

BMW Motorrad

The Ultimate Riding Machine

Rider's Manual (US Model)

C 600 Sport

Motorcycle/Dealer Data

Motorcycle data

Model

Vehicle identification number

Color number

Initial registration

License plate

Dealer Data

Contact in Service

Ms./Mr.

Phone number

Dealer's address/phone number (company stamp)

Welcome to BMW

We congratulate you on your choice of a Maxi-Scooter from BMW 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 operation that enables you to make the best possible use of all your Scooter's technical features. In addition, it contains information on maintenance and care to help you maintain your motorcycle's reliability and safety, as well as its value.
If you have any questions concerning the Maxi-Scooter communication system, your authorized BMW Motorrad retailer is always happy to provide you with advice and assistance.

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

BMW Motorrad.

01 41 8 550 577



Table of Contents

1 General instructions 5
Overview 6
Abbreviations and symbols 6
Equipment 7
Technical data 7
Notice concerning current status 7

2 Overviews 9
General view, left side 11
General view, right side 13
Multifunction switch, left 14
Multifunction switch, right 15
Cockpit 16
Underneath seat 17

3 Displays 19
Multifunction display 20
Warning and indicator lamps 21
Service display 22
Distance covered since the fuel reached the reserve level 23
Ambient temperature..... 23
Tire inflation pressures 23
Oil level indicator 24
Warning lights 24

4 Operation..... 39
Steering and ignition lock 40
Time and date 41
Display 42
Lights 43
Turn indicator 44
Hazard warning flashers 44
Emergency-off switch (kill switch) 45
Heated handlebar grips 45
Seat heating 46
Brakes 47
Mirrors 48
Windshield 48
Storage compartments..... 49
Spring preload 50
Tires 50
Headlight..... 51
Seat 51

5 Anti-theft alarm system DWA 53
Overview 54
Activation 54
Alarm function..... 56
Deactivation 57
Programming..... 58
Logging on remote control 59
Synchronization 60
Battery 61

6 Riding..... 63
Safety instructions 64
Checklist 65
Starting..... 66
Riding 67
Breaking in 67
Brakes 68
Maxi-Scooter Parking 69
Refueling..... 70

Secure motorcycle for transport 72
7 Technology in detail 75
Brake system with BMW Motorrad ABS 76
Tire Pressure Control TCP/RDC 77
8 Accessories 79
General instructions 80
Onboard power sockets 80
Topcase 80
Scooter lock 83
9 Maintenance 85
General instructions 86
Standard tool kit 86
Engine oil 86
Brake system 89
Coolant 94
Wheel rims and tires 95
Wheels 96
BMW Motorrad front wheel stand 101
Fuses 103
Bulbs 103
Jump-starting 110
Battery 110
Fairings and panels 112
10 Care 115
Care products 116
Washing your motorcycle 116
Cleaning sensitive motorcycle parts 116
Paint care 117
Maxi-Scooter Storage 118
Protective wax coating 118
Maxi-Scooter Returning to use 118
11 Technical data 119
Troubleshooting chart 120
Threaded fasteners 121
Engine 122
Fuel 123
Engine oil 123
Clutch 124
Transmission 124
Rear-wheel drive 124
Suspension 125
Brakes 125
Wheels and tires 126
Electrical system 127
Frame 129
Dimensions 129
Weights 130
Performance data 130
Anti-theft alarm system 130
Remote control 131
12 Service 133
Reporting safety defects 134
BMW Motorrad Service 135
BMW Motorrad Mobility Services 135
Maintenance procedures 135
Confirmation of maintenance work 137
Confirmation of service 142
13 Appendix 145
Certificate 146
14 Index 147

General instructions

Overview 6
Abbreviations and symbols 6
Equipment 7
Technical data 7
Notice concerning current status 7

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your Maxi-Scooter. All maintenance and repair work carried out on your motorcycle will be documented in Chapter 12. Documentation confirming performance of scheduled maintenance is a precondition for generous handling of out-of-warranty claims and goodwill warranty treatment.
When the time comes to sell your Scooter, please remember to hand over this Rider's Manual; it is an important part of your motorcycle.

Abbreviations and symbols

Indicates warnings that it is imperative to observe for your own safety and the safety of others, and to protect your product against damage.

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

◀ Indicates the end of an item of information.

• Instruction.

» Result of an activity.

Reference to a page with more detailed information.

◁ Indicates the end of accessory or equipment-dependent information.

Tightening torque.

Technical data.

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

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

ABS Anti-Lock Brake System.

TPC Tire Pressure Control (TPC).

EWS Electronic immobilizer.

DWA Anti-theft alarm.

Equipment

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

Technical data

All dimensions, weights and performance data contained this Rider's Manual refer to the German DIN standards and comply with their tolerance specifications. Versions for individual countries may differ.

Notice concerning current status

The high safety and quality standards of BMW Scooters are maintained by constant development work on designs, equipment and accessories. Because of this, your motorcycle may differ from the information supplied in the Rider's Manual. In addition, BMW Motorrad cannot guarantee the total absence of errors. We hope you will appreciate that no claims can be recognized based on the data, illustrations or descriptions in this manual.

Overviews

General view, left side 11
General view, right side 13
Multifunction switch, left 14
Multifunction switch, right 15
Cockpit 16
Underneath seat 17


1
2
4
3

General view, left side

1 Brake-fluid reservoir for rear brake (➠ 93)
2 Fuel fill location (under cover) (➠ 70)
3 Adjusting spring preload (➠ 50)
4 Engine oil fill location and oil dipstick (under step plate) (➠ 86)


1
2
3
7
4
6
5

General view, right side

1 Brake-fluid reservoir for front brake (➠ 92)

2 Type plate (on the right of the head tube)

3 Battery (under fairing side panel) (➠ 110)
Fuses (under fairing side panel) (➠ 103)

4 Vehicle Identification Number (on right frame tube)

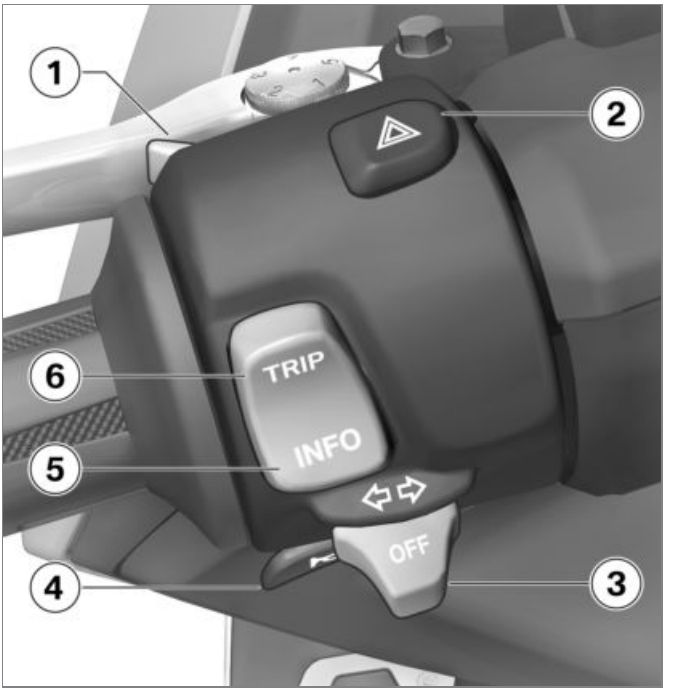
5 Coolant level indicator (through cutout in fairing side panel) (➠ 94)

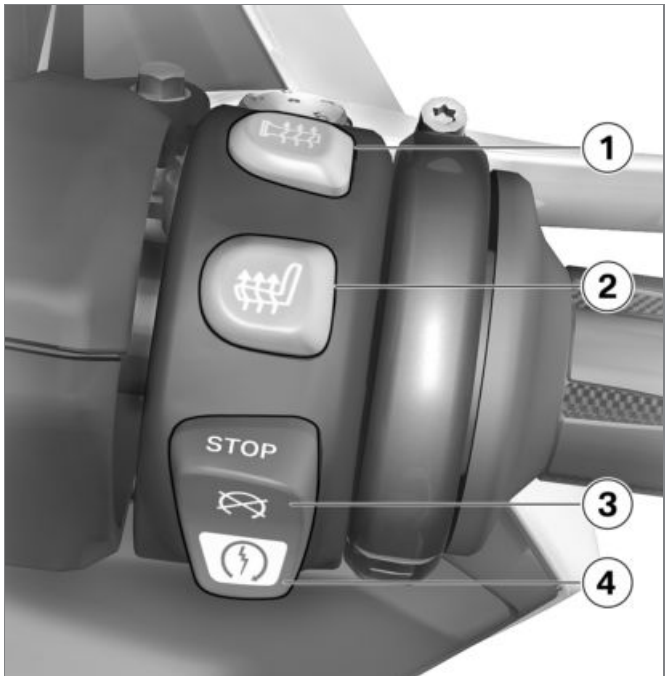
6 Coolant expansion tank (under step plate support) (➠ 94)

7 – with seat heating OE
Operating passenger seat heater (➠ 47)

Multifunction switch, left

1 Operation of high-beam headlight and headlight flasher (➠ 43)
2 Using hazard warning flashers (➠ 44)
3 Turn indicators (➠ 44)
4 Horn
5 INFO, operation of onboard computer (➠ 42)
6 TRIP, operation of odometer (➠ 42)





Multifunction switch, right

1 – with heated handlebar grips[OE]
Heated hand grip (➠ 45)

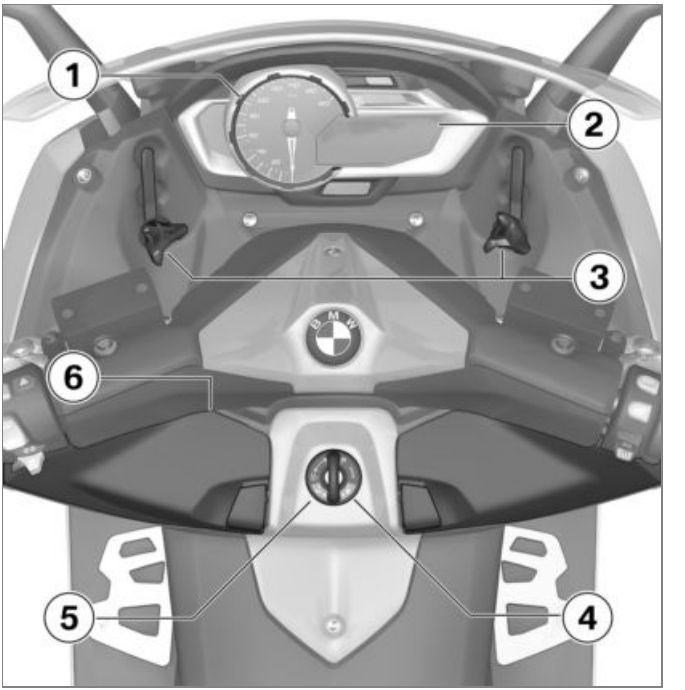
2 – with seat heating[OE]
Operation of seat heating (➠ 46)

3 Emergency-off switch (kill switch) (➠ 45)

4 Starter button (➠ 66)

Cockpit

1 Speedometer
2 Multifunction display (➠ 20)
3 Windshield adjustment (➠ 48)
4 Tank cover release (integrated in steering and ignition lock) (➠ 70)
5 Seat release (integrated in steering and ignition lock) (➠ 51)
6 Storage compartment (➠ 49)
Outlet (in the storage compartment) (➠ 80)





Underneath seat

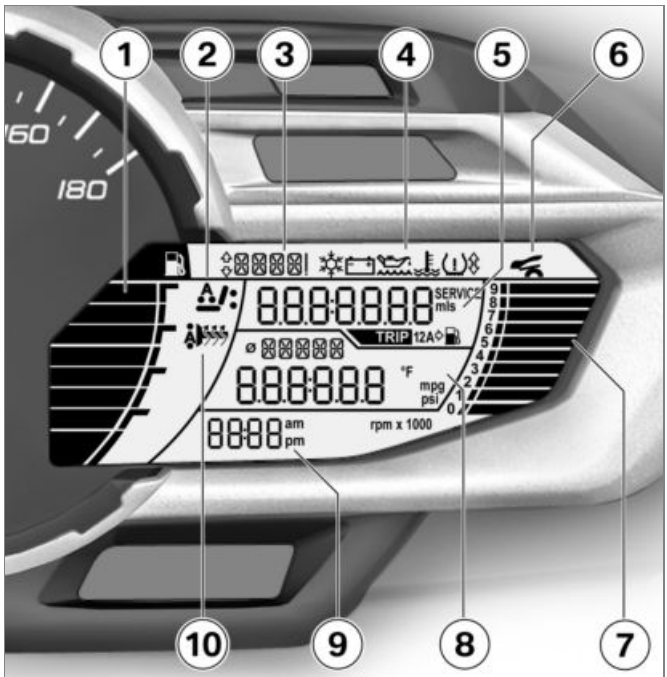
1 Rider's Manual (US Model)
2 Onboard tool kit (➠ 86)
3 Payload table
4 Tire inflation pressure table
5 Release of rear storage compartment (BMW Flexcase) (➠ 49)

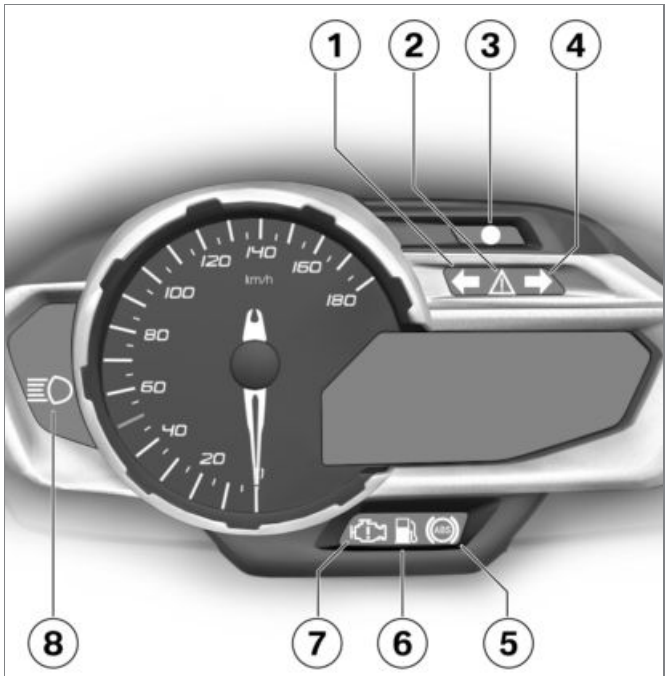
Displays

Multifunction display 20
Warning and indicator lamps 21
Service display 22
Distance covered since the fuel reached the reserve level 23
Ambient temperature 23
Tire inflation pressures 23
Oil level indicator 24
Warning lights 24

Multifunction display

1 Fuel fill level indicator
2 – with seat heating OE
Display of set seat heating level (➠ 46)
3 Text field for warnings (➠ 24)
4 Warning symbols (➠ 24)
5 Odometer (➠ 42)
Service display (➠ 22)
Display of mileage driven since reaching reserve quantity (➠ 23)
6 Cargo area opened (➠ 49)
7 Tachometer
8 Onboard computer displays (➠ 42)
9 Clock (➠ 41)
10 – with heated handlebar grips OE
Display of set heated handlebar grip level (➠ 45)

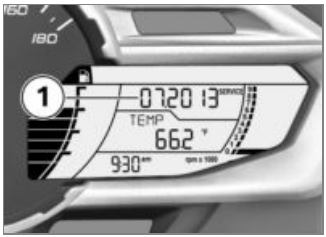




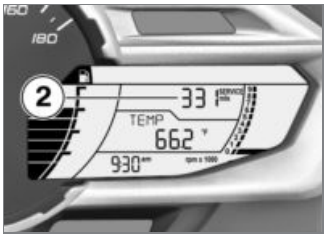
Warning and indicator lamps

1 Indicator light for left turn indicator
2 General warning light (➠ 24)
3 Anti-theft alarm telltale light (➠ 57)
4 Indicator light for right turn indicator
5 ABS warning light (➠ 31)
6 Fuel-reserve warning light (➠ 30)
7 Warning light for engine electronics (➠ 31)
8 Headlight high beam indicator light

Service display



If the time remaining until the next service will elapse within one month, the service date **1** appears briefly following the pre-ride check. In this example the display means "July, 2013."

