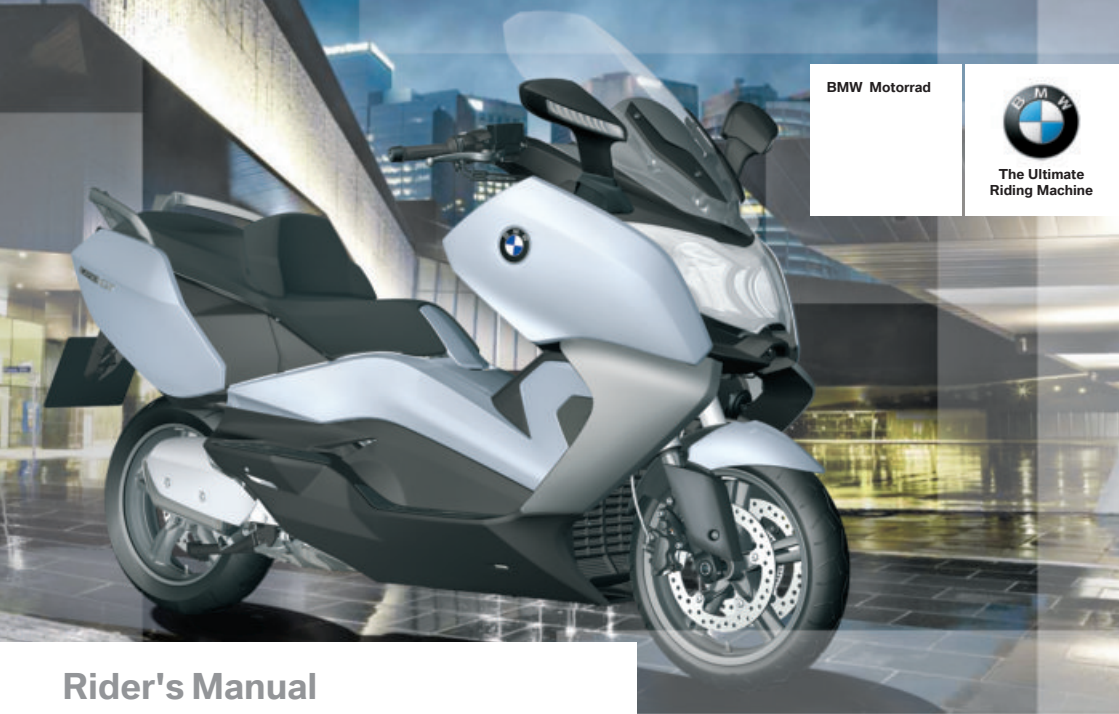




BMW Motorrad



The Ultimate
Riding Machine

Rider's Manual **C 650 GT**

Vehicle data/dealership details

Vehicle data

Model

Vehicle Identification Number

Colour code

Date of first registration

Registration number

Dealership details

Person to contact in Service department

Ms/Mr

Phone number

Dealership address/phone number (company stamp)

Welcome to BMW

We congratulate you on your choice of a Maxi-Scooter from BMW Motorrad and welcome you to the community of BMW riders.

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

In addition, it contains information on maintenance and care to help you maintain your vehicle's reliability and safety, as well as its value.

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

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

BMW Motorrad.

01 41 8 550 601



Table of Contents

1 General instructions	5	Ambient temperature.....	23	5 Anti-theft alarm	
Overview	6	Tyre pressures	23	DWA	53
Abbreviations and symbols	6	Oil level	24	Overview	54
Equipment	7	Warnings	24	Activation	54
Technical data	7	4 Operation.....	37	Alarm function.....	56
Actuality.....	7	Ignition switch/steering lock	38	Deactivation	57
2 General views	9	Date and time	39	Programming.....	57
General view, left side	11	Reading	40	Registration of the remote control	59
General view, right side	13	Lights	41	Synchronisation	60
Multifunction switch, left	14	Turn indicators	43	Battery	61
Multifunction switch, right	15	Hazard warning flashers	43	6 Riding.....	63
Cockpit.....	16	Emergency off switch (kill switch)	44	Safety instructions	64
Underneath the seat	17	Grip heating	44	Checklist	65
3 Status indicators	19	Seat heating	45	Starting.....	66
Multifunction display	20	Brakes	46	Riding	67
Warning and telltale lights	21	Mirrors	47	Running in	67
Service-due indicator.....	22	Windscreen	47	Brakes	68
Kilometres travelled after fuel down to reserve.....	23	Stowage compartments.....	47	Maxi-Scooter Parking	69
		Spring preload	48	Refuelling	70
		Tyres.....	49	Securing vehicle for transportation	72
		Headlight.....	49		
		Seat.....	49		

