



BMW Motorrad



Rider's Manual (US Model)

**C 650 GT**

## Motorcycle/Retailer Data

### Motorcycle Data

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Model

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Vehicle identification number

---

Color number

---

Initial registration

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License plate

### Retailer Data

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Contact in Service

---

Ms./Mr.

---

Phone number

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Retailer's address/phone number (company stamp)

## **Welcome to BMW**

Congratulations on choosing a Maxi-Scooter from BMW Motorrad and welcome to the community of BMW motorcycle owners and riders. Please read this Rider's Manual carefully before starting to use your new Maxi-Scooter. It contains important information on operation that enables you to make the best possible use of all your Scooter's technical features. In addition, it contains information on maintenance and care to help you maintain your motorcycle's reliability and safety, as well as its value.

If you have any questions concerning the Maxi-Scooter communication system, your authorized BMW Motorrad retailer is always happy to provide you with advice and assistance.

We hope that you enjoy your BMW Maxi-Scooter and wish you a safe and pleasant journey

BMW Motorrad.

01 40 1 615 157



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## **General instructions**


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## Overview


You will find an overview of your Maxi-Scooter in Chapter 2 of the Owner's Handbook. All maintenance and repair work carried out on your vehicle will be documented in Chapter 12. Documentation confirming performance of scheduled maintenance is a precondition for generous handling of out-of-warranty claims and goodwill warranty treatment.


When the time comes to sell your Maxi-Scooter, please remember to hand over this Rider's Manual; it is an important part of your motorcycle.


## Abbreviations and symbols

 **CAUTION** Hazard with low risk. Failure to avoid this hazard can result in minor or moderate injury.

 **WARNING** Hazard with moderate risk. Failure to avoid this hazard can result in death or serious injury.

 **DANGER** Hazard with high risk. Failure to avoid this hazard results in death or serious injury.


 **ATTENTION** Special instructions and precautionary measures. Non-compliance can cause damage to the vehicle or accessories and warranty claims may be denied as a result.

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

◀ 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 accessory or equipment-dependent information.

 Tightening torque.

 Technical data.

NV National-market version.

OE Optional extra.  
BMW Motorrad optional extras are already completely installed during motorcycle production.



OA Optional accessory. BMW Motorrad optional accessories can be purchased and installed at your authorized BMW Motorrad retailer.

EWS Electronic immobilizer.

DWA Anti-theft alarm.

ABS Anti-Lock Brake System.

ASC Automatic Stability Control.

CVT Continuously variable transmission.  
Transmission with a continuously variable gear ratio

RDC Tire Pressure Control (RDC).

SVA Side View Assist. Assistance system which indicates the presence of a vehicle alongside to the driver.

## Equipment

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

If your Scooter was supplied with equipment not described in this rider's manual, you will find these features described in a separate manual.

## Technical Data

All dimensions, weights and performance data contained this Rider's Manual refer to the German DIN standards and comply with their tolerance specifications. The technical data and specifications in this Rider's Manual serve as points of reference. The vehicle-specific data may vary, for instance due to the selected optional equipment, national-market version or country-specific measuring procedures. Detailed values can be obtained from the registration documents and the signs on the vehicle or from your authorized BMW Motorrad retailer or other qualified service partner or specialist workshop. The information on the vehicle documents always takes precedence over the information in this Rider's Manual.

## Notice concerning current status

The high safety and quality standards of BMW Scooters are maintained by consistent, ongoing development efforts embracing their design, equipment, and accessories. For this reason, some aspects of your vehicle may vary from the descriptions in this rider's manual. In addition, BMW Motorrad cannot guarantee the total absence of errors. We hope you will appreciate that no claims can be recognized based on the data, illustrations or descriptions in this manual.

## Additional sources of information

### BMW Motorrad retailers

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

## Internet

The Rider's Manual for your vehicle, the operating and installation instructions for optional accessories and general BMW Motorrad information related to the technology or other features are available at **[www.bmw-motorrad.com/service](http://www.bmw-motorrad.com/service)**.

## Certificates and operating permits

The certificates for the vehicle and the official operating permits for possible accessories are available at **[www.bmw-motorrad.com/certification](http://www.bmw-motorrad.com/certification)**.

## Data memory

### General

Electronic control units are installed in the vehicle. Electronic control units process data received from vehicle sensors,

self-generated data or data exchanged between control units, for example. Some control units are required for safe vehicle operation or provide driving assistance, such as driver assistance systems. Control units also make comfort and infotainment functions possible.

Information about the stored or exchanged data can be obtained from the vehicle manufacturer, such as in the form of a separate booklet.

## Personal references

Every vehicle is marked with a unique vehicle identification number. Depending on the country, the vehicle owner can be identified using the vehicle identification number and registration number and the help of the relevant authorities. There are also other ways to trace data obtained from the vehicle back to

the driver or vehicle owner, such as via the used ConnectedDrive Account.

## Data privacy laws

In accordance with applicable data privacy laws, vehicle users have certain rights over the vehicle manufacturer or company that collects or processes personal data.

Vehicle users have the right to obtain comprehensive information without charge from the locations that store the vehicle user's personal data.

These locations may be:

- The vehicle manufacturer
- Qualified service partners
- Specialist workshops
- Service providers

Vehicle users may request information about the type of personal data that is stored, the purpose for which the data will be

used and the source of the data. This information can only be obtained by a registered owner or a person with written proof authorizing use of the vehicle.

The right to information also includes information related to data transmitted to other companies or locations.

The vehicle manufacturer's website contains the appropriate privacy policy notices. The privacy policy notices contain information on the right to delete or correct data. The vehicle manufacturer also provides the manufacturer contact information and the contact information of the data security officer.

The vehicle owner can have a BMW Motorrad retailer or other qualified service partner or specialist workshop read out the data stored in the vehicle for a fee if required.

The vehicle data is read out via the power socket required by law for on-board diagnosis (OBD) in the vehicle.

## Legal requirements for the disclosure of data

The vehicle manufacture is required by the law applicable in this context to provide authorities with the data stored by the manufacturer. Providing this data within the scope required is on a case-by-case basis, for instance to clarify a criminal offense.

Government agencies are authorized by the law applicable in this context to read out the data from the vehicle themselves in individual cases.

## Operating data in the vehicle

Control units process data so that the vehicle can run.

Examples of these include:

- Status messages from the vehicle and its individual components, such as wheel RPM, wheel speed and deceleration
- Environmental conditions, such as temperature
- Operating conditions of system components, such as fill levels and tire pressure
- Malfunctions and faults in key system components, such as lights and brakes
- Vehicle responses in specific driving situations, such as activation of dynamic driving systems
- Information about events causing damage to the vehicle

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

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

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

The data is necessary for providing control unit functions. In addition, it is used by the vehicle manufacturer to detect and eliminate malfunctions as well as to optimize vehicle functions. The majority of this data is temporary and is processed only within the vehicle itself. Only a small amount of event-driven data is stored in the event data recorder and fault memory.

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

The information can be read out by a BMW Motorrad retailer or other qualified service partner or specialist workshop. The power socket required by law for on-board diagnosis (OBD) in the vehicle is used to read out the data. The data is collected, processed and used by the respective service network locations. The data documents the vehicle's technical states and helps with fault finding, compliance with warranty obligations and quality improvements.

The manufacturer also has product monitoring obligations arising from product liability law. The

vehicle manufacturer requires technical data from the vehicle in order to fulfill these obligations. The data from the vehicle can also be used to verify customer warranty and guarantee claims. The fault memory and event data recorder in the vehicle can be reset by a BMW Motorrad retailer or other qualified service partner or specialist workshop as part of repair work or servicing.

## **Data input and data transfer in the vehicle**

### **General**

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

Examples of these include:

- Windshield position settings
- Chassis and suspension adjustment settings

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

Depending on the individual equipment, this includes:

- Multimedia data, such as music for playback
- Address book data for use in conjunction with a communication system or integrated navigation system
- Entered navigation destinations
- Data about the use of internet services. This data can be stored locally in the vehicle or is on a device connected to the vehicle, such as a smartphone, USB stick or MP3 player. If this data is saved in the vehicle, it can be deleted at any time.

This data is transmitted to third parties only upon personal request as part of the use of online

services. The data transmitted depends on the selected settings when using the services.

### **Integrating mobile end devices**

Depending on the equipment, mobile end devices connected to the vehicle, such as smartphones, are controlled using the vehicle's controls.

This enables audio and visual output from mobile end devices through the multimedia system. At the same time, certain information is transmitted to the mobile end device. This includes for instance position data and other general vehicle data, depending on the type of integration, and makes it possible to optimize the use of selected apps, such as those for navigation or music playback.

The way the data is processed further is determined by the provider of the particular app

used. The range of possible settings depends on the particular app and the operating system of the mobile end device.

## Services

### General

If the vehicle has a mobile phone connection, this connection makes it possible to exchange data between the vehicle and other systems. The mobile phone connection is made possible through the vehicle's transmitter and receiver or via personally integrated mobile end devices such as smartphones. Online functions, as they are called, are used over this mobile phone connection. These include online services and apps provided by the vehicle manufacturer or other providers.

### Vehicle manufacturer services

In the case of the vehicle manufacturer's online services, the particular functions are described at the appropriate location, such as in the Rider's Manual or on manufacturer's website. The relevant legal information on data privacy is also provided there. Personal data may be used in order to provide online services. The data is exchanged over a secure connection, i.e. with the vehicle manufacturer's IT systems which are intended for this purpose.

Any collection, processing and use of personal data that goes beyond the provision of services take place only as permitted by law, on the basis of a contractual agreement or as a result of consent. It is also possible to have the entire data connection activated or deactivated. This is not

the case for legally prescribed functions.

### Services of other providers

When using the online services of other providers, these services are subject to the responsibility and the data protection and usage conditions of the respective provider. The vehicle manufacturer has no control over the content exchanged via these services. Information about the type, scope and purpose of collecting and using personal data as part of third-party services can be obtained from the particular service provider.

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## General view, left side

- 1 Brake fluid expansion tank for the rear wheel brake (➡ 94)
- 2 Fuel filler opening (under the tank cover) (➡ 75)
- 3 Adjustable backrest (➡ 64)
- 4 Spring preload setting (➡ 65)
- 5 Oil filler opening and oil dipstick (under the running board) (➡ 88)

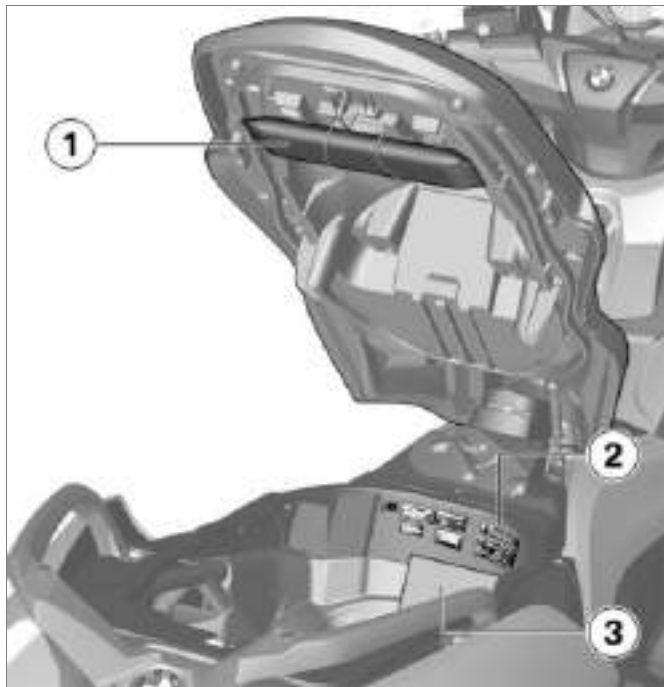


## General view, right side

- 1 Brake-fluid reservoir for front brake (■ 93)
- 2 Type plate (on the right of the head tube)
- 3 Under the fairing side panel:  
Battery (■ 110)  
Fuses (■ 112)  
Diagnostic connector (■ 114)
- 4 Vehicle identification number (on the right-hand frame tube)
- 5 Coolant level indicator (through cutout in fairing side panel) (■ 95)
- 6 Coolant expansion tank (under the step plate support) (■ 95)
- 7 Operating passenger seat heater (■ 57)

## Underneath seat

- 1 Onboard tool kit (➡ 86)
- 2 Load capacity table  
Tire inflation pressure table  
Note on calibrating the  
ASC
- 3 Rider's Manual (US Model)





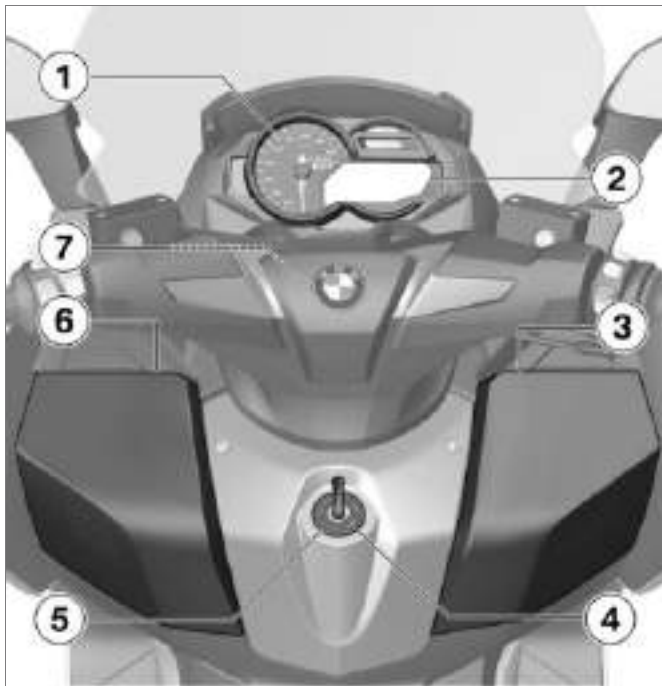
## Multifunction switch, left

- 1 High-beam headlight and headlight flasher (➔ 46)
- 2 Hazard warning lights system (➔ 46)
- 3 Windshield (➔ 63)
- 4 Turn indicators (➔ 47)
- 5 Horn
- 6 TRIP/INFO rocker switch  
Selecting displays (➔ 47)  
Resetting trip odometer (➔ 48)  
Resetting average data (➔ 48)  
Calling up the SETUP menu (➔ 49)

## Multifunction switch, right

- 1 Heated handlebar grips (➔ 56)
- 2 Seat heating (➔ 57)
- 3 Emergency on/off switch (kill switch) (➔ 45)
- 4 Starter button (➔ 70)





## Dashboard

- 1 Speedometer
- 2 Multifunction display  
(⇒ 25)  
Warning and indicator lights (⇒ 24)
- 3 Storage compartment  
(⇒ 59)
- 4 Unlocking mechanism of tank cover (integrated in the ignition switch/steering lock) (⇒ 75)
- 5 Unlocking mechanism of the seat (integrated in the ignition switch/steering lock) (⇒ 58)
- 6 Storage compartment  
(⇒ 59)  
Power socket (in the storage compartment)  
(⇒ 118)
- 7 Connector for optional accessories (under the handlebar trim panel)





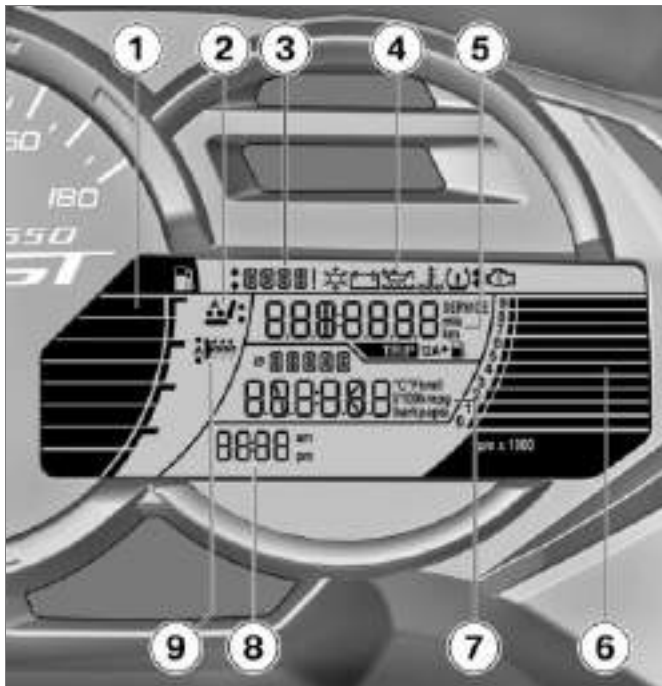
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## Indicator and warning lights

- 1 Turn indicator, left
- 2 General warning light (☛ 26)
- 3 Photodiode for recording the ambient brightness  
Anti-theft alarm LED (☛ 55)
- 4 Turn indicator, right
- 5 ABS (☛ 37)
- 6 Fuel reserve (☛ 31)
- 7 High beam
- 8 ASC (☛ 38)





## Multifunction display

- 1 Fuel fill level indicator
- 2 Set heating stage (⇒ 57)
- 3 Text field for warnings (⇒ 26)
- 4 Warning symbols (⇒ 26)
- 5 Tripmeter (⇒ 48)  
Service display (⇒ 40)  
Display of distance driven since reaching fuel reserve (⇒ 41)
- 6 Tachometer
- 7 Onboard computer displays (⇒ 47)
- 8 Clock (⇒ 50)
- 9 Set heating stage (⇒ 56)

## Warning lights

### Display












Warnings are displayed with appropriate warning lights.