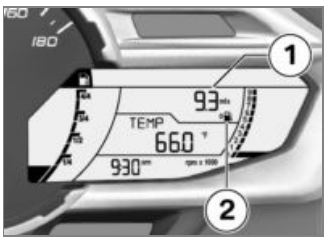


If the motorcycle covers high annual mileages then shorter service intervals may be required. When the odometer reading for the recalculated early service falls to within 621 miles (1000 km), the remaining miles (kilometers) **2** are counted down in 62-mile (100-km) increments and briefly displayed following the pre-ride check.

When a service date elapses without service, the universal warning light lights up in yellow, appearing together with the date and mileage (kilometer) display. The "Service" message is displayed continuously.

If the service display appears more than a month before the service date, the stored date must be adjusted in the instrument cluster. This situation can occur if the battery was disconnected.◀

Distance covered since the fuel reached the reserve level



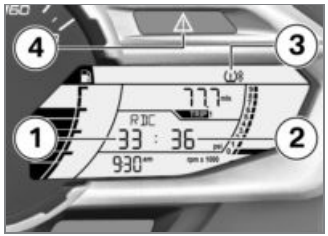
After reaching the fuel reserve quantity, the miles covered since this point in time are indicated **1** with the **2** symbol. This odometer is reset and no longer appears as soon as the tank is refueled to a level higher than the reserve level.

Ambient temperature

When ambient temperatures drop below 37 °F (3 °C) the temperature display responds by flashing a warning indicating possible ice formation on the road surface. The display automatically switches from any other mode to the temperature reading when the temperature drops below this threshold for the first time.

Tire inflation pressures

– with Tire Pressure Control (TPC/RDC)[OE]

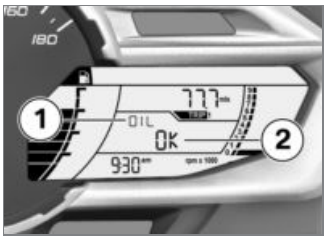


The displayed tire inflation pressures refer to a tire temperature of 68 °F (20 °C). The figure on the left side **1** indicates the front tire's inflation pressure, while the figure on the right **2** shows the inflation pressure in the rear tire. Immediately after switching on the ignition, "– – : – –" is displayed, as the transfer of the inflation pressure values does not begin until a speed of 19 mph (30 km/h) is exceeded for the first time.

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

Additional information on the BMW Motorrad Tire Pressure Control is provided starting on page (➠ 78).

Oil level indicator



The oil level indicator **1** provides information on the oil level in the engine. It can only be displayed when the vehicle is stopped.

The conditions for the oil level indicator are as follows:
- Engine at operating temperature.
- Engine idling for at least ten seconds.
- Side-stand retracted.
- Scooter is positioned vertically.

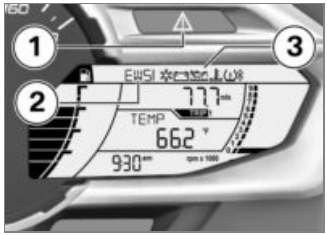
The possible displays at position **2** mean:
OK: Oil level correct.
CHECK: Check oil level during next refueling stop.
– – –: No measurement possible (above-mentioned conditions not met).

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

Warning lights

Display

Warnings are displayed with the corresponding warning lamps.



Warnings for which no separate warning light is provided are signaled by the universal warning light **1** and are accompanied by a warning notice such as **2** or the warning symbol **3** in the multifunction display. The universal warning light lights up in either yellow or red depending on the urgency of the warning.
If several warnings are active, all corresponding warning lamps and warning symbol are displayed; warnings appear alternately.
The following page contains a list of potential warnings.

Overview of warning indicators

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 Lights up yellow	EWS ! is indicated	Electronic immobilizer is active (➠ 30)
 Lights up		Fuel down to reserve (➠ 30)
 Lights up red	 Appears on the display	Coolant temperature too high (➠ 30)
 Appears on the display		Engine in emergency-operation mode (➠ 31)
 Lights up yellow	 Appears on the display	Engine oil level too low (➠ 31)
	OIL CHECK is indicated	
 Flashes		ABS self-diagnosis not completed (➠ 31)
 Lights up		ABS error (➠ 31)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 Lights up yellow	 + LAMP ! is displayed	Taillight defective (➠ 32)
 Lights up yellow	 + LAMP ! is displayed	Headlight bulb defective (➠ 32)
 Lights up yellow	 + LAMP ! is displayed	Tail light and headlight bulb defective (➠ 32)
 Lights up yellow	 Appears on the display	Rear storage compartment opened (➠ 32)
	 Aappears on the display	Outside temperature warning (➠ 33)
 Flashes red	 Appears on the display	Front tire inflation pressure is outside approved range (➠ 33)
	The critical tire inflation pressure flashes	
 Flashes red	 Appears on the display	Rear tire inflation pressure is outside approved range (➠ 34)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
	The critical tire inflation pressure flashes	Rear tire inflation pressure is outside approved range (➠ 34)
 Flashes red	 Appears on the display	Tire inflation pressure of both tires is outside approved range (➠ 34)
	Tire inflation pressures flash	
	"––" or "––:––" is indicated	Transmission error (➠ 35)
 Lights up yellow	 Appears on the display	Sensor defective or system error (➠ 35)
	"––" or "––:––" is indicated	
 Lights up yellow	RDC! is indicated	Battery of tire-inflation pressure sensor weak (➠ 36)
	DWA! is indicated	Anti-theft alarm battery low charge (➠ 36)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 Lights up yellow	DWA ! is indicated	Anti-theft alarm battery discharged (➠ 36)
 Lights up red	 Appears on the display	Battery charging voltage insufficient (➠ 37)

Electronic immobilizer is active

General warning light shows yellow.

EWS! is indicated.
Possible cause:

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

- Remove other ignition keys located on the ignition key.
- Use the reserve key.
- Have the defective key replaced, preferably by an authorized BMW Motorrad retailer.

Fuel down to reserve

Fuel reserve symbol lights up.

A fuel shortage can cause irregular engine operation or engine shut-off (accident hazard) and the catalytic converter can be damaged.
Do not drive to the extent that the fuel tank is completely empty.◀

Possible cause:

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

Fuel reserve
Approx. 3.2 quarts (Approx. 3 l)

- Refueling (➠ 70).

Coolant temperature too high

General warning light shows red.

Temperature symbol is displayed.

Driving with an overheated engine can result in engine damage.
Be sure to observe the measures listed below.◀

Possible cause:

Coolant level is too low.

- Checking coolant level (➠ 94).

If coolant level is too low:

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

Possible cause:

The coolant or engine oil temperature too high.

- If possible, continue driving in the part-load range to cool down the engine.
- Should the coolant or engine oil temperature frequently be too high, have the fault rectified as quickly as possible by an authorized workshop, preferably an authorized BMW Motorrad retailer.

Engine in emergency-operation mode


Engine symbol appears on the display.

The engine is in the emergency operating mode. Unusual engine response is a possibility.
Adapt your style of riding accordingly. Avoid accelerating sharply and overtaking.◀

Possible cause:

The engine control unit has diagnosed a fault. In exceptional cases, the engine stops and can no longer be started. Otherwise, the engine runs in the emergency operating mode.

- Continued driving is possible, however the accustomed engine performance may not be available.
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Engine oil level too low


General warning light shows yellow.


Oil level symbol appears on the display.

OIL CHECK is indicated.
Possible cause:

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

- Checking engine oil level (➠ 86).

If oil level is too low:

- Top up engine oil.

ABS self-diagnosis not completed


ABS warning lamp flashes.

Possible cause:

The self-diagnosis routine was not completed; the ABS function is not available. The Scooter must reach a speed of at least 3.1 mph (5 km/h) before the ABS self-diagnosis routine can be completed.

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

ABS error


ABS warning lamp lights up.

Possible cause:

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

- Continued driving is possible while taking the failed ABS function into account. Observe additional information on situa-

tions which can lead to an ABS error (➠ 77).
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Taillight defective


General warning light shows yellow.


+ LAMP ! is displayed.

Possible cause:

Taillight defective.
- The diode taillight must be replaced. Please contact a specialized workshop, preferably an authorized BMW Motorrad retailer.

Headlight bulb defective


General warning light shows yellow.


+ LAMP ! is displayed.

Failure of a bulb on the motorcycle is a safety risk because it potentially makes the motorcycle less noticeable to other road users.
Replace defective bulbs as soon as possible; it is best always to carry a complete set of spare bulbs on the motorcycle.◀

Possible cause:

Low-beam headlight or high-beam headlight defective.
- Replacing bulbs for low-beam and high-beam headlight (➠ 103).

Possible cause:

Parking light defective.
- Replacing parking light bulb (➠ 105).

Tail light and headlight bulb defective


General warning light shows yellow.


+ LAMP ! is displayed.

Possible cause:

The tail light and one headlight bulb are defective.
- See the fault descriptions above.

Rear storage compartment opened


General warning light shows yellow.


The storage compartment is displayed.

Possible cause:

The storage compartment under the seat is opened.

Accident hazard due to open storage compartment while riding!
If this warning appears while riding, stop as soon as possible and check the locking of the storage compartment.
Do not ride with an open storage compartment!◀

- Close storage compartment.

Outside temperature warning

Ice crystal symbol appears on the display.

Possible cause:

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

The outside temperature warning does not mean that there is no risk of black ice forming at measured temperatures above 37 °F (3 °C).
At low outside temperatures, icy conditions must especially be expected on bridges and in shady road areas.◀

- Think well ahead when driving.

Front tire inflation pressure is outside approved range

– with Tire Pressure Control (TPC/RDC)OE

General warning light flashes red.

Tire symbol with arrow pointing upward is displayed.

The critical tire-inflation pressure flashes.
Possible cause:

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

- Check tire for damage and suitability for continued use.

If it is still possible to drive with tire:

Incorrect tire inflation pressure result in poorer handling of the Scooter.
Always adapt your driving style to the incorrect tire inflation pressure.◀

- Correct tire inflation pressure at the next opportunity.

Before adjusting the tire inflation pressure, observe the information on temperature compensation and on inflation pressure adjustment in the chapter "Technology in detail".◀

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

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

- Do not continue riding.
- Contact roadside service.

Rear tire inflation pressure is outside approved range

– with Tire Pressure Control (TPC/RDC)[OE]


General warning light flashes red.


Tire symbol with arrow pointing downward is displayed.

The critical tire-inflation pressure flashes.
Possible cause:

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

- Check tire for damage and suitability for continued use.

If it is still possible to drive with tire:


Incorrect tire inflation pressure result in poorer handling of the Scooter.
Always adapt your driving style to the incorrect tire inflation pressure.◀

- Correct tire inflation pressure at the next opportunity.

Before adjusting the tire inflation pressure, observe the information on temperature compensation and on inflation pressure adjustment in the chapter "Technology in detail".◀

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

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

- Do not continue riding.
- Contact roadside service.

Tire inflation pressure of both tires is outside approved range

– with Tire Pressure Control (TPC/RDC)[OE]


General warning light flashes red.


Tire symbol with arrows pointing upward and downward is displayed.

Tire inflation pressures flash.
Possible cause:

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

- Check tire for damage and suitability for continued use.

Are the tires still suitable for driving:


Incorrect tire inflation pressure result in poorer handling of the Scooter.
Always adapt your driving style

to the incorrect tire inflation pressure.◀

- Correct tire inflation pressure at the next opportunity.

▷ Before adjusting the tire inflation pressure, observe the information on temperature compensation and on inflation pressure adjustment in the chapter "Technology in detail".◀

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

If you are unsure about the drivability of the tires:

- Do not continue riding.
- Contact roadside service.

Transmission error

– with Tire Pressure Control (TPC/RDC)OE

"––" or "–– : –– " is indicated.

Possible cause:

The motorcycle's speed has not exceeded the threshold of approx. 19 mph (30 km/h). The TPC/RDC sensors do not send their signal until after this speed has been exceeded for the first time (➠ 78).

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

Possible cause:

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

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

Sensor defective or system error

– with Tire Pressure Control (TPC/RDC)OE


General warning light shows yellow.


Tire symbol appears on the display.

"––" or "–– : –– " is indicated.

Possible cause:

Wheels without installed TPC/RDC sensors are mounted.

- Retrofit wheel set with TPC/RDC sensors.

Possible cause:

One or two TPC/RDC sensors have failed.

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

Possible cause:

A system fault has occurred.

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

Battery of tire-inflation pressure sensor weak

– with Tire Pressure Control (TPC/RDC)[OE]



General warning light shows yellow.

RDC ! is indicated.



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

Possible cause:

The battery for the tire inflation pressure sensor is no longer charged to full capacity. Operation of the tire inflation pressure control is only ensured for a limited time.

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

Anti-theft alarm battery low charge

– with anti-theft alarm system (DWA)[OE]

DWA ! is indicated.



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

Possible cause:

The anti-theft alarm battery no longer has its full capacity. The operation of the anti-theft alarm system is only ensured for a limited time with the motorcycle battery disconnected.

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

Anti-theft alarm battery discharged

– with anti-theft alarm system (DWA)[OE]



General warning light shows yellow.

DWA ! is indicated.

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

Possible cause:

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

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

Battery charging voltage insufficient

 General warning light shows red.

 Battery symbol appears in the display.

 A discharged battery will lead to the failure of various motorcycle systems such as lighting, engine or ABS. This can result in dangerous driving situations.

Do not continue riding.◀

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

Possible cause:

Alternator or alternator drive defective.

- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Operation

Steering and ignition lock 40
Time and date 41
Display 42
Lights 43
Turn indicator 44
Hazard warning flashers 44
Emergency-off switch (kill switch) 45
Heated handlebar grips 45
Seat heating 46
Brakes 47
Mirrors 48
Windshield 48
Storage compartments 49
Spring preload 50
Tires 50
Headlight 51
Seat 51

Steering and ignition lock

Keys

You receive two ignition keys.

– with Topcase OA

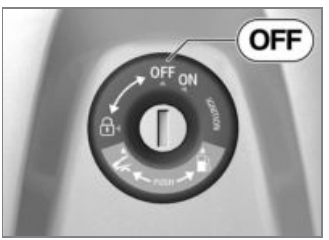
A Topcase with a lock for the same key can be ordered on request. Please contact an authorized workshop for this purpose, preferably an authorized BMW Motorrad retailer.

Switching on ignition



- Turn key to position **ON**.
» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-Ride Check in progress. (➠ 66)
» ABS self-diagnosis in progress. (➠ 67)

Switching off ignition



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

Locking handlebars

- Turn handlebars to left.



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

Time and date

Setting time

- Switch off engine and switch on ignition.