7 Engineering details..... 75

Brake system with	
BMW Motorrad ABS	76
Tyre pressure monitoring	
RDC.....	78

8 Accessories 81

General instructions	82
Power sockets	82
Topcase.....	82
Scooter lock.....	85

9 Maintenance 87

General instructions	88
Standard toolkit	88
Engine oil	88
Brake system	91
Coolant.....	95
Rims and tyres	97
Wheels	97
BMW Motorrad front-wheel	
stand	104
Fuses	105
Lighting	106
Jump-starting	110
Battery	110
Body panels.....	112

10 Care 115

Care products	116
Washing the vehicle.....	116
Cleaning easily damaged	
components.....	116
Paint care	117
Maxi-Scooter Laying up ...	118
Protective wax coating ...	118
Restore the Maxi-Scooter	
to use	118

11 Technical data 119

Troubleshooting chart.....	120
Threaded fasteners	121
Engine	123
Fuel	124
Engine oil	125
Clutch	125
Transmission	126
Rear-wheel drive	126
Running gear.....	127
Brakes	127
Wheels and tyres.....	128
Electrics	129
Frame	132
Dimensions	132

Weights	133
Riding specifications	133
Anti-theft alarm.....	133
Remote control.....	134

12 Service 135

BMW Motorrad Service ...	136
BMW Motorrad Mobility	
services	136
Maintenance work.....	136
Confirmation of mainten-	
ance work	138
Confirmation of service ...	143

13 Appendix..... 145

Certificate	146
-------------------	-----

14 Index 147

General instructions

Overview	6
Abbreviations and symbols	6
Equipment	7
Technical data	7
Actuality	7

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your Maxi-Scooter. All maintenance and servicing work on the vehicle is documented in Chapter 12. This record of the maintenance work you have had performed on your vehicle is a precondition for generous treatment of goodwill claims.

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

Abbreviations and symbols



Indicates warnings that you must comply with for reasons of your safety and the safety of others, and to protect your product against damage.



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



Indicates the end of an item of information.



Instruction.



Result of an activity.



Reference to a page with more detailed information.



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



Tightening torque.



Technical data.

OE

Optional extras.

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

OA

Optional accessories.

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

ABS

Anti-lock brake system.

RDC

Tyre pressure monitoring.

EWS

Electronic immobiliser.

DWA

Anti-theft alarm (Diebstahlwarnanlage).

Equipment

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

Technical data

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

Actuality

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

General views

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



General view, left side

- 1 Brake-fluid reservoir for the rear-wheel brake (▮▮▮▮ 94)
- 2 Fuel filler neck (underneath cover) (▮▮▮▮ 70)
- 3 Adjustable pelvis support (▮▮▮▮ 50)
- 4 Adjuster, spring preload (▮▮▮▮ 48)
- 5 Engine oil filler neck and oil dipstick (underneath footplate) (▮▮▮▮ 88)

