BMW Motorrad

Rider's Manual

C 650 GT

Vehicle data/dealership details

Vehicle data

Model

Vehicle Identification Number

Colour code

Date of first registration

Registration number

Dealership details

Person to contact in Service department

Ms/Mr

Phone number

Dealership address/phone number (company stamp)

Welcome to BMW

We congratulate you on your choice of a Maxi-Scooter from BMW Motorrad and welcome you to the community of BMW riders.
Please read this Rider's Manual carefully before starting to use your new Maxi-Scooter. It contains important information on how to operate the controls and how to make the best possible use of all this Scooter's technical features.
In addition, it contains information on maintenance and care to help you maintain your vehicle's reliability and safety, as well as its value.
If you have questions concerning your Maxi-Scooter, your authorised BMW Motorrad dealer will gladly provide advice and assistance.

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

BMW Motorrad.

01 40 1 615 151

Table of Contents

General instructions

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your Maxi-Scooter. All maintenance and repair work on the vehicle is documented in Chapter 12. This record of the maintenance work you have had performed on your vehicle is a precondition for generous treatment of goodwill claims.
When the time comes to sell your Maxi-Scooter, please remember to hand over this Rider's Manual; it is an important part of the vehicle.

Abbreviations and symbols

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

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

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

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

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

◄ Indicates the end of an item of information.

• Instruction.

» Result of an activity.

Reference to a page with more detailed information.

◁ Indicates the end of a passage relating to specific accessories or items of equipment.

Tightening torque.

Technical data.

NV National-market version.

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

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

EWS Electronic immobiliser.

DWA Anti-theft alarm (Diebstahlwarnanlage).

ABS Anti-lock brake system.

ASC Automatic Stability Control.

CVT Continuously Variable Transmission. Transmission with continuously variable ratio

RDC Tyre pressure monitoring.

SVA Side View Assist. Assistance system giving the rider visual indication of the presence of a vehicle alongside.

Equipment

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

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

Technical data

All dimensions, weights and power outputs in the rider's manual refer to the German standard DIN (Deutsches Institut für Normung e. V.) and comply with its specified tolerances. Technical data and specifications in this rider's manual serve as reference points. The vehicle-specific data may deviate from these, for example as a result of selected optional equipment, the national-market version or country-specific measuring procedures. Detailed values can be taken from the vehicle registration documents and signs on the vehicle, or can be obtained from your authorised

BMW Motorrad Retailer or another qualified service partner or specialist workshop. The specifications in the vehicle documents always have priority over the information provided in this rider's manual.

Currentness

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

Additional sources of information

BMW Motorrad Retailer

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

Internet

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

Certificates and operating licences

The certificates for the vehicle and the official operating licences for any accessories are available at **www.bmw-motorrad.com/certification**.

Data memory

General

Control units are installed in the vehicle. Control units process data that they receive, for example, from vehicle sensors, or that they generate themselves or exchange between each other. Some control units are required for the vehicle to function safely or provide assistance during riding, for example assistance systems. In addition, control units enable comfort or infotainment functions.
Information on data that has been stored or exchanged can be obtained from the manufacturer of the vehicle, for example via a separate booklet.

Personal reference

Each vehicle is identified with a clear vehicle identification number. Depending on the country, the vehicle identification num-

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

Data protection rights

In accordance with applicable data protection laws, vehicle users have certain rights in relation to the manufacturer of the vehicle or in relation to companies which collect or process personal data.

Vehicle users have the right to obtain full information at no cost from persons or entities storing personal data of the vehicle user. These entities may include:

– Manufacturer of the vehicle
– Qualified service partners
– Specialist workshops
– Service providers

Vehicle users have the right to request information on what personal data has been stored, for what purpose the data is used, and where the data comes from. To obtain this information, proof of ownership or use is required. The right to information also includes information about data that has been shared with other companies or entities.

The website of the vehicle manufacturer contains the applicable data protection information. This data protection information includes information on the right to have data deleted or corrected. The manufacturer of the vehicle also provides their contact details and those of the data protection officer on their website.

The vehicle owner can also request that a BMW Motorrad Retailer or another qualified service partner or specialist workshop read out the data that is stored in the vehicle for a charge.

The vehicle data is read out using the legally prescribed socket for on-board diagnosis (OBD) in the vehicle.

Legal requirements for the disclosure of data

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

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

Operating data in the vehicle

Control units process data to operate the vehicle.

This includes, for example:

- Status reports of the vehicle and its individual components, for example wheel revolutions, wheel speed, deceleration
- Environmental conditions, for example temperature

The data is only processed in the vehicle itself and is generally non-permanent. The data is not stored beyond the operating period.

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

- Operating conditions of system components, for example filling levels, tyre pressure
- Malfunctions and faults in important system components, for example light and brakes
- Response of the vehicle in special riding situations, for example engagement of the driving dynamics systems
- Information on incidents resulting in damage to the vehicle

The data is necessary for the provision of control unit functions. Furthermore, the data is used to detect and rectify malfunctions and to enable the vehicle manufacturer to optimise vehicle functions.

The vast majority of this data is non-permanent and is only processed in the vehicle itself. Only a small amount of the data is stored in incident or fault memories as required by events.

If services are accessed, for example repairs, service processes, warranty cases and quality assurance measures, this technical information can be read out of the vehicle together with the vehicle identification number.

The information can be read out by a BMW Motorrad Retailer or another qualified service partner or specialist workshop. The legally stipulated socket for onboard diagnosis (OBD) in the vehicle is used to read out the data.

The data is obtained, processed and used by the relevant parts of the retailer network. The data is used to document the technical conditions of the vehicle, to help with error localization, to comply with warranty obligations and to improve quality.

In addition, the manufacturer has various product monitoring obligations arising from product liability legislation. To meet these obligations, the vehicle manufacturer requires technical data from the vehicle. The data from the vehicle can also be used to check warranty claims from the customer.
Error and incident memories in the vehicle can be reset during servicing or repair work by a BMW Motorrad Retailer or another qualified service partner or specialist workshop.

Data input and data transfer in the vehicle

General

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

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

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

Incorporation of mobile end devices

Depending on the equipment, mobile end devices connected to the vehicle, for example smartphones, can be controlled using the operating elements of the vehicle.
The image and sound of the mobile end device can then be output via the multimedia system. At the same time, specific information is transferred to the mobile end device. Depending on the type of integration, this includes, for example, position data and additional general vehicle information. This enables optimal

use of the selected apps, for example navigation or music playback.
The type of additional data processing is determined by the provider of the respective app. The scope of the possible settings depends on the corresponding app and the operating system of the mobile end device.

Services

General

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

Services of the vehicle manufacturer

For online services of the vehicle manufacturer, the individual functions are described at suitable points, for example rider's manual, website of the manufacturer. At the same time, information is also provided on the relevant data protection law. Personal data may be used to provide online services. Data is exchanged using a secure connection, for example with the IT systems provided by the vehicle manufacturer.
Obtaining, processing and using personal data outside of the normal provision of services requires legal permission, contractual agreement or consent. It is also possible to have the entire data connection activated or deactivated. Statutory functions are excluded from this.

Services from other providers

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

General views

General view, left side

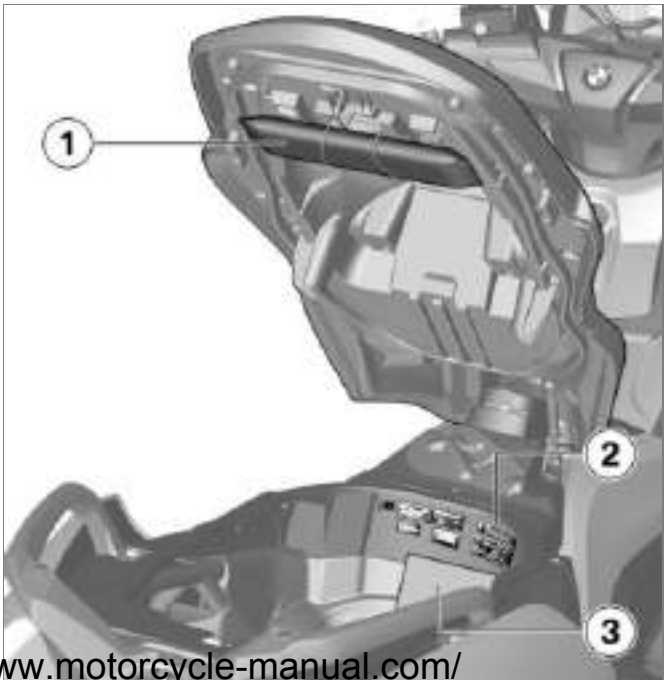
1 Brake fluid expansion tank for the rear wheel brake (➡ 106)
2 Fuel filler opening (under the tank cover) (➡ 84)
3 Adjustable backrest (➡ 70)
4 Setting the spring preload (➡ 71)
5 Oil filler opening and oil dipstick (under the footboard) (➡ 100)

General view, right side

1 Brake-fluid reservoir for the front-wheel brake (➠ 105)
2 Type plate (on the steering head tube right)
3 Underneath the side panel:
Battery (➠ 122)
Fuses (➠ 125)
Diagnostic connector (➠ 127)
4 Vehicle Identification Number VIN (on right frame tube)
5 Coolant sight glass (through opening in side panel) (➠ 107)
6 Coolant expansion tank (underneath footrest plate) (➠ 107)
7 Rear-seat heating operation (➠ 64)

Underneath the seat

1 Toolkit (➡ 98)
2 Payload table
Table of tyre pressures
Note on calibration of ASC
3 Rider's Manual

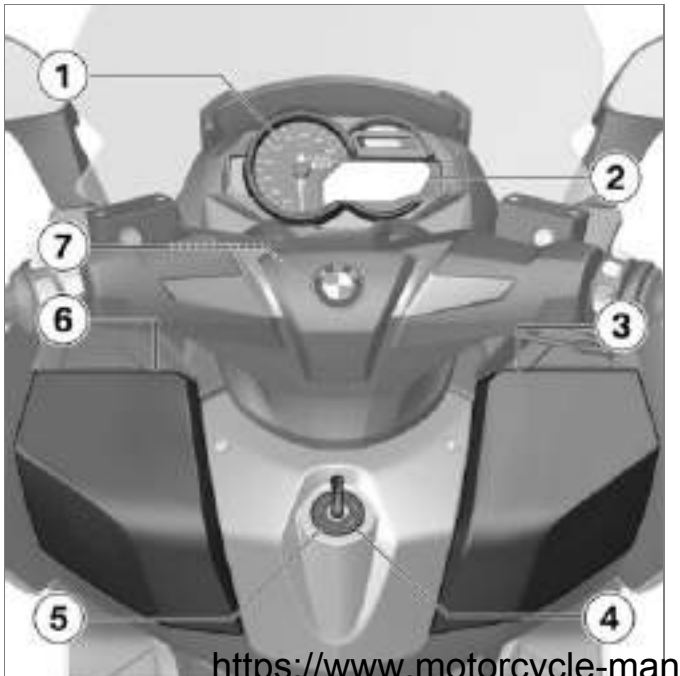


Multifunction switch, left

1 High-beam headlight and headlight flasher (➠ 48)
2 Hazard warning lights system (➠ 52)
3 Windscreen (➠ 69)
4 Turn indicators (➠ 52)
5 Horn
6 TRIP/INFO rocker switch
Selecting readings (➠ 53)
Resetting trip distance recorder (➠ 54)
Resetting the average values (➠ 54)
Call up SETUP (➠ 54)
7 Daytime riding light (➠ 49)

Multifunction switch, right

1 Heated handlebar grips (➠ 63)
2 Seat heating (➠ 63)
3 Emergency off switch (kill switch) (➠ 47)
4 Starter button (➠ 76)



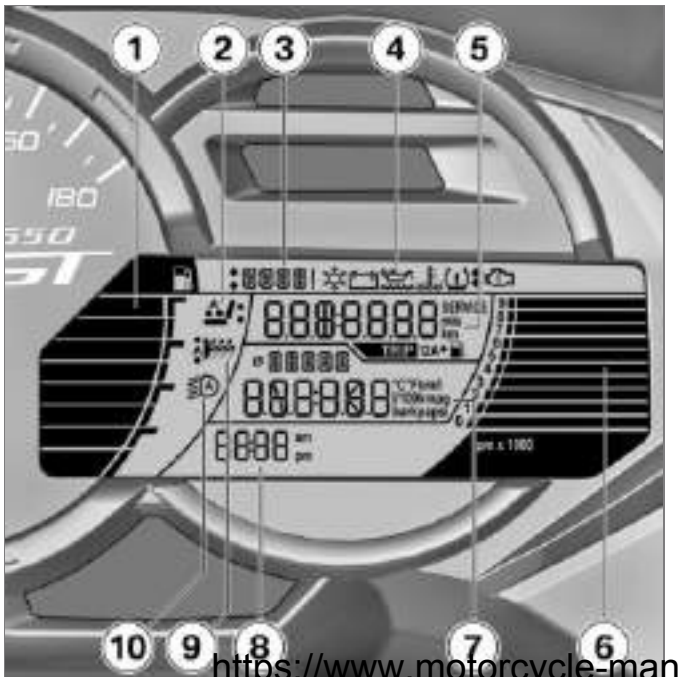
Operating area

1 Speedometer
2 Multifunction display (➠ 25)
Warning and indicator lights (➠ 24)
3 Stowage compartment (➠ 65)
4 Unlocking the tank cover (integrated into the ignition steering lock) (➠ 84)
5 Unlocking the motorcycle seat (integrated into the ignition steering lock) (➠ 65)
6 Stowage compartment (➠ 65)
Socket (in the storage compartment) (➠ 130)
7 Plug for optional accessories (under handlebar trim panel)

Status indicators

Indicator and warning lights

1 Day run lights (➠ 49)
2 Turn indicators, left
3 General warning light (➠ 26)
4 Photosensor for recording the ambient brightness
Alarm system LED (➠ 61)
5 Turn indicators, right
6 ABS (➠ 38)
7 Fuel reserve (➠ 31)
8 Malfunction indicator lamp (➠ 32)
9 High-beam
10 ASC (➠ 39)



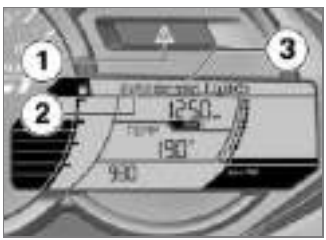
Multifunction display

1 Fuel-gauge reading
2 Selected heating stage (➠ 63)
3 Text box for warnings (➠ 26)
4 Warning symbols (➠ 26)
5 Trip distance recorder (➠ 54)
Service-due indicator (➠ 41)
Distance covered since fuel dropped to reserve (➠ 42)
6 Engine speed display
7 On-board computer readings (➠ 53)
8 Clock (➠ 56)
9 Selected heating stage (➠ 63)
10 Automatic for daytime riding light (➠ 50)

Warnings

Mode of presentation

Warnings are indicated by the corresponding warning lights.