Warnings for which no separate warning light is provided are signaled by the general warning light **1** which is accompanied by a warning notice in position **2** such as EWS! or a warning symbol **3** in the multifunction display. The universal warning light lights up in either yellow or red depending on the urgency of the warning.

If several warnings are active, all corresponding warning lights and warning symbol are displayed; warnings appear alternately. You will find an overview of the potential warnings on the following pages.













## Overview of warning indicators








Indicator and warning lights	Display text	Meaning
 General warning light shows yellow.	EWS! is indicated	EWS active (⇒ 31)
	 appears on the display	Outside temperature warning (⇒ 31)
 lights up		Fuel down to reserve (⇒ 31)
 General warning light shows red.	 appears on the display	Coolant temperature too high (⇒ 31)
 General warning light shows yellow.	 appears on the display	Engine oil level too low (⇒ 32)
	OIL CHECK is indicated	
 General warning light shows yellow.	 appears on the display	Engine in emergency-operation mode (⇒ 32)
 General warning light shows yellow.	 flashes	Severe fault in the engine management system (⇒ 33)

## Indicator and warning lights

## Display text

## Meaning

	General warning light shows yellow.	 + LAMP! is displayed	Taillight defective (⇒ 33)
	General warning light shows yellow.	 + LAMP! is displayed	Headlight bulb defective (⇒ 33)
	General warning light shows yellow.	 + LAMP! is displayed	Tail light and headlight bulb defective (⇒ 34)
	General warning light flashes red.	 appears on the display	Front tire inflation pressure is outside approved range (⇒ 34)
		The critical tire inflation pressure flashes	
	General warning light flashes red.	 appears on the display	Rear tire inflation pressure is outside approved range (⇒ 35)
		The critical tire inflation pressure flashes	
	General warning light flashes red.	 appears on the display	Tire inflation pressure of both tires is outside approved range (⇒ 35)

Indicator and warning lights	Display text	Meaning
	tire inflation pressures flash	Tire inflation pressure of both tires is outside approved range (➡ 35)
	"--" or "-- : --" is indicated	Transmission error (➡ 36)
 General warning light shows yellow.	 appears on the display	RDC sensor defective or system fault (➡ 37)
	"--" or "-- : --" is indicated	
 General warning light shows yellow.	RDC! is indicated	RDC sensor battery low (➡ 37)
 flashes		ABS self-diagnosis not completed (➡ 37)
 lights up		ABS error (➡ 38)
 flashes rapidly		ASC intervention (➡ 38)
 flashes slowly		ASC self-diagnosis not completed (➡ 38)

## Indicator and warning lights

## Display text

## Meaning



lights up

ASC switched off (➡ 38)



lights up

ASC error (➡ 39)



lights up

CAL. flashes.

ASC calibration not yet completed  
(➡ 39)

DWA! is displayed

Anti-theft alarm battery low charge  
(➡ 39)



General warning  
light shows yellow.

DWA! is displayed

Anti-theft alarm system battery  
discharged (➡ 39)



General warning  
light shows red.



appears on the  
display

Battery charge current insufficient  
(➡ 40)



## EWS active



General warning light lights up yellow.

EWS! is indicated.

Possible cause:

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

- Remove other ignition keys located on the ignition key.
- Use the second ignition key.
- Have the defective ignition key replaced, preferably by a BMW Motorrad partner.

## Outside temperature warning



Ice crystal symbol appears on the display.

Possible cause:

The outside temperature measured at the motorcycle is lower than 37 °F (3 °C).



### WARNING

#### Risk of black ice, even above 37 °F (3 °C)

Accident hazard

- At a low outside temperature, icy conditions must be expected on bridges and in shady road areas. ◀
- Think well ahead when driving.

## Fuel down to reserve



Fuel reserve symbol lights up.



### WARNING

#### Rough engine running or switching off of the engine due to a fuel shortage

Accident hazard, damage to catalytic converter

- Do not drive to the extent that the fuel tank is completely empty. ◀

Possible cause:

At the most, the fuel tank still contains the reserve fuel quantity.



Fuel reserve

Approx. 3.2 quarts (Approx. 3 l)

- Refueling (➡ 75).

## Coolant temperature too high



General warning light shows red.



Temperature symbol is displayed.

**ATTENTION****Riding with overheated engine**

Engine damage

- Be sure to observe the measures listed below. ◀

Possible cause:

Coolant level is too low.

- Checking coolant level (➡ 95).

If coolant level is too low:

- Have the coolant system checked at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

The coolant or engine oil temperature too high.

- If possible, continue driving in the part-load range to cool down the engine.
- Should the coolant or engine oil temperature frequently be too high, have the fault rectified

as quickly as possible by an authorized workshop, preferably an authorized BMW Motorrad retailer.

**Engine oil level too low**

General warning light lights up yellow.



Oil level symbol appears on the display.

OIL CHECK is indicated.

Possible cause:

The electronic oil level sensor has detected that the engine's oil level is too low. Check the oil level on the oil dipstick at the next refueling stop:

- Checking engine oil level (➡ 88).

If oil level is too low:

- Top up engine oil.

**Engine in emergency-operation mode**

General warning light lights up yellow.



Engine symbol appears on the display.

**WARNING****Unusual handling when the engine is in emergency operation**

Accident hazard

- Avoid rapid acceleration and passing maneuvers. ◀

Possible cause:

The engine control unit has diagnosed a fault. The engine is running in the emergency-operation mode.

- Continued driving is possible, however the accustomed engine performance may not be available.

- » In exceptional cases, the engine stops and can no longer be started.
- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

## Severe fault in the engine management system



General warning light lights up yellow.



The engine symbol flashes.



## WARNING

### Damage to engine during emergency operation

Accident hazard

- Drive slowly and avoid rapid acceleration and passing maneuvers.
- If possible, have the vehicle picked up and the fault elim-

inated at a specialist workshop, preferably an authorized BMW Motorrad retailer. ◀

Possible cause:

The engine control unit has diagnosed a fault which can lead to a severe consequential fault (e.g. overheating). The engine is in the emergency-operation mode.

- Avoid high load and engine speed ranges if possible.
- » It is not recommended to continue your journey.
- Have the malfunction corrected as soon as possible at an authorized specialist workshop, preferably an authorized BMW Motorrad retailer.

### Taillight defective



General warning light lights up yellow.



+ LAMP! is displayed.



## WARNING

### Overlooking the vehicle in traffic due to a defective light source on the vehicle

Safety risk

- Replace defective bulbs as soon as possible; it is best always to carry a complete set of spare bulbs on the motorcycle. ◀

Possible cause:

Light source for combined taillight and brake light defective.

- The diode taillight must be replaced. Please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

### Headlight bulb defective



General warning light lights up yellow.



+ LAMP ! is displayed.



## WARNING

### Overlooking the vehicle in traffic due to a defective light source on the vehicle

Safety risk

- Replace defective bulbs as soon as possible; it is best always to carry a complete set of spare bulbs on the motorcycle.◀

Possible cause:

Low-beam headlight or high-beam headlight defective.

- Replacing bulbs for low-beam and high-beam headlight (➡ 105).

Possible cause:

Parking light defective.

- The diode parking light must be replaced. Please contact a specialist service facility,

preferably an authorized BMW Motorrad Retailer.

### Tail light and headlight bulb defective



General warning light lights up yellow.



+ LAMP ! is displayed.

Possible cause:

The tail light and one headlight bulb are defective.

- See the fault descriptions above.

### Front tire inflation pressure is outside approved range

– with tire pressure monitor (RDC)<sup>OE</sup>



General warning light flashes red.



Tire symbol with arrow pointing upward is displayed.

The critical tire-inflation pressure flashes.

Possible cause:

The measured front tire inflation pressure is outside the permissible tolerance.

- Check tire for damage and suitability for continued use. If it is still possible to drive with tire:



## WARNING

### Tire pressure is outside the approved tolerance range.

Risk of accident, deterioration in the handling characteristics of the vehicle.

- Adjust the driving style.◀
- Correct tire inflation pressure at the next opportunity.



## NOTICE

Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" section: ◀

- Have the tire checked for damage at an authorized service facility, preferably an authorized BMW Motorrad retailer.

If you are unsure about the tire's suitability for continued riding:

- Do not continue riding.
- Contact roadside service.

### Rear tire inflation pressure is outside approved range

– with tire pressure monitor (RDC)<sup>OE</sup>



General warning light flashes red.



Tire symbol with arrow pointing downward is displayed.

The critical tire-inflation pressure flashes.

Possible cause:

The measured rear tire inflation pressure is outside the permissible tolerance.

- Check tire for damage and suitability for continued use.

If it is still possible to drive with tire:



## WARNING

### Tire pressure is outside the approved tolerance range.

Risk of accident, deterioration in the handling characteristics of the vehicle.

- Adjust the driving style. ◀
- Correct tire inflation pressure at the next opportunity.



## NOTICE

Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" section: ◀

- Have the tire checked for damage at an authorized service facility, preferably an authorized BMW Motorrad retailer.

If you are unsure about the tire's suitability for continued riding:

- Do not continue riding.
- Contact roadside service.

### Tire inflation pressure of both tires is outside approved range

– with tire pressure monitor (RDC)<sup>OE</sup>



General warning light flashes red.



Tire symbol with arrows pointing upward and downward is displayed.

Tire inflation pressures flash.  
Possible cause:

The measured tire inflation pressure of both tires is outside the permissible tolerance.

- Check tire for damage and suitability for continued use.

Are the tires still suitable for driving:



## WARNING

### Tire pressure is outside the approved tolerance range.

Risk of accident, deterioration in the handling characteristics of the vehicle.

- Adjust the driving style.◀
- Correct tire inflation pressure at the next opportunity.



## NOTICE

Before adjusting the tire pressure, check the information on temperature compensation and tire pressure adjustment in the "Technology in detail" section:◀

- Have the tire checked for damage at an authorized service facility, preferably an authorized BMW Motorrad retailer.

If you are unsure about the drivability of the tires:

- Do not continue riding.
- Contact roadside service.

### Transmission error

– with tire pressure monitor (RDC)<sup>OE</sup>

"--" or "-- : --" is indicated.

Possible cause:

The motorcycle's speed has not exceeded the threshold of approx. 19 mph (30 km/h). The RDC sensors do not send their

signal until after this speed has been exceeded for the first time (➡ 83).

- Watch the TCP/RDC display at a higher rate of speed. A continuous error is only present if the general warning light also lights up. In this case:
- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

There is a fault in the radio connection to the RDC sensors. Possible causes are radio systems in the surrounding area, which interfere with the connection between the RDC control unit and the sensors.

- Watch the RDC display in another environment. A continuous error is only present if the general warning light also lights up. In this case:

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

## RDC sensor defective or system fault

– with tire pressure monitor (RDC)<sup>OE</sup>



General warning light lights up yellow.



Tire symbol appears on the display.

"--" or "--:--" is indicated.

Possible cause:

Wheels without RDC sensors are fitted.

- Retrofit wheels with RDC sensors.

Possible cause:

One or two RDC sensors have failed.

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Possible cause:

A system fault has occurred.

- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

## RDC sensor battery low

– with tire pressure monitor (RDC)<sup>OE</sup>



General warning light lights up yellow.

RDC! is indicated.



## NOTICE

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

Possible cause:

The RDC sensor battery no longer has its full capacity. Operation of the tire pressure control is only guaranteed for a limited period.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

## ABS self-diagnosis not completed



ABS warning lamp flashes.

Possible cause:

The self-diagnosis routine was not completed; the ABS function is not available. The Maxi-Scooter must reach a speed of at least 3 mph (5 km/h)

before ABS self-diagnosis can be completed.

- Ride off slowly. It must be noted that the ABS function is not available until the self-diagnosis has been completed.

### ABS error



ABS warning lamp lights up.

Possible cause:

The ABS control unit has detected an error. The ABS function is not available.

- Continued driving is possible while taking the failed ABS function into account. Observe additional information on situations which can lead to an ABS error (➡ 81).
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

### ASC intervention



ASC warning light flashes rapidly.

ASC has detected instability at the rear wheel and responded by reducing the torque. The ASC warning light flashes longer than the ASC intervention lasts. This feature continues to furnish the rider with visual feedback confirming that the system has initiated active closed-loop intervention even after the critical situation has passed.

### ASC self-diagnosis not completed



ASC warning light flashes slowly.

Possible cause:



ASC self-diagnosis routine not completed

The Maxi-Scooter must reach a specified minimum speed with the engine running before the system can check operation of the wheel speed sensors:

min 3 mph (min 5 km/h)

- Ride off slowly. It must be noted that the ASC function is not available until the self-diagnosis has been completed.

### ASC switched off



ASC warning light lights up.

Possible cause:

The ASC system has been deactivated by the rider.

- Switch on ASC (➡ 53).



## ASC error



ASC warning light lights up.

Possible cause:

The ASC control unit has detected an error.

- It remains possible to continue riding. It must be noted that the ASC function is not available. You should also take account of the additional information on situations that can lead to an ASC fault (➔ 82).
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

## ASC calibration not yet completed



ASC warning light lights up.

CAL. flashes.

Possible cause:

The ASC calibration is not yet completed

- Finish or repeat ASC calibration.
- Calibrating ASC (➔ 54).
- Canceling ASC calibration: Switch the ignition on and off.

## Anti-theft alarm battery low charge

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

DWA! is displayed.



### NOTICE

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

Possible cause:

The anti-theft alarm battery no longer has its full capacity. The operation of the DWA is only

guaranteed for a limited period with the battery disconnected.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

## Anti-theft alarm system battery discharged

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



General warning light lights up yellow.