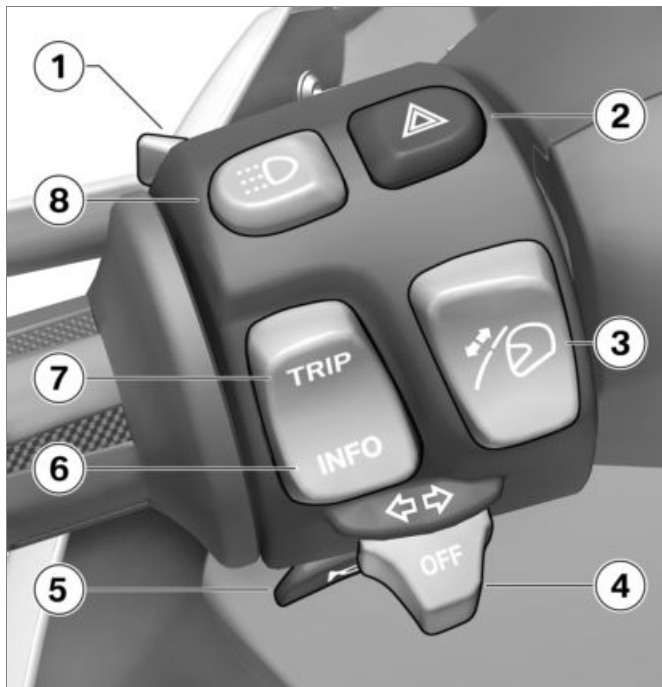


General view, right side

- 1 Brake-fluid reservoir for the front-wheel brake (▮▮▮ 93)
- 2 Type plate (on the steering head tube right)
- 3 Battery (underneath side panel) (▮▮▮ 110)
Fuses (behind side panel) (▮▮▮ 105)
- 4 VIN (on right frame tube)
- 5 Coolant sight glass (through opening in side panel) (▮▮▮ 95)
- 6 Coolant expansion tank (underneath footrest plate) (▮▮▮ 96)
- 7 – with seat heating^{OE}
Rear-seat heating operation (▮▮▮ 45)

Multifunction switch, left

- 1 Operation of high-beam headlight and headlight flasher (➡ 42)
- 2 Control for hazard warning flashers (➡ 43)
- 3 Windscreen control (➡ 47)
- 4 Operation of the flashing turn indicators (➡ 43)
- 5 Horn
- 6 INFO, operation of the on-board computer (➡ 40)
- 7 TRIP, operation of the trip-meter (➡ 40)
- 8 – with daytime riding lights^{OE}
Operation of the daytime riding lights (➡ 42)