- Press button **1** (TRIP) repeatedly until total mileage **3** is shown.
- Press and hold button **1** (TRIP) until first value of clock **4** to be set flashes.
- Set flashing value with buttons **1** (TRIP) and **2** (INFO).
- Press and hold button **1** (TRIP) each time until next value flashes.
- Set flashing value with buttons **1** (TRIP) and **2** (INFO).
- Press and hold button **1** (TRIP) until display no longer flashes.

» Setting is completed.

Setting can be ended after each step:

- Do not press buttons until display no longer flashes.

» The settings made up until now will be applied.

Setting time and date

- Switch off engine and switch on ignition.

▷ Date and time are set directly after each other.◀



- Press button **2** (INFO) repeatedly until date **3** is displayed.

▷ The indicated sequence of day, month and year may vary depending on the country.◀

- Press and hold button **2** (INFO) until first value of date **3** to be set flashes.
- Set flashing values with buttons **1** (TRIP) and **2** (INFO).
- Press and hold button **2** (INFO) each time until next value flashes.
- After time has been set, press and hold button **2** (INFO) until display no longer flashes.

» Setting is completed.

Setting can be ended after each step:

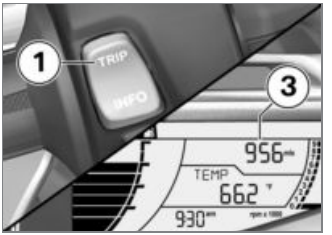
- Do not press buttons until display no longer flashes.

» The settings made up until now will be applied.

Display

Selecting display readings

- Switch on ignition.



- Press button **1** (TRIP) to select display in area **3**.

The following data can be displayed:

– Total distance covered
– Tripmeter 1 (Trip 1)
– Tripmeter 2 (Trip 2)
– Auto tripmeter (Trip A), is automatically reset when at least five seconds pass after switching off the ignition and the date has changed.
– After reaching reserve quantity: distance driven since then



- Press button **2** (INFO) to select the display in area **4**.

The following data can be displayed:

– Ambient temperature (TEMP)
– Average speed (ØSPEED)
– Average consumption (ØFUEL)
– Current consumption (FUEL)
– Date (Date)
– Oil level indicator (OIL)

– with Tire Pressure Control (TPC/RDC)[OE]

Tire inflation pressures (option) (TPM/RDC)◁

Resetting tripmeter

- Switch on ignition.
- Select desired odometer.



- Press the button **1** and continue to hold it until the odometer in the sector **3** resets.

Resetting average data

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



- Press and hold button **2** (INFO) until displayed value in area **4** has been reset.

Lights

Low-beam headlight and parking light

The parking lights come on automatically when the ignition is switched on.
After switching off the ignition, the parking lamps remain lit for a short time.

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

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

Headlight high beam and flasher



- Press switch **1** toward front to switch on high beams.
- Pull switch **1** rearward to operate headlight flasher.

Parking light

• Switch off ignition.



• Immediately after switching off the ignition push the button **1** to the left and maintain pressure until the parking lights come on.
• Switch ignition on and then off again to switch off parking lights.

Turn indicator

Operating turn indicator

• Switch on ignition.



• Press button **1** toward left to switch on left-hand turn indicators.
• Press button **1** toward right to switch on right-hand turn indicator.
• Press button **1** into center position to switch off turn indicators.

Hazard warning flashers

Operating hazard warning flashers

• Switch on ignition.

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

If a turn indicator button is pressed with the ignition switched on, the flashing function replaces the emergency flashing function as long as the button is pressed. If the turn indicator button is released, the emergency flasher function becomes active again.◀



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

» Ignition can be switched off.

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

Emergency-off switch (kill switch)



1 Emergency-off switch (kill switch)

Operating the emergency ON/OFF switch when riding can cause the rear wheel to lock and thus cause a fall.
Do not operate the emergency ON/OFF switch when riding.◀

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



a Engine switched off
b Operating position

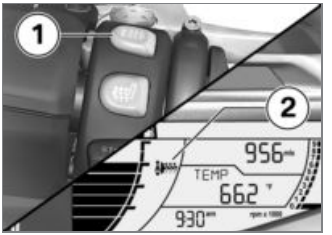
Heated handlebar grips

– with heated handlebar grips[OE]

Operating heated handlebar grips

- Start engine.

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



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

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

Heating output is automatically controlled in dependence on ambient temperature, speed and engine speed.

100 % heating output

50 % heating output

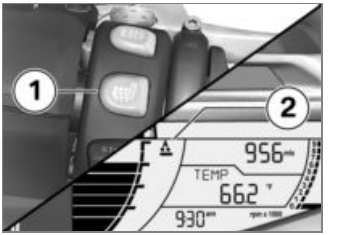
Seat heating

– with seat heating[OE]

Operating driver's seat heater

- Start engine.

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



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

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

A Heating output is automatically controlled in dependence on ambient temperature, speed and engine speed.

100 % heating output

50 % heating output

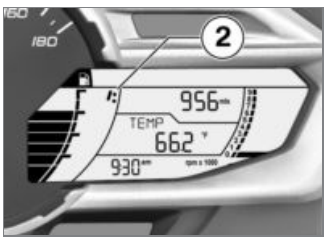
Operating passenger seat heater

- Start engine.

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



- Press button **1** on side with two dots to switch on high heating output (HIGH).
- Press button **1** on side with one dot to switch on low heating output (LOW).
- Move button **1** into center position to switch off seat heater.



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

50 % heating output

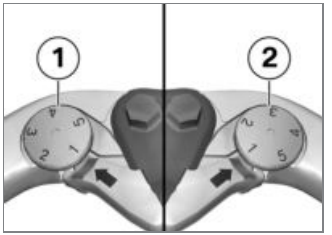
100 % heating output

Brakes

Adjusting handbrake lever

Changing the position of the brake-fluid reservoir can allow air to penetrate the brake system.
Do not reposition the handlebar controls on the handlebars or the handlebars in their mounts.◀

Adjusting the handbrake lever while driving can lead to accidents.
Only adjust the handbrake lever when the Scooter is stationary.◀



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

The adjusting screw can be turned more easily if you press the handbrake lever forward when doing so.◀

» Adjustment options:

– from Position 1: largest distance between handlebar grip and brake lever
– up to Position 5: smallest distance between handlebar grip and brake lever

Mirrors

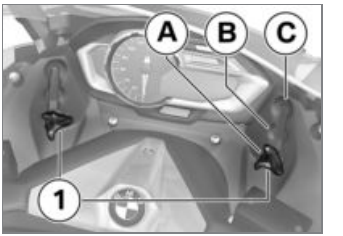
Adjusting mirrors



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

Windshield

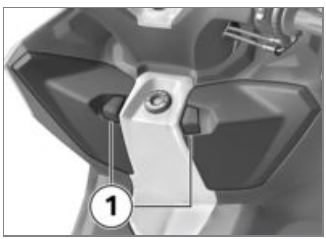
Adjusting windshield



- Loosen clamping screws **1** on left and right until windshield can be easily adjusted.
- Move windshield into desired position **A**, **B** or **C**.
- Make sure that the windshield adjustment is identical on the left and right.
- Tighten clamping screws on left and right.

Storage compartments

Operating front storage compartments



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

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

Operating rear storage compartment (BMW Flexcase)

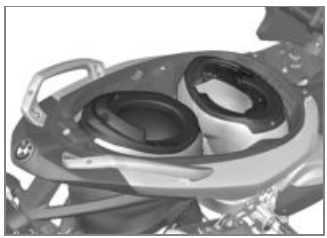
- Open seat.

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



- Pull release lever **1** toward front to enlarge storage compartment, e.g. for holding motorcycle helmets.

» The bottom **2** lowers.
» The vehicle cannot be started with the bottom lowered.



- To store two helmets in the storage compartment, position the helmets as shown in the picture.



- To close storage compartment, empty storage compartment and pull bottom upward into locking device by lever **3**.
- Close seat.

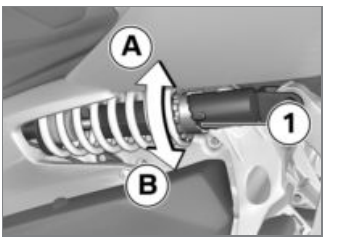
Spring preload

Setting

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

Adjusting spring preload at rear wheel

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



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

Basic setting of spring preload, rear
Increase from lowest preload by 4 notches (Full tank of gas, with rider 187 lbs (85 kg))

Tires

Checking tire pressure

Incorrect tire inflation pressure results in poorer handing characteristics of the Scooters and reduces the life of the tires.
Ensure proper tire inflation pressure.◀

At high road speeds, tire valves installed perpendicular to the wheel rim have a tendency to open as a result of centrifugal force.
Use valve caps with rubber seals and screw them on firmly to prevent sudden tire deflation.◀

- Make sure ground is level and firm and park scooter.
- Check tire pressures against data below.

Tire pressure, front
34.8 psi (2.4 bar) (With tire cold)

Tire pressure, rear
36.3 psi (2.5 bar) (Single rider, with cold tires)
42.1 psi (2.9 bar) (Driver with passenger and/or load, with cold tire)

If tire pressure is too low:

- Correct tire pressure.

Headlight

Adjusting headlight for RHD/LHD traffic

This motorcycle's headlight features a symmetrical low beam. No special adjustments or procedures are required prior to operating the motorcycle in a country where traffic travels on the side of the road opposite to that of your home country (left-hand drive to right-hand drive or vice versa).

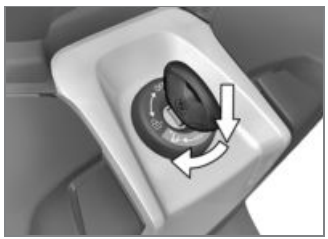
Headlamp range and spring preload

The headlamp range generally remains constant due to the adjustment of the spring preload to the loading state.
If you are unsure whether the headlight range is correct, consult a specialized workshop, preferably an authorized BMW Motorrad retailer.

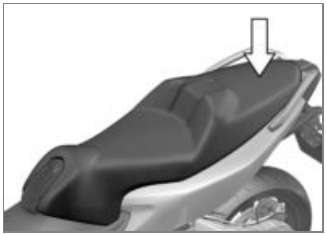
Seat

Operating seat

- Switch off ignition.



- Press ignition key downward and then turn clockwise.



- If seat is jammed, press down at rear and then raise at rear.
- To close, press seat into locking device at rear.

Anti-theft alarm system DWA

Overview 54
Activation 54
Alarm function 56
Deactivation 57
Programming 58
Logging on remote control..... 59
Synchronization..... 60
Battery..... 61

Overview

– with anti-theft alarm system (DWA) OE

General information on DWA

Any attempt to move the motorcycle, change its position, start it without authorization or disconnect the motorcycle battery, results in the alarm being triggered. The sensitivity of the system is designed so that minor vibrations of the motorcycle do not trigger an alarm. Each theft attempt is signaled following activation of the system acoustically with the siren and optically with synchronized flashing of all 4 turn indicators.

You can adjust the behavior of your DWA in partial areas to meet your needs.

Protection of motorcycle battery

To protect the motorcycle battery and to maintain the starting capability, the activated DWA switches off automatically after several days. However, it remains active for at least 10 days.

Radio interference

Radio systems or devices which transmit on the same frequency as the remote control of the DWA can interfere with its function. With corresponding problems point the remote control at the motorcycle from a different direction.

Controls



1 LED
2 Right-hand button (➠ 56)
3 Left-hand button (ribbed) (➠ 55)

For the position of the indicator LED on the motorcycle, please see the Rider's Manual of your motorcycle.◀

Activation

– with anti-theft alarm system (DWA) OE

Activation with motion sensor



The alarm function will be activated

– by pressing the button **1** of the remote control once or
– by switching off the ignition (if programmed); after the ignition is switched off, 30 seconds pass until the activation phase

Activation is confirmed

– by the turn indicators lighting up twice and
– with a double alarm tone.

If the alarm function is to be activated after the ignition has been switched off for more than one minute, then the button **1** must be pressed for longer than one second.

Activation phase

The anti-theft alarm system requires 15 seconds until it is completely activated. No alarm triggering takes place during this time.

Protection of the battery



After approx. one hour in the deactivated state, the DWA switches off to protect the battery. To activate the alarm function after this period, the ignition must be switched on and then off again.

Motion sensor when transporting Maxi-Scooter

If, for example, the Maxi-Scooter is to be transported by train, it is advisable to switch off the motion sensor. The strong movements

could result in an accidental triggering of the alarm.

Deactivating motion sensor



- Press button **1** of the remote control again during the activation phase.

» Turn indicators are illuminated three times.
» Alarm tone sounds three times.
» Motion sensor is deactivated.

Alarm function

– with anti-theft alarm system (DWA) OE

Alarm triggering

The alarm can be set off by:
– The motion sensor
– Switching on the ignition with an unauthorized key
– Disconnection of the DWA from the motorcycle battery (DWA battery assumes the power supply).

Alarm



The duration of the alarm is 26 seconds. The system is reactivated after another 12 seconds. A triggered alarm can be interrupted at any time by pressing the button **1** of the remote control. This function does not change the state of the anti-theft alarm system.
During the alarm, an alarm tone sounds and the turn indicators flash. The type of alarm sound can be programmed.

Reason for triggering of the alarm

After the alarm function has been deactivated, the DWA indicator light signals the reason for any alarm triggering which may have occurred for one minute:

– 1x flash: motion sensor; motorcycle was tilted forward/back
– 2 flashes: motion sensor; motorcycle was tilted to the side
– 3 flashes: ignition switched on with unauthorized key
– 4 flashes: DWA disconnected from motorcycle battery

Note on alarm triggering

If an alarm was triggered after the last activation of the alarm function, then this is pointed out with a single signal tone after the ignition is switched on.

Deactivation

– with anti-theft alarm system (DWA)[OE]

Deactivate alarm function



• Press button **1** of remote control once **or** switch on ignition with an authorized key.

The alarm function can only be deactivated with the ignition key if the emergency ON/OFF switch is in the operating position.◀

If the alarm function is deactivated by means of the remote control and the ignition then not switched on, the alarm function is automatically reactivated after 30 seconds if "Activation after ignition off" has been programmed.◀

» Turn indicators light up once.
» Alarm tone sounds once (if programmed).
» Alarm function is deactivated.

Protection of the battery

After approx. one hour in the activated state, the receiver for the remote control in the DWA switches off to protect the battery. The ignition must be switched on to deactivate the alarm function after this period.

Programming

– with anti-theft alarm system (DWA) OE

Programming options

The anti-theft alarm system can be adapted to individual needs in the following points:

– Confirmation alarm tone after activation/deactivation of the DWA in addition to the turn indicators lighting up
– Rising and falling or intermittent alarm tone
– Automatic activation of the alarm function when the ignition is switched off

Factory settings

The anti-theft alarm system is delivered with the following factory settings:

– Confirmation alarm tone after activation/deactivation of the DWA: no
– Alarm tone: intermittent
– Automatic activation of the alarm function when the ignition is switched off: no

Programming DWA



- Deactivate alarm function.
- Switching on ignition (➠ 40).
- Press button **1** three times.

» Acknowledgment tone sounds once.

- Switch off the ignition within ten seconds.
- Press button **2** three times.

» Acknowledgment tone sounds once.

- Switch on the ignition within ten seconds.

» Acknowledgment tone sounds three times.
» The programming function is active.

The actual programming is carried out in four steps, and Step 2 is not assigned any function. The number of flashing signals on the DWA indicator light of the motorcycle shows the active programming step. Pressing the button **1** is confirmed by an alarm tone, and pressing the button **2** by an acknowledgment tone.