DWA! is displayed.



### NOTICE

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

Possible cause:

The anti-theft alarm system battery is completely discharged. Operation of the DWA is no longer guaranteed when the vehicle's battery is disconnected.

- Contact an authorized service facility, preferably an authorized BMW Motorrad retailer.

## Battery charge current insufficient



General warning light shows red.



Battery symbol appears in the display.



### WARNING

## Failure of vehicle systems

Accident hazard

- Do not continue riding. ◀

The battery is not being charged. If you continue driving, the motorcycle electronics will discharge the battery.

Possible cause:

Alternator or alternator drive defective.

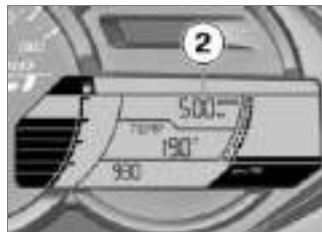
- Have the malfunction corrected as soon as possible at an

authorized service facility, preferably an authorized BMW Motorrad Retailer.

## Service display



If service is due within a month, the service date **1** is displayed.



If service is due within 700 miles, the remaining distance **2** is displayed and is counted down in steps of 100 miles. It is briefly displayed following the Pre-Ride-Check.

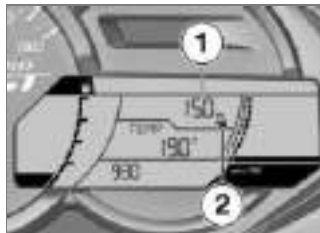


When a service date elapses without service, the general warning light lights up in yellow, appearing together with the date and mileage (kilometerage) display. The **SERVICE** message is displayed continuously.

## NOTICE

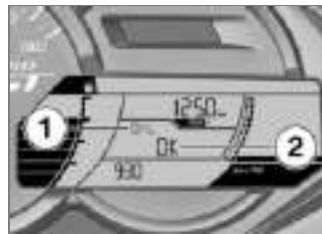
If the service display appears more than a month before the service date, the current day's date must be reset in the instrument cluster. This situation can occur if the battery was disconnected. ◀

## Distance traveled since fuel reached reserve level



The distance traveled **1** since reaching the fuel reserve is displayed by the symbol **2**. This odometer is reset and no longer displayed once the fuel reserve quantity is exceeded.

## Oil level indicator



The oil level display **1** provides information on the oil level in the engine. This display can only be activated when the vehicle is stopped.

The conditions required for using the oil level display are as follows:

- Engine at normal operating temperature.
- Engine idling for at least ten seconds.
- Side stand retracted.

– Maxi-Scooter is positioned vertically.

The displays which may appear in positions **1** and **2** mean the following:

OIL OK: oil level correct.

OIL CHECK: check oil level during next refueling stop.

OIL ---: no measurement possible (above-mentioned conditions not met).



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

## Outside temperature

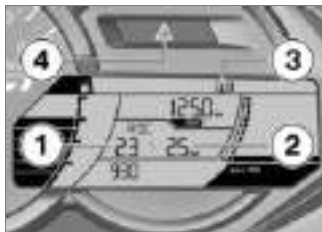


When the outside temperature drops below 37 °F (3 °C) the temperature display responds by flashing a warning indicating possible ice formation on the road surface. The display automatically switches from any other mode to the temperature

reading when the temperature drops below this threshold for the first time.

## Tire inflation pressures

– with tire pressure monitor (RDC)<sup>OE</sup>



The displayed tire inflation pressures refer to a tire air temperature of 68 °F (20 °C). The figure on the left side **1** indicates the front tire's inflation pressure, while the figure on the right **2** shows the inflation pressure in the rear tire. Immediately after

switching on the ignition, -- : -- is displayed, as the transmission of the tire pressure values does not begin until a speed of 19 mph (30 km/h) is exceeded for the first time.



If the general warning light **4** flashes red and if the symbol **3** is also displayed, then a warning indicator is concerned. The upper arrow next to the tire symbol indicates a problem at the front wheel, and the lower arrow indicates a problem at the rear wheel.

Further information on BMW Motorrad RDC can be found from page (➔ 83) onwards.

## Operation

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## Steering and ignition lock

### Ignition key

You receive two ignition keys.

– with topcase<sup>OA</sup>

The Topcase can also be operated using the same ignition key if desired. Please contact an authorized workshop for this purpose, preferably an authorized BMW Motorrad retailer.

### Locking handlebars

- Turn handlebars to left.



- Turn key to position **3** while moving handlebars slightly.
  - » Ignition, lights and all electrical circuits are switched off.
  - » Handlebars are locked.
  - » Left-hand storage compartment is locked.
  - » Key can now be removed.

## Switching on ignition



- Turn the ignition key to position **ON**.
  - » The windshield moves to the driving position.
  - » Parking lights and all function circuits switched on.
  - » Engine can be started.
  - » Pre-Ride-Check is carried out. (➡ 70)
  - » ABS self-diagnosis is performed. (➡ 71)
  - » ASC self-diagnosis is performed. (➡ 72)

## Switch off ignition



- Turn the ignition key to the **OFF** position.
  - » The windshield moves to the park position.
  - » Light is switched off, parking lamps and lighting for the rear storage compartment stay lit up for a little while.
  - » Handlebars not locked.
  - » Key can now be removed.

## Emergency on/off switch (kill switch)



- 1** Emergency on/off switch (kill switch)



### WARNING

#### Operation of the emergency ON/OFF switch when riding

Danger of falling due to blocking of rear wheel

- Do not operate the emergency ON/OFF switch when riding. ◀

The engine can be switched off easily and quickly using the emergency on/off switch.



- a** Engine is switched off  
**b** Operating position

## Lights

### Low-beam headlight and parking lights

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

After switching off the ignition, the parking lamps remain lit for a short time.

 **NOTICE**

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

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

### High-beam headlight and headlight flasher



- Press switch **1** toward front to switch on high-beam headlight.

- Pull switch **1** toward rear to actuate headlight flasher.

### Parking lights

- Switch off ignition.



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

## Hazard warning lights system

### Operate hazard warning flashers

- Switch on the ignition.

 **NOTICE**

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

 **NOTICE**

If a turn signal button is pressed when operating readiness is present, the turn signal function replaces the hazard warning lights function for the duration of operation. If the turn signal button is no longer pressed, the hazard warning lights function is activated again.◀





- Press button **1** to switch on hazard warning flashers.
- » Ignition can be switched off.
- Switch on ignition and press button **1** again to switch off hazard warning flashers.

## Turn indicators

### Operating turn signals

- Switch on the ignition.



- Press button **1** to left to switch on left-side turn signals.
- Press button **1** to right to switch on right-side turn signals.
- Move button **1** to center position to switch off turn signals.



### NOTICE

The turn indicators automatically switch off when the defined riding time and distance have been reached. The defined riding time and distance can be set by an authorized BMW Motorrad retailer. ◀

- » Factory setting:
  - Riding time = 10 s
  - Distance = 200 m

## Display

### Selecting display readings

- Switch on the ignition.



- Briefly press TRIP **1** in each case to select the display in section **3**.

The following data can be displayed:

- Odometer
- Trip odometer 1 TRIP 1
- Trip odometer 2 TRIP 2

- The automatic trip distance TRIP A is automatically reset if at least five hours have passed since the ignition was switched off and the date has changed.
- Fuel reserve reached: Distance traveled since this point in time
- Call up the settings menu: SETUP
- Average speed ØSPEED
- Average fuel consumption ØFUEL
- Current fuel consumption FUEL
- Date DATE
- Oil level indicator OIL
- with tire pressure monitor (RDC)<sup>OE</sup>

RDC tire pressures◀



- Briefly press INFO **2** in each case to select the display in section **4**.

The following data can be displayed:

- Ambient temperature TEMP

### Resetting trip odometer

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



- Press and hold down TRIP **1** until the trip odometer in panel **3** is reset.

### Resetting average data

- Switch on the ignition.
- Select average fuel consumption or average speed.
- » The desired average value is displayed.



- Press and hold down INFO **2** until the displayed value in panel **4** is reset.

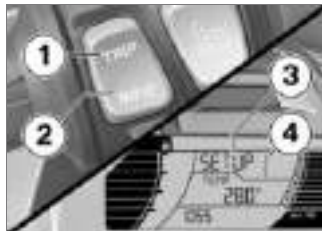
## SETUP

### Selecting the SETUP Requirement

The Maxi-Scooter is stationary.

#### Requirement

The onboard computer is displayed.



- Briefly press TRIP **1** repeatedly until SETUP **3** is displayed.
- Press and hold TRIP **1** to start SETUP.
- » The dividing line **4** is hidden.



SETUP CLOCK is displayed.

- Briefly press TRIP **1** in each case to select the following parameter in SETUP.
  - with anti-theft alarm system (DWA)<sup>OE</sup>
  - Activate alarm function of anti-theft alarm system automatically after switching off the ignition DWA ON or leave switched off DWA OFF.◀
  - Switch the ASC on or off ASC ON / ASC OFF; or calibrate the ASC ASC CAL.
  - Set time display CLOCK.
  - Set date DATE.
  - Exit SETUP EXIT.

### Exit SETUP Requirement

There are four ways to exit SETUP.



- Press and hold TRIP **1**.
  - » The on-board computer is displayed.
- Alternatively: Briefly press TRIP **1** repeatedly until SETUP EXIT is displayed.
- Press and hold INFO **2**.
  - » The on-board computer is displayed.
- Alternate method: Switch the ignition off and then on.
  - » The on-board computer is displayed.
- Alternatively: Drive off.



Speed for the operation  
is in SETUP

max 6 mph (max 10 km/h)

- » When the permissible speed for operation is exceeded, SETUP ends.
- » The on-board computer is displayed.
- » All settings are saved irrespective of how SETUP was closed.

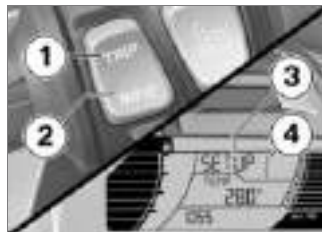
## Time and date

### Set clock

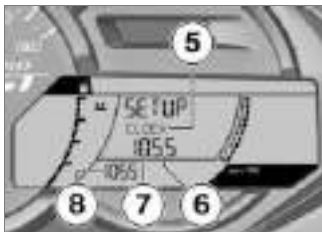
#### Requirement

The Maxi-Scooter is stationary.

- Switch on the ignition.
  - » The onboard computer is displayed.



- Briefly press TRIP **1** repeatedly until SETUP **3** is displayed.
- Press and hold TRIP **1** to start SETUP.
  - » The dividing line **4** is hidden.
  - » SETUP CLOCK is displayed.



- Press and hold INFO **2** to set the hours.
- » Hours **7** flash.
- Briefly press TRIP **1** to increase hours.
- Briefly press INFO **2** to reduce hours.
- When the hours have been set as desired, press and hold INFO **2**.
- » Minutes **6** flash.
- Briefly press TRIP **1** to increase minutes.
- Briefly press INFO **2** to reduce minutes.

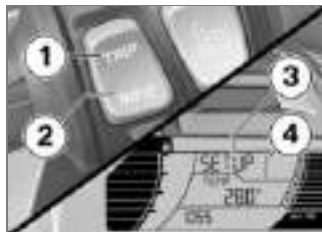
- When the minutes have been set as desired, press and hold INFO **2**.
- » The minutes **6** no longer flash.
- Check the setting on the time display **8**.
- » The clock is now set.
- Press and hold TRIP **1**.
- » The on-board computer is displayed.

## Set date

### Requirement

The Maxi-Scooter is stationary.

- Switch on the ignition.
- » The onboard computer is displayed.
- Selecting the SETUP (➔ 49).



SETUP **3** has been started. The separating line **4** is hidden.

- » SETUP DATE is displayed.



- Press and hold INFO **2**.
- » The year **6** flashes.

- Briefly press TRIP **1** to move the year forwards.
- Briefly press INFO **2** to move the year backwards.
- When the year has been set as desired, press and hold INFO **2**.
  - » The month **8** flashes.
- Briefly press TRIP **1** to move the month forwards.
- Briefly press INFO **2** to move the month backwards.
- When the month has been set as desired, press and hold INFO **2**.
  - » The day **7** flashes.
- Briefly press TRIP **1** to move the day forwards.
- Briefly press INFO **2** to move the day backwards.
- When the day has been set as desired, press and hold INFO **2**.
  - » The day **7** no longer flashes.
  - » The clock is now set.

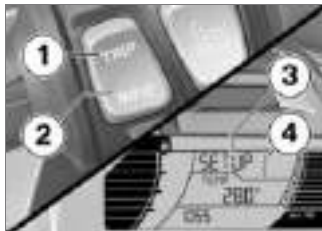
- Press and hold TRIP **1**.
  - » The on-board computer is displayed.

## Automatic Stability Control (ASC)

### Deactivating ASC Requirement

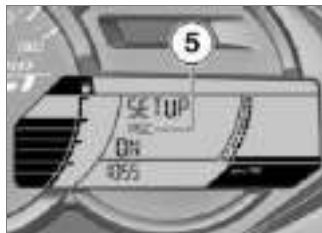
The Maxi-Scooter is stationary.


- Switch on the ignition.
  - » The onboard computer is displayed.
- Selecting the SETUP (➡ 49).



SETUP **3** has been started. The separating line **4** is hidden.

- » SETUP ASC is displayed.



- Short-press INFO **2** to toggle between ASC ON **5** and ASC OFF.
  - » SETUP ASC OFF is displayed.
-  ASC warning light lights up.

- » ASC is switched off.
- Long-press TRIP **1** to exit SETUP.
  - » The onboard computer is displayed.
  - » Even with ASC switched off, engine speed is governed to prevent extreme acceleration

of the rear wheel while clear of the ground. This is in order to protect the drive train.

## Switch on ASC

### Requirement

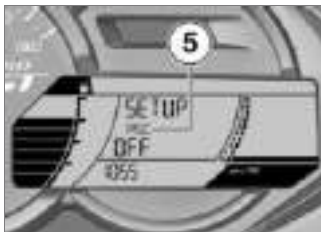
The Maxi-Scooter is stationary.


- Switch on the ignition.
  - » The onboard computer is displayed.
- Selecting the SETUP (➔ 49).



SETUP 3 has been started. The separating line 4 is hidden.

- » SETUP ASC is displayed.



- Short-press INFO 2 to toggle between ASC ON 5 and ASC OFF.
  - » SETUP ASC ON is displayed.
-  ASC-warning light remains OFF.

- » ASC is switched on.
- Long-press TRIP 1 to exit SETUP.
  - » The onboard computer is displayed.
- Alternatively, switch the ignition off and on again.
  - » If the ASC warning light continues to light up after switching the ignition off and then

on again, an ASC fault has occurred.

## Calibrating

Calibrating means that the control is adapted to the effective tire radii of the front and rear wheel.

### Effective tire radius


- The effective tire radius depends on the tire make, tread depth, tire pressure and load.
- Calibrate the ASC control after every tire change to compensate for changes in the tire radii.
- Calibrate the ASC control regularly as tire wear progresses to maintain optimum operation.
- Recalibration is not required after removing and refitting an unchanged wheel, e.g. for brake servicing.

## Calibrating ASC Requirement

Reduced stability reserves of the ASC control after tire change.

- Switch on ASC (➡ 53).
- » SETUP ASC ON is displayed.



- Long-press INFO **2** to start calibration.
- » CAL. **3** flashes.
-  ASC warning light begins to light up.
- » There are no functions assigned to **1** or **2**.