Warnings for which there is no dedicated warning light are indicated by 'General' warning light **1** showing in combination with a warning text appearing at position **2**, such as EWS!, or a warning symbol **3** appearing on the multifunction display.
The 'general' warning light shows red or yellow, depending on the urgency of the warning.

If two or more warnings occur at the same time, all the appropriate warning lights and warning symbols appear, alternating with warning words as applicable.
The possible warnings are listed on the next pages.

Warnings, overview

Indicator and warning lights	Display text	Meaning
 General warning light shows yellow	EWS! appears on the display	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 appears on the display	
 lights up yellow		Emissions warning (➠ 32)

Indicator and warning lights	Display text	Meaning
 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 control unit (➠ 33)
 General warning light shows yellow	 + LAMP! appears on the display	Rear light defective (➠ 33)
 General warning light shows yellow	 + LAMP! appears on the display	Bulb for headlight defective (➠ 34)
 General warning light shows yellow	 + LAMP! appears on the display	Rear light and bulb for headlight are defective (➠ 34)
 General warning light flashes red	 appears on the display	Tyre pressure, front, outside permitted tolerance (➠ 35)
	The critical tyre pressure flashes	
 General warning light flashes red	 appears on the display	Tyre pressure, rear, outside permitted tolerance (➠ 35)
	The critical tyre pressure flashes	

Indicator and warning lights	Display text	Meaning
 General warning light flashes red	 appears on the display	Tyre pressure, both tyres, outside permitted tolerance (➠ 36)
	The tyre pressure readings flash	
	"--" or "--:--" is displayed	Signal transmission disrupted (➠ 37)
 General warning light shows yellow	 appears on the display	RDC sensor defective or system error (➠ 37)
	"--" or "--:--" is displayed	
 General warning light shows yellow	RDC! appears on the display	Battery of RDC sensor weak (➠ 38)
 flashes		ABS self-diagnosis not completed (➠ 38)
 lights up		ABS fault (➠ 38)
 quick-flashes		ASC intervention (➠ 39)

Indicator and warning lights	Display text	Meaning
 slow-flashes		ASC self-diagnosis not completed (➠ 39)
 lights up		ASC switched off (➠ 39)
 lights up		ASC fault (➠ 39)
 lights up	CAL. flashes.	ASC calibration not yet completed (➠ 40)
	DWA! appears on the display	Anti-theft alarm battery weak (➠ 40)
 General warning light shows yellow	DWA! appears on the display	Anti-theft alarm battery flat (➠ 40)
 General warning light shows red	 appears on the display	Insufficient battery charge current (➠ 40)
 General warning light shows yellow	SVA! appears on the display	SVA fault (➠ 41)

EWS active


General warning light shows yellow.

EWS! appears on the display.
Possible cause:

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

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

Outside temperature warning


Ice-crystal symbol appears on the display.

Possible cause:

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

WARNING

Risk of black ice also applicable at over 3 °C

Risk of accident

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

Fuel down to reserve


The reserve-fuel symbol lights up.

WARNING

Irregular engine operation or engine shutdown due to lack of fuel

Risk of accident, damage to catalytic converter

- Do not run the fuel tank dry.◀

Possible cause:

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

	Fuel reserve
approx. 3 l	

- Refuelling (➡ 84).

Coolant temperature too high


General warning light shows red.


Temperature symbol appears on the display.

ATTENTION

Riding with overheated engine

Engine damage

- Compliance with the information set out below is essential.◀

Possible cause:

The coolant level is too low.

- Check coolant level (➡ 107).

If the coolant level is too low:

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

Possible cause:

The coolant or engine-oil temperature is too high.

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

Engine-oil level too low

General warning light shows yellow.

Oil-level symbol appears on the display.

OIL CHECK appears on the display.

Possible cause:

The electronic oil-level sensor has registered an excessively low oil level. Check the engine-oil level with the dipstick the next time you stop to refuel:

- Checking engine oil level (➡ 100).

If the oil level is too low:

- Top up the engine oil.

Emissions warning

Malfunction indicator lamp shows yellow.

Possible cause:

The engine control unit has diagnosed a fault.

- Have the fault rectified at your convenience by a specialist workshop, preferably an authorised BMW Motorrad dealer.

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

Engine in emergency-operation mode

General warning light shows yellow.

Engine symbol appears on the display.

WARNING

Unusual ride characteristics when engine running in emergency-operation mode

Risk of accident

- Avoid accelerating sharply and overtaking.◀

Possible cause:

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

- It is possible to continue to ride but it may be that the engine performance is not as it normally is.

» If the pollutant emissions are above the setpoint values, the malfunction indicator lamp also lights up.

» In exceptional cases, the engine stops and refuses to start.

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

Severe fault in the engine control unit

General warning light shows yellow.

Engine symbol flashes.

WARNING

Engine damage when running in emergency-operation mode

Risk of accident

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

Possible cause:

The engine control unit has diagnosed a fault that could lead to serious consequential faults (e.g. overheating). The engine is in emergency-operation mode.

- Avoid high load and rpm ranges if possible.

» Continued driving is not recommended.

» If the pollutant emissions are above the setpoint values, the malfunction indicator lamp also lights up.

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

Rear light defective

General warning light shows yellow.

 + LAMP! appears on the display.

WARNING

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

Safety risk

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

Possible cause:

Bulb for combined rear light and brake light is defective.

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

Bulb for headlight defective

 General warning light shows yellow.

 + LAMP! appears on the display.

WARNING

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

Safety risk

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

Possible cause:

Low-beam or high-beam headlight defective.

- Replacing bulbs for low-beam headlight and high-beam headlight (118).

Possible cause:

Parking light defective.

- The LED parking light must be replaced. Consult a specialist workshop, preferably an authorised BMW Motorrad dealer.

Rear light and bulb for headlight are defective

 General warning light shows yellow.

 + LAMP! appears on the display.

Possible cause:

The rear light and a headlight bulb are defective.

- See the fault descriptions above.

Tyre pressure, front, outside permitted tolerance

– with tyre pressure control (RDC)[OE]


General warning light flashes red.


Tyre symbol with arrow pointing up appears on the display.

The critical tyre pressure flashes. Possible cause:

Measured tyre pressure in the front tyre is outside permitted tolerance.

- Check the tyre for damage and to ascertain whether the vehicle can be ridden with the tyre in its present condition.

If the vehicle can be ridden with the tyre in its present condition:

WARNING

Tyre pressure outside the permitted tolerance.

Risk of accident, degradation of the vehicle's driving characteristics.

- Adapt your style of riding accordingly.◀
- Correct the tyre pressure at the earliest possible opportunity.

NOTICE

Before adjusting the tyre pressure, observe the information on temperature compensation and pressure adaptation in the section entitled "Engineering details":◀

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

If you are unsure whether the vehicle can be ridden with the tyre in its present condition:

- Do not continue your journey.
- Notify the breakdown service.

Tyre pressure, rear, outside permitted tolerance

– with tyre pressure control (RDC)[OE]


General warning light flashes red.


Tyre symbol with arrow pointing down appears on the display.

The critical tyre pressure flashes. Possible cause:

Measured tyre pressure in the rear tyre is outside permitted tolerance.

- Check the tyre for damage and to ascertain whether the

vehicle can be ridden with the tyre in its present condition.

If the vehicle can be ridden with the tyre in its present condition:

WARNING

Tyre pressure outside the permitted tolerance.

Risk of accident, degradation of the vehicle's driving characteristics.

- Adapt your style of riding accordingly.◀
- Correct the tyre pressure at the earliest possible opportunity.

NOTICE

Before adjusting the tyre pressure, observe the information on temperature compensation and pressure adaptation in the section entitled "Engineering details":◀

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

If you are unsure whether the vehicle can be ridden with the tyre in its present condition:

- Do not continue your journey.
- Notify the breakdown service.

Tyre pressure, both tyres, outside permitted tolerance

– with tyre pressure control (RDC)[OE]


General warning light flashes red.


Tyre symbol with arrows pointing up and down appears on the display.

The tyre pressure readings flash.

Possible cause:

Measured tyre pressure in both tyres is outside permitted tolerance.

- Check the tyre for damage and to ascertain whether the vehicle can be ridden with the tyre in its present condition.

If the vehicle can be ridden with the tyres in the present condition:

WARNING

Tyre pressure outside the permitted tolerance.

Risk of accident, degradation of the vehicle's driving characteristics.

- Adapt your style of riding accordingly.◀
- Correct the tyre pressure at the earliest possible opportunity.

NOTICE

Before adjusting the tyre pressure, observe the information

on temperature compensation and pressure adaptation in the section entitled "Engineering details":◀

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

If you are unsure whether the vehicle can be ridden with the tyres in the present condition:

- Do not continue your journey.
- Notify the breakdown service.

Signal transmission disrupted

– with tyre pressure control (RDC)[OE]

"--" or "--:--" is displayed.

Possible cause:

The vehicle has not yet accelerated past the threshold of approximately 30 km/h. The RDC sensors do not start transmitting signals until the vehicle reaches a speed above this threshold for the first time (➠ 93).

- Increase speed above this threshold and observe the RDC readings. Assume that a permanent fault has not occurred unless the 'General' warning light comes on to accompany the symptoms. Under these circumstances:
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Possible cause:

Wireless communication with the RDC sensors has been disrupted. Possible causes include radio-communication systems operating in the vicinity and interfering with the link between the RDC control unit and the sensors.

- Move to another location and observe the RDC readings. Assume that a permanent fault has not occurred unless the 'General' warning light comes on to accompany the symptoms. Under these circumstances:
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

RDC sensor defective or system error

– with tyre pressure control (RDC)[OE]


General warning light shows yellow.


Tyre symbol appears on the display.

"--" or "--:--" is displayed.

Possible cause:

Vehicle is fitted with wheels not equipped with RDC sensors.

- Fit wheels equipped with RDC sensors.

Possible cause:

One or two RDC sensors have failed.

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

Possible cause:

A system error has occurred.

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

Battery of RDC sensor weak

– with tyre pressure control (RDC)[OE]

General warning light shows yellow.

RDC! appears on the display.

NOTICE

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

Possible cause:

The integral battery RDC sensor has lost a significant proportion of its original capacity. There is no assurance of how long the tyre pressure control system can remain operational.

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

ABS self-diagnosis not completed

ABS warning light flashes.

Possible cause:

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

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

ABS fault

ABS warning light shows.

Possible cause:

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

- You can continue to ride the vehicle, but make due provision for the fact that the ABS function is not available. Bear in mind the more detailed information on situations that can lead to an ABS fault (➠ 91).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

ASC intervention


ASC warning light quick-flashes.

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

ASC self-diagnosis not completed


ASC warning light slow-flashes.

Possible cause:

 ASC self-diagnosis not completed
The Maxi-Scooter has to reach a defined minimum speed with the engine running for the wheel speed sensors to be tested:
min 5 km/h

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

ASC switched off


ASC warning light flashes.

Possible cause:

The rider has switched off the ASC.

- ASC Switching on (➠ 59).

ASC fault


ASC warning light flashes.

Possible cause:

The ASC control unit has detected a fault.

- You can continue to ride. Bear in mind that the ASC is not available. Bear in mind the more detailed information on situations that can lead to a ASC fault (➠ 92).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

ASC calibration not yet completed


ASC warning light flashes.

CAL. flashes.

Possible cause:

ASC calibration has not yet completed

- Complete or repeat ASC calibration.
- Calibrating ASC (➠ 60).
- Cancel ASC calibration: Switch the ignition off and then on again.

Anti-theft alarm battery weak

– with anti-theft alarm (DWA)[OE]

DWA! appears on the display.

NOTICE

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

Possible cause:

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

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

Anti-theft alarm battery flat

– with anti-theft alarm (DWA)[OE]


General warning light shows yellow.

DWA! appears on the display.

NOTICE

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

Possible cause:

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

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

Insufficient battery charge current


General warning light shows red.


Battery symbol appears on the display.

WARNING

Failure of the vehicle systems

Risk of accident

- Do not continue your journey.◀

Battery is not being charged. If you continue to ride the vehicle the on-board electronics will drain the battery.

Possible cause:

Alternator or alternator drive defective.

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

SVA fault

– with Side View Assist[OE]

General warning light shows yellow.

SVA! appears on the display.

Possible cause:

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

- You can continue to ride the vehicle, but make due provision for the fact that the SVA function is not available.
- Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Service-due indicator

The service-due date **1** shows when a service is due within one month.

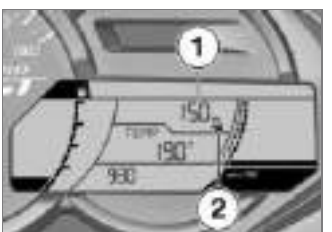
When a service is due within 1000 kilometres (US version, 700 miles), countdown distance **2** is shown and counted down in steps of 100 kilometres (US version, 100 miles). This reading appears briefly after the Pre-Ride-Check completes.

If service is overdue, the due date or the odometer reading at which service was due is accompanied by the 'General' warning light showing yellow. The word SERVICE remains permanently visible.

NOTICE

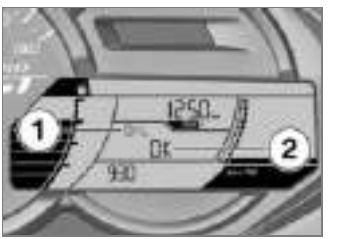
If the service-due indicator appears more than a month before the service date, the current date has to be corrected. This situation can occur if the battery was disconnected.◀

Distance ridden after fuel down to reserve



The distance you ride after the fuel level drops to reserve is shown at **1** along with symbol **2**. This distance recorder is reset and the reading disappears as soon as you refuel and top up the tank to above the reserve level.

Oil level



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

The preconditions for the oil level check are as follows:
– Engine at operating temperature.
– Engine idling for at least ten seconds.
– Side stand retracted.
– Maxi-Scooter is upright.

The meanings of the readings that can appear at position **1** and **2** are as follows:
`OIL OK`: oil level is correct.
`OIL CHECK`: check the oil level the next time you stop for fuel.
`OIL ---`: oil level cannot be measured (conditions as stated above not satisfied).

The appropriate warning symbol shows if the oil level is too low.