- **Step 1**: is a confirmation tone to sound after the DWA is activated/deactivated?

Yes:

- Press button **1**.

No:

- Press button **2**.

• **Step 2**:
This step is not assigned any function.
• Press button **1** or button **2**.

• **Step 3**: Which alarm tone is to be selected?
Rising and falling:
• Press button **1**.

Intermittent:
• Press button **2**.

• **Step 4**: Is the alarm function to be automatically activated after the ignition is switched off?
Yes:
• Press button **1**.

No:
• Press button **2**.

When is the programming canceled?

Programming is canceled
– by switching off the ignition before the last programming step
– **or** automatically if more than 30 seconds pass between two programming steps.

The data are not saved when programming is canceled.

Save programming

Programming is saved
– by switching off the ignition after the last programming step
– **or** automatically 30 seconds after the last programming step.

The DWA indicator light stops flashing and acknowledgment tones sound.

Logging on remote control

– with anti-theft alarm system (DWA)[OE]

When is it necessary to log on a remote control?

Should you log on an additional remote control or want to replace a lost remote control, then you must always log on all remote controls with the DWA. You can log on a maximum of four remote controls.

Logging on remote control



- Deactivate alarm function.
- Switching on ignition (➠ 40).
- Press button **2** three times.

» Acknowledgment tone sounds once.

- Switch off the ignition within ten seconds.
- Press button **2** three times.

» Acknowledgment tone sounds once.

- Switch on the ignition within ten seconds.

» Acknowledgment tone sounds twice.

You can log on a maximum of remote controls for the DWA. The logon for each remote control is carried out in three steps.

- Press and hold button **1** and button **2**.

» LED flashes for ten seconds.

- As soon as the LED goes out, release button **1** and button **2**.

» LED lights up.

- Press button **1** or button **2**.

» Alarm tone sounds once.
» LED goes out.
» Remote control is logged on.

- Repeat the three previous work steps for each additional remote control.

Logon ended

The logon is ended if

– four remote controls have been logged on
– the ignition is switched off
– no button was pressed for 30 seconds after the ignition was switched off
– no button was pressed for 30 seconds after a remote control was logged on

After the logon is completed, the LED flashes and the acknowledgment tone sounds three times.

Synchronization

– with anti-theft alarm system (DWA)[OE]

When is it necessary to synchronize the remote control?

The remote control must be synchronized when the buttons of the remote control has been operated more than 256 times outside the range of the receiver. In this case, the receiver on the motorcycle no longer reacts to the signals of the remote control.

Synchronize remote control



- Press and hold button **1** and button **2**.

» LED flashes for ten seconds.

- As soon as the LED goes out, release button **1** and button **2**.

» LED lights up.

- Press button **1** or button **2**.

» LED goes out.

– Remote control is synchronized.

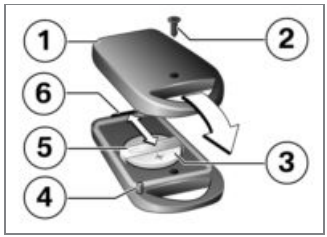
Battery

– with anti-theft alarm system (DWA)[OE]

When is a battery change required?

The batteries of the remote control must be replaced after approx. 2 - 3 years. A weak battery can be recognized from the fact that the LED does not light up at all or only briefly when a button is pressed.

Replace battery



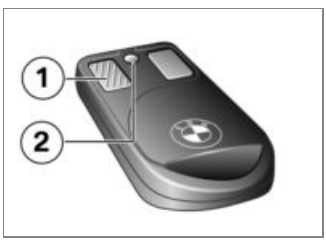
- Remove screw **2** and take off lower housing section **1**.
- Slide old battery **3** forward under retainer **5**.

Batteries of the wrong type or incorrect poling of the batteries can destroy the device. Use specified battery (see the chapter "Technical Data"). Ensure proper poling when inserting the battery.◀

- Install a new battery while making sure that the positive terminal of the battery is at the top.

- Position lower housing section on nose **6** of front edge and close while watching two guide pins **4**.
- Install screw **2**.

» The LED of the remote control lights up; i.e. the remote control must be synchronized.



- To synchronize the remote control within the range of the receiver, press the button **1** twice.

» LED **2** begins to flash and goes out after a few seconds.

» The remote control is ready to operate again.

Riding

Safety instructions 64
Checklist..... 65
Starting 66
Riding..... 67
Breaking in..... 67
Brakes 68
Maxi-Scooter Parking 69
Refueling 70
Secure motorcycle for transport 72

Safety instructions

Rider's Equipment

Do not ride without the correct clothing. Always wear:
– Helmet
– Rider's suit
– Gloves
– Boots

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

Loading

Overloading and imbalanced loads can adversely affect the Maxi-Scooter's handling.
Do not exceed the gross weight limit and observe the loading information.◀

- Adjust spring preload and tire inflation pressure for current gross vehicle weight.

– with luggage carrier OA

- Comply with maximum payload of luggage rack.

 Payload of luggage rack
max 20 lbs (max 9 kg)◁

– with Topcase OA

- Observe maximum payload and permissible top speed of Topcase.

 Payload of Topcase
max 11 lbs (max 5 kg)

 Speed limit for driving with Topcase
max 81 mph (max 130 km/h)◁

Speed

If you ride at high speed, always bear in mind that various boundary conditions can adversely affect the handling of your Maxi-Scooter:
– Settings of spring-strut and shock absorber system
– Imbalanced load
– Loose clothing
– Insufficient tire inflation pressure
– Poor tire tread
– Etc.

Risk of poisoning

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

Inhaling exhaust fumes therefore represents a health hazard and can even cause loss of consciousness with fatal consequences.
Do not inhale exhaust fumes.

Do not run the engine in closed rooms.◀

Burn hazard

⚠ Engine and exhaust system become very hot when the motorcycle is in use. There is a risk of burn injuries by contact with hot surfaces, particularly at the muffler.
After parking the Maxi-Scooter, make sure that nobody comes into contact with the engine and exhaust system.◀

Catalytic converter

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

⚠ Unburned fuel will destroy the catalytic converter.
Note the points listed for protection of the catalytic converter.◀

Danger of overheating

⚠ Cooling would be inadequate if the engine were allowed to idle for a lengthy period with the motorcycle at a standstill: overheating would result. In extreme cases, the motorcycle could catch fire.
Do not allow the engine to idle unnecessarily. After starting, ride off immediately.◀

Modifications

⚠ Modifications of the Maxi-Scooter (e.g. engine management system, throttle valves, clutch) can cause damage to the affected components and failure of safety-related functions. Damage caused in this way is not covered by the warranty.
Do not make any modifications.◀

Checklist

Use the following checklist to check important functions, settings and wear limits before you ride off:
– Brakes
– Brake fluid levels for front and rear brake
– Spring preload
– Tread depth and tire pressure
– Secure luggage attachment

At regular intervals:

– Engine oil level (every time you refuel)
– Brake pad wear (during every third stop for refueling)

Starting

Starting engine

- Switch on ignition.

» Pre-Ride Check in progress. (➠ 66)
» ABS self-diagnosis in progress. (➠ 67)

- Operate brake.



- Press starter button **1**.

▷ Vehicle cannot be started with side stand extended. If side stand is extended with engine running, engine stops.◀

» Engine starts.
» Consult the troubleshooting chart if the engine refuses to start. (➠ 120)

Pre-Ride Check

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

Phase 1

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

Phase 2

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

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

⚠ If it was not possible to switch on the warning lights, possible malfunctions cannot be indicated.
Watch all warning and indicator lights on the display.◀

- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis

The readiness for operation of the BMW Motorrad ABS is checked by the self-diagnosis. The self-diagnosis routine runs automatically when you switch on the ignition. To check the wheel sensors, the Maxi-Scooter must be driven a few yards.

Phase 1

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



ABS warning lamp flashes.

Phase 2

» Checking wheel sensors while starting off.



ABS warning lamp flashes.

ABS self-diagnosis completed

» The ABS warning light goes out.

If an ABS error is indicated following completion of the ABS self-diagnosis routine:

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

Riding

At engine speeds below the starting speed of approx. 2,000 rpm, the centrifugal clutch opens and the Maxi-Scooter is idling. It the engine speed is increased above the starting speed, the clutch closes and the Maxi-Scooter starts off.

In the range from approx. 31 mph (50 km/h) to approx. 68 mph (110 km/h), the engine operates at a constant speed in the range of the maximum torque. The change in the speed is achieved by adjusting the gear ratio in the steplessly adjustable transmission. This only slightly changes the engine noise in this speed range.
Initial speeds above approx. 68 mph (110 km/h) are achieved by increasing the engine speed.

Breaking in

Engine

- Drive in frequently changing load ranges prior to your first inspection.
- Try to do most of your riding during this initial period on

twisting, fairly hilly roads, avoiding highways if possible.
- Have the first inspection carried out after 300 - 750 mls (500 - 1,200 km).

Brake pads

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

New brake pads can extend stopping distance by a significant margin.
Brake early.◀

Tires

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

New tires do not provide full tire traction. Accident hazards exist in particular on wet roads and at extreme angles. Always think well ahead and avoid extreme angles.◀

Brakes

How do you achieve the shortest stopping distances?

During braking the load distribution changes dynamically between the front and the rear wheel. The heavier you brake, the greater the weight transfer to the front wheel. Increases in the load on an individual wheel are accompanied by a rise in the effective braking force that the wheel can provide.
To achieve the shortest possible braking distance, the front brake must be applied quickly and with progressively greater levels of force. This procedure provides ideal exploitation of the extra weight transfer to the front wheel. With the frequently instructed "forced braking," in which the brake pressure is generated as quickly as possible and with great force, dynamic load distribution lags behind the progressive increases in deceleration rate and the braking force cannot be completely transferred to the road surface. The front wheel can lock up.

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

Descending mountain passes

There is a danger of the brakes fading if you use only the rear brakes when descending mountain passes.
Under extreme conditions, the brakes could overheat and suffer severe damage.
Use both front and rear brakes, and make use of the engine's braking effect as well.◀

Wet, soiled brakes

Moisture and dirt on the brake disks and the brake pads result in a decrease in the braking action.
Delayed or poorer braking action must be expected in the following situations:
– When driving in the rain and through puddles.
– After washing the vehicle.
– When driving on roads spread with salt.
– After working on the brakes due to oil or grease residues.
– When driving on soiled roads or offroad.

Poor braking action due to moisture and dirt.
Brake until brakes are dry or clean; clean if necessary.
Brake early until the full braking action is available again.◀

Maxi-Scooter Parking

Side stand

• Switch off engine.

If the ground is soft or uneven, there is no guarantee that the motorcycle will rest firmly on the stand.
Always check that the ground under the stand is level and firm.◀

• Extend side stand and park Maxi-Scooter.

» The parking brake prevents the motorcycle from rolling.

The side stand is designed to support only the weight of the motorcycle.
Do not lean or sit on the motorcycle with the side stand extended.◀

• If the slope of the road permits, turn the handlebars to the left.

Center stand

• Switch off engine.

If the ground is soft or uneven, there is no guarantee that the motorcycle will rest firmly on the stand.
Always check that the ground under the stand is level and firm.◀

Excessive movements could result in the center stand retracting, and the motorcycle could topple as a result.

Do not sit on the motorcycle while it is resting on the center stand.◀

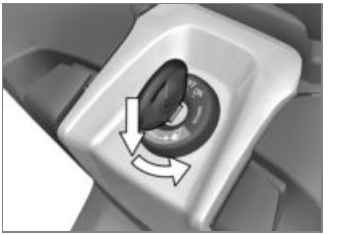
- Extend center stand and jack up Maxi-Scooter.

Refueling

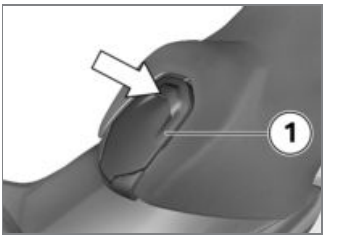
Fuel is highly flammable. Fire at the fuel tank can result in fire and explosion.
Do not smoke. Never bring a naked flame near the fuel tank.◀

Fuel attacks plastic surfaces, making them cloudy or unattractive.
Immediately wipe off plastic parts after contact with fuel.◀

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



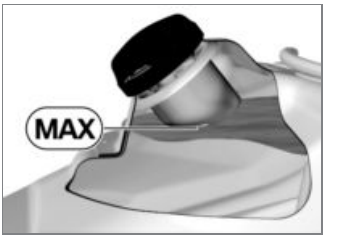
- Press ignition key downward in center position and then turn counterclockwise.



- In case of jamming, press tank cover **1** toward rear and then fold open toward front.



- Open fuel filler cap **2**.



Fuel expands when exposed to heat. When the tank is overfilled, fuel can escape and get onto the road. This results in a danger of falling.

Do not overfill the fuel tank.◀

⚠ Leaded fuel will destroy the catalytic converter.
Do not refuel with leaded gasoline or gasoline with metallic additives, e. g. manganese or Iron.◀

- Refuel with quality listed below at most until lower edge of filler neck is reached.

▷ When refueling after running on reserve, make sure that you top up the tank to a level above reserve, as otherwise the sensor will not be able to register the new level and the fuel warning lamp will not be switched off.◀

Recommended fuel quality
Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI

Usable fuel quantity
Approx. 4.2 gal (Approx. 16 l)

Fuel reserve
Approx. 3.2 quarts (Approx. 3 l)



- Close fuel filler cap **2**.



- Press tank cover **1** into locking device.

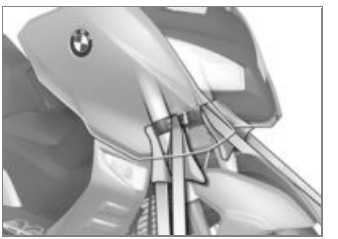
Secure motorcycle for transport

- Protect all component surfaces against which straps are routed against scratching. For example, use adhesive tape or soft cloths.



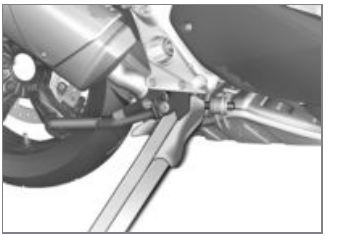
The Maxi-Scooter can tip away to the side and fall over.
Secure Maxi-Scooter against tipping to the side, preferably with the assistance of a second person.◀

- Push motorcycle onto transport surface, and do not place on side stand or center stand.

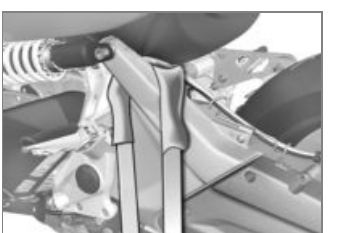


Components can be damaged.
Do not pinch components, e.g. brake lines or wiring harnesses.◀

- Lay straps at front over lower fork bridge on both sides and tension.



- Lay strap at rear right around retaining pin of muffler and tension.



- Lay strap at rear left around spring strut mount and tension.
- Tension all straps evenly; the motorcycle should be pulled

down against its springs with the suspension compressed as much as possible.

Technology in detail

Brake system with BMW Motorrad ABS 76

Tire Pressure Control TCP/RDC 77

Brake system with BMW Motorrad ABS

How does ABS work?