- » The menu item can only be closed by switching the ignition off and on.
- » Calibration starts up and waits for the Maxi-Scooter to be driven.



### ATTENTION

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

Accident hazard

- Carry out calibration on a flat and straight stretch of road that has good adhesion.◀
- Travel straight ahead and keep the speed constant within the following speed range for 6 seconds.




Speed range for ASC calibration

The Maxi-Scooter must be driven straight ahead in a specific speed range:



Speed range for ASC calibration

19...31 mph (30...50 km/h)

- » ASC is calibrated.
-  ASC warning light goes out.

- » The onboard computer is displayed.
- » ASC calibration is completed.
- » You may continue driving.

## Anti-theft alarm (DWA)

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

### Activate DWA

- Switching on ignition (➡ 44).
- Adjust DWA (➡ 55).
- Turn off ignition.
- » If the DWA is activated, the DWA is automatically activated after the ignition is switched off.



- » Activation takes approximately 30 seconds to complete.
- Turn indicators are illuminated twice.
- Confirmation tone sounds twice (if programmed).

## Alarm signal

The DWA alarm can be set off by:

- Motion sensor
- Switching on ignition with an unauthorized ignition key.
- Disconnecting the DWA from the motorcycle battery (DWA battery takes over the power supply – alarm sound only, hazard warning lights do not flash).

If the DWA battery is discharged all functions remain operational; the only difference is that the alarm cannot be set off if the system is disconnected from the motorcycle battery.

The duration of the alarm signal is approx. 26 seconds. During the DWA alarm, an alarm tone sounds and the indicators flash. The type of alarm sound can be set by an authorized BMW Motorrad retailer.

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

### Light signals on DWA LED:

- 1 flash: motion sensor 1
- 2 flashes: motion sensor 2
- 3 flashes: ignition turned on with unauthorized ignition key
- 4 flashes: DWA disconnected from motorcycle battery
- 5 flashes: motion sensor 3

## Deactivate DWA

- Switching on ignition (➡ 44).
  - » Turn indicators light up once.
  - » Confirmation tone sounds once (if programmed).
  - » DWA is now switched off.

## Adjust DWA Requirement

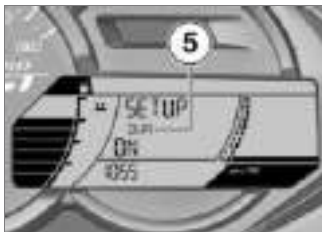
The Maxi-Scooter is stationary.

- Switch on the ignition.
  - » The onboard computer is displayed.
- Selecting the SETUP (➡ 49).



SETUP **3** has been started. The separating line **4** is hidden.

» SETUP DWA is displayed.



- Press INFO **2** briefly to change between DWA ON **5** and DWA OFF.

The following settings are available:

- DWA ON: DWA is activated respectively is activated automatically when the ignition is switched off.
- DWA OFF: DWA is deactivated.
- Press and hold TRIP **1** to exit SETUP.
  - » The onboard computer is displayed.

## Heated handlebar grips

– with heated grips<sup>OE</sup>

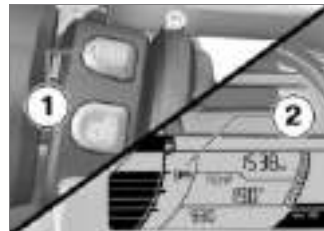
### Operating heated grips

- Start engine.



#### NOTICE

The heated grips option can only be activated when the engine is running.◀

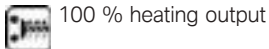


- Press button **1** repeatedly until desired heating level **2** is shown.

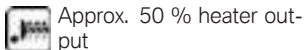
The handlebar grips can be heated manually at two levels or automatically. The second manual level is used for fast heat-up of the grips; then the switch should be switched back to the first level. The following displays are available:



Heater output is automatically adjusted in dependence on ambient temperature, speed and engine speed.



100 % heating output



Approx. 50 % heater output

## Seat heating

– with seat heating<sup>OE</sup>

### Operating driver's seat heater

- Start engine.



#### NOTICE

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



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

The rider's seat can be heated at two manual levels or automatically. The second manual level is used for fast heat-up of the seat; then the switch should be switched back to the first level. The following displays are available:



Heater output is automatically adjusted in dependence on ambient temperature, speed and engine speed.



100 % heating output



Approx. 50 % heater output

### Operating passenger seat heater

- Start engine.



#### NOTICE

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



- Operate the rocker switch **1** on the side with two dots, to

switch on the high heater output HIGH.

- Operate the rocker switch **1** on the side with one dot, to switch on the low heater output LOW.
- Set the rocker switch **1** to the center position, to switch off seat heating.



The set level **2** is shown in the display. The second stage is used to quickly heat up the passenger seat; then the switch should be switched back to the first stage. The following displays are available:



Approx. 50 % heater output



100 % heating output

## Seat

### Operate the seat

- Switch off ignition.



- Insert the ignition key in the steering lock and then turn it clockwise.



- If it is difficult to move, press down the seat at the rear, then lift it up at the rear.
- To close, press the seat into the locking mechanism at the rear.

## Tank cover

### Unlocking the tank cover

- Refueling (➡ 75).

## Storage compartments

### Operating front storage compartments



- To open a storage compartment, press corresponding release lever **1** downward.
- To close a storage compartment, press corresponding door into locking device.

#### NOTICE

The left-hand storage compartment is locked together with the steering lock.◀

### Operating rear storage compartment

- Open seat.
- Operate the seat (➡ 58).

#### NOTICE

The lighting of the storage compartment is switched on when the ignition is switched on. After switching off the ignition, the storage compartment lighting remains lit for a short time.◀



- To store two helmets in the storage compartment, position

- the helmets as shown in the picture.
- Close seat.



## Setting

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Wind deflection wing.....	64
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## Mirrors

### Adjusting mirrors



- Move mirror into desired position by applying light pressure at edge.

## Headlight

### Adjusting headlight for RHD/LHD traffic

This motorcycle's headlight features a symmetrical low beam. No special adjustments or procedures are required prior to operating the motorcycle in a country where traffic travels on the

side of the road opposite to that of your home country (left-hand drive to right-hand drive or vice versa).

### Headlight range and spring preload

The headlight range generally remains constant due to the adjustment of the spring preload to the loading state.

If you are unsure whether the headlight range is correct, consult a specialized workshop, preferably an authorized BMW Motorrad retailer.

## Windshield

### Automatic park- and drive position



#### ATTENTION

### Windshield collision during automatic operation

Scratches, cracks and fractures in windshield

- Do not keep any items in the driving area.
- Note or remove obstacles.
- Actuate windshield button to stop automatic drive.◀



#### NOTICE

The windshield moves to the parking position after the ignition is switched off.

Damage caused by concentrated sunlight is avoided.

The parking position is approximately in the middle of the adjustment range.◀

### Automatic park position after ignition OFF

- When the ignition is switched off the windshield returns automatically to park position.
- Automatic drive starts only if the windshield travel position



is higher than the parking position.

- If the windshield encounters resistance before it reaches its limit position the pressure-sensitive finger guard system goes active. The windshield stops moving.
- Automatic drive stops immediately if the windshield rocker switch is operated.
- If the ignition is switched on in automatic drive, the windshield moves towards the drive position again.

### **Automatic drive after ignition ON**

- When the ignition is switched on, the windshield returns to the last drive position.
- Automatic drive starts only if the windshield travel position is higher than the parking position.

- Automatic drive stops immediately if the windshield rocker switch is operated.
- If the ignition is switched on during automatic drive the windshield moves towards the park position again.
- If automatic drive ends or is stopped, the windshield can be adjusted with the rocker switches while the engine is running.

### **Adjusting windshield**

- Switching on ignition (44).
- The windshield moves from the wiper park position into the final drive position.
- Start engine to avoid discharging battery.



- Push rocker switch **1** up to raise the windshield.
- Push rocker switch **1** down to lower the windshield.

## Wind deflection wing

### Adjusting slipstream deflectors



#### WARNING

#### Adjusting the slipstream deflectors.

Accident hazard

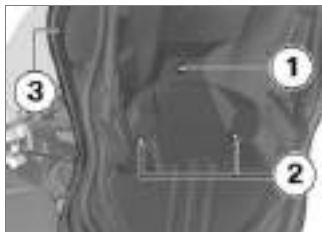
- Only adjust the slipstream deflectors when the motorcycle is stationary. ◀
- Turn slipstream deflector **1** in or out to adjust the airflow for the rider.

## Backrest

### Adjust backrest

#### Requirement

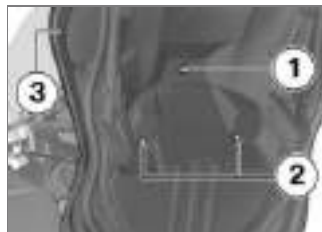
The backrest is delivered in the rearmost of three possible positions.



- Open the seat **3**.
- Remove screws **1** and **2**.
- Remove backrest.




- Position the mountings **4** in the required position above the seat bench **3**.



- Tighten the shorter screws **1** five turns.

- Tighten the longer screws **2** five turns.
- Repeat this sequence until the backrest is firmly secured. Here, tighten the screws only hand-tight.

	Backrest on seat bench
1 lb/ft (2 Nm)	

- Close the seat **3**.

## Brakes

### Adjust handbrake lever



#### WARNING

#### Modified position of the brake fluid reservoir

Air in the brake system

- Do not twist the handlebar fitting or the handlebars.◀

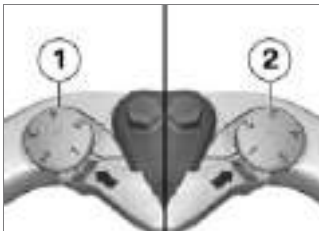


#### WARNING

#### Adjusting the handbrake lever while driving.

Accident hazard

- Only adjust the handbrake lever when the Scooter is stationary.◀



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



#### NOTICE

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

- » Adjustment options:
  - from Position 1: largest distance between handlebar grip and brake lever
  - up to Position 5: smallest distance between handlebar grip and brake lever

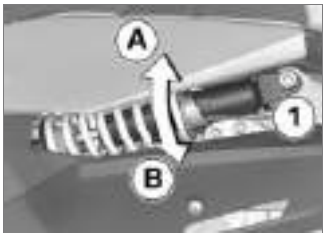
### Spring preload

#### Setting

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

## Adjusting spring preload at rear wheel

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



- If you want to increase the spring preload, turn adjusting ring **1** with the tools from the onboard toolkit in direction **A**.
- If you want to decrease the spring preload, turn adjusting ring **1** with the tools from the onboard toolkit in direction **B**.



Basic setting of spring preload, rear

Increase from lowest preload by 3 notches. (One-up without load)

Increase from lowest preload by 4 notches. (One-up with load)

Increase from lowest preload by 6 notches. (Two-up and load)

## **Riding**

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## Safety information

### Rider's Equipment

Do not drive without the correct clothing:

- Helmet
- Rider's suit
- Gloves
- Boots

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

### Load



#### WARNING

**Reduced riding stability caused by overloading and uneven loading**

Accident hazard

- Do not exceed the gross weight limit and observe the loading information. ◀
- Adjust the spring preload setting to the total weight of the vehicle.
  - with luggage rack<sup>OA</sup>
- Comply with maximum payload of luggage rack.



Payload of luggage rack

max 20 lbs (max 9 kg)◀

- with topcase<sup>OA</sup>
- Observe maximum payload and permissible top speed of Topcase.



Payload of Topcase

max 11 lbs (max 5 kg)



Maximum speed when riding with a loaded topcase

max 112 mph (max 180 km/h)◀

### Speed

If you drive at high speed, always bear in mind the following examples of marginal conditions that can adversely affect the drivability of your Maxi-Scooter:

- Setting for the suspension system
- Unevenly distributed load
- Loose clothing
- Insufficient tire inflation pressure
- Tire tread in poor condition

### Risk of poisoning

Exhaust fumes contain carbon monoxide, which is colorless and odorless but highly toxic.



## WARNING

### Harmful exhaust gas

Danger of suffocation

- Do not inhale exhaust fumes.
- Do not run the engine in closed rooms. ◀

### Burn hazard



## CAUTION

### Intense heating up of engine and exhaust system while riding

Burn hazard

- After parking the motorcycle, make sure that no persons or objects come into contact with the engine and exhaust system. ◀

### Catalytic converter

If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.

The following must be observed:

- Do not run the fuel tank dry.
- Do not run the engine with the spark-plug cap removed.
- Stop the engine immediately if it misfires.
- Use unleaded fuel only.
- Comply with all specified maintenance intervals.



## ATTENTION

### Unburned fuel in the catalytic converter

Damage to catalytic converter

- Note the points listed for protection of the catalytic converter. ◀

### Danger of overheating



## ATTENTION

### Engine idling for a lengthy period while at a standstill

Overheating due to insufficient cooling; in extreme cases vehicle fire

- Do not allow the engine to idle unnecessarily.
- After starting, ride off immediately. ◀

### Modifications



## ATTENTION

### Modifications to the Maxi-Scooter (e.g., engine control unit, throttle valves, clutch)

Damage to the affected parts, failure of safety-relevant functions. Damage caused in this way is not covered by the warranty.

- Do not make any modifications. ◀

## Observe checklist

- Use the following checklist to check your motorcycle at regular intervals.

### Requirement

#### Before every journey:

- Check operation of the brake system.
- Check operation of the lighting and signal system.
- Check tire tread depth (⇒ 97).
- Check secure hold of topcase and luggage.

### Requirement

#### At every third refueling stop:

- Adjusting spring preload at rear wheel (⇒ 66).
- Check engine oil level (⇒ 88).

- Check front brake pad thickness (⇒ 90).
- Checking rear brake pad thickness (⇒ 91).
- Checking brake fluid level of front brake (⇒ 93).
- Checking brake fluid level for rear brake (⇒ 94).
- Checking coolant level (⇒ 95).

## Starting

### Starting engine

- Switch on the ignition.
  - » Pre-Ride-Check is carried out. (⇒ 70)
  - » ABS self-diagnosis is performed. (⇒ 71)
  - » ASC self-diagnosis is performed. (⇒ 72)
- Operate the brake.



### NOTICE

Vehicle cannot be started with side stand extended. If side

stand is extended with engine running, engine stops. ◀



- Press starter button **1**.
  - » Engine starts.
  - » Consult the troubleshooting chart if the engine refuses to start. (⇒ 130)

### Pre-Ride-Check

After the ignition is switched on, the instrument cluster conducts a test of the analog instruments as well as the warning and indicator lights in a "Pre-Ride-Check". Starting the engine before the test routine is completed will



cancel the remainder of the routine.

### Phase 1

The pointer of the speedometer is run up to the end stop. The warning and indicator lights are switched on.

### Phase 2

The speedometer pointer is moved back. The switched-on indicator and warning lights are switched off.

If the pointer has not been moved, or if one of the warning and indicator lights has not been switched on:



## WARNING

### Defective warning lights

Lack of display of malfunctions

- Check the display of all indicator and warning lights. ◀

- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

### ABS self-diagnosis

The self-diagnosis routine is determining whether BMW Motorrad ABS is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition. To check the wheel speed sensors, the Maxi-Scooter must be driven a few meters.

### Phase 1

- » Check on system components monitored by diagnostic system while motorcycle is parked.



ABS warning lamp flashes.

### Phase 2

- » Check wheel sensors while starting off.



ABS warning lamp flashes.

### ABS self-diagnosis completed

- » ABS warning light goes out.