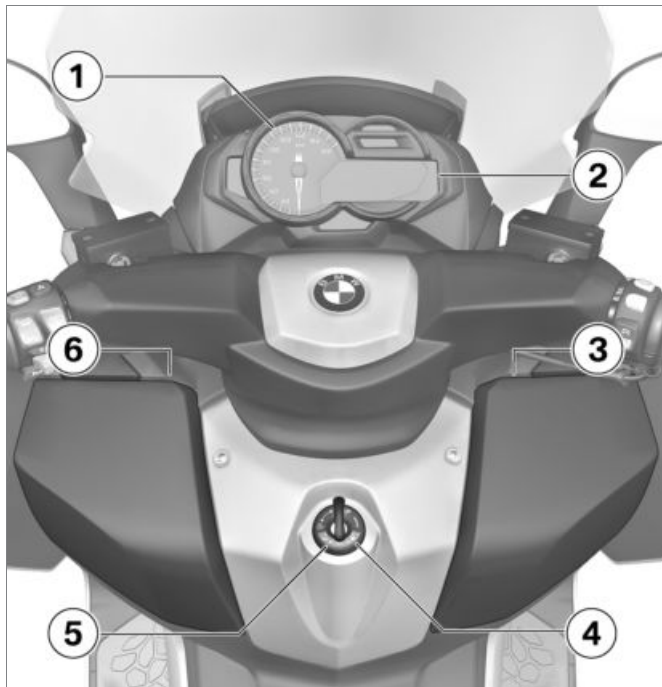


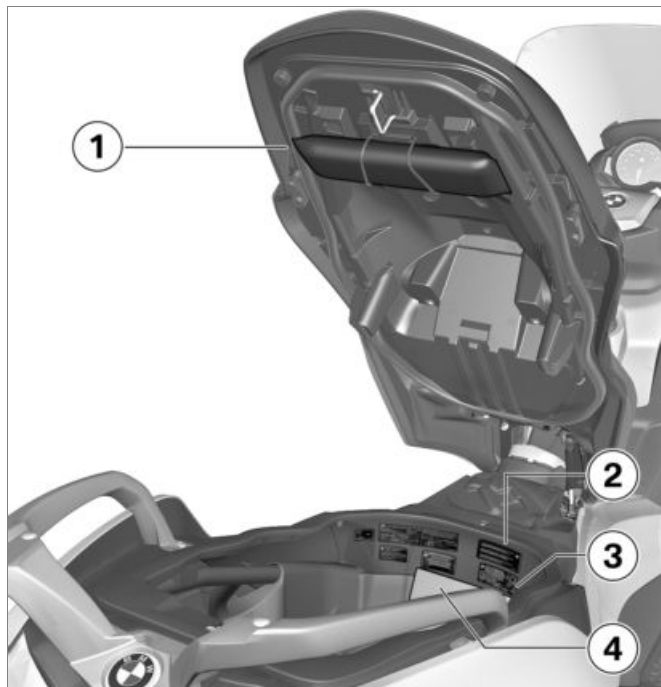
Multifunction switch, right

- 1 – with heated handlebar grips^{OE}
Grip heating control (➡ 44)
- 2 – with seat heating^{OE}
Operation of seat heating (➡ 45)
- 3 Emergency off switch (kill switch) (➡ 44)
- 4 Starter button (➡ 66)

Cockpit

- 1 Speedometer
- 2 Multifunction display
( 20)
Warning and telltale lights
( 21)
- 3 Rider's Manual (in the storage compartment) ( 47)
- 4 Release for fuel-tank cover
(integrated into ignition switch/steering lock)
( 70)
- 5 Seat release (integrated into ignition switch/steering lock) ( 49)
- 6 Stowage compartment
( 47)
Socket (in the stowage compartment) ( 82)





Underneath the seat

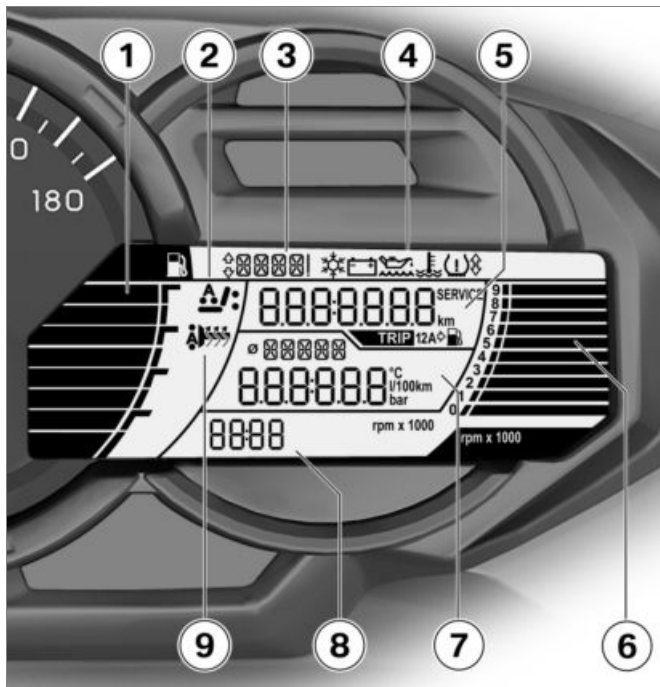
- 1 Toolkit (→ 88)
- 2 Payload table
- 3 Table of tyre pressures
- 4 Rider's Manual (at edge of carpet)