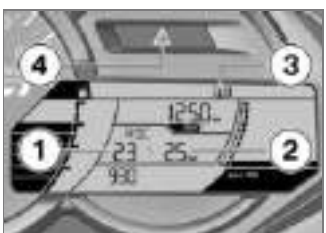
Ambient temperature

If the outside temperature drops below 3 °C the temperature display flashes to draw your attention to the risk of black ice forming. The display automatically switches from any other

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

Tyre pressures

– with tyre pressure control (RDC)[OE]



The tyre-pressure readings are based on a tyre air temperature of 20 °C. The front tyre pressure is on the left **1**; the reading on the right **2** is the rear tyre pressure. --:-- appears directly after the ignition is switched on, because the sensors do not transmit tyre pressures until the first time the vehicle accelerates to more than 30 km/h.

If "General" warning light **4** flashes red, accompanied by symbol **3**, the reading is a warning. The top arrow beside the tyre symbol indicates a problem with the front wheel, the bottom arrow indicates a problem with the rear wheel.

The detailed description of BMW Motorrad RDC starts on page (93).

Side View Assist

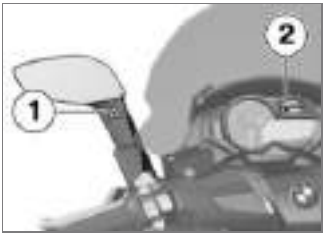
– with Side View Assist[OE]

Indicator lights

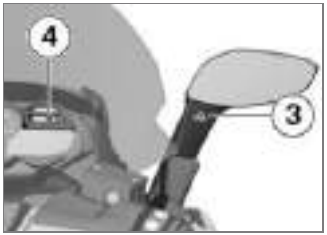
The SVA indicator lights inform the driver if a vehicle is in the blind spot or approaching from behind.

NOTICE

Side View Assist does not replace the rider's personal judgement of the traffic situation.
Pay attention to the traffic situation and the area around the vehicle, even if the indicator lights do not indicate any vehicles.
Always obey the rule of looking behind you twice before turning off or leaving your lane by looking over your shoulders.◀



– Indicator light **1 comes on** if a vehicle is detected in the blind spot on the left.
– Indicator lights **1** and **2 flash** simultaneously, if a vehicle is detected in the blind spot on the left and the left indicator is switched on.



– Indicator light **3 comes on** if a vehicle is detected in the blind spot on the right.
– Indicator lights **3** and **4 flash** simultaneously if a vehicle is detected in the blind spot on the right and the right indicator is switched on.

Pre-Ride-Check

The instrument cluster runs a test of the indicator lights **1** and **3** when the ignition is switched on. In the process, the indicator lights come on briefly.

Communication fault

NOTICE

The indicator lights **1** and **3** flash rapidly if there is no communication between instrument cluster and the SVA control unit.
It is possible to continue the journey taking the failed SVA function into consideration.
Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad Retailer.◀

See the "Driving" section (▪ 79) for more information on the lean angle, activation and differential speed.
See the "Technology in Detail" section for more information on the surroundings sensors (▪ 94).

Operation

Ignition switch/steering lock

Ignition key

You receive two ignition keys.

– with topcase[OA]

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

Lock the handlebars

- Turn the handlebars all the way to left.

- Turn the ignition key to position **3**, while moving the handlebars slightly.

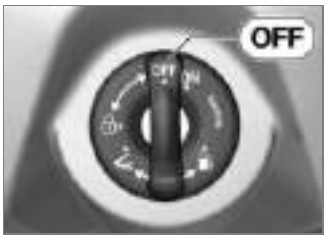
» Ignition, lights and all function circuits are switched off.
» Handlebars are locked.
» Left stowage compartment is locked.
» Ignition key can be removed.

Switching on ignition

- Turn ignition key to position **ON**.

» Windscreen moves to the drive position.
» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-Ride-Check is performed. (➡ 77)
» ABS self-diagnosis is in progress. (➡ 77)
» ASC self-diagnosis is in progress. (➡ 78)

Switching off ignition



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

» Windscreen moves to parking position.
» The lights are switched off, the side light and light on the rear stowage compartment remain illuminated briefly.
» Handlebars not locked.
» Ignition key can be removed.

Emergency off switch (kill switch)

1 Emergency off switch (kill switch)

WARNING

Operation of the kill switch while riding

Risk of fall due to rear wheel locking

- Do not operate the kill switch when riding.◀

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

a Engine switched off
b Normal operating position (run)

Lights

Low-beam headlight and sidelights

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

After switching off the ignition the side light remains illuminated briefly.

NOTICE

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

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

– with daytime riding light OE

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

High-beam headlight and headlight flasher

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

Parking lights

- Switch off the ignition.

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

Daytime riding light

– with daytime riding light OE

Automatic or manual daytime riding light

The daytime riding light is switched on and off either automatically or manually.
You can switch the automatic function for the daytime riding light on or off in SETUP.
Recommended setting:
– SETUP DRL **ON** (DRL: daytime riding light)

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

Automatic daytime riding light

WARNING

The automatic daytime riding light does not replace a per-
sonal assessment of the light conditions
Risk of accident
- Switch off the automatic daytime riding light in poor light conditions.◀
- Starting the engine (➠ 76).

NOTICE

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

The symbol for automatic daytime riding light appears on the display.

» If the symbol for automatic riding light does not appear, this is because the active setting is SETUP DRL **OFF**.
- Proceed as follows in order to switch the daytime riding light to automatic:

- Repeatedly short-press TRIP **1** until SETUP **3** appears on the display.
- Long-press TRIP **1** to start SETUP.

» Dividing line **4** disappears.
» SETUP CLOCK appears on the display.

- Repeatedly short-press TRIP **1** until the SETUP DRL menu item **3** appears on the display.
- Short-press INFO **2** to toggle between ON and OFF.

» SETUP DRL **ON** appears on the display.

- Long-press TRIP **1**.

The symbol for automatic daytime riding light appears on the display.

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

Requirement

Automatic for daytime riding light is switched on.

- Press button **1** (e. g. when you ride into a tunnel, and the response of the automatic daytime riding light to the change in ambient brightness is delayed).

» Automatic for daytime riding light is switched off.

» The low-beam headlight and the front side lights are switched on.

- Press button **1** again.

» Automatic for daytime riding light is re-activated.

» The daytime riding light is switched on again as soon as ambient light is bright enough.

» The low-beam headlight and the background lighting of the instrument panel are switched off.

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

Manual daytime riding light

Requirement

Automatic for daytime riding light must be switched off.

WARNING

Switching on the daytime riding light in the dark.

Risk of accident

- Do not use the daytime riding light in the dark.◀
- Starting the engine (➡ 76).

- Repeatedly short-press TRIP **1** until SETUP **3** appears on the display.
- Long-press TRIP **1** to start SETUP.

» Dividing line **4** disappears.

» SETUP CLOCK appears on the display.

- Repeatedly short-press TRIP **1** until the SETUP DRL menu item **3** appears on the display.
- Short-press INFO **2** to toggle between ON and OFF.

» SETUP DRL **OFF** appears on the display.

- Long-press TRIP **1**.

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

NOTICE

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

» The low-beam headlight and the front side lights are switched off.

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

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

NOTICE

If the high-beam headlight is switched on while the daytime riding light is on, the daytime riding light is switched off after approx. 2 seconds and the high-beam headlight, low-beam headlight and front side light are switched on.
If the high beam headlight is switched off again, the daytime running light is not automatically reactivated, but must be switched on again if required.◀

Hazard warning lights system

Operating 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

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

- Press button **1** to switch on the hazard warning flashers.

» Ignition can be switched off.

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

Turn indicators

Operating the turn indicators

- Switch on the ignition.

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

NOTICE

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

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

Reading

Select display

- Switch on the ignition.

- Short-press TRIP **1** to step through the readings in panel **3**.

The following values can be displayed:
– Odometer
– Tripmeter 1 TRIP 1
– Tripmeter 2 TRIP 2
– Automatic trip distance TRIP A is reset automatically if at least 5 hours have passed since the ignition was switched off and the date has changed.
– After fuel down to reserve: distance ridden since
– Call up the menu for settings: SETUP

- Short-press INFO **2** to step through the readings in panel **4**.

The following values can be displayed:
– Ambient temperature TEMP

– Average speed ØSPEED
– Average consumption ØFUEL
– Current consumption FUEL
– Date DATE
– Oil level OIL

– with tyre pressure control (RDC)[OE]

Tyre pressures RDC◁

Resetting trip distance recorder

- Switch on the ignition.
- Select the tripmeter.

» The selected trip distance recorder appears on the display.

- Operate and hold TRIP **1** until the trip distance recorder has been reset in this area **3**.

Resetting the average values

- Switch on the ignition.
- Select average consumption or average speed.

» The average value you want appears on the display.

- Press and hold down INFO **2** until the reading in panel **4** has reset.

SETUP

SETUP selecting

Requirement

The Maxi-Scooter is at a standstill.

Requirement

The on-board computer readings appear on the display.

- Repeatedly short-press TRIP **1** until SETUP **3** appears on the display.
- Long-press TRIP **1** to start SETUP.

» Dividing line **4** disappears.

SETUP CLOCK appears on the display.

- Short-press TRIP **1** to step through the following parameters in SETUP.

– with anti-theft alarm (DWA) OE
– Automatically activate anti-theft alarm function when the ignition is switched off DWA ON or leave the automatic function switched off DWA OFF.◁
– with Side View Assist OE
– Deactivate SVA OFF or activate SVA ON Side View Assist.◁
– with daytime riding light OE
– Activate automatic daytime riding light DRL ON or manual daytime riding light DRL OFF.◁
– Switch ASC on or off ASC ON / ASC OFF and calibrate ASC ASC CAL.
– Set the time CLOCK.
– Set the date DATE.
– Exit SETUP EXIT.

Exit the SETUP

Requirement

There are 4 ways of exiting SETUP.

- Long-press TRIP **1**.
» The on-board computer appears on the display.
- Alternatively: Repeatedly short-press TRIP **1** until SETUP EXIT appears on the display.
- Long-press INFO **2**.
» The on-board computer appears on the display.
- Alternatively: Switch the ignition off and then on.
» The on-board computer appears on the display.
- Alternatively: Ride off.

Speed for operation of SETUP
max 10 km/h

» SETUP is ended as soon as the vehicle accelerates past the permissible speed for operation of the menu.
» The on-board computer appears on the display.
» All settings are saved, regardless of how you exited SETUP.

Date and time

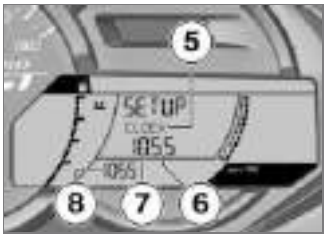
Setting the clock

Requirement

The Maxi-Scooter is at a standstill.

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

- Repeatedly short-press TRIP **1** until SETUP **3** appears on the display.
- Long-press TRIP **1** to start SETUP.
» Dividing line **4** disappears.
» SETUP CLOCK appears on the display.



- Long-press INFO **2** to set the hours number.

» Hours reading **7** flashes.

- Short-press TRIP **1** to step the hours reading up.
- Short-press INFO **2** to step the hours reading down.
- When the hours reading is correct, long-press INFO **2**.

» Minutes reading **6** stops flashing.

- Check time reading **8**.

» This completes the process.

- Long-press TRIP **1**.

» The on-board computer appears on the display.

Setting the date

Requirement

The Maxi-Scooter is at a standstill.

- Switch on the ignition.

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

- SETUP selecting (➡ 54).

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

» `SETUP DATE` appears on the display.

- Long-press INFO **2**.

» Year **6** flashes.
• Short-press TRIP **1** to increment the year.
• Short-press INFO **2** to decrement the year.
• When the year reading is correct, long-press INFO **2**.
» Month **7** flashes.
• Short-press TRIP **1** to increment the month.
• Short-press INFO **2** to decrement the month.
• When the month reading is correct, long-press INFO **2**.
» Day **8** flashes.
• Short-press TRIP **1** to increment the day.
• Short-press INFO **2** to decrement the day.
• When the day reading is correct, long-press INFO **2**.
» Day **8** stops flashing.
» This completes the process.
• Long-press TRIP **1**.
» The on-board computer appears on the display.

Automatic Stability Control (ASC)

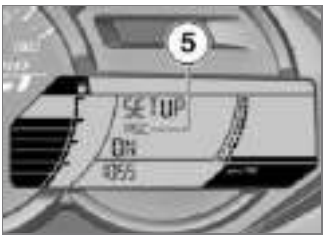
ASC Switching off

Requirement

The Maxi-Scooter is at a standstill.

• Switch on the ignition.
» The on-board computer readings appear on the display.
• SETUP selecting (➠ 54).

SETUP **3** is started. The separating line **4** is hidden.
» `SETUP ASC` appears on the display.



• Short-press INFO **2** to toggle between `ASC ON` **5** and `ASC OFF`.
» `SETUP ASC OFF` appears on the display.
ASC warning light flashes.
» `ASC` is switched off.
• Long-press TRIP **1** to exit `SETUP`.
» The on-board computer readings appear on the display.

» 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 drivetrain.

ASC Switching on

Requirement

The Maxi-Scooter is at a standstill.

- Switch on the ignition.
» The on-board computer readings appear on the display.
- SETUP selecting (➡ 54).

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

» SETUP ASC appears on the display.

- Short-press INFO **2** to toggle between ASC ON and ASC OFF **5**.
» SETUP ASC ON appears on the display.

ASC warning light remains off.

» Anti-theft alarm (ASC) is switched on.
- Long-press TRIP **1** to exit SETUP.
» The on-board computer readings appear on the display.
- Alternatively, switch the ignition off and then on.

» If you switch the ignition off then on again and the ASC light comes back on, there is a fault in the ASC.

Calibration

Calibration is the process of adapting control to the effective tyre radii of the front and rear wheels.

Effective tyre radius

– Effective tyre radius depends on tyre make, tread depth, tyre press and the load carried on the vehicle.
– Always re-calibrate the ASC after changing a tyre or tyres to adapt the system to the changed tyre radii.
– As tyre wear progresses, regularly re-calibrate the ASC so that it can operate as effectively as possible.
– It is not necessary to recalibrate the system after removing and reinstalling a wheel to which no changes have been made, for example when a wheel is removed so that the brakes can be serviced.

Calibrating ASC

Requirement

Reduced reserves of stability of ASC control following a tyre change.

• ASC Switching on (➡ 59).
» SETUP ASC ON appears on the display.

• Long-press INFO **2** to start calibration.
» CAL. **3** flashes.

ASC warning light starts to show.