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

- It remains possible to continue riding. It must be noted that the ABS function is not available.
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

## ASC self-diagnosis

The self-diagnosis routine is determining whether BMW Motorrad ASC is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition.

### Phase 1

- » Check on system components monitored by diagnostic system while motorcycle is parked.



ASC warning light flashes slowly.

### Phase 2

- » Checks diagnosis-capable system components when motorcycle starts to move.



ASC warning light flashes slowly.

## ASC self-diagnosis completed

- » The ASC symbol is no longer displayed.

- Watch all warning and indicator lights on the display.



ASC self-diagnosis routine not completed

The Maxi-Scooter must reach a specified minimum speed with the engine running before the system can check operation of the wheel speed sensors:

min 3 mph (min 5 km/h)

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

- It remains possible to continue riding. It must be noted that the ASC function is not available.
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

- » If the ASC adjusts without request, too often or too soon, refer to the troubleshooting table for help. (130)

## Riding

At engine speeds below approximately 1800 rpm, the centrifugal clutch opens and the Maxi-Scooter is idling. If the engine speed is increased, the clutch closes and the Maxi-Scooter drives off.

In the range from approximately 25 mph (40 km/h) to approximately 75 mph (120 km/h), the engine operates at almost constant speed in the range of the maximum torque. The change in speed is achieved by CVT. This only slightly changes the engine noise in this speed range. Speeds above approximately 75 mph (120 km/h) are achieved by increasing the engine speed.

## Breaking in

### Engine

- Drive in frequently changing load ranges prior to the pre-delivery check.
- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding highways if possible.
- Have the initial inspection performed after the first 300 - 750 mls (500 - 1200 km).

### Brake pads

New brake pads must be run in before they achieve their optimum friction force. This initial reduction in braking efficiency can be compensated for by exerting greater pressure on the brake levers.



**WARNING**

### New brake pads

Extension of the braking distance, accident hazard

- Brake early.◀

### Tires

New tires have a smooth surface. This must be roughened by riding in a restrained manner at various heel angles until the tires are run in. This running in procedure is essential if the tires are to achieve maximum grip.



**WARNING**

### Loss of adhesion of new tires on wet roads and at extreme angles

Accident hazard

- Always think well ahead and avoid extreme angles.◀

## Brakes

### How do you achieve the shortest stopping distances?

During braking the load distribution changes dynamically between the front and the rear wheel. The heavier you brake, the greater the weight transfer to the front wheel. Increases in the load on an individual wheel are accompanied by a rise in the effective braking force that the wheel can provide.

To achieve the shortest possible braking distance, the front brake must be applied quickly and with progressively greater levels of force. This procedure provides ideal exploitation of the extra weight transfer to the front wheel. With the frequently instructed "forced braking," in which the brake pressure is generated as quickly as possible and

with great force, dynamic load distribution lags behind the progressive increases in deceleration rate and the braking force cannot be completely transferred to the road surface. It would cause the front wheel to lock up.

Locking up of the front wheel is prevented by BMW Motorrad ABS.

## Descending mountain passes



### WARNING

### Braking only with the rear-wheel brake when descending mountain passes

Reduced of braking action, destruction of the brakes caused by overheating

- Use both front and rear brakes, and make use of the engine's braking effect as well. ◀

## Wet, soiled brakes

Moisture and dirt on the brake disks and the brake pads result in a decrease in the braking action. Delayed or poorer braking action must be expected in the following situations:

- When driving in the rain and through puddles.
- After washing the vehicle.
- When driving on roads spread with salt.
- After working on the brakes due to oil or grease residues.
- When driving on soiled roads or offroad.



### WARNING

### Poorer braking action due to moisture and dirt

Accident hazard

- Brake until brakes are dry or clean; clean if necessary.

- Brake early until the full braking action is available again. ◀

## Park the Maxi-Scooter

### Side stand

- Switch off engine.



### ATTENTION

### Poor ground conditions in area of stand

Component damage cause by tipping over

- Always check that the ground under the stand is level and firm. ◀
- Extend side stand and park Maxi-Scooter.
- » The parking brake prevents the motorcycle from rolling.



### ATTENTION

### Loading of the side stand with additional weight

Component damage cause by tipping over

- Do not sit on the motorcycle when it is parked on the side stands.◀
- If the slope of the road permits, turn the handlebars to the left.

### Center stand

- Switch off engine.

#### ATTENTION

### Poor ground conditions in area of stand

Component damage cause by tipping over

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

#### ATTENTION

**Center stand folds if subject to sharp movements.**

Component damage cause by tipping over

- Do not sit on the motorcycle while it is resting on the center stand.◀
- Extend center stand and jack up Maxi-Scooter.

### Refueling

#### WARNING

### Fuel is highly flammable

Fire and explosion hazard

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

#### ATTENTION

### Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.◀

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



- Insert the ignition key in the steering lock and then turn it counter-clockwise.



- If it is difficult to move, press the tank cover **1** to the rear and then fold it to the front.



- Open the gas cap **2**.



### WARNING

#### Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank

Accident hazard

- Do not overfill the fuel tank.◀



### ATTENTION

#### Refueling with leaded fuel

Damage to catalytic converter

- Do not refuel with leaded gasoline or gasoline with metallic additives, e.g. manganese or iron.◀

- Refuel with a fuel meeting the specifications listed, continuing until the fuel is no higher than the lower edge of the filler neck.



### NOTICE

If refueling is carried out after running on fuel reserve, the resulting filling capacity must be greater than the fuel reserve so that the new fill level is detected and the fuel reserve indicator light is switched off.◀



Recommended fuel quality

Normal unleaded (max. 15 % ethanol, E15)  
87 AKI (91 ROZ/RON)  
min 87 AKI



Usable fuel quantity

Approx. 4.1 gal (Approx. 15.5 l)



Fuel reserve

Approx. 3.2 quarts (Approx. 3 l)



- Press the tank cover **1** into the locking mechanism.

## Secure the vehicle for transportation

- Protect all component surfaces along which tensioning straps are routed against scratching, e.g. using adhesive tape or soft cloths.



- Close the gas cap **2**.



## ATTENTION

### Motorcycle tips to the side when raising

Component damage cause by tipping over

- Secure the motorcycle against tipping to the side, preferably with the assistance of a second person.◀
- Push the vehicle onto the transportation flat and hold it in position; do not place it on the side stand or center stand.



## ATTENTION

### Pinching of components

Component damage

- Do not pinch components, e.g. brake lines or wiring harnesses.◀
- Lay the tensioning straps at the front across the lower fork bridge on both sides and tension the straps.



- Lay the rear right tensioning strap around the retainer spike of the silencer and tension it.



- Lay the rear left tensioning strap around the spring strut mount and tension it.

- Tension all straps evenly; the motorcycle should be pulled down against its springs with the suspension compressed as much as possible.



## Technology in detail

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## General notes

More information on the topic of technology is available at:

**[bmw-motorrad.com/technology](http://bmw-motorrad.com/technology)**

## Antilock Brake System (ABS)

### How does the ABS work?

The maximum braking force that can be transferred to the road surface is partially dependent on the friction coefficient of the road surface. Gravel, ice, snow and wet roads offer a considerably poorer friction coefficient than a dry, clean asphalt surface. The poorer the friction coefficient of the road surface is, the longer the braking distance will be. If the maximum transferable brake force is exceeded when the driver increases the brake pressure, the wheels begin to lock and driving stability is lost.

A fall can occur. Before this situation occurs, ABS intervenes and adjusts the brake pressure to the maximum transferable braking force. This enables the wheels to continue to turn and maintains driving stability regardless of the road surface condition.

### What happens when rough roads are encountered?

Bumpy or rough roads can briefly lead to a loss of contact between the tires and the road surface, until the transferable braking force is reduced to zero. If braking is carried out in this situation, the ABS reduces the brake pressure to ensure driving stability when restoring contact to the road. At this point in time, the BMW Motorrad ABS must assume extremely low friction coefficients (gravel, ice, snow)

so that the road wheels turn in every imaginable case and the driving stability is ensured. After detecting the actual conditions, the system adjusts the optimum brake pressure.

### Lifting off rear wheel

Even during severe braking, a high level of tire grip can mean that the front wheel does not lock up until very late, if at all. Consequently, ABS does not intervene until very late, if at all. Under these circumstances the rear wheel can lift off the ground, and the outcome can be a high-siding situation in which the Maxi-Scooter can flip over.



## WARNING

### Lifting off of the rear wheel due to heavy braking

Accident hazard

- When braking heavily, bear in mind that the ABS control cannot always be relied on to prevent the rear wheel from lifting off the ground. ◀

### What are the design characteristics of the BMW Motorrad ABS?

The BMW Motorrad ABS ensures driving stability on any surface within the limits of driving physics. The system is not optimized for the special conditions encountered under extreme weather during off-road and race-track use.

### Special situations

To detect the tendency of the wheels to lock up, the speeds of the front and rear wheel are compared. If implausible values are detected over a longer period of time, the ABS function is deactivated for safety reasons and an ABS error is indicated. A self-diagnosis routine must be completed before the error will be displayed.

Apart from problems on the BMW Motorrad ABS, unusual riding conditions can also cause a fault message to be generated.

#### Unusual riding conditions:

- With ASC switched off: riding for a lengthy period with the back wheel lifted off the ground (wheelie)
- Rear wheel rotating with the vehicle held stationary by applying the front brake (burn-out).

- Rear wheel skidding on a slippery surface for a lengthy period, for example deceleration using the engine's braking effect.

Should a fault code occur due to an unusual driving condition, the ABS function can be reactivated by switching the ignition off and then on again.

### How important is regular maintenance?



## WARNING

### Brake system not regularly serviced

Accident hazard

- To ensure that the BMW Motorrad ABS is in a properly maintained condition, it is vital that the specified service intervals are kept to. ◀

## Reserves for safety

But remember: 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.

Be careful in curves! When you apply the brakes on a corner, the motorcycle's weight and momentum take over and even BMW Motorrad ABS is unable to counteract their effects.

## Automatic Stability Control (ASC)

### How does ASC work?

BMW Motorrad ASC compares the wheel speeds of the front and rear wheels. Differences in the relative rotation speeds allow the system to determine the slip rate, and thus the stability re-

serves at the rear wheel. The engine management system adapts the engine torque when the slip limit is exceeded.

### Special situations

As lean angles increase, acceleration potential is also progressively restricted by the laws of physics. This can result in delayed acceleration when coming out of very tight curves.

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

tended period may cause the ASC of the BMW Motorrad to switch off automatically.

If the front wheel loses contact to the ground during extreme acceleration, the ASC reduces the engine torque until the front wheel touches the ground again. BMW Motorrad recommends that you respond to this condition by twisting back the throttle grip somewhat to return to stable dynamic operating conditions as quickly as possible.

On smooth surfaces never completely twist the throttle grip back in an abrupt manner. The engine's braking torque could cause the rear wheel to lock, resulting in unstable motorcycle conditions. This case cannot be controlled by BMW Motorrad ASC.

## Slippery roads

On very loose surfaces (e.g. sand or snow) the control interventions of the ASC can reduce the driving power at the rear wheel to such a degree that the rear wheel no longer turns sufficiently. In this case, BMW Motorrad recommends switching off the ASC temporarily.

Bear in mind that the rear wheel will spin on the loose surface and close the throttle in good time before you reach a firm surface. Then switch on the ASC again.

## Tire pressure control (RDC)

– with tire pressure monitor (RDC)<sup>OE</sup>

## Operation

A sensor located in each tire monitors the pressure and air temperature of the tire and transmits this information to the control unit.

The sensors are equipped with a centrifugal controller that suppresses transmission of the measured values until a speed of approximately 18 mph (30 km/h) is reached. Before initial reception of the tire pressure, "--" is shown in the multifunction display for each tire. The sensors continue to transmit the monitored data for approximately 15 minutes after the motorcycle comes to a stop.

## Temperature compensation

The tire inflation pressure is temperature dependent, i.e. it increases or decreases together with the tire air temperature. The

tire air temperature is dependent on the ambient temperature, the driving style and the length of the journey.

The tire pressures that appear in the multifunction display are temperature-compensated; they are adjusted for a tire air temperature of 68 °F (20 °C). No temperature compensation is available in the pressure gages at filling stations, meaning that the measured tire pressure varies according to tire air temperature. As a result, the pressure figures indicated by the gauges at filling stations will usually vary from those appearing in the multifunction display.

## Adjusting inflation pressure

Compare the TCP/RDC value in the multifunction display with the value on the back cover of the Rider's Manual. The difference between the two values must be compensated with the tire inflation pressure tester at the filling station.

Example: according to the Rider's Manual, the tire inflation pressure is to be 36 psi (2.5 bar), however 33 psi (2.3 bar) is shown in the multifunction display. It is low by 3 psi (0.2 bar).

The tester at the filling station indicates 34.8 psi (2.4 bar). This value must be increased by 3 psi (0.2 bar) to 37.8 psi (2.6 bar) in order to produce the correct tire inflation pressure.

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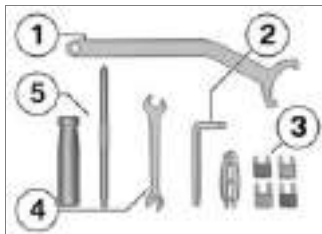
## General instructions

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

If special tightening torques are to be taken into account for assembly, these are listed. An overview of all required tightening torques is contained in the chapter "Technical Data". Information on additional maintenance and repair work is provided in the repair manual for your vehicle on DVD, which you can obtain from your BMW Motorrad partner.

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

## Standard tool kit



- 1** Hook wrench
  - Adjusting spring preload at rear wheel (⇒ 66).
- 2** Torx wrench T30
  - Checking engine oil level (⇒ 88).
  - Topping up coolant (⇒ 95).
- 3** Spare fuses with gripper
  - Miniature fuses: 4 A, 7.5 A, 10 A and 15 A
  - Replace the fuses.
- 4** Open-ended wrench
  - Wrench size: 8/10 mm

- 4** – Removing battery (⇒ 111).
- 5** Reversible screwdriver insert
  - Phillips PH1 and Torx T25
  - Remove body panels.
  - Removing battery (⇒ 111).

## Front wheel stand

### Mount front wheel stand Requirement

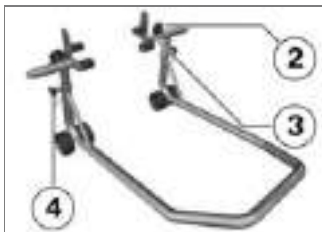
The base stand and its accessories are available through your authorized BMW Motorrad retailer.

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Use basic stand with front wheel mount.



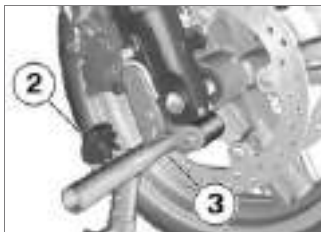


- Install the spacer buffer **1** on the left and right in the lower position.



- Loosen fastening screws **2** on left and right.

- Push mounts **3** on left and right far enough apart that front suspension fits between them.
- Use locating pins **4** on left and right to set front wheel stand to desired height.
- Center front wheel stand relative to front wheel and push it against front axle.



- Align two mounts **3** on left and right so that front suspension rests securely on them.
- Tighten fastening screws **2** on left and right.



### **ATTENTION**

#### **Lifting-off of the center stand if the vehicle is raised too high**

Component damage cause by tipping over

- When raising the motorcycle, make sure that the center stand remains on the ground.
- Adjust the height of the front wheel stand if necessary. ◀
- Press down front wheel stand evenly to raise Maxi-Scooter.
- Ensure Maxi-Scooter is standing securely.