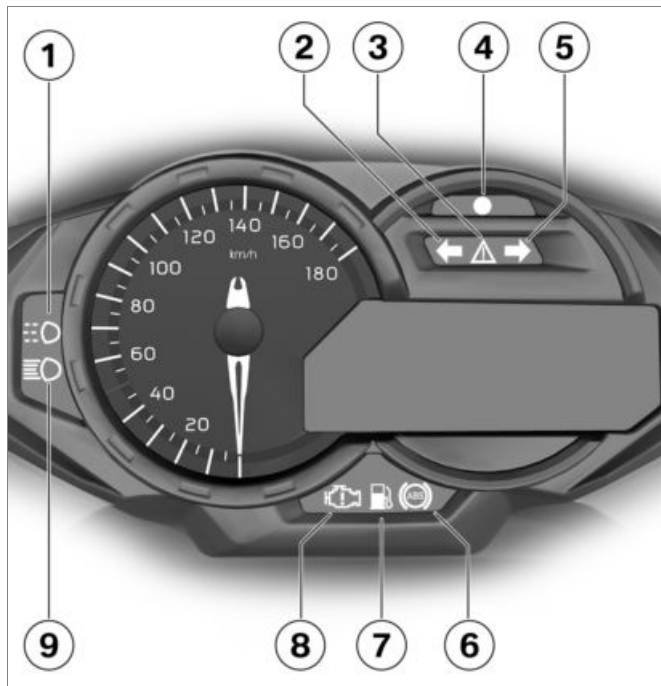
Status indicators

Multifunction display	20
Warning and telltale lights.....	21
Service-due indicator	22
Kilometres travelled after fuel down to reserve	23
Ambient temperature	23
Tyre pressures.....	23
Oil level	24
Warnings	24

Multifunction display

- 1 Fuel-gauge reading
- 2 – with seat heating^{OE}
- Indicator for seat-heating stage (➡ 45)
- 3 Text box for warnings (➡ 24)
- 4 Warning symbols (➡ 24)
- 5 Odometer and tripmeters (➡ 41)
- Service-due indicator (➡ 22)
- Distance covered since fuel dropped to reserve (➡ 23)
- 6 Rev. counter
- 7 On-board computer readings (➡ 40)
- 8 Clock (➡ 39)
- 9 – with heated handlebar grips^{OE}
- Indicator for grip-heating stage (➡ 44)

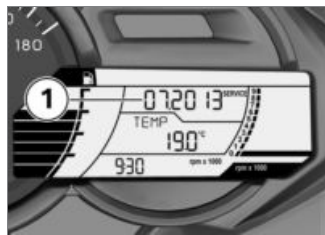




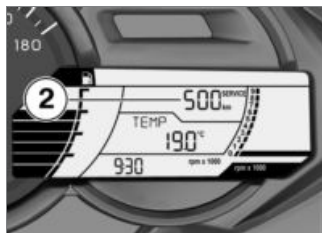
Warning and telltale lights

- 1 – with daytime riding lights^{OE}
Telltale light for daytime riding lights (➡ 42)
- 2 Telltale light for left turn indicators
- 3 General warning light (➡ 24)
- 4 Anti-theft alarm telltale light (➡ 56)
- 5 Telltale light for right turn indicators
- 6 ABS warning light (➡ 30)
- 7 Warning light for fuel down to reserve (➡ 29)
- 8 Warning light for engine electronics (➡ 30)
- 9 High-beam headlight telltale light

Service-due indicator



If the next service is due in less than one month, the date for the next service **1** is shown briefly after the Pre-Ride Check completes. In this example the reading means "July 2013".



If the vehicle covers long distances in the course of the year, under certain circumstances it might be necessary to have it serviced at a date in advance of the forecast due date. If the countdown distance to the odometer reading at which a service will be due is less than 1000 km, the distance is counted down in steps of 100 km **2** and is shown briefly after the Pre-Ride Check completes.

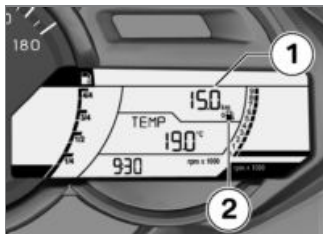


If service is overdue, the due date or the odometer reading at which service was due

is accompanied by the 'general' warning light showing yellow. The word "Service" remains permanently visible.

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

Kilometres travelled after fuel down to reserve



When reaching the fuel reserve the kilometres travelled since this time **1** are displayed with the symbol **2**. This counter is re-set and the reading disappears as soon as refuelling brings the total quantity of fuel in the tank back above the reserve level.