The maximum braking force that can be transferred to the road surface is partially dependent on the friction coefficient of the road surface. Gravel, ice, snow and wet roads offer a considerably poorer friction coefficient than a dry, clean asphalt surface. The poorer the friction coefficient of the road surface is, the longer the braking distance will be.
If the maximum transferrable braking force is exceeded when the driver increases the brake pressure, the wheels begin to lock and driving stability is lost, and a fall can result. Before this situation occurs, ABS intervenes and adjusts the brake pressure to the maximum transferrable braking force. This enables the wheels to continue to turn and maintains driving stability regardless of the road surface condition.

What happens when rough roads are encountered?

Bumpy or rough roads can briefly lead to a loss of contact between the tires and the road surface, until the transferable braking force is reduced to zero. If braking is carried out in this situation, ABS must reduce the brake pressure to ensure driving stability when restoring contact to the road. At this point in time, the BMW Motorrad ABS must assume extremely low friction coefficients (gravel, ice, snow) so that the running wheels turn in every imaginable case and the driving stability is ensured. After detecting the actual conditions, the system adjusts the optimum brake pressure.

Lifting off rear wheel

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


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

What are the design characteristics of the BMW Motorrad ABS?

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

Special situations

To detect the tendency of the wheels to lock up, the speeds of the front and rear wheel are compared. If implausible values are detected over a longer period of time, the ABS function is deactivated for safety reasons and an ABS fault is indicated. A self-diagnosis routine must be completed before the error will be displayed.
In addition to problems on the BMW Motorrad ABS, unusual driving conditions can also lead to a fault message.

Unusual riding conditions:

- Driving on the rear wheel (wheely) for a longer period.
- Rear wheel spinning in place with front brake engaged (burn out).
- Locked-up rear wheel for a longer period of time, e.g. when riding downhill offroad.

Should a fault code result due to one of the driving conditions described above, the ABS function can be reactivated by switching the ignition off and then on again.

How important is regular maintenance?

Any technical system is always only as good as its maintenance condition.
To ensure that the BMW Motorrad ABS is in an optimally maintained condition, it is vital that the specified running-in checks be complied with.◀

Reserves for safety

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

Tire Pressure Control TCP/RDC

- with Tire Pressure Control (TPC/RDC)[OE]

Operation

A sensor located in each tire monitors the air temperature and the inflation pressure inside the tire and transmits this information to the control unit.
The sensors are equipped with a centrifugal controller that suppresses transmission of the monitored data until a speed of approx. 18 mph (30 km/h) is reached. Before initial reception of the tire inflation pressure, – – is shown in the display for each tire. The sensors continue to transmit the monitored data for approx. 15 minutes after the motorcycle comes to a stop.

Temperature compensation

The inflation pressure within a tire is sensitive to temperature: it responds to higher tire temperatures by increasing, and to lower temperatures by dropping. Tire temperature, in turn, varies according to the ambient temperature as well as in response to driving style and trip duration.

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

Adjusting inflation pressure

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

Example: according to the Rider's Manual, the tire inflation pressure is to be 36 psi (2.5 bar), however 33 psi (2.3 bar) is shown in the multifunction display. It is low by 3 psi (0.2 bar).
The tester at the filling station indicates 34.8 psi (2.4 bar). This value must be increased by 3 psi (0.2 bar) to 37.8 psi (2.6 bar) in order to produce the correct tire inflation pressure.

Accessories

General instructions 80
Onboard power sockets 80
Topcase 80
Scooter lock 83

General instructions

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

The safety, operation and suitability of the parts and accessory products have been checked extensively by BMW. Therefore, BMW assumes responsibility for these products. BMW shall not be liable for unapproved parts and accessory products of any kind.
Whenever you are planning modifications, comply with all the legal requirements. The motorcycle must not infringe on national road-vehicle construction and use regulations of your country.
Your authorized BMW Motorrad retailer offers you qualified advice in choosing genuine BMW parts, accessories and other products.
You will find all BMW Motorrad optional accessories on our website: **"www.bmw-motorrad.com"**.

Onboard power sockets

Information on using onboard power sockets:

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

Cable routing
The cords from the power sockets to the devices must be routed in such a way that they:
– do not interfere with the rider's freedom of movement
– do not limit steering angles and handling characteristics
– cannot be caught or trapped

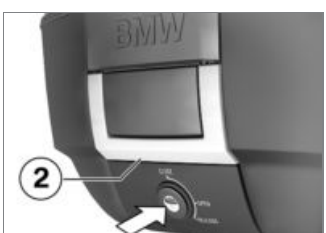
Topcase

– with Topcase OA

Opening the Topcase



- Turn key in Topcase lock **1** to OPEN position.



- Press Topcase lock toward front.

» Topcase handle **2** pops up.



- Pull release lever behind cover **3** toward rear.

» Topcase lid opens.

- Open Topcase lid.

Closing the Topcase

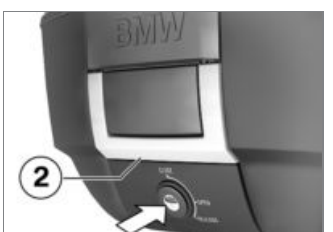


- Make sure that Topcase handle **2** is extended.
- Close Topcase lid and press into locking device. Ensure that no luggage is trapped between lid and case.
- Close Topcase handle **2**.
- Turn key in Topcase lock into CLOSE position and remove if necessary.

Removing Topcase



- Turn key in Topcase lock **1** to OPEN position.



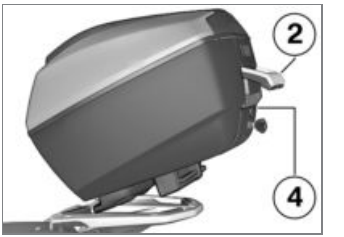
- Press Topcase lock toward front.

» Topcase handle **2** pops up.



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

Mounting the Topcase

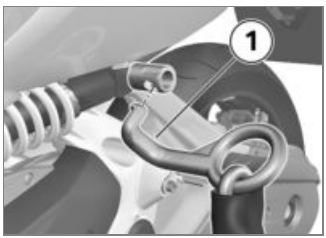


- Make sure that the Topcase handle **2** is extended and that the key is in the Topcase lock in the RELEASE position.
- Insert Topcase in Topcase carrier at front.
- Pull release lever **4** toward rear while simultaneously inserting Topcase in Topcase carrier at rear.
- Close Topcase handle **2**.
- Turn key in Topcase lock into CLOSE position and remove if necessary.

Scooter lock

– with Scooter lock OA

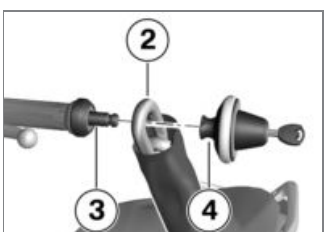
Locking motorcycle



- Thread rear end piece **1** of Scooter lock into rear mount from below.
- Then turn end piece toward front.

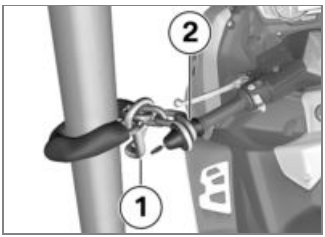


- Turn handlebars toward left and guide Scooter lock to end of handlebars.



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

- Lock Scooter lock and remove key.



As an alternative, the Maxi-Scooter can be connected to a solid object, e.g. to a post.

- To do this, lay Scooter lock around post and pull chain through end piece **1**. Then connect first chain link **2** to handlebars as described above.

Maintenance

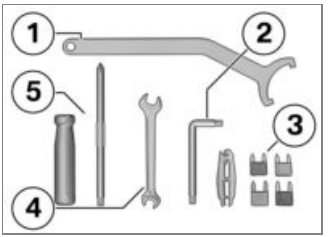
General instructions 86
Standard tool kit 86
Engine oil 86
Brake system 89
Coolant 94
Wheel rims and tires 95
Wheels 96
BMW Motorrad front wheel stand 101
Fuses 103
Bulbs 103
Jump-starting 110
Battery 110
Fairings and panels 112

General instructions

The 'Maintenance' chapter describes work involving the checking and replacement of wear parts that can be performed with a minimum of effort.
If special tightening torques are to be taken into account for assembly, these are listed. An overview of all required tightening torques is contained in the chapter "Technical Data".
Information on additional maintenance and repair work is provided in the Repair Manual for your motorcycle on DVD, which you can obtain from your authorized BMW Motorrad retailer.

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

Standard tool kit



1 Hook wrench
– Adjusting spring preload at rear wheel (➠ 50).

2 Torx wrench T30
– Checking engine oil level (➠ 86).
– Topping up coolant (➠ 94).

3 Spare fuses with gripper
Miniature fuses: 4 A, 7.5 A, 10 A and 15 A
– Replace the fuses.

4 Open-ended wrench
Wrench size: 8/10 mm
– Removing battery (➠ 111).

5 Reversible screwdriver insert
with Phillips PH1 and Torx T25
– Remove body panels.
– Replacing rear turn indicator bulb (➠ 107).
– Removing battery (➠ 111).

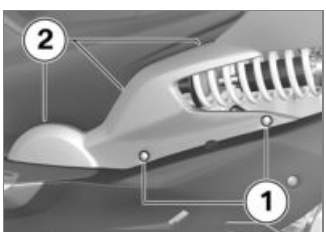
Engine oil

Checking engine oil level

After longer Maxi-Scooter immobilization periods, engine oil can collect in the oil pan; this must be pumped into the oil tank before the reading is taken. Here, the engine oil must be at operating temperature. Checking the oil level with the engine cold or after a short trip leads to mis-

interpretations and therefore to incorrect oil fill quantities.
To ensure that the display of the engine oil level is correct, only check the oil level after a longer trip.◀

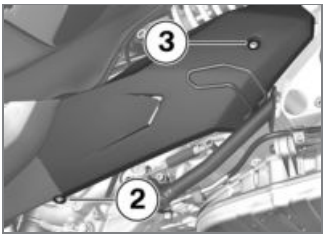
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Let the engine run in neutral for one minute.
- Switch off ignition.



- Remove screws **1**.
- Pull cover outward at lower side and remove. While doing so, watch locking lugs at position **2**.
- Extend side stand.



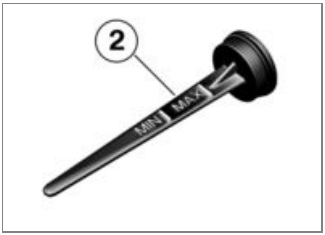
- Lift step plate support and remove screw **1**.



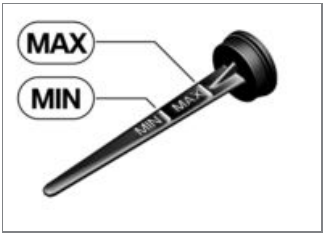
- Remove screw **2** and screw **3**.
- Remove step plate.
- Wipe area around oil filler location clean.



- Remove oil dipstick **1**.



- Clean measuring range **2** of oil dipstick with a dray cloth.
- Position oil dipstick on oil filler opening, but do not screw in.
- Remove oil dipstick and read fluid level.



Specified level of engine oil
Between MIN and MAX marking (Engine at operating temperature)

If the oil level is below MIN mark:

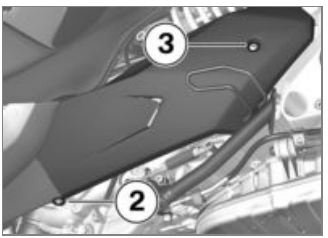
- Add engine oil up to specified level.

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

If oil level is above MAX mark:

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

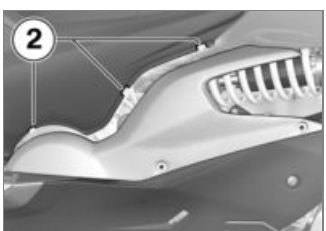
- Install oil dipstick.



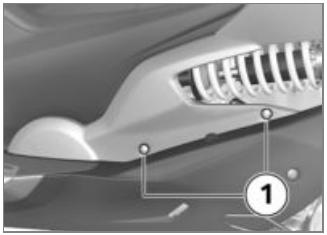
- Position step plate.
- Install screw **2** and screw **3**.



- Install step plate support and screw **1**.



- Mount cover at positions **2** and engage.



- Install screws **1**.

Brake system

Checking brake operation

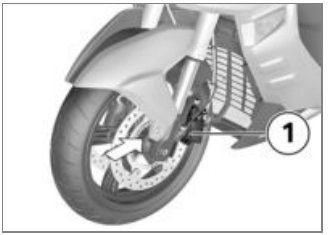
- Actuate right-hand brake lever.
» Pressure point must be clearly perceptible.
- Actuate left-hand brake lever.
» Pressure point must be clearly perceptible.
- To check parking brake, extend side stand and push Maxi-Scooter back and worth.
» It must not be possible to push the Maxi-Scooter.

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

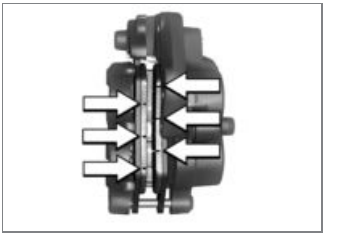
- Have the brakes checked at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Checking front brake pad thickness

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



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



Front brake-pad wear limit
min 0.04 in (min 1.0 mm) (Only friction material without carrier plate. Wear markings (grooves) must be clearly visible.)

If the wear indicators are no longer clearly visible:

Dropping below the minimum pad thickness leads to reduced braking performance and may result in damage to the brakes.

In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.◀

- Have the brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

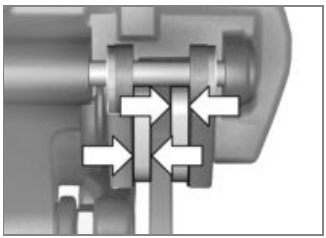
Checking rear brake pad thickness

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



- Conduct a visual inspection of the brake pad thickness. View-

ing direction: from lower right toward brake pads **1**.



Rear brake-pad wear limit
min 0.04 in (min 1.0 mm) (Only friction material without carrier plate.)

If the wear indicating marks are no longer visible:

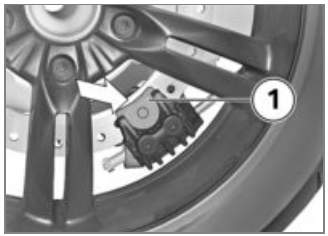
Dropping below the minimum pad thickness leads to reduced braking performance and may result in damage to the brakes.

In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.◀

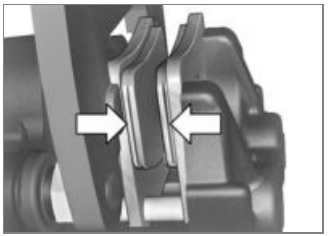
- Have the brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

Checking brake pad thickness of parking brake

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



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



Brake-pad wear limit of parking brake	
min 0.04 in (min 1.0 mm) (Wear markings (grooves) must be clearly visible.)	

If brake pads have dropped below minimum pad thickness:

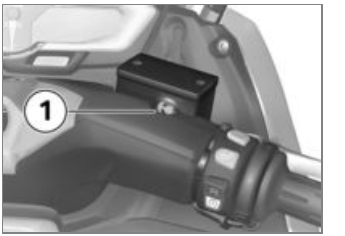
If the pad thickness drops below the minimum thickness, then braking performance is reduced and the Maxi-Scooter may move despite the side stand being extended.
To prevent the Maxi-Scooter from falling over, do not drop below the minimum pad thickness.◀

- Have the brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.

Checking brake fluid level of front brake

A low fluid level in the brake reservoir can allow air to penetrate the brake system. This significantly reduces braking efficiency.
Check brake fluid level regularly.◀

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



- Read off brake fluid level at sight glass **1** of right-hand brake-fluid reservoir.