» There are no functions assigned to buttons **1** and **2**.
» The only way to exit this menu item is to switch the ignition of and then on again.
» Calibration is stated and expects the Maxi-Scooter to be ridden forward.

ATTENTION

ASC is not available until calibration is completed

Risk of falling

• Use a smooth and level stretch of straight road with good grip for the calibration procedure.◀
• Ride in a straight line and remain for 6 seconds in the following speed range, riding at as steady a speed as possible.

Speed range for ASC calibration
The Maxi-Scooter has to be ridden in a straight line within a certain speed range:
30...50 km/h

» ASC is calibrated.

ASC warning light goes out.

» The on-board computer readings appear on the display.
» ASC calibration has completed.
» You can resume your journey.

Anti-theft alarm (DWA)

– with anti-theft alarm (DWA)[OE]

DWA activating

- Switching on ignition (▪ 46).
- DWA adjusting (▪ 62).
- Switch off the ignition.

» If the DWA is activated, the DWA is automatically activated after having switched off the ignition.
» Activation takes approximately 30 seconds to complete.
– Turn indicators flash twice.
– Confirmation tone sounds twice (if programmed).

Alarm signal

A DWA alarm can be triggered by:
– motion sensor
– an attempt to use an unauthorised vehicle key to switch on the ignition
– disconnection of the DWA anti-theft alarm from the motorcycle's battery (DWA internal battery in the anti-theft alarm provides power - alarm tone only, the turn indicators do not flash).

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

The alarm signal continues for approx. 26 seconds. While a DWA alarm is in progress an alarm tone sounds and the turn indicators flash. The type of alarm tone can be set by an authorised BMW Motorrad dealer.

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

Light signals issued by the DWA LED:

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

DWA deactivating

- Switching on ignition (➨ 46).
- » Turn indicators flash once.
- » Confirmation tone sounds once (if programmed).
- » Anti-theft alarm (DWA) is deactivated.

DWA adjusting

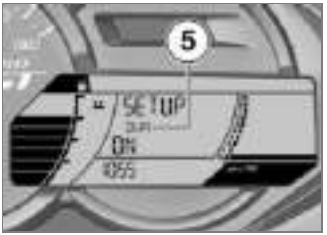
Requirement

The Maxi-Scooter is at a standstill.

- Switch on the ignition.
- » The on-board computer readings appear on the display.
- SETUP selecting (➨ 54).

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

» SETUP DWA is displayed.



- Briefly press INFO **2** to switch between DWA ON **5** and DWA OFF.

The following settings are available:

- DWA ON: The DWA anti-theft alarm is active and will be armed automatically when the ignition is switched off.
- DWA OFF: The DWA anti-theft alarm is deactivated.
- Press and hold TRIP **1** to exit SETUP.
- » The on-board computer readings appear on the display.

Heated handlebar grips

– with heated grips OE

Operating the heated handlebar grips

• Start the engine.

NOTICE

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

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

The grips can be heated with two-stage manual heating or automatic heating. The second manual stage is for heating the grips quickly: it is advisable to switch back to stage one as soon as the grips are warm. The following can be displayed:

Heating power is controlled automatically as a function of ambient temperature, road speed and engine rpm.

100% heating power

approx. 50% heating power

Seat heating

– with seat heating OE

Operating front-seat heating

• Start the engine.

NOTICE

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

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

The front seat can be heated with two-stage manual heating or automatic heating. The second manual stage is for heating the seat quickly: it is advisable to switch back to stage one as soon

as the seat is warm. The following can be displayed:

Heating power is controlled automatically as a function of ambient temperature, road speed and engine rpm.

100% heating power

approx. 50% heating power

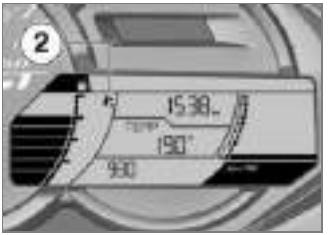
Operating rear-seat heating

- Start the engine.

NOTICE

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

- Press the side of rocker switch **1** with two dots to switch the heating to HIGH.
- Press the side of rocker switch **1** with one dot to switch the heating to LOW.
- Centre rocker switch **1** to switch off the seat heating.



The stage you select is indicated by the symbol in the multifunction display **2**. Stage two is for heating the rear seat quickly: it is advisable to switch back to stage one as soon as the seat is warm. The following can be displayed:

approx. 50% heating power

100% heating power

Seat

Operate motorcycle seat

- Switch off the ignition.

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

- In the event of stiff movement, push down the motorcycle seat at the rear and then lift it up at the rear.
- To close, push the motorcycle seat into the lock at the rear.

Tank cover

Unlocking tank cover

- Refuelling (84).

Stowage compartments

Using front stowage compartments

- To open a stowage compartment, press appropriate release lever **1** down.
- To close a stowage compartment, press the lid until it latches shut.

NOTICE

The left stowage compartment is locked along with the steering.◀

Opening/closing rear stowage compartment

- Open the seat.
- Operate motorcycle seat (➡ 65).

NOTICE

The stowage compartment light switches on when switching on the ignition.
After switching off the ignition the stowage compartment light remains illuminated briefly.◀

- To stow two helmets in the stowage compartment, position the helmets as shown here.
- Close the seat.

Adjustment

Mirrors

Adjusting mirrors

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

Headlight

Adjusting headlight for driving on left/driving on right

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

Headlight beam throw and spring preload

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

Windscreen

Automatic parking and riding positions

ATTENTION

Collision of the windscreen during automatic operation

Scratches, cracks and fractures in the windscreen

- Do not stow objects in the cockpit.
- Take note of or remove obstructions.
- Press the button for the windscreen to stop automatic movement.◀

NOTICE

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

Damage caused by concentrated sunlight is prevented.

The parking position is around the middle of the adjustment range.◀

Automatic parking position after ignition OFF

– The windscreen moves to the parking position automatically when you switch off the ignition.

– Automatic movement starts when the windscreen was

raised to a riding position higher than the parking position.
– If the windscreen encounters resistance before it reaches its limit position the pressure-sensitive finger guard system goes active. The windscreen's movement is stopped.
– Automatic movement is stopped immediately if you press a rocker switch for the windscreen.
– The windscreen moves back toward the riding position if you switch the ignition on again while automatic movement is in progress.

Automatic riding position after ignition ON

– The windscreen returns to the last-used riding position when you switch on the ignition.
– Automatic movement starts only if the windscreen was raised beforehand to a riding position higher than the parking position.
– Automatic movement is stopped immediately if you press a rocker switch for the windscreen.
– The windscreen moves back toward the parking position if you switch the ignition off again while automatic movement is in progress.
– After the windscreen's automatic movement ends or is stopped, with the engine running you can adjust the windscreen by means of the rocker switches.

Adjusting windscreen

- Switching on ignition (46).
- The windscreen moves from the parking position to the last-used riding position.
- Start the engine to avoid discharging the battery.

- Press top section of rocker switch **1** to raise the windscreen.
- Press bottom section of rocker switch **1** to lower the windscreen.

Slipstream deflector

Adjusting slipstream deflectors

WARNING

Adjusting the slipstream deflector while riding.

Risk of accident

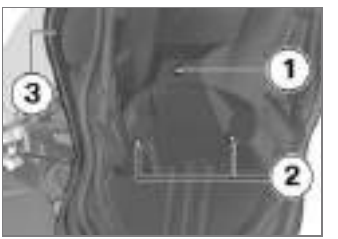
- Adjust the slipstream deflector when the motorcycle is at a standstill.◀
- Move slipstream deflector **1** in or out to adjust the airflow for the rider.

Backrest

Adjusting backrest

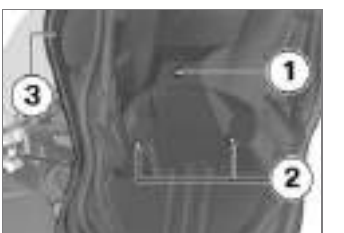
Requirement

The backrest is installed ex-works in the rearmost of three possible positions.



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

- Align fixtures **4** in the desired positions above seat **3**.



- Tighten short screw **1** five turns.
- Tighten long screws **2** five turns.

- Repeat this sequence until the backrest is installed. Tighten the screws only until hand-tight.

	Backrest to seat
2 Nm	

- Close seat **3**.

Brakes

Adjusting the front brake lever

WARNING

Relocated brake fluid tank

Air in the brake system

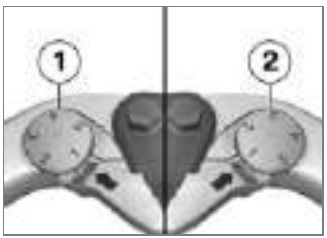
- Do not turn the handlebars or the handlebar fitting on the handlebar.◀

WARNING

Adjusting the handbrake lever while riding.

Risk of accident

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



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

NOTICE

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

» Adjustment options:

– from position 1: widest span between handlebar grip and clutch lever
– to position 5: narrowest span between handlebar grip and handlebar lever

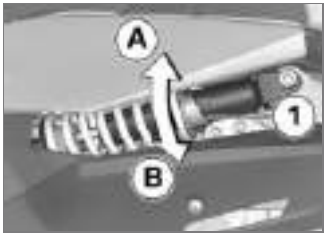
Spring preload

Adjustment

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 for rear wheel

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



- To increase spring preload: Use the tool from the on-board toolkit to turn adjusting ring **1** in direction **A** as indicated by the arrow.
- To reduce spring preload: Use the tool from the on-board toolkit to turn adjusting ring **1** in direction **B** as indicated by the arrow.

Basic setting of spring preload, rear
Increase 3 notches from the lowest preload setting. (One-up without luggage)

Basic setting of spring preload, rear
Increase 4 notches from the lowest preload setting. (One-up with luggage)
Increase 6 notches from the lowest preload setting. (Two-up with luggage)

Riding

Safety information

Rider's equipment

Do not ride without the correct clothing:
– Helmet
– Motorcycling jacket and trousers
– Gloves
– Boots

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

Loading

WARNING

Handling adversely affected by overloading and imbalanced loads
Risk of falling

- Do not exceed the permissible gross weight and be sure to comply with the instructions on loading.◀
- Set spring preload to suit gross weight.

– with luggage carrier OA

- Note the maximum permissible payload of the luggage carrier.

Payload of luggage carrier
max 9 kg◁

– with topcase OA

- Note the maximum permissible payload of the topcase and the speed limit for riding with a topcase on the vehicle.

Payload of topcase
max 5 kg

Maximum speed for riding with a loaded topcase
max 180 km/h◁

Speed

If you ride at high speed, always bear in mind that boundary conditions including those outlined below can adversely affect the handling of your Maxi-Scooter:
– Setting of suspension system
– Imbalanced load
– Loose clothing
– Insufficient tyre pressure
– Poor tyre tread

Risk of poisoning

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

WARNING

Exhaust gases adversely affecting health

Risk of asphyxiation

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

Risk of burn injury

CAUTION

Engine and exhaust system become very hot when the vehicle is in use

Risk of burn injury

- When you park the vehicle make sure that no-one and no objects can come into contact with the hot engine and exhaust system.◀

Catalytic converter

If unburned fuel enters the catalytic converter because the engine misfires, there is a danger of overheating and damage.

The following guidelines must be observed:

– Do not run the fuel tank dry.
– Do not attempt to start or run the engine with a spark-plug cap disconnected.
– Stop the engine immediately if it misfires.
– Use only unleaded fuel.
– Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in catalytic converter

Damage to catalytic converter

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

Risk of overheating

ATTENTION

Engine running for prolonged period with vehicle at standstill

Overheating due to insufficient cooling; in extreme cases vehicle fire

- Do not allow the engine to idle unnecessarily.
- Ride away immediately after starting the engine.◀

Tampering

ATTENTION

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

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

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

Comply with checklist

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

Requirement
Always before riding off:

- Check operation of the brake system.
- Check operation of the lights and signalling equipment.
- Checking tyre tread depth (➠ 109).
- Check that topcase and luggage are securely fastened.

Requirement
Every 3rd refuelling stop:

- Adjusting spring preload for rear wheel (➠ 71).
- Checking engine oil level (➠ 100).
- Checking front brake pad thickness (➠ 102).
- Check rear brake pad thickness (➠ 103).
- Check the brake-fluid level, front brakes (➠ 105).
- Checking brake-fluid level, rear brakes (➠ 106).
- Check coolant level (➠ 107).

Starting

Starting the engine

- Switch on the ignition.
» Pre-Ride-Check is performed. (➠ 77)
» ABS self-diagnosis is in progress. (➠ 77)
» ASC self-diagnosis is in progress. (➠ 78)
- Actuate brake.

NOTICE

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

- Press the starter button **1**.
» The engine starts.
» Consult the troubleshooting chart below if the engine refuses to start. (➠ 144)

Pre-Ride-Check

The instrument panel runs a test of the instruments and the telltale and warning lights when the ignition is switched on: this is the "Pre-Ride-Check". The test is aborted if you start the engine before it completes.

Phase 1

The speedometer needle swings to the limit value on its scale. The warning and indicator lights are switched on.

Phase 2

The speedometer needle swings back to its original position. The telltale and warning lights go out.

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

WARNING

Faulty warning lights

No indication of malfunctions

- Check all the telltale and warning lights.◀
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

ABS self-diagnosis

BMW Motorrad ABS performs self-diagnosis to ensure its operability. Self-diagnosis is performed automatically when you switch on the ignition. The Maxi-Scooter has to move forward a few metres for the wheel-speed sensors to be tested.

Phase 1

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

ABS warning light flashes.

Phase 2

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

ABS warning light flashes.

ABS self-diagnosis completed

» The ABS warning light goes out.

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

- You can continue to ride. Bear in mind that the ABS function is not available.
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

ASC self-diagnosis

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

Phase 1

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

ASC warning light slow-flashes.

Phase 2

» Pullaway test of the system components with diagnostic capability.

ASC warning light slow-flashes.

ASC self-diagnosis completed

» The ASC symbol no longer shows.

• Check all the warning and tell-tale lights.

 ASC self-diagnosis not completed
The Maxi-Scooter has to reach a defined minimum speed with the engine running for the wheel speed sensors to be tested:
min 5 km/h

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

• You can continue to ride. Bear in mind that the ASC is not available.

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

» If the ASC intervenes unnecessarily, too often or too soon, consult the troubleshooting chart for assistance. (146)

Riding

At engine speeds below approx. 1800 rpm the centrifugal clutch remains disengaged, the Maxi-Scooter is in neutral. When engine speed increases the clutch engages and the Maxi-Scooter moves off.