## Engine oil

### Checking engine oil level



#### ATTENTION

**Incorrect oil level display after long immobilization period caused by oil collecting in the oil sump instead of the oil reservoir**

Misinterpretation of the oil capacity

- Only check the oil level after a longer journey or when the engine is warm.◀
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Allow engine to run in neutral for one minute.
- Switch off ignition.



- Remove the running board rest **1**.



- Remove the cover **2** in an upward motion.

- Wipe area around oil fill location to clean it.

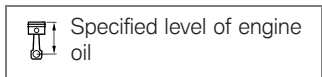


- Remove oil dipstick **1**.



- Clean the measuring range **2** on the oil dipstick with a dry cloth.


- Position the oil dipstick on the oil filler opening, but do not screw in.
- Remove oil dipstick and read fluid level.



Between MIN and MAX marking (Engine at operating temperature, merely put the oil dipstick in place, **do not screw it in.**)

If oil level is below minimum mark:

- Add engine oil up to specified level.

 Engine oil, quantity for topping up  
max 0.5 quarts (max 0.5 l) (Difference between MIN and MAX)

If oil level is above MAX mark:

- Have fluid level corrected by an authorized workshop, preferably an authorized BMW Motorrad retailer.
- Install oil dipstick.



- Install cover **2**.



- Insert the running board rest **1**.

## Brake system

### Check brake operation

- Actuate right-hand brake lever.
  - » Pressure point must be clearly perceptible.
- Actuate left-hand brake lever.
  - » Pressure point must be clearly perceptible.
- To check the parking brake, extend the side stand and try to slide the Maxi-Scooter back and forth.
  - » It must not be possible to slide the Maxi-Scooter.

If no clear resistance points can be felt or if the Maxi-Scooter can be pushed:

- Have the brakes checked at an authorized workshop, preferably an authorized BMW Motorrad retailer.


### Check front brake pad thickness

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



- Conduct a visual inspection of the brake pad thickness. Viewing direction: left and right between wheel and front suspension toward brake pads **1**.



 Front brake-pad wear limit

min 0.04 in (min 1.0 mm)  
(Only friction material without carrier plate. Wear markings (grooves) must be clearly visible.)

If the wear indicators are no longer clearly visible:



## WARNING

### Dropping below the minimum pad thickness

Reduced braking action, damage to the brake

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

### Checking rear brake pad thickness

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



- Conduct a visual inspection of the brake pad thickness. Viewing direction: from lower right toward brake pads **1**.



Rear brake-pad wear limit

min 0.04 in (min 1.0 mm)  
(Only friction material without carrier plate.)

If the wear indicating marks are no longer visible:



## WARNING

### Dropping below the minimum pad thickness

Reduced braking action, damage to the brake

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

### Checking brake pad thickness of parking brake

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Conduct a visual inspection of the brake pad thickness.



Brake-pad wear limit of parking brake

The brake disc must **not be visible** through the bore holes on the carrier plate (clean bore holes).

If brake pads have dropped below the minimum lining thickness:



## ATTENTION

**The parked vehicle rolls away as a result of reduced braking power caused by the**

### minimum lining thickness not being met

Component damage caused by tipping over, despite the side stand being extended

- Do not let the lining thickness for the parking brake fall below the minimum. ◀
- Have brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

## Checking brake fluid level of front brake



### WARNING

#### Insufficient brake fluid in the brake-fluid reservoir

Considerably reduced braking performance caused by air in the brake system

- Adjust the riding mode immediately until the fault is rectified.
- Check brake fluid level regularly. ◀
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Align handlebars so that brake-fluid reservoir is positioned horizontally.

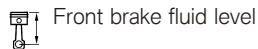


- Read off brake fluid level on right-hand brake-fluid reservoir **1**.



### NOTICE

The brake fluid level in the brake-fluid reservoir drops due to brake pad wear. ◀



Brake fluid, DOT4

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

If brake fluid level falls below the approved level:

- Have defect corrected as soon as possible by an authorized workshop, preferably an authorized BMW Motorrad retailer.

## Checking brake fluid level for rear brake



### WARNING

#### Insufficient brake fluid in the brake-fluid reservoir

Considerably reduced braking performance caused by air in the brake system

- Adjust the riding mode immediately until the fault is rectified.
- Check brake fluid level regularly. ◀
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



- Read off brake fluid level on left-hand brake-fluid reservoir **1**.



### NOTICE

The brake fluid level in the brake-fluid reservoir drops due to brake pad wear. ◀



Rear brake fluid level

Brake fluid, DOT4

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

If brake fluid level falls below the approved level:

- Have defect corrected as soon as possible by an authorized workshop, preferably an authorized BMW Motorrad retailer.



## Coolant

### Checking coolant level

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



- Read off coolant level on expansion tank through opening **1** below right-hand step plate.



Setpoint setting for coolant in expansion tank

Between MIN and MAX marking (With cold engine)

If coolant level drops below approved level:

- Add coolant.

### Topping up coolant



- Take off step plate support **1**.



- Remove screw **1** and take off cover.



- Open the cap **2** of the coolant expansion tank and top up with coolant to the specified level.
- Checking coolant level (→ 95).
- Close the cap of the coolant expansion tank.



- Lay on cover and install screw **1**.



- Mount step plate support **1**.

## Tires

### Checking tire pressure



**WARNING**

#### Incorrect tire inflation pressure.

Scooter driving characteristics impaired. ASC control characteristics impaired and tire service life reduced.

- Ensure proper tyre inflation pressure. ◀





**WARNING**

#### Automatic opening of vertically installed valve inserts at high speeds

Sudden loss of tire inflation pressure

- Use valve caps with rubber sealing ring and screw on firmly. ◀

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Check tire pressures against data below.

 Tire pressure, front
36.3 psi (2.5 bar) (with tire cold)
 Tire pressure, rear
42.1 psi (2.9 bar) (with tire cold)

If tire pressure is too low:

- Correct tire pressure.

## Rims and tires

### Checking wheel rims

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.

- Subject wheel rims to visual inspection for defects.
- Have damaged rims checked and, if necessary, replaced by a specialist service facility, preferably an authorized BMW Motorrad retailer.

### Check tire tread depth



#### Riding with heavily worn tyres

Risk of accident due to poorer rideability

- If necessary, replace the tyres before the legally specified minimum tread depth is reached.◀
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.

- Measure tire tread depth in main tread grooves with wear indicators.



### NOTICE

Tread wear marks are integrated into the main grooves on every tire. If the tire tread has worn down to the level of the marks, the tire is completely worn. The locations of the marks are indicated on the edge of the tire, e.g. by the letters T1, TW1 or by an arrow.◀

When the minimum tread depth is reached:

- Replace the worn tires.

## Wheels

### Affect of wheel size on ABS

The wheel sizes play a major role in the ABS system. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes resulting from conversion to wheels not installed as standard equipment can seriously affect the control efficiency of the system.

The sensor rings required for wheel speed detection must also match the system installed and must not be replaced.

If you want to equip your Maxi-Scooter with different wheels, please speak to a specialized workshop, and preferably a BMW Motorrad retailer. In some cases the data stored in the

control unit can be adapted to the new wheel sizes.

### Effect of wheel sizes on the ASC

The wheel sizes play a major role in the ASC suspension control system. The radii of the wheels in particular are stored in the control unit as the basis for all necessary calculations. A change in these sizes resulting from conversion to wheels not installed as standard equipment can seriously affect the control efficiency of these systems.

#### ATTENTION

### Faults in the ASC caused by changing tire radii

The ASC grips despite good adhesion

- Check the wear and pressure of both tires.
- Calibrate the ASC after every tire change.

- If there are an unexpectedly large number of ASC interventions: Recalibrate the ASC.◀



#### ATTENTION

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


Accident hazard

- Recalibrate the ASC after every software update.◀

Information on calibration, see "Operation" (➔ 53).

### RDC sticker

- with tire pressure monitor (RDC)<sup>OE</sup>



**! Sensor Position**



## ATTENTION

### Improper tire removal

Damage to the RDC sensors

- Inform a specialist service facility or an authorized BMW Motorrad retailer on the fact that the wheel is equipped with a RDC sensor. ◀

On motorcycles equipped with RDC, there is a sticker on the wheel near to the position of the RDC sensor. When changing the tire, it is important to take care not to damage the RDC sensor. Draw the attention of the

BMW Motorrad retailer or tire fitter to the RDC sensor.

### Removing front wheel



- Remove screws **1** and **2** on left and right and take off front wheel cover toward front.



- Remove screw **1** and take wheel speed sensor out of bore.
- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.



## ATTENTION

### Unintentional pressing together of brake pads

Component damage when mounting the brake caliper or when pressing the brake pads apart

- Do not actuate the brakes with the brake caliper removed. ◀
- Remove screws **2** of brake calipers on left and right.



- Push brake pads **3** apart slightly by turning brake caliper **4** back and forth against brake rotor **5**.
- Carefully pull brake calipers back and outward to remove them from brake rotors.
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.

- Raise Maxi-Scooter at front, preferably using a BMW Motorrad front wheel stand, until the front wheel rotates freely.
- Mount front wheel stand (➔ 86).



- Loosen the clamping bolts **1** on the right.
- Remove quick-release axle **2** while supporting wheel.
- Roll front wheel forward to remove it.

## Install front wheel



### WARNING

#### Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC

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



### ATTENTION

#### Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer. ◀



## ATTENTION

### Front wheel installation opposite the running direction

Accident hazard

- Observe running direction arrows on tire or rim. ◀
- Roll front wheel into front suspension.



- Lift front wheel and install quick-release axle **2** with torque.



Quick-release axle in axle mount

22 lb/ft (30 Nm)

- Tighten clamping screws **1** to specified torque.



Clamping screws (quick-release axle) in telescopic forks

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

6 lb/ft (8 Nm)

- Remove front wheel stand.
- Slide the brake calipers onto the brake rotors.



- Install screws **2** on left and right with appropriate torque.



Brake caliper on fork leg

21 lb/ft (28 Nm)



## ATTENTION

**Contact between the wheel speed sensor cable and the brake disc**

Sensor cable wearing through

- Make sure that sensor cable is routed correctly. ◀
- Insert wheel speed sensor in bore and install screw **1**.
- Remove adhesive tape from wheel rim.
- Firmly pull the handbrake lever until the pressure point is perceptible, and repeat this operation several times.



- Mount front wheel cover and install screws **1** and **2** on right and left.
- Calibrating ASC (➡ 54).

## Removing rear wheel

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.



**CAUTION**

### Hot exhaust system

Burn hazard

- Do not touch hot exhaust system. ◀
- Remove the screw **1**.



- Move trim **2** backward in direction of arrow parallel to the rear silencer.
- » Remove the bolts **4** from the grommets **3**.
- Remove cover **2**.





- Loosen nut **5**.



- Remove screw **6** by counter-holding nut on the inside and gripping rear silencer **7**.
- Pull rear silencer **7** from front silencer

- Extend the side stand to activate the parking brake, or apply the rear wheel brake.



- Remove five screws **8** on rear wheel, holding wheel as you do so.
- Lower rear wheel to the ground and roll out toward rear.

### Install rear wheel



**WARNING**  
Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC

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



### ATTENTION

#### Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.◀
- Roll and mount rear wheel onto rear wheel support.



- Fit five screws **8** and tighten diagonally with specified torque.



Rear wheel to output shaft

Tightening sequence: Tighten crosswise

44 lb/ft (60 Nm)



- Coat silencer pipe with high temperature grease.
- Push rear silencer **7** onto front silencer and hold.



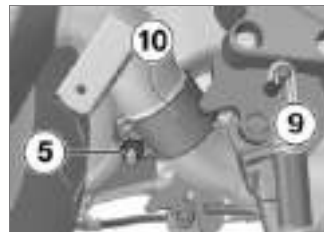
- Insert screw **6** and tighten to the specified torque while

counter-holding the nut on this inside.



Muffler on bracket

14 lb/ft (19 Nm)

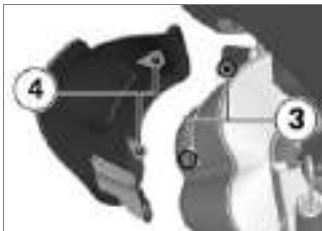


- Align clip **10** with opening at tab **9**.
- Tighten nut **5** to the specified torque.



End muffler on front muffler

14 lb/ft (19 Nm)



- Place cover with bolts **4** onto grommets **3**.



- Move trim **2** forward in direction of arrow parallel to the rear silencer.

» The bolts **4** are placed in the grommets **3**.

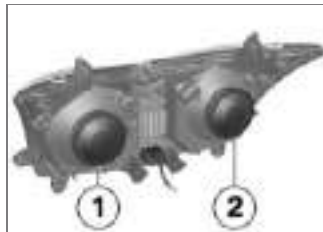
- Fit the screw **1**.
- Calibrating ASC (→ 54).

## Light sources

### Replacing bulbs for low-beam and high-beam headlight

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
  - Switch off ignition.
  - To replace the light source for the low-beam headlight, remove the right-hand fairing side panel.
  - To replace the light source for the high beam, remove the left-hand fairing side panel.
- » Replace the light source from below. Removing the fairing

side panel improves the alignment.



- Remove the cover **1** to replace the light source for the high beam.
- Remove the cover **2** to replace the light source for the low-beam headlight.

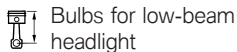


- Disconnect plug **3**.



- Remove the wire spring clip **4** from the retainers and fold it up.
- Remove light source **5**.

- Replace defective light source.



Bulbs for low-beam  
headlight

H7 12 V 55 W



Bulb for high-beam  
headlight

H7 12 V 55 W

- To avoid leaving contamination deposits on the new bulb's glass surface, always hold it by its base.

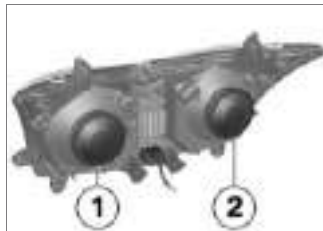


- Insert bulb **5**, ensuring that the lug **6** is in the correct position.

- Install the wire spring clip **4** in the retainers.



- Connect plug **3**.



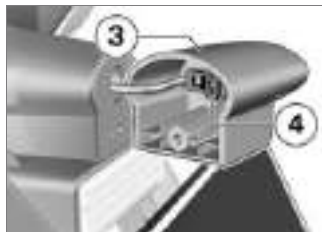
- Install cover **1** or cover **2**.
- Install fairing side panel (▣ 109).

## Replacing bulb for license-plate light

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Switch off ignition.



- Remove the screw **1**.



- Remove spacer **3** from numberplate carrier **2**.
- Remove socket **4** from spacer **3**.



- Remove light source from socket.

- Replace defective light source.

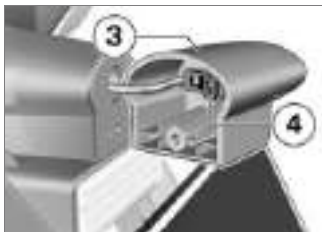
 Light source for license plate light

W5W 12 V 5 W

- To protect the glass on the new bulb against contamination, always use a clean, dry cloth to hold it; do not touch with bare fingers.



- Insert bulb in socket.



- Insert socket **4** into spacer **3**.



- Place spacer **3** onto number-plate holder **2**.
- Fit the screw **1**.

## Fairings and panels

### Removing fairing side panel



- Remove the screw **1**.



#### NOTICE

This description is based on the right fairing side panel, but also applies to the left fairing side panel. ◀



- Remove screws **2**.
- Open storage compartment **3**.