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



Front brake fluid level
Brake fluid, DOT4
The brake fluid level must not fall below the MIN mark. (Brake-fluid reservoir horizontal)

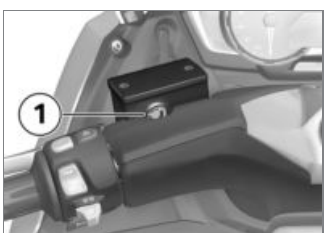
If brake fluid level falls below the approved level:

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

Checking brake fluid level for rear brake

A low fluid level in the brake reservoir can allow air to penetrate the brake system. This significantly reduces braking efficiency.
Check brake fluid level regularly.◀

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



- Read off brake fluid level at sight glass **1** of left-hand brake-fluid reservoir.

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



Rear brake fluid level
Brake fluid, DOT4
The brake fluid level must not fall below the MIN mark. (Brake-fluid reservoir horizontal)

If brake fluid level falls below the approved level:

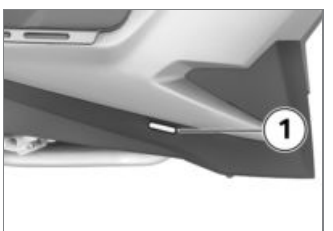
- Have the defect corrected as soon as possible by an autho-

rized workshop, preferably an authorized BMW Motorrad retailer.

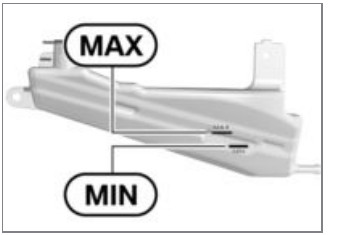
Coolant

Checking coolant level

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



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

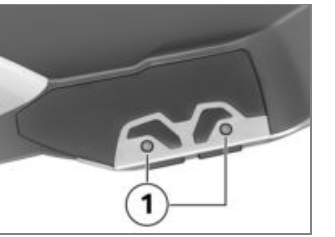


	Setpoint setting for coolant in expansion tank
Between MIN and MAX marking (With cold engine)	

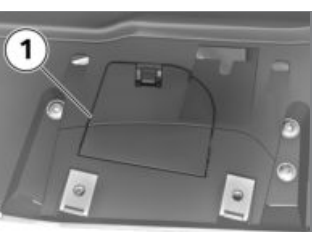
If coolant level drops below approved level:

- Add coolant.

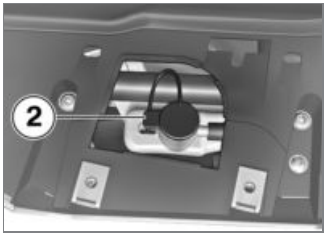
Topping up coolant



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



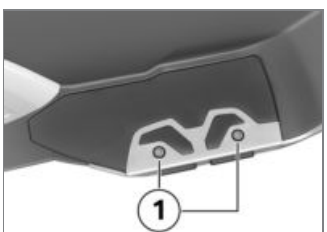
- Open cover **1** and remove.



- Open cap **2** of coolant expansion tank and add coolant up to specified level.
- Checking coolant level (➠ 94).
- Close cap of coolant expansion tank.



- Close cover **1**.



- Mount step plate support.
- Install screws **1**.

Wheel rims and tires

Check wheel rims

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Subject wheel rims to visual inspection for defects.
- Have damaged rims checked and, if necessary, replaced by a specialist service facility, preferably an authorized BMW Motorrad retailer.

Checking tire tread depth

The handling of your Maxi-Scooter can already change for the worse before the legally prescribed minimum tread depth is reached.
Have tires replaced even before the minimum tread depth is reached.◀

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

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

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

When the minimum tread depth is reached:

- Replace the worn tires.

Wheels

Tire recommendation

For every size of tire, BMW Motorrad has tested and approved certain makes as roadworthy. BMW Motorrad cannot evaluate the suitability of other tires, and can therefore take no responsibility for their driving safety.
BMW Motorrad recommends only using the tires tested and approved by BMW Motorrad. Extensive information is available at your authorized BMW Motorrad retailer or on the Internet at www.bmw-motorrad.com.

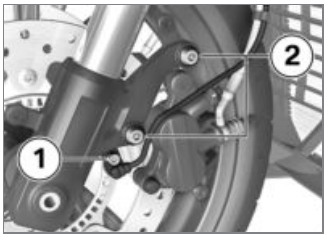
Affect of wheel size on ABS

The wheel sizes play a major role with the ABS system. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes due to conversion to others than the wheels installed as standard equipment can seriously affect the control comfort of the system.
The sensor wheels required for wheel speed detection must also match the system installed and may not be replaced.
If you want to equip your Maxi-Scooter with different wheels, please speak to a specialized workshop, and preferably a BMW Motorrad retailer. In some cases the data stored in the control unit can be adapted to the new wheel sizes.

Removing front wheel



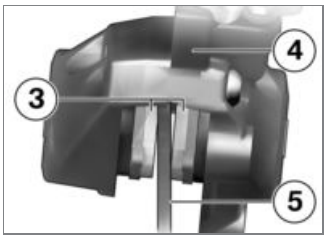
- Remove screws **1** and **2** on left and right and take off front wheel cover toward front.



- Remove screw **1** and extract the ABS sensor from its socket.
- Mask off area of wheel rim that could be scratched in process of removing brake calipers.

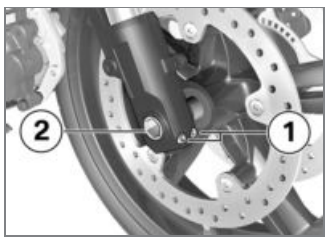
Once the calipers have been removed, there is a risk of the brake pads being pressed together to the extent that they cannot be slipped back over the brake rotor on reassembly.
Do not operate the handbrake lever when the brake calipers have been removed.◀

- Remove screws **2** of brake calipers on left and right.



- Push brake pads **3** apart slightly by turning the brake caliper **4** back and forth against the brake rotor **5**.
- Carefully pull brake calipers back to remove them from the brake rotors.

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Raise front of Maxi-Scooter until front wheel can turn freely. BMW Motorrad recommends the BMW Motorrad front-wheel stand for lifting the Maxi-Scooter.
- Mounting front wheel stand (➠ 101).



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

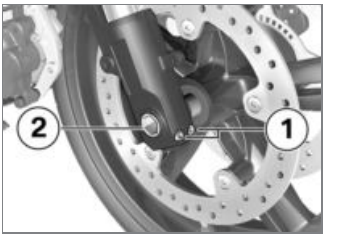
Installing front wheel

Malfunctions may occur during control interventions by ABS if a wheel other than the standard wheel is installed. Please see the information on the effect of wheel sizes on the ABS system at the beginning of this chapter.◀

Threaded fasteners not tightened to the specified torque can work loose or their threads can suffer damage. Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.◀

The front wheel must be installed right way round to rotate in the correct direction. Observe the direction of rotation arrows on the tires or on the rim.◀

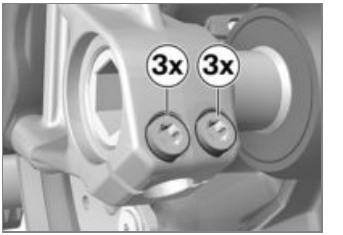
- Roll front wheel into front wheel guide.



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

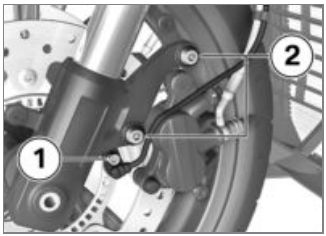
Quick-release axle in axle mount
22 lb/ft (30 Nm)

- Tighten axle clamping screws **1** to appropriate torque.



Clamping screws (quick-release axle) in telescopic forks
Tightening sequence: Tighten the screws 6 times, alternating between one and the other each time
6 lb/ft (8 Nm)

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



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

Brake caliper on fork leg
21 lb/ft (28 Nm)

The cable of the wheel speed sensor could chafe through if it comes into contact with the brake disk.
Make sure that sensor cable is routed correctly.◀

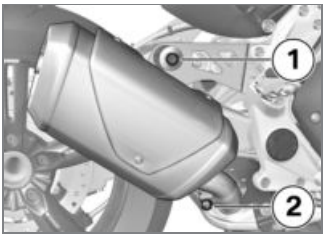
- Insert ABS sensor in its socket and install screw **1**.
- Remove adhesive tape from wheel rim.
- Press handbrake lever firmly a number of times until resistance point is noticeable.



- Mount front wheel cover and install screws **1** and **2** on right and left.

Removing rear wheel

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



Danger of burns from the hot exhaust system.
Do not touch the exhaust system. If necessary, do not continue work until the exhaust system has cooled down.◀

- Remove screw **1** while bracing nut on back.
- Slacken screw **2**.



- Turn end muffler out.
- Operate rear-wheel brake or fold out side stand to activate parking brake.



- Remove five screws **1** on rear wheel, holding wheel as you do so.
- Lower rear wheel to the ground and roll out toward rear.

Installing rear wheel

Malfunctions may occur during control interventions by ABS if a wheel other than the standard wheel is installed. Please see the information on the effect of wheel sizes on the ABS system at the beginning of this chapter.◀

Threaded fasteners not tightened to the specified torque can work loose or their threads can suffer damage. Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.◀

- Roll and mount rear wheel onto rear wheel support.

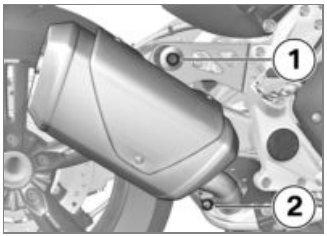


- Fit five screws **1** and tighten diagonally with specified torque.

Rear wheel on output shaft
Tightening sequence: diagonally
44 lb/ft (60 Nm)



- Turn end muffler into starting position and align so that screwdriver handle of onboard toolkit fits between rear wheel and muffler.



- Install screw **1** with appropriate torque while bracing nut on back.

Muffler on bracket
15 lb/ft (20 Nm)

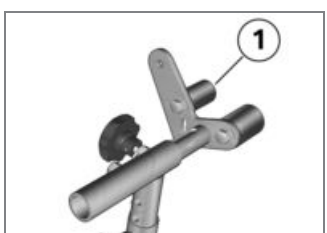
- Tighten screw **2** to specified torque.

End muffler on front muffler
14 lb/ft (19 Nm)

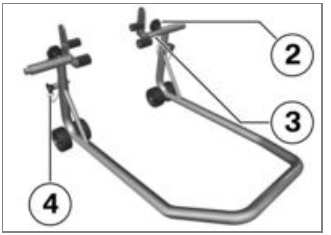
BMW Motorrad front wheel stand

Mounting front wheel stand

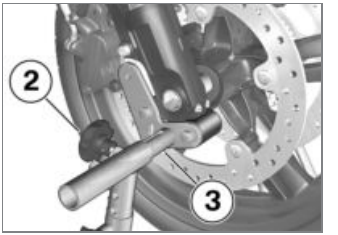
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Use basic stand with tool number (83 30 0 402 241) in combination with front-wheel adapter (83 30 0 402 242).



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



- Loosen adjusting screws **2** on left and right.
- Push mounts **3** on left and right far enough apart that front suspension fits between them.
- Use locating pins **4** on left and right to set front wheel stand to desired height.
- Center front wheel stand relative to front wheel and push it against front axle.



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



If the Maxi-Scooter is raised too far at the front, the center stand lifts off the ground and the Maxi-Scooter can tilt to the side.

When raising the motorcycle, make sure that the center stand remains on the ground. Adjust the height of the front wheel stand if necessary.◀

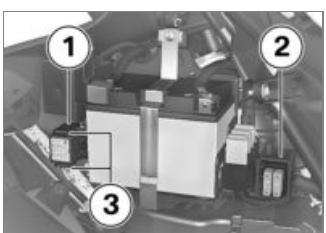
- Press down front wheel stand evenly to raise Maxi-Scooter.
- Ensure Maxi-Scooter is standing securely.

Fuses

Removing fuse

If defective fuses are bridged, this results in a danger of short-circuit and thus a danger of fire.
Replace defective fuses with new fuses.◀

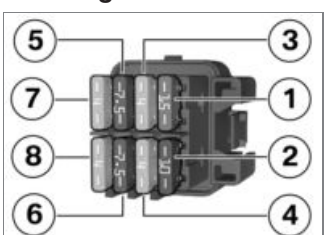
- Switch off ignition.
- Removing right-hand side panel.



- Pull defective fuse out of fuse box **1** or out of fuse holder **2** with tool from onboard toolkit.
- To open fuse box, press together locking lever **3** and remove fuse cover.

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

Installing fuse



- Replace defective fuse with fuse with required amperage.

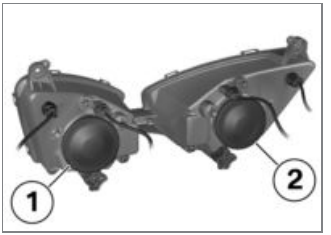
An overview of the fuse assignment and the required amperages is provided in the chapter "Technical Data". The numbers in the graphic match the fuse numbers.◀

- Close fuse cover.
» Locking device audibly engages.
- Installing side panel (➠ 113).

Bulbs

Replacing bulbs for low-beam and high-beam headlight

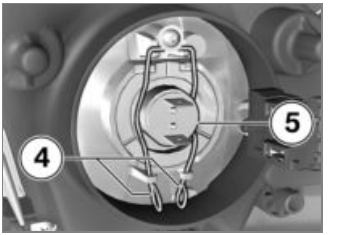
- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Switch off ignition.
- To replace bulb for low-beam headlight, remove right-hand side panel.
- To replace bulb for high-beam headlight, remove left-hand side panel.



- To replace bulb for high-beam headlight, remove cover **1**.
  To replace bulb for low-beam headlight, remove cover **2**.



- Disconnect plug **3**.

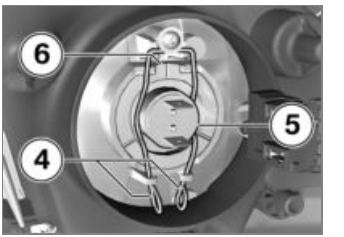


- Remove wire spring clip **4** from retainers and fold it up.
- Remove bulb **5**.
- Replacing defective bulb.

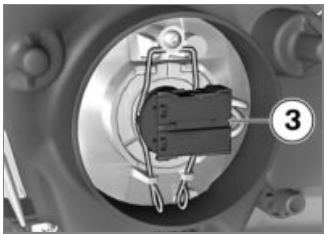
Bulbs for low-beam headlight
H7 / 12 V / 55 W

Bulb for high-beam headlight
H7 / 12 V / 55 W

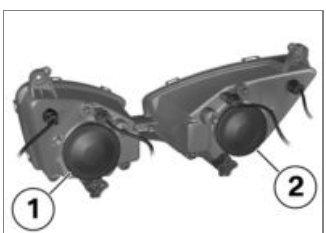
- To avoid leaving contamination deposits on the new bulb's glass surface, always hold it by its base.



- Insert bulb **5**, ensuring that the lug **6** is in the correct position.
- Install wire spring clips **4** in retainers.



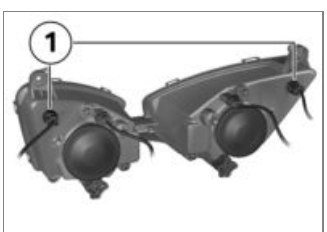
- Attach the plug **3**.