At speeds from approx. 40 km/h to approx. 120 km/h the engine is running at virtually constant speed and operating in its maximum torque band. It is the CVT that effects any change in speed. Consequently, engine noise changes only slightly within this speed range.
Speeds higher than approx. 120 km/h are achieved by an increase in engine rpm.

Running in

Engine

- Until the running-in check, vary the engine load range frequently as you ride.
- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding high-speed main roads and highways if possible.
- Do not omit the running-in check after 500 - 1200 km.

Brake pads

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

WARNING

New brake pads

Longer stopping distance, risk of accident

- Apply the brakes in good time.◀

Tyres

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

WARNING

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

Risk of accident

- Ride carefully and avoid extremely sharp inclines.◀

Side View Assist

Deactivating and activating SVA

– with Side View Assist OE

- SETUP selecting (54).
- Deactivate or activate SVA in SETUP.

NOTICE

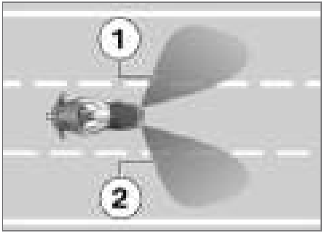
If SVA is deactivated, SVA! will be shown in the display.◀

» The selected setting remains stored even after the ignition is switched off.

Driving with SVA

– with Side View Assist OE

SVA is activated in SETUP.



If the driving speed is within the activation speed, SVA monitors the areas **1** and **2**.

- Driving within the activation speed.
- » Vehicles driving in your blind spot will be indicated, depending on the driving situation.
- » If the driving speed is outside the activation speed, SVA does not work. The indicator lights stay off.
- » The activation speed is in the following range:

25...80 km/h

- Driving past stationary objects.
- » SVA does not work in the event of stationary objects such as parked vehicles, crash barriers, street lights, road signs, etc.
- Driving in heavy traffic.
- » Vehicles detected at the front and rear are confused with a truck or a stationary object.
- – The indicator lights stay off.
- Driving in a tilted position.
- » Depending on the level of the tilt and the position of the surrounding area sensors, SVA's functionality may be limited on the inside or outside of corners.
- – Slight tilt: SVA = active
- – Large tilt: SVA = inactive
- » If SVA is showing vehicles which are not there, or is not showing vehicles which are there, the troubleshooting chart can help. (➡ 145)

Being overtaken with SVA

– with Side View Assist OE

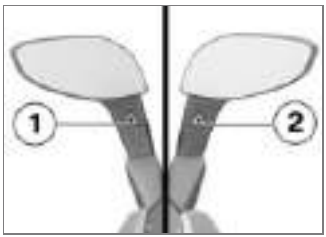
The Maxi-Scooter is overtaken by a vehicle.

Vehicle in blind spot

A vehicle approaches from behind to overtake the Maxi-Scooter.

- » The telltale lights remain off as long as the overtaking vehicle stays out of range of the surroundings sensors.

Vehicle detected



The overtaking vehicle is inside the monitored zone.

» The vehicle is detected by the rear surroundings sensor.

» The vehicle has not yet been detected by the front surroundings sensor.

– Corresponding indicator light **1** or **2** lights up.

The difference in speed between the two vehicles is of significance during an overtaking manoeuvre.

- Allowing a passing vehicle to overtake within the speed differential.

NOTICE

Side View Assist does not replace the rider's personal judgement of the traffic situation.
Pay attention to the traffic situation and the area around the vehicle, even if the indicator lights do not indicate any vehicles.
Always obey the rule of looking behind you twice before turning off or leaving your lane by looking over your shoulders.◀

» Indicator lights **1** and **2** indicate vehicles overtaking slowly.

» The speed differential is:
max 10 km/h

- Allowing the overtaking vehicle to complete its manoeuvre.

» The overtaking vehicle advances into the field of view of the Maxi-Scooter.

– The vehicle's presence is no longer detected by the rear surroundings sensor, but now it is registered by the front surroundings sensor.

– The corresponding telltale light goes out.

Overtake with SVA

– with Side View Assist[OE]

A vehicle is overtaken with the Maxi-Scooter.

– If the overtaking manoeuvre is completed in time, the indicator lights will not come on.

– If the overtaking manoeuvre takes longer and the vehicle being overtaken stays in the blind spot, the indicator light for the corresponding side will come on.

Brakes

How can stopping distance be minimised?

Load distribution shifts dynamically between the front and rear wheels when the vehicle brakes. The sharper the vehicle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking.
To optimise stopping distance, apply the front brakes rapidly and keep on increasing the force you apply to the brake lever. This makes the best possible use of the dynamic increase in load at the front wheel. In the "panic braking situations" that are trained so frequently, braking force is applied as rapidly as possible and with the rider's full force applied to the brake levers; under these circumstances, the dynamic shift in load distribution cannot keep pace with the increase in deceleration and the tyres cannot transmit the full braking force to the surface of the road. Under these circumstances the front wheel would lock up.

BMW Motorrad ABS prevents the front wheel from locking up.

Descending mountain passes

WARNING

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

Wet and dirty brakes

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

WARNING

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

Park Maxi-Scooter

Side stand

- Switch off the engine.

ATTENTION

Poor ground underneath the stand
Risk of damage to parts if vehicle topples
- Always check that the ground under the stand is level and firm.◀
- Extend the side stand and prop the Maxi-Scooter on the stand.

» The parking brake prevents the vehicle from rolling away.

ATTENTION

Additional weight placing strain on the side stand
Risk of damage to parts if vehicle topples
- Do not sit or lean on the vehicle while it is propped on the side stand.◀
- If the camber of the roadway permits, turn the handlebars all the way to the left.

Centre stand

- Switch off the engine.

ATTENTION

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

ATTENTION

Centre stand folds in due to sharp movements
Risk of damage to parts if vehicle topples
- Do not lean or sit on the vehicle with the centre stand extended.◀
- Extend the centre stand and lift the Maxi-Scooter on to the stand.

Refuelling

WARNING

Fuel is highly flammable
Risk of fire and explosion
- Do not smoke. Never bring a naked flame near the fuel tank.◀

ATTENTION

Wetting of plastic surfaces by fuel
Damage to the surfaces (surfaces become unsightly or dull)
- Clean plastic surfaces immediately after contact with fuel.◀
- Place the Maxi-Scooter on the centre stand, ensuring the ground is level and firm.

- Push the ignition key into the steering lock and then turn anticlockwise.

- In the event of stiff movement, push the tank cover **1** towards the rear and then open out towards the front.

- Open fuel filler cap **2**.

WARNING

Escape of fuel due to heat-induced expansion if fuel tank is overfilled

Risk of falling

- Do not overfill the fuel tank.◀

ATTENTION

Engine operation with leaded fuel

Damage to catalytic converter

- Do not attempt to run the vehicle on leaded fuel or fuel with metallic additives (e.g. manganese or iron).◀
- Refuel with fuel of the grade listed; do not fill the tank past the lower edge of filler neck.

NOTICE

When refuelling after running on reserve, make sure that you top up the tank to a level above reserve, so that the new level is detected and the fuel reserve indicator light is switched off.◀

Recommended fuel grade
E5 Super unleaded (maximum 15% ethanol, E15) E10 95 ROZ/RON 90 AKI
Usable fuel capacity
approx. 15.5 l
Fuel reserve
approx. 3 l

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

E5

E10

- Close **2** fuel filler cap.

- Push tank cover **1** into the lock.

Securing vehicle for transport

- Protect all components that might come into contact with tensioning straps against scratching, e.g. with adhesive tape or soft cloths.

ATTENTION

Vehicle topples to side when being lifted on to stand

Risk of damage to parts if vehicle topples

- Secure the vehicle to prevent it toppling, preferably with the assistance of a second person.◀
- Push the vehicle onto the transportation area; do not place it on the side stand or centre stand.

ATTENTION

Trapping of components

Component damage

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

- Loop a tensioning strap at the rear right around the retainer spike of the silencer and tighten.

- Loop a tensioning strap at the rear left around the spring strut mount and tighten.
- Tighten all the straps uniformly; the vehicle's suspension should be compressed as tightly as possible front and rear.

Engineering details

General instructions

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

Anti-lock brake system (ABS)

How does ABS work?

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

What are the effects of surface irregularities?

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

Rear wheel lift

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

WARNING

Rear wheel lift due to severe braking

Risk of falling

- When you brake sharply, bear in mind that ABS control cannot always be relied on to prevent the rear wheel from lifting clear of the ground.◀

What is the design baseline for BMW Motorrad ABS?

Within the limits imposed by physics, BMW Motorrad ABS ensures directional stability on any surface. The system is not optimised for special requirements that apply under extreme competitive situations off-road or on the track.

Special situations

The speeds of the front and rear wheels are compared as one means of detecting a wheel's incipient tendency to lock. If the system registers implausible values for a lengthy period the ABS function is deactivated for safety reasons and an ABS fault message is issued. Self-diagnosis has to complete before fault messages can be issued. In addition to problems with the BMW Motorrad ABS, exceptional riding conditions can lead to a fault message being issued.

Exceptional riding conditions:

– With ASC switched off: Riding for a lengthy period with the front wheel lifted off the ground (wheelie).
– Rear wheel rotating with the vehicle held stationary by applying the front brake (burnout).
– Rear wheel skidding on a slippery surface for a lengthy period, for example deceleration using the engine's braking effect.

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

What significance devolves on regular maintenance?

WARNING

Brake system not regularly serviced

Risk of accident

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

Reserves for safety

The potentially shorter braking distances which BMW Motorrad ABS permits must not be used as an excuse for careless riding. ABS is primarily a means of ensuring a safety margin in genuine emergencies.
Take care when cornering! When you apply the brakes on a corner, the vehicle's weight and momentum take over and even BMW Motorrad ABS is unable to counteract their effects.

Automatic Stability Control (ASC)

How does ASC work?

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

Special situations

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

The speeds of the front and rear wheels are compared as one means of detecting the rear wheel's incipient tendency to spin or slip sideways. If the system registers implausible values for a lengthy period the ASC function is deactivated for safety reasons and an ASC fault message is issued. Self-diagnosis has to complete before fault messages can be issued.
Riding for a lengthy period with the front wheel lifted off the ground (Wheelie) would result in automatic shutdown of the BMW Motorrad ASC.

If the front wheel lifts clear of the ground under severe acceleration, the ASC reduces engine torque until the front wheel regains contact with the ground. Under these circumstances, BMW Motorrad recommends rolling the throttle slightly closed so as to restore stability with the least possible delay.

Never snap the throttle grip closed when riding on a slippery surface. Engine braking torque can cause the rear wheel to lock, with a corresponding loss of stability. The BMW Motorrad ASC is unable to control a situation of this nature.

Slippery surface

On very loose surfaces (for example sand or snow), the ASC's attempts to control propulsive power might reduce drive to the extent that the rear wheel no longer turns. Under these circumstances, BMW Motorrad recommends temporarily switching off ASC. 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 reactivate ASC.

Tyre pressure monitoring (RDC)

– with tyre pressure control (RDC)[OE]

Function

A sensor integrated into each tyre measures the tyre air temperature and the tyre pressure and transmits this information to the control unit.
Each sensor has a centrifugal-force tripswitch that does not enable transmission of the measured values until the vehicle has accelerated to about 30 km/h. The multifunction display shows "--" for each tyre until the tyre-pressure signal is received for the first time. The sensors continue to transmit the measured-value signals for approximately 15 minutes after the vehicle comes to a stop.

Temperature compensation

Tyre pressure is a temperature-sensitive variable: pressure increases as tyre air temperature rises and decreases as tyre air temperature drops. Tyre-air temperature depends on ambient temperature as well as on the style of riding and the duration of the ride.

The tyre-pressure readings shown by the multifunction display are temperature-compensated; the reference tyre temperature for these readings is always 20 °C. The gauges on service station air lines do not compensate for temperature. The tyre pressure recorded depends on tyre air temperature. In most instances, therefore, these gauge readings will not tally with the pressures shown by the multifunction display.

Pressure adaptation

Compare the RDC readings on the multifunction display with the value in the table on the back cover of the Rider's Manual. When using the air-line gauge at

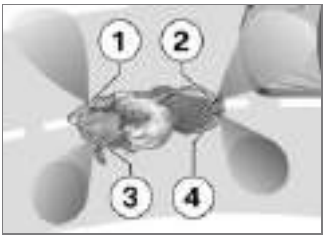
a service station to compensate for the difference between the RDC reading and the value in the table.

Example: According to the Rider's Manual, tyre pressure should be 2.5 bar, but the reading in the multifunction display is 2.3 bar, so pressure is low by 0.2 bar.
The gauge on the air line shows 2.4 bar. You must now increase tyre pressure by the 0.2 bar difference between the value in the table and the RDC reading; when the air-line gauge shows 2.6 bar, the tyre is inflated to the correct pressure.

Side View Assist

– with Side View Assist[OE]

Layout and control



The major components of Side View Assist are as follows.

4 ultrasonic sensors as surroundings sensors

– Ultrasonic sensor **1** in the front right fairing side panel
– Ultrasonic sensor **2** on the right in the number plate carrier
– Ultrasonic sensor **3** in the front left fairing side panel
– Ultrasonic sensor **4** on the left in the number plate carrier

The graphic shows the invisible monitoring [illegible] monitored by the surroundings sensors.

2 telltale lights

– Telltale light in right mirror housing
– Telltale light in left mirror housing

Control

– SVA control unit
– Wiring harness connecting all the components to the SVA control unit and the instrument cluster
– Function algorithms for analysing the riding situation depending on the surroundings sensors and riding speed and for generating the output signals that actuate the telltale lights. The algorithms make sure that signals from the rear surroundings sensors are interpreted as plausible riding situations only in combination

with the signals from the front surroundings sensors.

Function

The graphic shows the Maxi-Scooter banked for cornering.

- Ultrasonic sensors **3** and **4** register the roadway. The left telltale light remains off.
- Ultrasonic sensor **1** registers nothing.
- Ultrasonic sensor **2** registers the vehicle in the blind spot.
- The right telltale light shows, insofar as this response is permitted by the system's limits.

Limits of the system

Side View Assist is not an active safety system, but a comfort system with informative character that merely supports drivers in monitoring the traffic situation and vehicle environment.

SVA does not work, or works only to a limited extent, in the following situations:

- When the vehicle's speed is outside the range of the system's activation speed.
- Over the first few metres of distance covered after the system's activation speed is reached.
- When the vehicle's speed is much higher than that of the vehicle overtaken.
- When the overtaking vehicle's speed is much higher than that of the vehicle.
- In sharp bends, when the vehicle is banked to an acute angle, and on narrow roads.
- If the lanes are very wide.
- In thick fog, heavy rain or snow.
- If the surroundings sensors are dirty, iced over or obscured in some way.
- If vehicles with faulty silencers are overtaken or pass.

