheel imbalance	max 5 g

Rear wheel

Rear-wheel type	Aluminium cast wheel
Rear wheel rim size	4.50" x 15"
Tyre designation, rear	160/60 R 15
Load index, rear tyre	min. 67
Permissible rear-wheel imbalance	max 5 g

Tyre pressure

Tyre pressure, front	2.5 bar, Tyre cold
Tyre pressure, rear	2.5 bar, One-up, tyre cold 2.9 bar, two-up and/or with luggage, tyre cold

Electrics

Total capacity of the high-voltage battery unit	8 kWh, 3 modules, 12 cells per module with: 60 Ah
Battery	
Battery type	Absorbent Glass Mat (AGM)
Battery rated voltage	12 V
Battery rated capacity	8 Ah
Lighting	
Bulbs for the low-beam headlight	H7 / 12 V / 55 W
Bulb for high-beam headlight	H7 / 12 V / 55 W
Bulb for parking light	LED
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	LED
Bulb for tail light/brake light	LED
Bulb for number-plate light	W5W / 12 V / 5 W

Fuses

Retainer 1	20 A, Relay, electric fan
Retainer 2	4 A, Energy storage management, ILM (integrated charging module)
Retainer 3	4 A, Multifunction switch, left
Retainer 4	7.5 A, Anti-theft alarm, ignition lock, instrument cluster, diagnostic socket, control main relay
Retainer 5	Not used
Retainer 6	Not used
Retainer 7	Not used
Retainer 8	30 A, Basic module
Electrical rating of on-board socket	max 5 A

Frame

Position of the Vehicle Identification Number	Frame, front right, on steering-head tube
Type plate location	Inside, front panel carrier, right

Dimensions

Length of motorcycle	2190 mm, measured over spray guard
Height of motorcycle	1301 mm, across mirrors, at unladen weight
Width of motorcycle	750 mm, across handlebars 947 mm, Across mirrors
Front-seat height	780 mm, without rider at DIN unladen weight
Rider's inside-leg arc, heel to heel	1795 mm, Without rider at unladen weight

Weights

Unladen weight	265 kg, DIN unladen weight, without optional accessories
Permissible gross weight	445 kg
Maximum payload	180 kg
Permissible wheel load, front	224 kg
Permissible wheel load, rear	307 kg
Wheel load, front, at unladen weight	132 kg
Wheel load, rear, at unladen weight	133 kg

Riding specifications

Starting capability on uphill gradients (at permissible gross weight)	20 %
Top speed	approx. 120 km/h, electronically regulated
Maximum speed for reverser	approx. 3 km/h
Range	approx. 100 km, in everyday operation (Road riding mode)

Service

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Recycling

How to dispose of an end-of-life (EOL) E-Scooter?

Consult your nearest authorised BMW Motorrad dealer who is also a "certified disposal specialist for EOL motorcycles".

BMW Motorrad Service

BMW Motorrad has an extensive network of dealerships in place to look after you and your E-Scooter throughout Europe. Authorised BMW Motorrad dealerships have the technical information and the technical know-how to carry out reliably all maintenance and repair work on your BMW E-Scooter.

Visit our website www.bmw-motorrad.com to find out where the nearest authorised BMW Motorrad dealership is located.



WARNING

Maintenance and repair work not in compliance with correct procedure.

Risk of accident due to subsequent damage.

- BMW Motorrad recommends you to have all the associated work on your E-Scooter carried out by a specialist workshop, preferably an authorised BMW Motorrad dealer. ◀

Have all 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 repairs is essential.

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

BMW Motorrad Mobility services

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

Maintenance work

BMW pre-delivery check

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

BMW Running-in Check



First running-in check

500...1200 km

BMW Service

The BMW Service is carried out once a year; the extent of servicing can vary, depending on the age of the vehicle and the distance it has covered. Your authorised BMW Motorrad dealer confirms that the service work has been carried out and enters the date when the next service will be due.

Riders who cover long distances in a year might have to bring in their vehicles for service before the next scheduled date. It is to allow for these cases that a maximum odometer reading is entered as well in the confirmation of service. Servicing has to be brought forward if this odo-

meter reading is reached before the next scheduled date for the service.

To find out more about service go to:

bmw-motorrad.com/service

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

[illegible]

Maintenance schedule

- 1** BMW Running-in check
 - 2** Standard BMW service
( 134)
 - 3** Check the threaded fasteners of swinging-arm cover
 - 4** Replace the belt
 - 5** Change brake fluid, entire system
- ^a for the first time after one year, then every two years

Standard BMW service

A standard BMW service consists of the following maintenance work:

- Check the battery charge state.
- Perform vehicle test with the BMW Motorrad diagnosis system.
- Visually inspect the brake pipes, brake hoses and connections.
- Check the front and rear brake pads and brake discs for wear.
- Check the front and rear brake-fluid levels.
- Lubricate the bearer of Bowden cable for parking brake and check the basic setting and braking effect of parking brake.
- Check the steering-head bearing.
- Check the coolant composition.
- Check the tyre pressures and tread depth.
- Check the lights and signalling equipment.
- Function check, start enabling.
- Perform final inspection and check of roadworthiness.
- Set the service-due date and service countdown distance.
- Confirm BMW service in the on-board documentation.