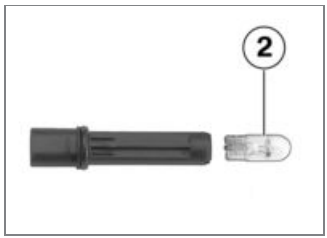
- Install cover **1** or cover **2**.
- Installing side panel (➠ 113).

Replacing parking light bulb

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Switch off ignition.
- To replace right-hand bulb for parking lamps, remove right-hand side panel.
- To replace left-hand bulb for parking lamps, remove left-hand side panel.



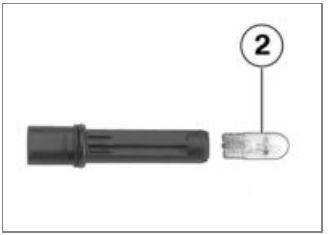
- Disconnect plug connection of bulb to be replaced and remove socket **1** by turning counterclockwise.



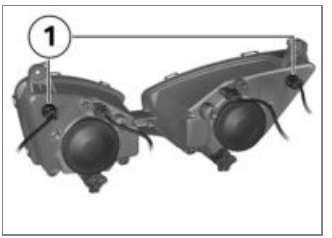
- Remove bulb **2** from the socket.
- Replacing defective bulb.

	Bulb for parking light
W5W / 12 V / 5 W	

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

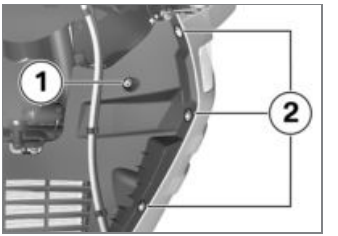


- Insert bulb **2** in bulb socket.

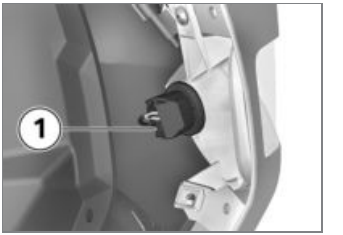


- Install socket **1** by turning clockwise and close plug connection.
- Installing side panel (➠ 113).

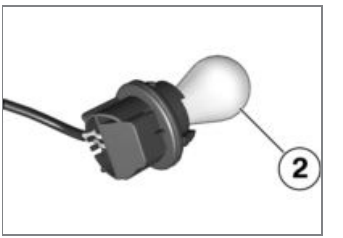
Replacing front turn indicator bulb



- Remove screw **1**.
- Unscrew screws **2** and pull out body-bound rivets using a screwdriver.
- Carefully pull radiator cover inward until turn indicator bulb can be reached.



- Remove socket **1** from light housing by turning it counterclockwise.



- Remove bulb **2** from socket by turning it counterclockwise.

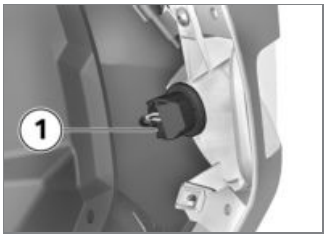
- Replacing defective bulb.

Bulbs for flashing turn indicators, front
PY21W / 12 V / 21 W
– with LED turn indicators[OE]
LED◁

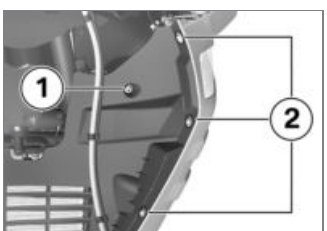
- To avoid leaving contamination deposits on the new bulb's glass surface, always hold it by its base.



- Install bulb **2** in socket by turning clockwise.



- Install socket **1** in light housing by turning clockwise.



- Move radiator cover into correct position.
- Mount body-bound rivets and press in screws **2**.
- Install screw **1**.

Replacing rear turn indicator bulb

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



- Remove screw **1**.



- Pull glass out of light housing.

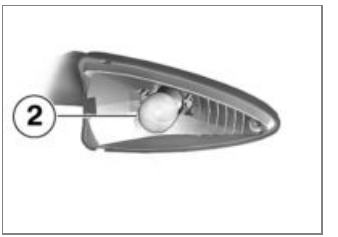


- Remove bulb **2** from light housing by turning it counterclockwise.

- Replace defective bulb.

Bulbs for flashing turn indicators, rear
RY10W / 12 V / 10 W
– with LED turn indicators OE
LED◁

- To prevent contaminants from being deposited on the new bulb's glass surface, always use a clean, dry cloth to hold it.



- Press bulb **2** into socket and install by turning clockwise.



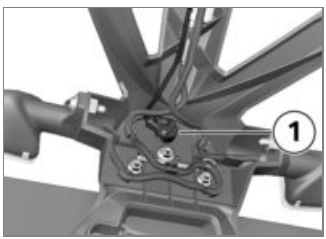
- Mount glass in light housing.



- Install screw **1**.

Replacing license plate light

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



- Pull socket **1** out of light housing.



- Remove bulb from socket.
- Replacing defective bulb.

	Bulb for license-plate light
W5W / 12 V / 5 W	

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



- Insert bulb in socket.



- Insert socket **1** in light housing.

Jump-starting

The wires leading to the power socket do not have a load-capacity rating adequate for jump-starting the Maxi-Scooter. Excessively high current can lead to a cable fire or damage to the motorcycle electronics.
Do not use the onboard socket to jump-start the engine of the Maxi-Scooter.◀

A short-circuit can result if the crocodile clips of the jump leads are accidentally brought into contact with the motorcycle.
Use only jump leads fitted with fully insulated crocodile clips at both ends.◀

Jump-starting with a donor-battery voltage higher than 12 V can damage the motorcycle electronics.
The battery of the donor vehicle must have a voltage of 12 V.◀

- Make sure ground is level and firm and place Maxi-Scooter on its center stand.
- Removing right-hand side panel.
- Begin by connecting one end of red jumper cable to positive terminal of your motorcycle and other end to positive battery terminal of other vehicle.
- Begin by connecting one end of black jumper cable to negative terminal of your motorcycle with a suitable grounding point or to negative battery terminal of other vehicle.
- Allow the engine on the support motorcycle to run while jump-starting.
- Start engine of motorcycle with discharged battery in usual way; if engine refuses to start, wait a few minutes before repeating attempt to protect starter and supporting battery.
- Allow both engines to run for several minutes before disconnecting the jumper cables.
- First disconnect jumper cable from negative terminal or ground support point, then from positive terminal or battery support point.

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

- Installing side panel (➠ 113).

Battery

Maintenance instructions

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

– Keep the surface of the battery clean and dry
– Be sure to read and comply with the instructions for charging the battery on the following pages
– Do not turn the battery upside down

If the battery is not disconnected, the onboard electronics (clock etc.) will drain the battery. This can cause the battery to run flat. If this happens, warranty claims will not be accepted.
During driving breaks of more than 4 weeks, a trickle-charger should be connected to the battery.◀

Charging connected battery

Charging the connected battery directly at the battery terminals can damage the motorcycle electronics.
To charge the battery via the battery terminals, disconnect the battery first.◀

If the multifunction display and indicator lamps fail to light up when you switch on the ignition, the battery is completely discharged (battery voltage below 9 V). Attempts to recharge a completely discharged battery through the onboard power socket can damage the motorcycle's electronic systems.
Always charge a completely drained battery directly at the terminals of the disconnected battery.◀

- Only charge connected battery via additional onboard socket. The additional onboard socket is only available as SE.
- Comply with operating instructions of charger.

Charging disconnected battery

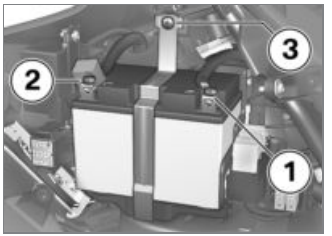
- Charge battery using a suitable charger.
- Comply with operating instructions of charger.
- Once battery is fully charged, disconnect charger's terminal clips from battery terminals.

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

Removing battery

- Switch off ignition.
– with anti-theft alarm system (DWA) OE
- Switch off anti-theft alarm if necessary.◁

- Removing right-hand side panel.

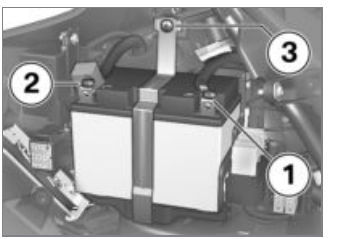


An incorrect disconnection sequence increase the risk of short-circuiting.
Always observe the proper sequence.◀

- Remove negative cable **1** first.
- Then remove positive cable **2**.
- Remove screw **3** and take off retaining hoop.
- Remove battery from holder.

Installing battery

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



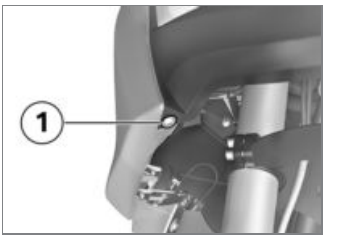
- Push retaining strap over battery and install screw **3**.

An incorrect installation sequence increases the risk of short-circuiting.
Always observe the proper sequence.◀

- First install positive cable **2**.
- Then install negative cable **1**.
- Installing side panel (➠ 113).
- Setting time and date (➠ 41).

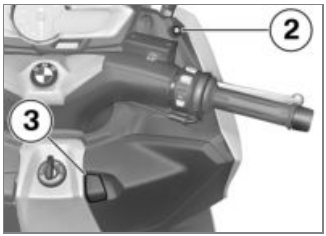
Fairings and panels

Removing side panel



- Remove screw **1**.

This description is provided based on the right-hand side panel, however also applies in the same way to the left side panel.◀



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

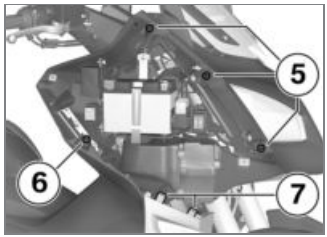


- Remove screw **4** in storage compartment.



- Pull side panel at upper edge out of mounts at positions **5**.
- Tilt side panel outward while pulling out of mount at position **6**.
- Then lift side panel somewhat and remove.

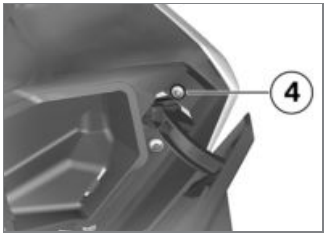
Installing side panel



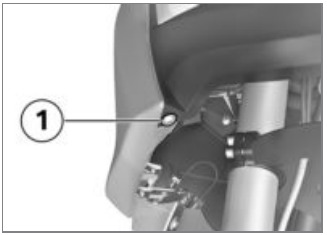
- Insert side panel in mounts **7**.

▷ This description is provided based on the right-hand side panel, however also applies in the same way to the left side panel.◀

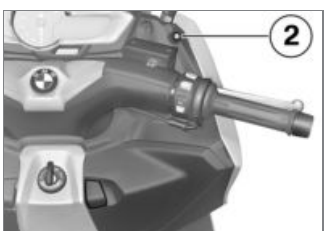
- Tilt side panel upward while at first pressing it into mount **6** and then into mounts **5**.



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



- Install screw **1**.



- Install screw **2**.

Care

Care products 116
Washing your motorcycle 116
Cleaning sensitive motorcycle parts 116
Paint care 117
Maxi-Scooter Storage..... 118
Protective wax coating 118
Maxi-Scooter Returning to use 118

Care products

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

The use of unsuitable products for cleaning and care can damage motorcycle components.

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

Washing your motorcycle

BMW Motorrad recommends that you use BMW Insect Remover to soften and wash off insects and stubborn dirt from painted parts before washing the motorcycle.

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

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

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

After washing the Scooter, after driving through water or in the rain, braking can be delayed due to damp brake disks and brake pads. Brake early until the brake disks and pads are dry.◀

Warm water intensifies the effect of salt.

Only use cold water to remove road salt.◀

The high water pressure from high-pressure cleaners (steam blasters) can result in damage to seals, the hydraulic brake system, the electrics and the seat.

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

Cleaning sensitive motorcycle parts

Plastics

If plastic parts are cleaned using unsuitable cleaning agents, the surfaces can be damaged.

Do not use cleaning agents that

contain alcohol, solvents or abrasives to clean plastic parts. 'Insect sponges' or sponges with hard surfaces can also lead to scratches.◀

Fairings and panels

Clean fairings and panels with water and BMW plastic cleaner.

Windshields and lens are manufactured of plastic

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

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

Chrome

Especially in the case of road salt, carefully clean chrome parts with plenty of water and BMW auto shampoo. Use chrome polish for additional treatment.

Radiator

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

⚠ Cooling fins can be bent easily.

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

Rubber

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

⚠ Using silicone sprays for the care of rubber seals can cause damage.

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

Paint care

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

At the same time, you should remove particularly aggressive materials immediately; otherwise changes in the paint and discoloration can occur. These include spilled fuel, oil, grease and brake fluid as well as bird droppings.

It is advisable to use BMW Car Polish or BMW Paint Cleaner in this case.

Contamination on the paint finish is particularly easy to see after the motorcycle has been washed. Remove this type of soiling with cleaning naphtha or spirit on a clean cloth or cotton ball. BMW Motorrad recom-

mends using BMW tar remover for removing tar spots. Then add a protective wax coating to the paint at these locations.

Maxi-Scooter Storage

- Completely refuel Maxi-Scooter.
- Clean the Maxi-Scooter.
- Removing battery (➠ 111).
- Spray brake lever, side-stand and center stand mount with a suitable lubricant.
- Coat bare metal and chrome-plated parts with an acid-free grease (Vaseline).
- Park motorcycle in a dry room, raising it to remove weight from both wheels.

Protective wax coating

BMW Motorrad recommends that you apply BMW Car Wax or another wax containing carnauba or synthetic wax additives to protect the paintwork.
When water fails to form beads on the paint surface this indicates it is time to apply wax.

Maxi-Scooter Returning to use

- Remove the protective wax coating.
- Clean the Maxi-Scooter.
- Install a charged battery.
- Before starting: observe checklist.

Technical data

Troubleshooting chart 120
Threaded fasteners 121
Engine 122
Fuel 123
Engine oil 123
Clutch 124
Transmission 124
Rear-wheel drive 124
Suspension 125
Brakes 125
Wheels and tires 126
Electrical system 127
Frame 129
Dimensions 129
Weights 130
Performance data 130
Anti-theft alarm system 130
Remote control 131

Troubleshooting chart

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

Possible cause	Remedy
Side stand extended.	Retract side stand.
Starting without actuating brake	Actuate a brake lever during starting.
Storage compartment open	Close storage compartment.
No fuel in tank	Refueling (➠ 70).
Battery drained	Charge battery.