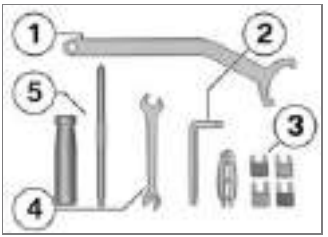
Maintenance

General instructions

The "Maintenance" chapter describes straightforward procedures for checking and replacing certain wear parts.
Special tightening torques are listed as applicable. The tightening torques for the threaded fasteners on your vehicle are listed in the section entitled "Technical data".
You will find information on more extensive maintenance and repair jobs in the Repair Manual on DVD for your vehicle, which is available from your authorised BMW Motorrad dealer.

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

Standard tool kit



1 Hook wrench
– Adjusting spring preload for rear wheel (➡ 71).

2 Torx wrench, T30
– Checking engine oil level (➡ 100).
– Topping up coolant (➡ 107).

3 Spare fuses with puller tool
Minifuses, 4 A, 7.5 A, 10 A and 15 A
– Replace the fuses.

4 Open-ended spanner
Width across flats 8/10
– Removing battery (➡ 124).

5 Reversible screwdriver blade
Phillips PH1 and Torx T25
– Removing body panels.
– Removing battery (➡ 124).

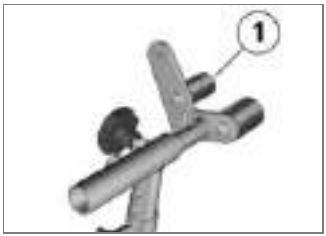
Front-wheel stand

Installing the front-wheel stand

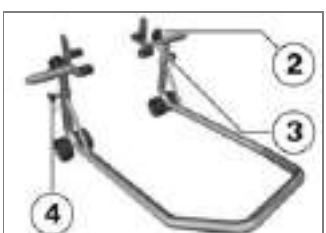
Requirement

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

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



- Install spacer buffers **1** in the bottom positions on left and right.



- Slacken securing screws **2** on left and right.
- Push adapters **3** on left and right apart until the front forks fit between them.
- Use locating pins **4** on left and right to set the front-wheel stand to the desired height.
- Centre the front-wheel stand relative to the front wheel and push it against the front axle.

- Align adapters **3** on left and right so that the front forks are securely seated.
- Tighten securing screws **2** on left and right.

ATTENTION

Centre stand retracts if the vehicle lifted too high

Risk of damage to parts if vehicle topples

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

Engine oil

Checking engine oil level

ATTENTION

Incorrect oil-level reading after relatively long immobilisation period due to oil collecting in the oil sump instead of the oil reservoir

Misinterpretation of the oil level

- Check the oil level only after a lengthy ride or when the engine is at operating temperature.◀
- With the Maxi-Scooter at operating temperature place it on its centre stand, making sure that the ground is level and firm.
- Allow the engine to idle for one minute.
- Switch off the ignition.

- Remove footboard support **1**.

- Remove oil dipstick **1**.

- Remove cover **2** upwards.
- Wipe the area around the oil filler neck clean.

- Wipe the oil off MIN-MAX part of dipstick **2** with a clean, dry cloth.

- Seat the oil dipstick on the oil filler neck, but do not engage the threads.
- Remove the oil dipstick and check the oil level.

Engine oil, specified level
Between MIN and MAX marks (Engine at operating temperature, insert oil dipstick until resting on edge of oil filler neck, **do not engage the threads**.)

If the oil level is below the minimum mark:

- Top up the engine oil to the specified level.

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

If the oil level is above the MAX mark:

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

- Install the oil dipstick.

- Install cover **2**.

- Insert footboard support **1**.

Brake system

Checking function of brakes

- Pull the right brake lever.
» The pressure point must be clearly perceptible.
- Pull the left brake lever.
» The pressure point must be clearly perceptible.
- To test the parking brake, extend the side stand and try to push the Maxi-Scooter forward and back.
» The Maxi-Scooter must refuse to move.

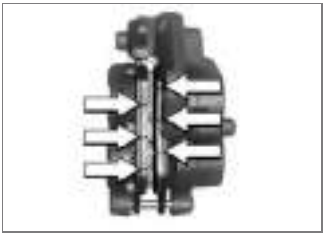
If a clear pressure point is not perceptible or if the Maxi-Scooter can be pushed in either direction:

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

Checking front brake pad thickness

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

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



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

If the wear indicating marks are no longer clearly visible:

WARNING

Brake-pad thickness less than permissible minimum

Diminished braking effect, damage to the brakes

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

Check rear brake pad thickness

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

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

	Brake-pad wear limit, rear
min 1.0 mm (Friction pad only, without backing plate.)	

If the wear indicating marks are no longer visible:

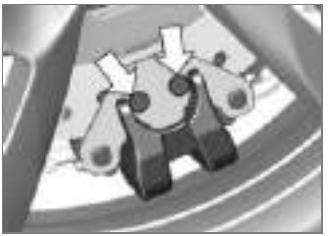
WARNING

Brake-pad thickness less than permissible minimum
Diminished braking effect, damage to the brakes

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

Checking brake-pad thickness, parking brake

- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Visually inspect the brake pads to ascertain their thickness.



Brake-pad wear limit of parking brake

When you look into the holes in the carrier plate (clean the holes first), the brake disc **should not be visible**.

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

ATTENTION

Parked vehicle rolls away due to lack of braking power if brake pads are worn past their minimum permissible thickness
Risk of damage to parts if vehicle topples despite extended side stand

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

Check the brake-fluid level, front brakes

WARNING

Not enough brake fluid in brake fluid tank

Considerably reduced braking power due to air in the brake system

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

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

NOTICE

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

Brake fluid level, front
Brake fluid, DOT4
It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal)

If the brake fluid level drops below the permitted level:

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

Checking brake-fluid level, rear brakes

WARNING

Not enough brake fluid in brake fluid tank

Considerably reduced braking power due to air in the brake system

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

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

NOTICE

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

Brake fluid level, rear
Brake fluid, DOT4
It is impermissible for the brake fluid level to drop below the MIN mark. (Brake-fluid reservoir horizontal)

If the brake fluid level drops below the permitted level:

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

Coolant

Check coolant level

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

- Check the coolant level in the expansion tank through opening **1** below the right footplate.

	Specified coolant level in expansion tank
	Between MIN and MAX marks (engine cold)

If the coolant drops below the permitted level:

- Top up the coolant.

Topping up coolant

- Remove footrest plate **1**.

- Remove screw **1** and remove the cover.

- Open cap **2** of the coolant expansion tank and top up the coolant to the specified level.
- Check coolant level (➡ 107).
- Close the cap of the coolant expansion tank.

- Lay the cover in position and install screw **1**.

- Install footrest plate **1**.

Tyres

Checking tyre pressure

WARNING

Incorrect tyre pressure.
Impaired handling characteristics of the Scooter. Impaired control response of the ASC and more rapid tyre wear.
- Always check that the tyre pressures are correct.◀

WARNING

Tendency of valve inserts installed vertically to open by themselves at high riding speeds
Sudden loss of tyre pressure
- Install valve caps fitted with rubber sealing rings and tighten firmly.◀
- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.

- Check tyre pressures against the data below.

 Tyre pressure, front
2.5 bar (tyre cold)

 Tyre pressure, rear
2.9 bar (tyre cold)

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

Wheel rims and tyres

Checking rims

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

Checking tyre tread depth

WARNING

Riding with badly worn tyres
Risk of accident due to impaired handling
- If applicable, have the tyres changed in good time before they wear to the minimum tread depth permitted by law.◀
- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Measure the tyre tread depth in the main tread grooves with wear marks.

NOTICE

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

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

Wheels

Effect of wheel size on ABS

Wheel size is very important as a parameter for the ABS. In particular, the diameter and the width of the vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects

on the performance of the system.
The sensor rings are essential for correct road-speed calculation, and they too must match the vehicle's system and consequently cannot be changed.
If you decide that you would like to fit non-standard wheels to your Maxi-Scooter, it is very important to consult a specialist workshop beforehand, preferably an authorised BMW Motorrad dealer. In some cases, the data programmed into the control unit can be changed to suit the new wheel sizes.

Effect of wheel size on ASC

Wheel size is very important as a parameter for the ASC running-gear control system. In particular, the radii of the vehicle's wheels are programmed into the control unit and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects on the performance of the control systems.

ATTENTION

Faults of the ASC due to changing tyre radii
ASC intervenes despite good grip
- Check both tyres for wear and check the tyre pressures.
- Always calibrate the ASC after changing a tyre or tyres.
- If ASC interventions are unexpectedly frequent: Re-calibrate the ASC.◀

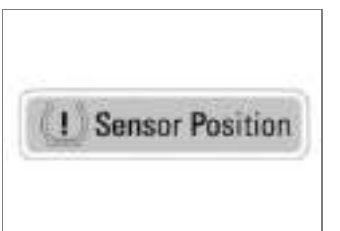
ATTENTION

Loss of the adaptation values for the tyre radii in the Digital Motor Electronics
Risk of falling
- Always re-calibrate the ASC after every software update.◀

See the section entitled "Operation" (➡ 60) for information on the calibration procedure.

RDC adhesive label

– with tyre pressure control (RDC)[OE]



ATTENTION

Tyre removal not in compliance with correct procedure
Damage to RDC sensors

- Be sure to explain to the specialist workshop or authorised BMW Motorrad dealer that the wheel is fitted with an RDC sensor.◀

If the motorcycle is equipped with RDC, each wheel rim bears an adhesive label indicating the position of the RDC sensor. When a tyre is being changed, special care must be taken not to damage the RDC sensor. Be sure to draw the attention of the authorised BMW Motorrad dealer or specialist workshop to the fact that the wheel is fitted with an RDC sensor.

Removing front wheel

- Remove screws **1** and **2** on left and right and work the front-wheel cover forward to remove.

- Remove screw **1** and remove the wheel-speed sensor from its bore.
- Mask off the parts of the wheel rim that could be scratched in the process of removing the brake calipers.

ATTENTION

Unwanted inward movement of the brake pads

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

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

- Force the brake pads **3** slightly apart by rocking brake caliper **4** back and forth against brake disc **5**.
- Carefully pull the brake callipers back and out until clear of the brake discs.
- Make sure the ground is level and firm and place the Maxi-Scooter on its centre stand.
- Lift the front of the Maxi-Scooter until the front wheel is clear of the ground, preferably using a BMW Motorrad front-wheel stand.
- Installing the front-wheel stand (➡ 98).

- Slacken right clamping screws **1**.
- Remove quick-release axle **2**, while supporting the wheel.
- Roll the front wheel forward to remove.

Installing front wheel

WARNING

Use of a non-standard wheel

Malfunctions in control attempts made by the ABS and ASC

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

ATTENTION

Tightening threaded fasteners to incorrect tightening torque

Damage, or threaded fasteners work loose

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

ATTENTION

Front wheel installed wrong way round

Risk of accident

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

- Raise the front wheel, insert quick-release axle **2** and tighten to specified torque.

Quick-release axle in axle holder
30 Nm

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

Clamping screws (quick-release axle) in telescopic forks
Tightening sequence: Tighten screws six times in alternate sequence
8 Nm

- Removing the front-wheel stand.
- Ease the brake calipers on to the brake discs.

- Tighten screws **2** on left and right to the specified tightening torque.

Brake caliper to fork leg
28 Nm

ATTENTION

Contact of cable of wheel speed sensor with the brake disc

Sensor cable chafes through

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

- Hold the front-wheel cover in position and install screws **1** and **2** on left and right.
- Calibrating ASC (60).

Removing rear wheel

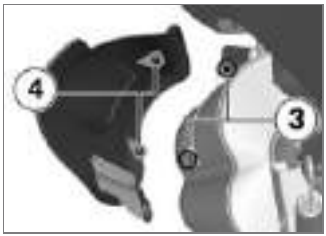
- Make sure the ground is level and firm and place the Maxi-Scooter on its centre stand.

CAUTION

Hot exhaust system

Risk of burn injury

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



- Ease trim panel **2** to the rear as indicated by the arrow, keeping it parallel with the rear silencer.

» Studs **4** are disengaged from grommets **3**.

- Remove cover **2**.

- Slacken nut **5**.

- Remove screw **6**, counter-holding the nut on the inside and holding rear silencer **7**.
- Separate rear silencer **7** from the front silencer.

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

- Remove five screws **8** from the rear wheel, while supporting the wheel.
- Lower the rear wheel to the ground and roll it out to the rear.

Installing the rear wheel

WARNING

Use of a non-standard wheel
Malfunctions in control attempts made by the ABS and ASC
- See the information on the effect of wheel size on the ABS and ASC systems at the start of this chapter.◀

ATTENTION

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

- Roll the rear wheel into position at the rear-wheel adapter and attach it.

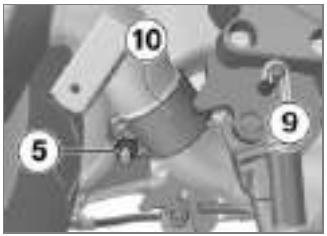
- Install five screws **8** and tighten to the specified torque in diagonally opposite sequence.

Rear wheel on output shaft
Tightening sequence: tighten in diagonally opposite sequence
60 Nm

- Apply high-temperature grease round the inside of the silencer pipe.
- Seat rear silencer **7** on the front silencer and hold it in position.

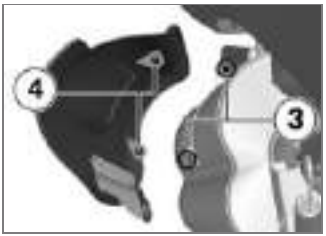
- Install screw **6** and tighten to the specified torque while counter-holding the nut at the inside.

	Silencer to bracket
19 Nm	

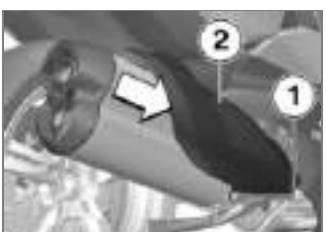


- Position clamp **10** with the recess at lug **9**.
- Tighten nut **5** to the specified tightening torque.

	End silencer to front silencer
19 Nm	



- Position trim panel with studs **4** at grommets **3**.



- Ease trim panel **2** forward as indicated by the arrow, keeping it parallel with the rear silencer.