- Remove screw **4** in storage compartment.



- Pull panel from top edge out of the bracket to the position **5**.
- Then slightly raise the side panel and remove.

## Install fairing side panel



- Seat the side panel in mounts **6**.

### **NOTICE**

This description is based on the right fairing side panel, but also applies to the left fairing side panel. ◀

- Tilt the side panel up and push it into holder **5**.



- Install screw **4** in right-hand storage compartment.
- Close storage compartment.



- Install screws **2**.



- Fit the screw **1**.

## Battery

### Maintenance instructions

Correct battery maintenance combined with proper charging and storage procedures extends the battery's service life, and is also required for warranty claims. Compliance with the points below is important in order to maximize battery life:

- Keep the surface of the battery clean and dry
- Be sure to read and comply with the instructions for charging

ing the battery on the following pages

- Do not turn the battery upside down



### ATTENTION

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

Total discharge of battery leading to a rejection of warranty claims

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

#### Charging a connected battery

- with additional onboard socket<sup>OA</sup>



### ATTENTION

#### Charging the battery connected to the vehicle using the battery terminals

Damage to the motorcycle's electronics

- Disconnect the battery before charging on the battery terminals.◀



### ATTENTION

#### A fully discharged battery must be charged via a power socket or extra socket.

Damage to vehicle electronics

- A fully discharged battery (battery voltage less than 12 V, indicator lights and multifunction display remain off when ignition is switched on) must always be charged directly at the poles of the **disconnected** battery.◀
- Only charge a connected battery via the additional power socket.
- Comply with operating instructions of charger.



## Charging a disconnected battery

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

### NOTICE

In the case of longer periods when the motorcycle is not being used, the battery must be recharged regularly. See the instructions for caring for your battery. Always fully recharge the battery before returning it to use.◀

## Removing battery

- Removing fairing side panel (➡ 108).

- Turn off ignition.
  - with anti-theft alarm system (DWA)<sup>OE</sup>
- Switch off anti-theft alarm system if necessary.◀



### ATTENTION

## Incorrect battery disconnection

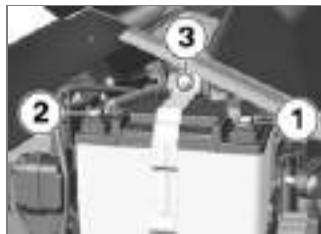
Danger of short circuit

- Follow the disconnection sequence.◀
- First remove negative battery cable **1**.

- Then remove positive battery cable **2**.
- Remove screw **3** and take off mounting bracket.
- Remove battery from the bracket.

## Install battery

- Place battery in battery compartment with positive terminal on left-hand side.



- Push retaining strap over battery and install screw **3**.

**ATTENTION****Incorrect battery connection**

Danger of short circuit

- Follow the installation sequence.◀
- First install positive battery cable **1**.
- Then install negative battery cable **1**.
- Install fairing side panel (⇒ 109).
- Set clock (⇒ 50).
- Set date (⇒ 51).

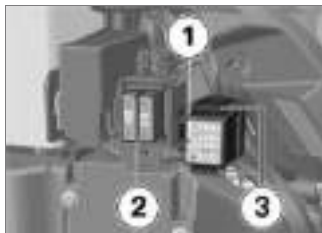
**Fuses****Remove the fuse Requirement**

The fuses are located underneath the front right fairing side panel.

**ATTENTION****Bypassing defective fuses**

Risk of short circuit and fire

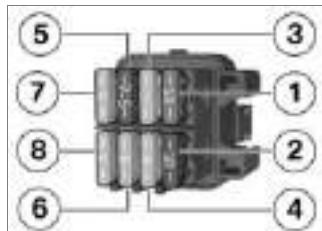
- Do not bypass defective fuses.
- Replace defective fuses with new fuses.◀
- Switch off ignition.
- Removing fairing side panel (⇒ 108).



- Pull the faulty fuse from the fuse box **1**/from the fuse holder **2** using the on-board tool kit.

**NOTICE**

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

**Install the fuse**

- Replace the faulty fuse from the fuse box with a fuse providing the necessary current level.
- Close the cover.

- » The locking mechanism should audibly engage.



- Replace the faulty fuse from the fuse holder with a fuse of-fering the necessary current level.

#### NOTICE

An overview of the fuse assign-ment and the required amper-ages is provided in the chapter "Technical Data". The numbers in the graphic match the fuse numbers.◀

- Install fairing side panel (➡ 109).

## Jump-starting

#### ATTENTION

#### **Current too strong when jump-starting the Maxi-Scooter**

Cable fire or damage to the vehi- cle electronics

- Jump start the Maxi-Scooter exclusively using the battery terminals, not the power socket.◀

#### ATTENTION

#### **Contact between crocodile clips of jump leads and mo- torcycle**

Danger of short circuit

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

#### ATTENTION

#### **Jump-starting with a voltage higher than 12 V**

Damage to the motorcycle's electronics

- The battery of the donor mo- torcycle must have a voltage of 12 V.◀
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Removing fairing side panel (➡ 108).
- Begin by connecting one end of red jumper cable to positive terminal of your motorcycle and other end to positive battery terminal of other vehicle.
- Begin by connecting one end of black jumper cable to nega- tive terminal of your motorcycle with a suitable grounding point or to negative battery terminal of other vehicle.

- Allow engine on support motorcycle to run while jump-starting.
- Start engine of vehicle with discharged battery in usual way; if engine does not start, wait a few minutes before repeating attempt in order to protect starter motor and donor battery.
- Allow both engines to run for several minutes before disconnecting the jump lead.
- First disconnect the jump lead from the negative terminal or ground support point, then from the positive terminal or positive battery connection point.

#### NOTICE

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

- Install fairing side panel (➡ 109).

## Data link connector

### Removing the diagnostic connector

#### Requirement

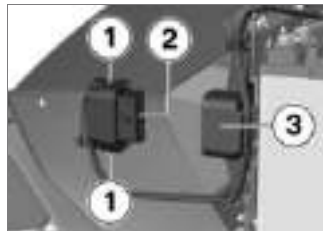
The diagnostic connector is located under the fairing side panel at the front right.



#### NOTICE

The data link connector for on-board diagnosis may only be disconnected by service or a workshop that works according to the specifications of the vehicle manufacturer with appropriately trained personnel and used by other authorized persons - otherwise use may lead to vehicle malfunctions.◀

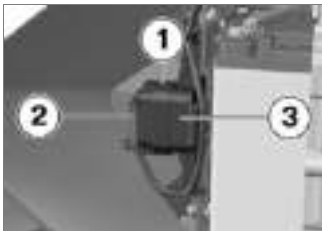
- Removing fairing side panel (➡ 108).



- Press the locks **1** together.
- Remove the diagnostic connector **2** from the bracket **3**.  
» The diagnosis and information system interface can be connected at the diagnostic connector **2**.

### Installing the diagnostic connector

- Disconnect the diagnosis and information system interface.



- Seat diagnostic connector **2** into the bracket **3**.
  - » The locks **1** engage.
- Install fairing side panel (➡ 109).



## **Accessories**

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## General notes



### CAUTION

#### Use of products from other manufacturers

Safety risk

- BMW Motorrad cannot examine or test each product of outside origin to ensure that it can be used on or in connection with BMW motorcycles without constituting a safety hazard. Nor is this guarantee provided when the official approval of a specific country has been granted. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW motorcycles and, consequently, they are not sufficient in some circumstances.
- Use only parts and accessories approved by BMW for your motorcycle. ◀

The safety, operation and suitability of BMW parts and accessory products have been checked extensively. Therefore, BMW assumes responsibility for these products. BMW shall not be liable for unapproved parts and accessory products of any kind.

Whenever you are planning modifications, comply with all the legal requirements. The motorcycle must not violate the regulations governing motorcycle approval for highway use applicable in your own country.

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

**[bmw-motorrad.com/accessories](http://bmw-motorrad.com/accessories)**

## Onboard power sockets

Information on using onboard power sockets:

### Operating electrical accessories

The battery capacity is not monitored while one or more onboard sockets are being used. If additional devices are operated over a longer period or adapters are connected for the entire day without the engine running, the battery may be completely discharged. The ability of the Maxi-Scooter to start is then not ensured.

### Cable routing

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

- Cables must not hinder the driver's movement.



- Cables must not restrict the steering angle and driving characteristics.
- Cables must not become trapped.

## Charger



### NOTICE

The power socket in the front left storage compartment is not suitable for chargers.

Only charge a connected battery via the additional power socket in the rear storage compartment. Observe the safety information in the "Maintenance" chapter before doing so. ◀

## Topcase

### Open Topcase

- with topcase<sup>OA</sup>



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



- Press Topcase lock toward front.
- » Topcase handle **2** pops up.



- Pull release lever behind cover **3** toward rear.
- » Topcase lid opens.
- Open Topcase lid.

### Close Topcase

- with topcase<sup>OA</sup>



- Make sure that Topcase handle **2** is extended.
- Close Topcase lid and press into locking device. Ensure that no items are trapped between cover and case.
- Close Topcase handle **2**.
- If necessary, turn the key in the topcase lock to the CLOSE position and remove.

### Remove Topcase

– with topcase<sup>OA</sup>



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



- Press Topcase lock toward front.
- » Topcase handle **2** pops up.



- Turn key in Topcase lock to RELEASE position.
- Pull release lever **4** toward rear while simultaneously lifting Topcase by carrying handle.
- Remove the Topcase from the Topcase carrier toward the rear.

### Mount Topcase

– with topcase<sup>OA</sup>



## Maximum payload and maximum speed

Observe maximum payload and top speed as indicated on label in Topcase.

If you cannot find your combination of motorcycle and topcase on the label, contact your BMW Motorrad Retailer.

The following values apply to the combination described here:

	Maximum speed when riding with a loaded topcase
max 112 mph (max 180 km/h)	
	Payload of Topcase
max 11 lbs (max 5 kg)	

- Make sure that the topcase handle **2** is folded out and the key in the topcase lock is in the RELEASE position.
- Insert the Topcase in the Topcase carrier at the front.
- Pull the release lever **4** toward the rear while simultaneously inserting the Topcase in the Topcase carrier at the rear.
- Close Topcase handle **2**.
- If necessary, turn the key in the topcase lock to the CLOSE position and remove.

## Scooter lock

– with Scooter lock<sup>OA</sup>

### Secure the vehicle



- Guide the rear end piece **1** of the Scooter lock from below into the rear mount.
- Then turn the end piece to the front.

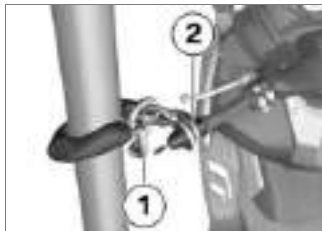


- Turn the handlebars to the left and guide the Scooter lock to the end of the handlebars.



- Slide the first chain link **2** onto the handlebar mount **3** and position the locking piece **4**.

- Lock the Scooter lock and remove the key.



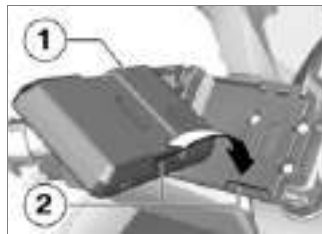
Alternatively, the Maxi-Scooter can be connected to a fixed object such as a pillar.

- To do so, lay the Scooter lock around the pillar and pull the chain through the end piece **1**.
- Connect the first chain link **2** to the handlebars as described above.

## Navigation system

– with navigation system<sup>OA</sup>

### Install navigation device



- Insert the navigation device **1** in the mountings **2**.



## Remove navigation device



- Swing the navigation device **1** toward the front and press into the latch mechanism **3** at the upper edge.
  - » Navigation device engages.
- Check that the navigation device is secure in the cradle.
  - » The red mark for unlocking is not visible.

- Press the release **2**.
  - » The red mark **3** indicates the release.
- Remove navigation device **1**.



## Care

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## Care products

BMW Motorrad recommends that you use cleaning and care products available at your authorized BMW Motorrad retailer. BMW CareProducts have been materials tested, laboratory tested, and field tested and provide optimum care and protection for the materials used in your motorcycle.



### ATTENTION

#### Use of unsuitable cleaning and care agents

Damage to motorcycle parts

- Do not use any solvents such as nitro thinners, cold cleaners, fuel or similar, and do not use cleaning agents that contain alcohol. ◀

## Washing your motorcycle

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

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

Make sure that the motorcycle is washed frequently, especially during the winter months.

To remove road salt, clean the Maxi-Scooter with cold water immediately after every trip.



### WARNING

**Damp brake disks and brake pads after washing the motorcycle, after riding through water or in the rain**

Poorer braking action, accident hazard

- Brake early until the brake rotors and brake pads are dry. ◀



### ATTENTION

#### Increased effect of salt caused by warm water

Corrosion

- Only use cold water to remove road salt. ◀



### ATTENTION

#### Damage caused by high water pressure from high-pressure cleaners or steam-jet devices

Corrosion or short circuit, damage to labels, to seals, to hydraulic brake system, to the electrical system and the seat

- Exercise caution when using high-pressure or steam-jet devices. ◀



## Cleaning sensitive motorcycle parts

### Plastics

#### ATTENTION

#### Use of unsuitable cleaning agents

Damage to plastic surfaces

- Do not use abrasive cleaners or cleaners containing alcohol or solvents.
- Do not use insect sponges or sponges with a hard surface.◀

#### Fairings and panels

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

#### Windshields and headlight diffuser made from plastic

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

#### NOTICE

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

#### Chrome

Carefully clean chrome parts with plenty of water and BMW Motorrad Care Products motorcycle cleaner. This is particularly important in the case of road salt. Use BMW Motorrad metal polish for additional treatment.

#### Radiator

Clean the radiator regularly to prevent overheating of the engine due to inadequate cooling. For example, use a garden hose with low water pressure.

#### ATTENTION

#### Bending of radiator fins

Damage to radiator fins

- When cleaning, ensure that the cooler fins are not bent.◀

#### Rubber

Treat rubber components with water or BMW rubber protection coating agent.

#### ATTENTION

#### Use of silicone sprays for care of rubber seals

Damage to rubber seals

- Do not use silicone sprays or care products that contain silicone.◀

#### Paint care

Washing the motorcycle regularly will help counteract the long-term effects of substances that damage the paint, especially if your motorcycle is ridden in areas with high air pollution or nat-

ural sources of dirt, such as tree resin or pollen.

However, remove particularly aggressive materials immediately; otherwise changes in the paint or discoloration can occur. These include spilled fuel, oil, grease and brake fluid as well as bird droppings. BMW Motorrad recommends using a solvent cleaner and then applying a BMW Motorrad high gloss polish to preserve the paint.

Contamination on the paint finish is particularly easy to see after the motorcycle has been washed. Remove this type of soiling with cleaning naphtha or spirit on a clean cloth or cotton ball. BMW Motorrad recommends removing tar stains with BMW tar remover. Then add a protective wax coating to the paint at these locations.

## Protective wax coating

Apply a preservative when water fails to bead up on the painted surface.

BMW Motorrad recommends BMW Motorrad high gloss polish or agents that contain carnauba or synthetic wax to protect the paint finish.

## Maxi-Scooter Storage

- Clean the Maxi-Scooter.
- Completely refuel Maxi Scooter.
- Removing battery (➡ 111).
- Spray the brake lever, main stand and side stand mounts with a suitable lubricant.
- Protect metal and chrome-plated parts with an acid-free grease (Vaseline).

- Park the Maxi-Scooter in a dry space, so that both wheels are unloaded.