Confirmation of maintenance work

BMW Pre-delivery Check

Completed

on _____

Stamp, signature

BMW Running-in Check

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

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or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

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Odometer reading _____

Next service
at the latest

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or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

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Odometer reading _____

Next service
at the latest

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Odometer reading _____

Stamp, signature**BMW Service**

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Next service
at the latest

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or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

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Odometer reading _____

Next service
at the latest

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or, if logged beforehand,

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Stamp, signature**BMW Service**

Completed

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Odometer reading _____

Next service
at the latest

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or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

The table is intended as a record of maintenance and repair work, the installation of optional accessories and, if appropriate, special campaign (recall) work.

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[illegible]

Item	Odometer reading	Date

Certificate

BMW C evolution Battery Certificate for the high-voltage battery services and conditions 144

BMW C evolution Battery Certificate for the high-voltage battery services and conditions

In relation to the high-voltage battery, supplementary to claims in respect of material defects as set out in the terms and conditions of sale and supply for new BMW C evolution vehicles, the selling authorised BMW Motorrad dealer issues to the purchaser of a BMW C evolution new vehicle the following commitments:

1. The BMW C evolution Battery Certificate for the high-voltage battery of the BMW C evolution new vehicle applies for the first 50000 km of the BMW C evolution new vehicle and ends, regardless of the distance covered, no later than five years after initial delivery

or initial registration of the BMW C evolution new vehicle, whichever comes first ("term of certificate").

2. Within the term of certificate the purchaser can stipulate rectification of a defect in the high-voltage battery free of charge.

3. If the BMW C evolution vehicle has to be recovered within the term of certificate on account of a defect in the high-voltage battery, the purchaser will receive reimbursement of the costs incurred for recovery and transport to the nearest BMW C evolution service workshop.

4. For technical reasons, the capacity of a lithium-ion high-voltage battery decreases in the course of its service life (natural wear). If charge-capacity measurement by an authorised

BMW Motorrad dealer within the term of certificate establishes that net battery capacity is less than 70 % of the original value on delivery of the BMW C evolution new vehicle, this percentage capacity below 70 % constitutes an excessive loss of capacity. This excessive loss of capacity will be eliminated free of charge to the purchaser.

5. The purchaser can request the commitments set out in this BMW C evolution Battery Certificate from the selling authorised BMW Motorrad dealer or any authorised BMW Motorrad dealer in the C evolution sales markets*.

6. The commitments from the BMW C evolution Battery Certificate require the inspections to have been undertaken with the regularity specified by the manufacturer and checks and, if applicable, improvements within the

framework of these inspections to have been carried out on the high-voltage battery. The commitments do not apply if a defect of the high-voltage battery or an excessive loss of capacity is due to accident damage or has occurred because

- the BMW C evolution vehicle was operated under conditions for which it was not homologated (e.g. in a country with conditions of homologation different from that of the place of initial delivery), or
- the BMW C evolution was handled incorrectly or overstrained, for example in motorsport competition, or
- parts were installed in the BMW C evolution vehicle the use of which the manufacturer had not approved, or the BMW C evolution vehicle of parts thereof (e.g. software) were modified in a way

not authorised by the manufacturer, or

- the instructions for handling, maintenance and care of the BMW C evolution vehicle (particularly as set out in the Rider's Manual) were not followed, or
- the high-voltage battery was opened or removed from the BMW C evolution vehicle.

7. This BMW C evolution Battery Certificate is a supplementary part of the terms and conditions of sale and supply for new BMW C evolution vehicles. Commitments and claims in accordance with the terms and conditions of sale and supply for new BMW C evolution vehicles are unaffected by the commitments set out in this BMW C evolution Battery Certificate.

8. A change of owner of the BMW C evolution vehicle does not affect the commitments set out in the BMW C evolution Battery Certificate.

* Sales markets are: Andorra, Austria, Belgium, Germany, France, Great Britain, Ireland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Portugal, San Marino, Spain, Switzerland.

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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.

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

Errors and omissions excepted.

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Important data for the quick vehicle check:

Charging time

Charging time of the high-voltage battery unit with standard charging cable	approx. 2.45 h, 80 % charge at charging current: 12 A approx. 4 h, 100 % charge at charging current: 12 A
Charging time of the high-voltage battery unit with Mode3 charging cable	approx. 2.15 h, 80 % charge at charging current: 16 A approx. 3 h, 100 % charge at charging current: 16 A

Tyre pressure

Tyre pressure, front	2.5 bar, Tyre cold
Tyre pressure, rear	2.5 bar, One-up, tyre cold 2.9 bar, two-up and/or with luggage, tyre cold

For further information on all aspects of your motorcycle, visit
bmw-motorrad.com