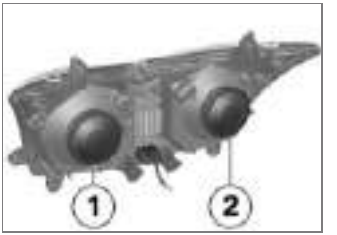
» Studs **4** are engaged in grommets **3**.
- Install screw **1**.
- Calibrating ASC (➡ 60).

Light source

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

- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Switch off the ignition.
- Remove the right side panel to replace the bulb for the low-beam headlight.
- Remove the left side panel to replace the bulb for the high-beam headlight.

» The bulbs have to be replaced from below. Removing the side panels improves orientation.



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

- Disconnect plug **3**.

- Disengage spring clip **4** from the latches and swing it up.
- Remove bulb **5**.

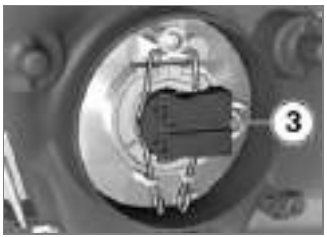
- Replace the defective bulb.

Bulbs for the low-beam headlight
H7 12 V 55 W

Bulb for high-beam headlight
H7 12 V 55 W

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

- Insert bulb **5**, making sure that tab **6** is correctly positioned.
- Engage spring retainer **4** in the catches.



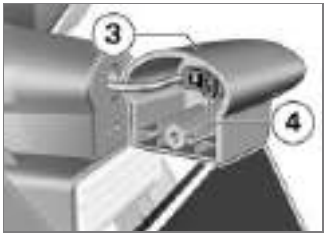
- Connect plug **3**.

- Install cover **1** or cover **2**, as applicable.

Replacing bulb for number-plate light

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

- Remove screw **1**.



- Disengage spacer **3** from number plate carrier **2**.
- Remove socket **4** from spacer **3**.

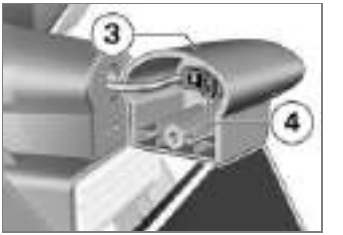
- Remove the bulb from the socket.

- Replace the defective bulb.

	Light source for the number plate light
W5W / 12 V / 5 W	

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

- Insert the bulb into the socket.



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

- Position spacer **3** on number plate carrier **2**.
- Install screw **1**.

Trim panel components

Remove the side panel

- Remove screw **1**.

NOTICE

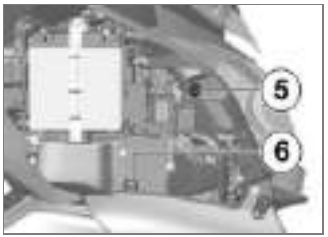
This description applies for the right-hand fairing side panel, but also applies accordingly for the left-hand fairing side panel.◀

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

- Remove screw **4** in the stowage compartment.

- Ease the fairing side panel out of its holder at position **5** at the top edge.
- Then slightly raise the fairing side panel and remove.

Installing side panel



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

NOTICE

This description applies for the right-hand fairing side panel, but also applies accordingly for the left-hand fairing side panel.◀

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

- Install screw **4** in the right stowage compartment.
- Close the stowage compartment.

- Install screws **2**.

- Install screw **1**.

Battery

Maintenance instructions

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

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

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

ging the battery on the following pages
– Do not turn the battery upside down

ATTENTION

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

Battery is deep-discharged; this voids the guarantee

- Connect a float charger to the battery if the motorcycle is to remain out of use for more than four weeks.◀

Recharging connected battery

– with extra socket OA

ATTENTION

Charging the battery that is connected to the vehicle via the battery terminals

Damage to the on-board electronics

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

ATTENTION

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

Damage to the vehicle electronics

- If a battery has discharged to the extent that it is completely flat (battery voltage less than 12 V, indicator lights and multifunction display remain off when the ignition is switched on) always charge the **disconnected** battery with the charger connected directly to the battery terminals.◀
- With the battery connected to the vehicle's on-board electrical system, charge only via the extra socket.
- Comply with the operating instructions of the charger.

Recharging disconnected battery

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

NOTICE

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

Removing battery

- Remove the side panel (121).
- Switch off the ignition.

– with anti-theft alarm (DWA) OE

- If applicable, switch off the anti-theft alarm.◁

ATTENTION

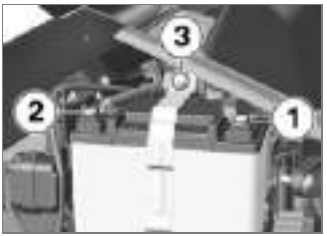
Battery not disconnected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with the specified disconnection sequence.◀
- First disconnect battery negative lead **1**.
- Then disconnect battery positive lead **2**.
- Remove screw **3** and remove the retainer.
- Remove the battery from its holder.

Installing battery

- Position the battery in the battery compartment with the positive terminal on the left side.



- Slip the battery retainer over the battery and install screw **3**.

ATTENTION

Battery not connected in accordance with correct procedure

Risk of short-circuit

- Always proceed in compliance with specified installation sequence.◀
- Connect battery positive lead **2** first.
- Then install battery negative lead **1**.

- Installing side panel (➡ 122).
- Setting the clock (➡ 56).
- Setting the date (➡ 57).

Fuses

Removing a fuse

Requirement

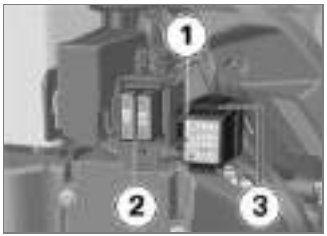
The fuses are located under the front right fairing side panel.

ATTENTION

Jumpering of blown fuses

Risk of short-circuit and fire

- Never attempt to jumper a blown fuse.
- Always replace a defective fuse with a new fuse of the same amperage.◀
- Switch off the ignition.
- Remove the side panel (➡ 121).

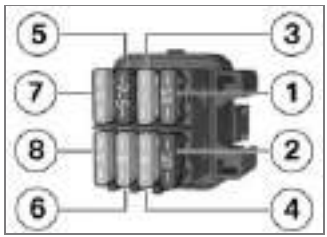


- Remove faulty fuse from the fuse box **1** or from the fuse carrier **2** with the toolkit.
- To open the fuse box, press the locking lever **3** and remove cover.

NOTICE

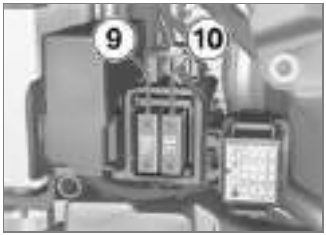
If fuse defects recur frequently have the electric circuits checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

Install fuse



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

» The latch engages with an audible click.



- Replace faulty fuse from the fuse carrier with a fuse with the required current level.

NOTICE

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

- Installing side panel (➡ 122).

Jump-starting

ATTENTION

Excessive current flowing when the Maxi-Scooter is jump-started

Wiring smoulders/ignites or damage to the on-board electronics

- If the Maxi-Scooter has to be jump-started connect the leads to the battery terminals; never attempt to jump-start the engine by connecting leads to the on-board socket.◀

ATTENTION

Contact between crocodile clips of jump leads and vehicle

Risk of short-circuit

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

ATTENTION

Jump-starting with a voltage greater than 12 V

Damage to the on-board electronics

- Make sure that the battery of the donor vehicle has a voltage rating of 12 V.◀
- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Remove the side panel (➡ 121).
- Begin by connecting one end of the red jump lead to the vehicle's battery positive terminal and the other end to the positive terminal of the donor vehicle's battery.
- Connect one end of the black jump lead to the vehicle's battery negative terminal and the other end to a suitable grounding point on or the negative

terminal of the donor vehicle's battery.
- Run the engine of the donor vehicle during jump-starting.
- Start the engine of the vehicle with the discharged battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt in order to protect the starter motor and the donor battery.
- Allow both engines to idle for a few minutes before disconnecting the jump leads.
- Disconnect the jump lead from the negative terminal and the ground point first, then disconnect the second jump lead from the positive terminal and the positive battery connection point.

NOTICE

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

- Installing side panel (➡ 122).

Diagnostic connector

Disengaging diagnostic connector

Requirement

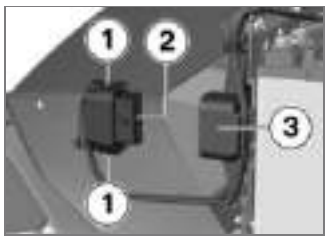
The diagnostic connector is underneath the front right side panel.

NOTICE

The diagnostic connector for on-board diagnostics may only be released by Service or a workshop working in accordance with the vehicle manufacturer's specifications with correspondingly trained personnel and used by

can otherwise lead to the vehicle malfunctioning.◀

- Remove the side panel (➡ 121).

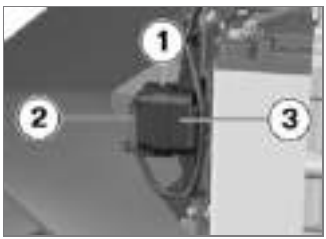


- Press in retainers **1**.
- Disengage diagnostic connector **2** from holder **3**.

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

Installing diagnostic connector

- Disconnect the interface for the diagnosis and information system.



- Seat diagnostic connector **2** in bracket **3**.

» Retainers **1** engage with an audible click.

- Installing side panel (122).

Accessories

General instructions

CAUTION

Use of other-make products
Safety risk

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

Parts and accessory products from BMW have undergone extensive testing to establish that they are safe, functional and suitable. Consequently, BMW accepts product liability. BMW accepts no liability whatsoever for parts and accessories that it has not approved.
Whenever you are planning modifications, comply with all the legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country.
Your BMW Motorrad dealer can offer expert advice on the choice of genuine BMW parts, accessories and other products.
To find out more about accessories go to:
bmw-motorrad.com/accessories

Power sockets

Notes on use of power sockets:

Operating electrical accessories
Battery capacity is not monitored while one or more sockets are in use. Running add-on devices for a lengthy period or leaving adapters plugged in for a period of days without the engine running can completely drain the battery. Under these circumstances there is no guarantee that the Maxi-Scooter will start.

Cable routing
Note the following with regard to the routing of cables from sockets to items of electrical equipment:

– Make sure that cables do not impede the rider.

– Make sure that cables do not restrict the steering angle or obstruct handling.
– Make sure that cables cannot be trapped.

Charger

NOTICE

The power socket in the front left stowage compartment is not suitable for connecting chargers. With the battery connected to the vehicle's on-board electrical system, charge only via the extra socket in the rear stowage compartment.
Always comply with the safety Information in the section entitled "Maintenance".◀

Topcase

Opening topcase

– with topcase OA

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

- Push the topcase lock forward.

» Topcase handle **2** pops up.

- Pull the release lever behind cover **3** to the rear.

» The lid of the topcase opens.

- Open the topcase lid.

Closing topcase

– with topcase OA

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

Removing the topcase

– with topcase OA

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

- Push the topcase lock forward.

» Topcase handle **2** pops up.

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

Installing topcase

– with topcase OA

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

Maximum payload and maximum permissible speed

Note the maximum permissible payload and the speed limit for riding with topcase fitted, as stated on the label inside the topcase.
Contact your authorised BMW Motorrad dealer if you cannot find your combination of vehicle and topcase on the label.
The values for the combination described here are as follows:

Maximum speed for riding with a loaded topcase
max 180 km/h

Payload of topcase
max 5 kg

Scooter Lock

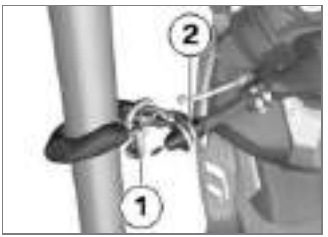
– with Scooter lock OA

Securing the vehicle

- Thread the rear end piece **1** of the Scooter lock into the rear fixture from below.
- Then turn the end piece forwards.

- 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 attach the locking unit **4**.
- Close Scooter lock and take out key.



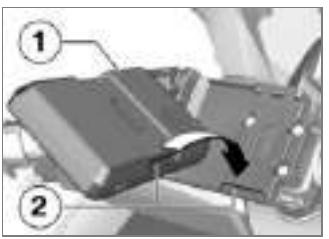
Alternatively, the Maxi-Scooter can be attached to a fixed object, e.g. a post.

- Hook the Scooter lock around the post and pull the chain through the end piece **1**.
- Connect the first chain link to the handlebars **2** as described above.

Navigation system

– with navigation system OA

Installing navigation device



- Set navigation device **1** in cradle **2**.

- Pivot navigation device **1** forward and at the top edge, press it into latching mechanism **3**.

» The navigation device engages.

- Check that the navigation device is secure in the cradle.

» The red release mark is not visible.

Removing navigation device

- Press release **2**.

» Red mark **3** indicates that latch is released.

- Remove navigation device **1**.

Care

Care products

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

ATTENTION

Use of unsuitable cleaning and care products
Damage to vehicle parts
- Do not use solvents such as cellulose thinners, cold cleaners, fuel or the like, and do not use cleaning products that contain alcohol.◀

Washing the vehicle

BMW Motorrad recommends that you use BMW insect remover to soften and wash off insects and stubborn dirt on painted parts prior to washing the motorcycle.
To prevent stains, do not wash the vehicle immediately after it has been exposed to strong sunlight and do not wash it in the sun.
Make sure that the vehicle is washed frequently, especially during the winter months.
To remove road salt, clean the Maxi-Scooter with cold water immediately after every trip.

WARNING

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

ATTENTION

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

ATTENTION

Damage due to high water pressure from high pressure cleaners or steam cleaners
Corrosion or short circuit, damage to labels, seals, hydraulic brake system, electrical system and the motorcycle seat

- Exercise restraint when using a steam jet or high pressure cleaning equipment.◀

Cleaning easily damaged components

Plastics

ATTENTION

Use of unsuitable cleaning agents

Damage to plastic surfaces

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

Body panels

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

Plastic windscreen and headlight lens

Remove dirt and insects with a soft sponge and generous amounts of water.

NOTICE

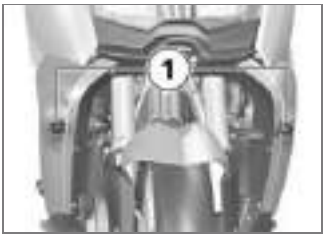
Soften stubborn dirt and insects by covering the affected areas with a wet cloth.◀

Clean the surrounding area sensors

– with Side View Assist[OE]

Requirement

Dirt or ice impairs the function of the surrounding area sensors.



- Clean the surrounding area sensors **1** with water and BMW plastic care emulsion.

- Clean the funnel **2** and surrounding area sensors with

water and BMW plastic care emulsion.