## Maxi-Scooter Returning to use

- Remove the protective wax coating.
- Clean the Maxi-Scooter.
- Install battery (➡ 111).
- Observe checklist (➡ 70).

## Technical data

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## Troubleshooting chart

Engine does not start at all or is very difficult to start.

Possible cause	Remedy
Side stand extended	Retract side stand.
Starting without actuating brake	Actuate a brake lever during starting.
No fuel in tank	Refueling (■ 75).
Battery drained	Charging battery (■ 111).

ASC adjusts without request, too often or too soon.

Possible cause	Remedy
Tires replaced and tire radii changed	Calibrating ASC (■ 54).
Front or rear tire pressure insufficient; tire pressure or load changed	Checking tire pressure (■ 96).
No drive on very loose surfaces (e.g. sand or snow)	Turn off the ASC to overcome extremely poor roads (■ 52).
Loss of the adaptation values for the tire radii in the DME after software update	Calibrating ASC (■ 54).

## Screw connections

Front wheel	Value	Valid
<b>Quick-release axle in axle mount</b>		
M18 x 1.5	22 lb/ft (30 Nm)	
<b>Clamping screws (quick-release axle) in telescopic forks</b>		
M6 x 30	<b>Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time</b>	
	6 lb/ft (8 Nm)	
<b>Brake caliper on fork leg</b>		
M8 x 32 - 10.9	21 lb/ft (28 Nm)	
Rear wheel	Value	Valid
<b>Rear wheel to output shaft</b>		
M10 x 1.25 x 40	<b>Tightening sequence: Tighten cross-wise</b>	
	44 lb/ft (60 Nm)	
<b>Muffler on bracket</b>		
M8 x 30	14 lb/ft (19 Nm)	

Rear wheel	Value	Valid
<b>End muffler on front muffler</b>		
M8 x 30	14 lb/ft (19 Nm)	

## Fuel

Recommended fuel quality	Normal unleaded (max. 15 % ethanol, E15) 87 AKI (91 ROZ/RON) min 87 AKI
Usable fuel quantity	Approx. 4.1 gal (Approx. 15.5 l)
Fuel reserve	Approx. 3.2 quarts (Approx. 3 l)

## Engine oil

Engine oil, capacity	Approx. 3.3 quarts (Approx. 3.1 l), with filter replacement
Specification	SAE 15W-50, API SJ/JASO MA2, Additives (for instance, molybdenum-based substances) are prohibited, because they would attack the coatings on engine components, BMW Motorrad recommends BMW Motorrad ADVANTEC Pro Oil
Engine oil, quantity for topping up	max 0.5 quarts (max 0.5 l), Difference between MIN and MAX

**BMW recommends** **ADVANTEC**  
ORIGINAL BMW ENGINE OIL

## Engine

Engine number location	Crankcase, on left below alternator
Engine type	652EA
Engine design	Water-cooled 2-cylinder four-stroke engine with four rocker-arm-actuated valves per cylinder, two overhead camshafts and dry-sump lubrication
Displacement	647 cc (647 cm <sup>3</sup> )
Cylinder bore	3.1 in (79 mm)
Piston stroke	2.6 in (66 mm)
Compression ratio	11.6:1
Rated output	60 hp (44 kW), at engine speed: 7500 min <sup>-1</sup>
Torque	46 lb/ft (63 Nm), at engine speed: 6000 min <sup>-1</sup>
Maximum engine speed	max 8500 min <sup>-1</sup>
Idle speed	1250 min <sup>-1</sup> , With engine at operating temperature
Emission standard	Euro 4



## Clutch

Clutch design	Centrifugal clutch
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## Transmission

Transmission design	CVT (Continuously Variable Transmission)
Primary gear ratio	1:1.06
Gear ratio of secondary transmission	1:3.28

## Rear-wheel drive

Type of final drive	Chain drive
Number of teeth of rear-wheel drive (Pinion/sprocket)	16/27
Secondary gear ratio	1.688

## Frame

Frame design	Steel-tube frame with partially self-supporting drive unit, steel-tube rear frame
Location of the vehicle identification number	Main frame front right at bottom
Location of type plate	Frame at front left on steering head

## Chassis and suspension

Type of front suspension	Upside-down telescopic forks
Spring travel, front	4.5 in (115 mm), on front wheel
Type of rear suspension	Cast-aluminum single swinging arm
Type of rear suspension	Directly linked spring strut with adjustable spring preload
Spring travel, rear	4.5 in (115 mm), On wheel

## Brakes

### Front wheel

Type of front brake	Dual brake disc, rigid, diameter 270 mm, 2-piston floating calliper
Front brake pad material	Sintered metal
Front brake-disk thickness	0.2 in (5.0 mm), New 0.18 in (4.5 mm), Wear limit

### Rear wheel

Type of rear brake	Hydraulically disk brake with 2-piston floating caliper, Service brake Cable-operated disk brake with 1-piston floating caliper, Parking brake
Rear brake pad material	Organic
Rear brake-disk thickness	0.2 in (5.0 mm), New 0.18 in (4.5 mm), Wear limit
Free travel of brake actuation (Rear wheel brake)	Approx. 0.5 in (Approx. 11.5 mm), At the measuring point

## Wheels and tires

Speed category of front/rear tires	S, minimum requirement: 112 mph (180 km/h)
<b>Front wheel</b>	
Front wheel design	Aluminum cast wheel
Front-wheel rim size	3.50" x 15"
Front tire designation	120/70 R 15
Load index for front tire	47
Permissible front-wheel imbalance	max 0.2 oz (max 5 g)
<b>Rear wheel</b>	
Rear wheel design	Aluminum cast wheel
Rear-wheel rim size	4.50" x 15"
Rear tire designation	160/60 R 15
Load index for rear tire	64
Permissible rear-wheel imbalance	max 0.2 oz (max 5 g)
<b>Tire inflation pressure</b>	
Tire pressure, front	36.3 psi (2.5 bar), with tire cold
Tire pressure, rear	42.1 psi (2.9 bar), with tire cold

## Electrical system

Electrical rating of onboard sockets	max 7.5 A, Power socket in the rear storage compartment
<b>Battery</b>	
Battery design	Absorbent Glass Mat
Battery voltage	12 V
Battery capacity	14 Ah
<b>Spark plugs</b>	
Spark plugs, manufacturer and designation	NGK LMAR8D-J
<b>Light sources</b>	
Bulbs for 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 taillight/brake light	LED
Light source for license plate light	W5W 12 V 5 W

<b>Fuses</b>	
Fuse 1	15 A, DME main relay
Fuse 2	10 A, Digital Motor Electronics (DME) control unit
Fuse 3	5 A, Alarm system (DWA)/tire pressure control (RDC) control unit, diagnostic socket, power socket in the rear storage compartment
Fuse 4	4 A, Brake light switch/connector for optional accessories
Fuse 5	7.5 A, Fan
Fuse 6	5 A, Power socket in the front storage compartment
Fuse 7	4 A, License plate light
Fuse 8	4 A, Terminal 15 (DME/ABS/instrument cluster) / relay
Fuse 9	40 A, Instrument cluster/ignition lock/voltage regulator
Fuse 10	30 A, Anti-Lock Brake System (ABS)

## Alarm system

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

Activation time	Approx. 30 s
Alarm duration	Approx. 26 s
Activation time between two alarms	12 s
Temperature range	-40...185 °F (-40...85 °C)
Operating voltage	9...16 V

## Dimensions

Motorcycle length	88 in (2235 mm), measured across license-plate carrier
Motorcycle height	55.9...60.8 in (1420...1545 mm), measured above windshield, at DIN unladen weight
Motorcycle width	31.7 in (805 mm), without mounted parts
Rider's seat height	31.7 in (805 mm), measured without rider at DIN unladen weight
Rider's inside-leg arc, heel to heel	75 in (1905 mm), measured without rider at DIN unladen weight

## Weights

Vehicle curb weight	575 lbs (261 kg)
Permissible front wheel load	max 375 lbs (max 170 kg)
Permissible rear wheel load	max 606 lbs (max 275 kg)
Permissible gross weight	981 lbs (445 kg)
Maximum payload	406 lbs (184 kg)

## Performance data

Top speed	112 mph (180 km/h)
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## Service

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## Reporting safety defects

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

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

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

## BMW Motorrad Service

With its worldwide dealer network, BMW Motorrad can attend to you and your Maxi-Scooter in over 100 countries around the globe. The BMW Motorrad retailers have the technical information and expertise needed to conduct reliable service and repairs covering every aspect of your BMW Maxi-Scooter.

You will find the nearest authorized BMW Motorrad retailer to you at our website:

**bmw-motorrad.com**



### WARNING

#### **Improperly performed maintenance and repair work**

Accident hazard caused by subsequent damage

- BMW Motorrad recommends having corresponding work on your Maxi-Scooter carried out by a specialized workshop,

preferably by an authorized BMW Motorrad retailer. ◀

To ensure that your BMW Maxi-Scooter consistently remains in optimal condition BMW Motorrad urges you to observe the recommended service intervals for your Maxi-Scooter.

Have all maintenance and repair work confirmed in the "Service" chapter in this manual. Documentation confirming regular maintenance is essential for generous treatment of claims submitted after the warranty period has expired (goodwill).

You can obtain information on the contents of the BMW Services from your BMW Motorrad retailer.

## BMW Motorrad Service History

### Entries

Maintenance work that has been performed is recorded in the diagnostics and information system. Like a Service Booklet, these entries provide proof of regular maintenance.

If an entry is made in the vehicle's electronic Service Manual, service-related data is stored on the central IT systems of BMW AG in Munich, Germany.

When there is a change in vehicle owner, the data entered in the electronic Service History can also be viewed by the new vehicle owner. A BMW Motorrad retailer or specialist workshop can view the data entered in the electronic Service Manual.

## Objection

At the BMW Motorrad retailer or specialist workshop, the vehicle owner can object to the entry of data in the electronic Service Manual with the related storage of data in the vehicle and the transfer of data to the vehicle manufacturer during his time as the vehicle owner. In this case, no entry is made in the vehicle's electronic Service Manual.

## BMW Motorrad Mobility Services

The BMW Motorrad Mobility Services furnish you and your new BMW motorcycle with extra security by offering a wide array of assistance services in the event of a breakdown (BMW Roadside Assistance, breakdown assistance, vehicle recovery and retrieval, etc.).

Contact your authorized BMW Motorrad retailer for

additional information on available mobility-maintenance services.

## Maintenance procedures

### BMW Pre-Delivery Check

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

### BMW Running-in Check

The BMW running-in check must be carried out between 300 mls (500 km) and 750 mls (1200 km).

### BMW Service

BMW service is carried out once a year. The scope of the services performed may be dependent on the vehicle owner and the mileage driven. Your BMW Motorrad retailer confirms that the service has been per-

formed and enters the date for the next service.

For riders who drive long distances annually, it may be necessary to come in for service before the entered date. In this case a corresponding maximum odometer reading will also be entered in the confirmation of service. If this odometer reading is reached before the next service date, service must be performed sooner.

The required scope of maintenance work for your vehicle can be found in the following maintenance schedule:

The required scope of maintenance work for your motorcycle can be found in the following maintenance schedule:





## Maintenance schedule

- 1** BMW Running-in check  
(including oil change)
- 2** BMW Service Standard  
Scope
- 3** Engine oil change with filter
- 4** Replace air cleaner insert
- 5** Replacing the CVT belt  
with rollers
- 6** Replacing the chain kit
- 7** Replace all spark plugs
- 8** Check valve clearance
- 9** Changing the transmission  
oil
- 10** Checking the clutch (clutch  
removed)
- 11** Change brake fluid in entire  
system
  - a** annually or every  
6000 miles (10000 km)  
(whichever comes first)
  - b** for the first time after one  
year, then every two years

## Maintenance confirmations

### BMW Service standard scope

The repair procedures belonging to the BMW Service standard package are listed below. The actual maintenance work applicable for your vehicle may differ.

- Checking charging state of battery
- Performing the brief test using the BMW Motorrad diagnosis system
- Visual check of brake lines, brake hoses and connections
- Check the front/rear brake fluid level
- Checking front brake pads and brake disks for wear
- Checking rear brake pads and brake disk for wear
- Lubricate the bearing of the Bowden cable for the parking brake, and check the basic setting and holding action of the parking brake
- Checking steering-head bearing
- Checking coolant level
- Check the throttle cable for play
- Check the chain tension and tighten the screw connection of the swinging arm housing cover
- Checking tire inflation pressure and tread depth
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Final inspection and check for road safety
- Set the service due date and remaining distance
- Confirm the BMW service in the vehicle literature



## **BMW pre-delivery check**

performed

on \_\_\_\_\_

\_\_\_\_\_  
Stamp, signature

## **BMW Running-in Check**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

Next service

latest

on \_\_\_\_\_

or, if reached earlier

at km \_\_\_\_\_

\_\_\_\_\_  
Stamp, signature

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

Next service

latest

on \_\_\_\_\_

or, if reached earlier

at km \_\_\_\_\_

Work performed

BMW Service

Engine oil change with filter

Replacing air cleaner element

Replace CVT belt

Replacing chain set

Replacing all spark plugs

Checking valve clearance

Change transmission oil (during maint.)

Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes

No

Information

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\_\_\_\_\_  
Stamp, signature

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

Next service

latest

on \_\_\_\_\_

or, if reached earlier

at km \_\_\_\_\_

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Replacing air cleaner element

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Changing brake fluid in entire system

Yes

No

Information

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Stamp, signature

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

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at km \_\_\_\_\_

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BMW Service

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Change transmission oil (during maint.)

Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes

No

Information

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\_\_\_\_\_

Stamp, signature

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

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latest

on \_\_\_\_\_

or, if reached earlier

at km \_\_\_\_\_

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Checking valve clearance

Change transmission oil (during maint.)

Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes

No

Information

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Stamp, signature \_\_\_\_\_

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

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on \_\_\_\_\_

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BMW Service

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Replacing chain set

Replacing all spark plugs

Checking valve clearance

Change transmission oil (during maint.)

Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes

No

Information

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\_\_\_\_\_  
Stamp, signature

**BMW Service**

performed

on \_\_\_\_\_

at km \_\_\_\_\_

Next service

latest

on \_\_\_\_\_

or, if reached earlier

at km \_\_\_\_\_

Work performed

BMW Service

Engine oil change with filter

Replacing air cleaner element

Replace CVT belt

Replacing chain set

Replacing all spark plugs

Checking valve clearance

Change transmission oil (during maint.)

Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes No

Information

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**BMW Service**

performed

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at km \_\_\_\_\_

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Changing brake fluid in entire system

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performed

on \_\_\_\_\_

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Checking clutch (clutch removed)

Changing brake fluid in entire system

Yes

No

Information

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## **Appendix**

Certificate..... 168

## Certification

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**RDC** (tire pressure control /  
Contrôle de pression des pneus)

FCC ID: MRXBC54MA4  
IC: 2546A-BC54MA4

FCC ID: MRXBC5A4  
IC: 2546A-BC5A4

**EWS** (electronic immobilizer /  
antidémarrage électronique)

FCC ID: 2AACW-K18KMMG  
IC: 11117A-K18KMMG

FCC ID: 2AACW-K19KMMG  
IC: 11117A-K19KMMG

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**WARNING:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

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The descriptions and illustrations in this manual may vary from your own motorcycle's actual equipment, depending upon its equipment level and accessories as well as your specific national version. No claims stemming from these differences can be recognized.

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

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

Errors and omissions excepted.

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Original Rider's Manual, printed in Germany.



## WARNING

### **Harmful substances**

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

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