Threaded fasteners

Front wheel	Value	Valid
Quick-release axle in axle mount		
M18 x 1.5	22 lb/ft (30 Nm)	
Clamping screws (quick-release axle) in telescopic forks		
M6 x 30	**Tighten the screws 6 times, alternating between one and the other each time**	
	6 lb/ft (8 Nm)	
Brake caliper on fork leg		
M8 x 32	21 lb/ft (28 Nm)	

Rear wheel	Value	Valid
Rear wheel on output shaft		
M10 x 1.25 x 40	**Diagonally**	
	44 lb/ft (60 Nm)	
Muffler on bracket		
M8 x 30	15 lb/ft (20 Nm)	
End muffler on front muffler		
M8 x 30	14 lb/ft (19 Nm)	

Engine

Engine design	Two-cylinder, four-stroke engine, DOHC control, 4 bucket tappet operated valves, two countershafts, liquid cooling, dry-sump lubrication
Displacement	647 cc (647 cm^3)
Cylinder bore	3.1 in (79 mm)
Piston stroke	2.6 in (66 mm)
Compression ratio	11.6:1
Rated output	60 hp (44 kW), at engine speed: 7500 min^{-1}
Torque	49 lb/ft (66 Nm), at engine speed: 6000 min^{-1}
Maximum engine speed	max 8500 min^{-1}

Fuel

Recommended fuel quality	Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI
Usable fuel quantity	Approx. 4.2 gal (Approx. 16 l)
Fuel reserve	Approx. 3.2 quarts (Approx. 3 l)

BMW recommends BP fuel

Engine oil

Engine oil, capacity	Approx. 3.3 quarts (Approx. 3.1 l), with filter replacement
Viscosity rating	
Specification	SAE 15W-50, API SJ/JASO MA2, Additives (e.g. on a molybdenum basis) are not permitted, as they will attack coated engine components, BMW Motorrad recommends BMW Motorrad High Performance Oil SAE 15W-50, API SJ/ JASO MA2

BMW recommends Castrol

Clutch

Clutch design	Centrifugal clutch

Transmission

Transmission design	CVT (Continously Variable Transmission)
Primary gear ratio	1:1.06
Gear ratio of secondary transmission	1:2.72
Gear ratio of CVT transmission	1:10.7...4.6

Rear-wheel drive

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

Suspension

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

Brakes

Type of front brake	Hydraulically actuated two-rotor disk brake with 2-piston floating calipers
Brake-pad material, front	Sintered metal
Type of rear brake	Hydraulically disk brake with 2-piston floating caliper, service brake Cable-operated disk brake with 1-piston floating caliper, parking brake
Brake-pad material, rear	Organic

Wheels and tires

Recommended tire combinations	You can obtain an overview of the current tire approvals from your authorized BMW Motorrad retailer or on the Internet at www.bmw-motorrad.com.
Front wheel	
Front wheel design	Cast aluminum, MT H2
Front-wheel rim size	3.50" x 15"
Front tire designation	120/70 R15
Rear wheel	
Rear wheel design	Cast aluminum, MT H2
Rear-wheel rim size	4.50" x 15"
Rear tire designation	160/60 R 15
Tire inflation pressure	
Tire pressure, front	34.8 psi (2.4 bar), with tire cold
Tire pressure, rear	36.3 psi (2.5 bar), single rider, with cold tires 42.1 psi (2.9 bar), driver with passenger and/or load, with cold tire

Electrical system

Battery	
Battery design	AGM (Absorptive Glass Mat) battery
Battery voltage	12 V
Battery capacity	10 Ah
Spark plugs	
Electrode gap of spark plug	$0.03^{\pm 0.01}$ in ($0.8^{\pm 0.1}$ mm)
Bulbs	
Bulbs for low-beam headlight	H7 / 12 V / 55 W
Bulb for high-beam headlight	H7 / 12 V / 55 W
Bulb for parking light	W5W / 12 V / 5 W
Bulbs for flashing turn indicators, front	PY21W / 12 V / 21 W
– with LED turn indicators[OE]	LED
Bulbs for flashing turn indicators, rear	RY10W / 12 V / 10 W
– with LED turn indicators[OE]	LED
Bulb for taillight/brake light	LED
Bulb for license-plate light	W5W / 12 V / 5 W

Fuses	
Fuse carrier	30 A, Fuse 9: control unit for instrument cluster/ ignition switch 30 A, Fuse 10: control unit for anti-lock brake system (ABS)
Fuse box	15 A, Fuse 1: DME main relay 10 A, Fuse 2: control unit for Digital Motor Electronics (DME) 4 A, Fuse 3: control unit for anti-theft alarm (DWA) / Tire Pressure Control (TPC) 5 A, Fuse 4: brake-light switch for front brake/rear brake/connector of optional accessories/power socket in front storage compartment 7.5 A, Fuse 5: fan 5 A, Fuse 6: power socket in rear storage compartment 4 A, Fuse 7: license plate light 4 A, Fuse 8: control unit for Digital Motor Electronics (DME)/anti-lock brake system (ABS)/instrument cluster

Frame

Frame design	Steel bridge frame with screwed-on side panels of cast light alloy
Location of the vehicle identification number	Front right frame tube
Location of type plate	Steering head at front right

Dimensions

Motorcycle length	84.8 in (2155 mm)
Motorcycle height	54.3 in (1378 mm), across windshield at DIN unladen weight
Motorcycle width	34.5 in (877 mm), across mirrors
Rider's seat height	31.5 in (800 mm), without driver
– with low seat[OA]	30.7 in (780 mm), without driver
Rider's inside-leg arc, heel to heel	72 in (1830 mm), without driver
– with low seat[OA]	71.3 in (1810 mm), without driver

Weights

Unladen weight	547 lbs (248 kg), DIN unladen weight, ready for road, 90 % full tank of gas, without OE
Permissible gross weight	981 lbs (445 kg)
Maximum payload	434 lbs (197 kg)

Performance data

Top speed	109 mph (175 km/h)

Anti-theft alarm system

– with anti-theft alarm system (DWA)[OE]

Activation time	15 s
Alarm duration	26 s
Activation time between two alarms	12 s
Temperature range	-40...185 °F (-40...85 °C)
Operating voltage	9...16 V

Remote control

– with anti-theft alarm system (DWA)[OE]

Range of remote control	32.8 ft (10 m)
Readiness for reception of remote control	1 h, after ignition off
Signal frequency	25 kHz, Broadband
Transmission frequency	433.92 MHz
Battery voltage (for remote control)	3 V
Battery type (for remote control)	CR 2032 lithium

Service

Reporting safety defects 134
BMW Motorrad Service 135
BMW Motorrad Mobility Services 135
Maintenance procedures 135
Confirmation of maintenance work 137
Confirmation of service 142

Reporting safety defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying BMW of North America, LLC.

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

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

BMW Motorrad Service

With its worldwide service network, BMW Motorrad can attend to you and your Maxi-Scooter in over 100 countries around the globe. The BMW Motorrad retailers have the technical information and expertise needed to conduct reliable service and repairs covering every aspect of your BMW Maxi-Scooter.
You can find the nearest authorized BMW Motorrad retailer by visiting our Internet site at "www.bmw-motorrad.com".

If this maintenance and repair work is performed inexpertly, there is a danger of damage and associated safety risks. BMW Motorrad recommends having corresponding work on your Maxi-Scooter carried out by a specialized workshop, preferably by an authorized BMW Motorrad retailer.◀

To ensure that your BMW Maxi-Scooter consistently remains in optimal condition BMW Motorrad urges you to observe the recommended service intervals for your Maxi-Scooter.
Have all maintenance and repair work confirmed in the "Service" chapter in this manual. Documentation confirming regular maintenance is essential for generous treatment of claims submitted after the warranty period has expired (goodwill).

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

BMW Motorrad Mobility Services

The BMW Motorrad Mobility Services furnish you and your new BMW motorcycle with extra security by offering a wide array of assistance services in the event of a breakdown (BMW Roadside Assistance, breakdown assistance, vehicle recovery and retrieval, etc.).
Contact your authorized BMW Motorrad retailer for additional information on available mobility-maintenance services.

Maintenance procedures

BMW Pre-Delivery Check

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

BMW Running-in Check

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

BMW Service

BMW Service is carried out once a year. The scope of the services performed may be dependent on the motorcycle owner and the mileage driven. Your BMW Motorrad retailer confirms that the service has been performed and enters the date for the next service.

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

Confirmation of maintenance work

BMW Pre-Delivery Check

Conducted

on_____

_____

Stamp, Signature

BMW Running-in Check

Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

_____

Stamp, Signature

BMW Service
Conducted

on

Odometer reading

Next service
at the latest

on
or, if reached sooner,

Odometer reading

Stamp, Signature

BMW Service
Conducted

on

Odometer reading

Next service
at the latest

on
or, if reached sooner,

Odometer reading

Stamp, Signature

BMW Service
Conducted

on

Odometer reading

Next service
at the latest

on
or, if reached sooner,

Odometer reading

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

Confirmation of service

The table is intended as proof of maintenance and repair work, the installed optional accessories and any special campaign (recall) work carried out.

Work carried out	Odometer reading	Date

Work carried out	Odometer reading	Date

Appendix

Certificate..... 146

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.

A
Abbreviations and symbols, 6
ABS
Self-diagnosis, 67
Technology in detail, 76
Warning indicators, 31
Accessories
General instructions, 80
Alarm
triggering, 56
Alarm function
Activate motion sensor, 55
Deactivating, 57
Ambient temperature
Display, 23
Outside temperature warning, 33
Anti-theft alarm system
Indicator light, 21
Warning indicator, 36
Average values
Resetting, 43

B
Battery
change, 61
Charging connected battery, 111
Charging disconnected battery, 111
Installing, 112
Maintenance instructions, 110
Position on vehicle, 13
Removing, 111
Technical data, 127
Warning for battery charge current, 37
Brake fluid
Checking fill level of front brake, 92
Checking fill level of rear brake, 93
Front brake reservoir, 13
Rear brake reservoir, 11
Brake pads
Check front, 89
Check rear, 90
Checking parking brake, 91
Running in, 68
Brakes
Adjusting handlebar lever, 47
Checking operation, 89
Safety instructions, 68
Technical data, 125
Breaking in, 67
Bulbs
Replacing front turn indicator bulb, 106
Replacing high-beam headlight bulb, 103
Replacing license plate light, 109
Replacing low-beam bulb in headlight, 103
Replacing parking light bulb, 105
Replacing rear turn indicator bulb, 107

Technical data, 127
Warning indicator for bulb defect, 32

C
Checklist, 65
Clock
Adjusting, 41
Clutch
Technical data, 124
Confirmation of maintenance work, 137
Coolant
Check fill level, 94
Fill level indicator, 13
Fill location, 13
Overheating warning indicator, 30
Topping up, 94

D
Date
Adjusting, 41
Deactivating
Alarm, 57
Motion sensor, 56
Dimensions
Technical data, 129

E
Electrical system
Technical data, 127
Emergency on/off switch (kill switch), 15
Operating, 45
Engine
Starting, 66
Technical data, 122
Warning for electronic engine management, 31
Engine oil
Checking level, 86
Fill location, 11
Oil dipstick, 11
Oil level indicator, 24
Technical data, 123
Topping up, 86
Warning for engine oil level, 31
Equipment, 7

F
Factory settings, 58
Frame
Technical data, 129
Front wheel stand
Mounting, 101
Fuel
Fill location, 11
Refueling, 70
Tank release, 16
Technical data, 123
Fuel reserve
Mileage covered, 23
Warning indicator, 30
Fuses
Position on vehicle, 13
Replacing, 103
Technical data, 128

H
Hazard warning flashers
Control, 14
Operating, 44
Headlight
Headlamp range, 51
RHD/LHD traffic, 51

Heated handlebar grips
Operating, 45
Horn, 14

I
Ignition
Switching off, 40
Switching on, 40
Immobilizer
Warning indicator, 30
Indicator lights
Overview, 21
Instrument cluster
Overview, 16

J
Jump-starting, 110

K
Keys, 40

L
Lights
Control, 14
Headlight low beam, 43
Operating headlight flasher, 43
Operating headlight high beams, 43
Operating parking light, 44
Parking lights, 43
logon
Remote control, 60
Luggage
Loading information, 64

M
Maintenance
General instructions, 86
Maintenance intervals, 135
Maxi-Scooter
Care, 115
Cleaning, 115
Parking, 69
Returning to use, 118
Storage, 118
Tying down, 72
Mirrors
Adjusting, 48
Mobility Services, 135
Motion sensor
Deactivating, 56
Multifunction display
Overview, 20
Selecting display readings, 42
Multifunction switch
General view, left, 14
General view, right, 15

N
Notice concerning current status, 7

O
Odometer
Resetting, 42
Onboard power socket
Information on use, 80
Position on vehicle, 16
Onboard tool kit
Contents, 86
Position on motorcycle, 17
Overview of warning indicators, 26
Overviews
Cockpit, 16
Left side of vehicle, 11

Left-hand multifunction switch, 14
Multifunction display, 20
Right side of vehicle, 13
Right-hand multifunction switch, 15
Underneath seat, 17
Warning and indicator lamps, 21

P
Pre-Ride-Check, 66
Programming, 58

R
RDC
Technology in detail, 77
Rear-wheel drive
Technical data, 124
Refueling, 70
Remote control
logon, 60
synchronize, 61
Rider's Manual (US Model)
Position on motorcycle, 17

S
Safety instructions
About brakes, 68
On riding, 64
Seat
Operating, 51
Release, 16
Seat heating
Operating, 46
Service, 135
Reporting safety defects, 134
Service display, 22
Spark plugs
Technical data, 127
Speedometer, 16
Spring preload
Adjusting, 50
Adjustment element, 11
Starting, 66
Control, 15
Steering lock
Locking, 40
Storage compartment
Operating, 49
Position on vehicle, 16
Rear release, 17
Suspension
Technical data, 125
Switching off, 69

T
Tachometer, 20
Technical data
Battery, 127
Brakes, 125
Bulbs, 127
Clutch, 124
Dimensions, 129
Electrical system, 127
Engine, 122
Engine oil, 123
Frame, 129
Fuel, 123
Rear-wheel drive, 124
Spark plugs, 127
Standards, 7
Suspension, 125

Tires, 126
Transmission, 124
Weights, 130
Wheels, 126
Tire Pressure Control TPC/RDC
Display, 23
Tires
Checking tire inflation pressures, 50
Checking tire tread depth, 95
Inflation pressure table, 17
Inflation pressures, 126
Recommendations, 96
Running in, 68
Technical data, 126
Topcase
Operating, 80
Torques, 121
Transmission
Technical data, 124
Troubleshooting chart, 120
Turn indicators
Control, 14
Operating, 44
Type plate
Position on vehicle, 16

V

Vehicle identification number
Position on vehicle, 13

W

Warning lamps
ABS, 31
Anti-theft alarm system, 36
Battery charge current, 37
Bulb defect, 32
Coolant temperature, 30
Display, 24
Electronic engine management, 31
Engine oil level, 31
Fuel reserve, 30
Immobilizer, 30
Outside temperature warning, 33
Overview, 21
Weights
Payload table, 17
Technical data, 130
Wheels
Installing front wheel, 98
Installing rear wheel, 100
Removing front wheel, 96
Removing rear wheel, 99
Size change, 96
Technical data, 126
Windshield
Adjustment elements, 16
Operating, 48

The descriptions and illustrations in this manual may vary from your own motorcycle's actual equipment, depending upon its equipment level and accessories as well as your specific national version. No claims stemming from these differences can be recognized.
Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.
The right to modify designs, equipment and accessories is reserved.
Errors and omissions excepted.

© 2014 Bayerische Motoren Werke Aktiengesellschaft
80788 Munich, Germany
Reprints and duplication of this work, in whole or part, are prohibited without the express written approval of BMW Motorrad, Aftersales.

Original Rider's Manual, printed in Germany.

Important data for refueling:

Fuel	
Recommended fuel quality	Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI
Usable fuel quantity	Approx. 4.2 gal (Approx. 16 l)
Fuel reserve	Approx. 3.2 quarts (Approx. 3 l)
Tire inflation pressure	
Tire pressure, front	34.8 psi (2.4 bar), with tire cold
Tire pressure, rear	36.3 psi (2.5 bar), single rider, with cold tires 42.1 psi (2.9 bar), driver with passenger and/or load, with cold tire

BMW recommends Castrol

Order No.: 01 41 8 550 577
12.2013, 4th edition, 07