Chrome

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

Radiator

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

ATTENTION

Bending of radiator fins

Damage to radiator fins

- Take care not to bend the radiator fins when cleaning.◀

Rubber

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

ATTENTION

Application of silicone sprays to rubber seals

Damage to the rubber seals

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

Care of paintwork

The long-term effects of materials that are damaging to paint can be prevented by regular vehicle washes, particularly if your vehicle is ridden in areas susceptible to high levels of air pollution or natural contamination, for example tree resin or pollen. Particularly aggressive materials, however, should be removed immediately, otherwise changes to or discolouration of the paint can result. These include, for example, spilled fuel, oil, grease, brake fluid or bird excrement. For this, we recommend BMW Motorrad solvent cleaner followed by BMW Motorrad gloss polish for preservation. Contamination of the paint surface can be seen particularly clearly after a vehicle wash. These areas should be cleaned immediately using benzine or spirit, applied with a clean cloth or cotton pad. BMW Motorrad recommends that tar spots be removed using BMW tar remover. The paint should then be preserved in these areas.

Vehicle preservation

If water no longer rolls off the paint, the paint must be preserved.

For paint preservation, BMW Motorrad recommends

the use of BMW Motorrad gloss polish or agents containing carnauba wax or synthetic wax.

Lay up the Maxi-Scooter

- Clean the Maxi-Scooter.
- Fully refuel the Maxi Scooter.
- Removing battery (124).
- Spray the brake-lever, centre-stand and side-stand pivot mounts with a suitable lubricant.
- Coat bright metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).
- Stand the Maxi-Scooter in a dry room in such a way that there is no load on either wheel.

Restore the Maxi-Scooter to use

- Remove the protective wax coating.
- Clean the Maxi-Scooter.
- Installing battery (124).
- Comply with checklist (76).

Technical data

Troubleshooting chart

Engine does not start or is difficult to start.

Possible cause	Rectification
Side stand extended	Retract the side stand.
Starting without brake application	Operate a brake lever when starting.
No fuel in tank	Refuelling (→ 84).
Battery flat	Recharging battery (→ 123).

– with Side View Assist[OE]
SVA is giving incorrect information.

Possible cause	Rectification
Surroundings sensors iced over or dirty	– with Side View Assist[OE] Clean the surrounding area sensors (139).
Surroundings sensors covered up	Make sure that the surroundings sensors cannot be covered up by your clothing or by items carried on the vehicle. Do not plug the funnel-shaped apertures for the surroundings sensors or cover them with stickers.
Rear silencer damaged or altered.	Use only BMW-approved rear silencers that are in perfect condition.
The SVA control unit has detected a fault. The SVA function is not available.	SVA! appears on the display. You can continue to ride the vehicle, but make due provision for the fact that the SVA function is not available. Have the fault rectified by a specialist workshop, preferably an authorised BMW Motorrad dealer.

ASC intervenes unnecessarily, too often or too soon.

Possible cause	Rectification
Tyres changed and tyre radii altered	Calibrating ASC (➡ 60).
Tyre pressure front or rear too low; tyre pressure or load changed	Checking tyre pressure (➡ 108).
No propulsive drive on very loose surfaces (e.g. sand or snow)	Switch off ASC if the stretch of road you are on is in very bad condition (➡ 58).
Loss of the adaptation values for the tyre radii in the digital engine electronics (DME) after software update	Calibrating ASC (➡ 60).

Screw connections

Front wheel	Value	Valid
Quick-release axle in axle holder		
M18 x 1.5	30 Nm	
Clamping screws (quick-release axle) in telescopic forks		
M6 x 30	**Tightening sequence: Tighten screws six times in alternate sequence**	
	8 Nm	
Brake caliper to fork leg		
M8 x 32 - 10.9	28 Nm	

Rear wheel	Value	Valid
Rear wheel on output shaft		
M10 x 1.25 x 40	**Tightening sequence: tighten in diagonally opposite sequence**	
	60 Nm	
Silencer to bracket		
M8 x 30	19 Nm	

Rear wheel	Value	Valid
End silencer to front silencer		
M8 x 30	19 Nm	

Fuel

Recommended fuel grade	E5 Super unleaded (maximum 15% ethanol, E15) E10 95 ROZ/RON 90 AKI
Usable fuel capacity	approx. 15.5 l
Fuel reserve	approx. 3 l

Engine oil

Engine oil, capacity	approx. 3.1 l, with filter change
Specification	SAE 15W-50, API SJ / JASO MA2, Additives (e.g. molybdenum-based) are not permissible because they can attack coated components of the engine, BMW Motorrad recommends BMW Motorrad ADVANTEC Pro oil.
Engine oil, quantity for topping up	max 0.5 l, Difference between MIN and MAX

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Engine

Location of engine number	Crankcase, left, below alternator
Engine type	652EA
Engine design	Water-cooled 2-cylinder four-stroke with four valves per cylinder, valve actuation by cam followers, two overhead camshafts and dry sump lubrication
Displacement	647 cm^3
Cylinder bore	79 mm
Piston stroke	66 mm
Compression ratio	11.6:1
Nominal output	44 kW, at engine speed: 7500 min^{-1}
– with power reduction to 35 kW^{OE}	35 kW, at engine speed: 7500 min^{-1}
Torque	63 Nm, at engine speed: 6000 min^{-1}
– with power reduction to 35 kW^{OE}	54 Nm, at engine speed: 4250 min^{-1}
Maximum engine speed	max 8500 min^{-1}
Idle speed	1250 min^{-1}, Engine at regular operating temperature
Exhaust emissions standard	Euro4

Clutch

Clutch type	Centrifugal clutch

Transmission

Gearbox type	CVT (Continuously Variable Transmission)
Primary transmission ratio	1:1.06
Transmission ratio, secondary transmission	1:3.28

Rear-wheel drive

Type of final drive	Chain drive
Final drive, number of teeth (Pinion / sprocket)	16/27
Secondary transmission ratio	1.688

Frame

Frame type	Tubular steel frame with supporting drive unit, steel pipe rear frames
Position of the Vehicle Identification Number	Main frame front right at bottom
Type plate location	Frame, front left, on steering head

Chassis and suspension

Type of front suspension	Upside-down telescopic fork
Spring travel, front	115 mm, at front wheel
Type of rear suspension	Cast aluminium single swinging arm
Type of rear suspension	Direct-pivot spring strut with adjustable spring preload
Spring travel, rear	115 mm, At wheel

Brakes

Front wheel	
Type of front brake	Twin-disc brake, fixed, disc diameter 270 mm, 2-piston floating caliper
Brake-pad material, front	Sintered metal
Brake disc thickness, front	5.0 mm, when new 4.5 mm, Wear limit
Rear wheel	
Type of rear brake	Hydraulically actuated disc brake with 2-piston floating caliper, Brake for riding Bowden-cable-actuated disc brake with 1-piston floating caliper, Parking brake
Brake-pad material, rear	Organic material
Brake disc thickness, rear	5.0 mm, when new 4.5 mm, Wear limit
Play of brake controls (Rear brake)	approx. 11.5 mm, At the measuring point

Wheels and tyres

Speed category, front/rear tyres	S, required at least: 180 km/h
Front wheel	
Front wheel type	Aluminium cast wheel
Front wheel rim size	3.50" x 15"
Tyre designation, front	120/70 R 15
Load index, front tyre	47
Permissible front-wheel imbalance	max 5 g
Rear wheel	
Rear-wheel type	Aluminium cast wheel
Rear wheel rim size	4.50" x 15"
Tyre designation, rear	160/60 R 15
Load index, rear tyre	64
Permissible rear-wheel imbalance	max 5 g
Tyre pressure	
Tyre pressure, front	2.5 bar, tyre cold
Tyre pressure, rear	2.9 bar, tyre cold

Electrical system

Electrical rating of on-board sockets	max 7.5 A, Socket in rear stowage compartment
Battery	
Battery type	AGM
Battery rated voltage	12 V
Battery rated capacity	14 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8D-J
Lighting	
Bulbs for the low-beam headlight	H7 12 V 55 W
Bulb for high-beam headlight	H7 12 V 55 W
Bulb for parking light	LED
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	LED
Bulb for tail light/brake light	LED
Light source for the number plate light	W5W / 12 V / 5 W

Fuses	
Fuse 1	15 A, DME main relay
Fuse 2	10 A, Digital engine electronics (DME) control unit
Fuse 3	5 A, Alarm system (DWA) / tyre pressure monitor (RDC) control unit, diagnostic socket, power socket in rear stowage compartment
Fuse 4	4 A, Brake-light switch / connector for optional accessories
Fuse 5	7.5 A, Fan
Fuse 6	5 A, Socket in front stowage compartment
Fuse 7	4 A, Number 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 braking system (ABS)

Anti-theft alarm

– with anti-theft alarm (DWA)[OE]

Activation time on arming	approx. 30 s
Alarm duration	approx. 26 s
Activation time between two alarms	12 s
Temperature range	-40...85 °C
Operating voltage	9...16 V

Dimensions

Length of motorcycle	2235 mm, measured over number-plate carrier
Height of motorcycle	1420...1545 mm, measured over windscreen, at DIN unladen weight
Width of motorcycle	805 mm, measured without mounted parts
Front-seat height	805 mm, measured without rider, at DIN unladen weight
Rider's inside-leg arc, heel to heel	1905 mm, measured without rider, at DIN unladen weight

Weights

Vehicle kerb weight	261 kg
Permissible wheel load, front	max 170 kg
Permissible wheel load, rear	max 275 kg
Permissible gross weight	445 kg
Maximum payload	184 kg

Riding specifications

Top speed	180 km/h

Service

BMW Motorrad Service

BMW Motorrad has an extensive after-sales service network in place to look after you and your Maxi-Scooter in more than 100 countries. Authorised BMW Motorrad dealerships have the technical information and the technical know-how to carry out reliably all maintenance and repair work on your BMW Maxi-Scooter.

You can locate your nearest authorised BMW Motorrad dealership by visiting our website:

bmw-motorrad.com

WARNING

Maintenance and repair work not in compliance with correct procedure

Risk of accident due to subsequent damage

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

In order to help ensure that your BMW Maxi-Scooter is always in optimum condition, BMW Motorrad recommends compliance with the maintenance intervals specified for your Maxi-Scooter.

Have all maintenance and repair work that is carried out confirmed in the "Service" chapter in this manual. For generous treatment of claims submitted after the warranty period has expired, evidence of regular maintenance is essential.

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

BMW Motorrad Service history

Entries

Maintenance work that has been carried out is entered in the proof of maintenance. The entries are like a Service Booklet and provide proof of regular maintenance.

If an entry is made in the electronic service booklet of the vehicle, service-relevant data is saved in the central IT systems of BMW AG, Munich.

If there is a change in vehicle owner, the data saved in the electronic service booklet can also be viewed by the new vehicle owner. A BMW Motorrad Retailer or a specialist workshop can also view data that is stored in the electronic service booklet.

Objection

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

BMW Motorrad Mobility services

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

Maintenance work

BMW Pre-delivery Check

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

BMW Running-in Check

The BMW running-in check has to be performed when the vehicle has covered between 500 km and 1200 km.

BMW Service

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

For riders with a high mileage it may be necessary to have a service before the specified deadline. In this case, a corresponding maximum mileage is entered in the service confirmation. If this mileage is reached before the next service deadline, the service must be brought forward.

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

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

	500 - 1200 km 300 - 750 mls	10 000 km 6 000 mls	20 000 km 12 000 mls	30 000 km 18 000 mls	40 000 km 24 000 mls	50 000 km 30 000 mls	60 000 km 36 000 mls	70 000 km 42 000 mls	80 000 km 48 000 mls	90 000 km 54 000 mls	100 000 km 60 000 mls	12 months	24 months
①	X												
②												X	
③		X	X	X	X	X	X	X	X	X	X	X[a]	
④			X		X		X		X		X		
⑤			X		X		X		X		X		
⑥					X				X				
⑦					X				X				
⑧					X				X				
⑨					X				X				
⑩					X				X				
⑪												X[b]	X[b]

Maintenance schedule

1 BMW running-in check (including oil change)
2 BMW Service standard scope
3 Engine-oil change, with filter
4 Replace air filter element
5 Replace CVT belt with rollers
6 Replace chainset
7 Replace all spark plugs
8 Check valve clearance
9 Change gearbox oil
10 Check the clutch (clutch removed)
11 Change brake fluid, entire system

[a] annually or every 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 tasks in the BMW Service standard scope are listed below. The actual scope of maintenance work applicable for your vehicle may vary.

- Checking battery charge state
- Performing vehicle test with BMW Motorrad diagnostic system
- Visually inspecting brake pipes, brake hoses and connections
- Checking front/rear brake-fluid level
- Checking front brake pads and brake discs for wear
- Checking rear brake pads and brake disc for wear
- Lubricating bearer of Bowden cable for parking brake and checking basic setting and braking effect of parking brake
- Checking steering-head bearing
- Checking coolant level
- Checking play of throttle cable
- Checking chain sag and checking security of threaded fasteners of swinging-arm housing cover
- Checking tyre pressures and tread depth
- Checking lights and signalling equipment
- Function test, engine start suppression
- Final inspection and check of roadworthiness
- Setting service-due date and countdown distance
- Confirming the BMW service in the on-board literature

BMW pre-delivery check

carried out

at_____

Stamp, signature

BMW Running-in Check

carried out

at_____

at km_____

Next service

at the latest

at_____

or, when reached earlier

at km_____

Stamp, signature

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

BMW Service
carried out

at_____
at km_____

Next service
at the latest
at_____
or, when reached earlier
at km_____

_____
Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Oil change, engine, with filter	☐	☐
Renewing air cleaner insert	☐	☐
Replacing CVT belt	☐	☐
Replacing chainset	☐	☐
Renewing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Changing gearbox oil (for maintenance)	☐	☐
Check clutch (clutch removed)	☐	☐
Change brake fluid in entire system	☐	☐

Notes

Service confirmations

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

Work performed	at km	Date

Work performed	at km	Date

Appendix

Certification

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 expressively 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.

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

Original rider's manual, printed in Germany.

Important data for refuelling:

Fuel	
Recommended fuel grade	E5 E10 Super unleaded (maximum 15% ethanol, E15) 95 ROZ/RON 90 AKI
Usable fuel capacity	approx. 15.5 l
Fuel reserve	approx. 3 l
Tyre pressure	
Tyre pressure, front	2.5 bar, tyre cold
Tyre pressure, rear	2.9 bar, tyre cold

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

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Order No.: 01 40 1 61 1111
06.2019, 5th edition, 01