Ambient temperature



If ambient temperature drops below 3 °C the temperature display flashes to draw your attention to the risk of black ice forming. The display automatically switches from any other mode to the temperature reading when the temperature drops below this threshold for the first time.

Tyre pressures

– with tyre pressure monitoring (RDC)^{OE}



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

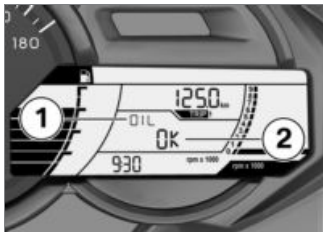


If "General" warning light **4** flashes red, accompanied by symbol **3**, the reading is a warning. The top arrow beside

the tyre symbol indicates a problem with the front wheel, the bottom arrow indicates a problem with the rear wheel.

The detailed description of BMW Motorrad RDC starts on page (➡ 78).

Oil level



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

The preconditions for the oil level check are as follows:

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

The meanings of the readings that can appear at position **2** are as follows:

OK: Oil level is correct.

CHECK: Check the oil level the next time you stop for fuel.

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

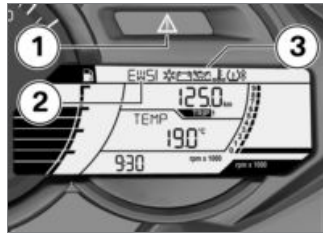


The appropriate warning symbol shows if the oil level is too low.

Warnings

Mode of presentation

Warnings are indicated by the corresponding warning lights.



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

If two or more warnings occur at the same time, all the appropriate warning lights and warning symbols appear, alternating with warning words as applicable.

The possible warnings are listed on the next pages.

Warnings, overview

Warning and telltale lights

Warning symbols in the display

Meaning



Lights up yellow

EWS ! appears on the display

Electronic immobiliser active (→ 29)



Lights up

Fuel down to reserve (→ 29)



Lights up red



Appears on the display

Coolant temperature too high (→ 29)



Appears on the display

Engine in emergency-operation mode (→ 30)



Lights up yellow



Appears on the display

Engine-oil level too low (→ 30)

OIL CHECK appears on the display



Flashes

ABS self-diagnosis not completed (→ 30)

Warning and telltale lights

Warning symbols in the display

Meaning

	Lights up		ABS fault (➡ 30)
	Lights up yellow		+ LAMP ! appears on the display Rear light defective (➡ 31)
	Lights up yellow		+ LAMP ! appears on the display Bulb for headlight defective (➡ 31)
	Lights up yellow		+ LAMP ! appears on the display Rear light and bulb for headlight are defective (➡ 31)
			Appears on the display Outside temperature warning (➡ 32)
	Flashes red		Appears on the display Tyre pressure, front, outside permitted tolerance (➡ 32)
		The critical tyre pressure flashes.	
	Flashes red		Appears on the display Tyre pressure, rear, outside permitted tolerance (➡ 33)
		The critical tyre pressure flashes.	

Warning and telltale lights

Warning symbols in the display

Meaning

	Flashes red		Appears on the display	Tyre pressure, both tyres, outside permitted tolerance (➡ 33)
			The tyre pressure readings flash.	
			"--" or "-- : --" is displayed.	Signal transmission disrupted (➡ 34)
	Lights up yellow		Appears on the display	Sensor defective or system error (➡ 35)
			"--" or "-- : --" is displayed.	
	Lights up yellow		RDC ! appears on the display	Battery of tyre-pressure sensor weak (➡ 35)
			DWA ! appears on the display	Anti-theft alarm battery weak (➡ 35)
	Lights up yellow		DWA ! appears on the display	Anti-theft alarm battery flat (➡ 36)
	Lights up red		Appears on the display	Battery charge voltage insufficient (➡ 36)

Electronic immobiliser active



General warning light shows yellow.

EWS ! appears on the display.

Possible cause:

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

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

Fuel down to reserve



The reserve-fuel symbol lights up.



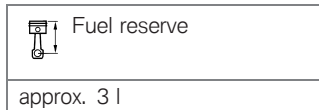
Lack of fuel can cause the engine to run irregularly or die (risk of accident) and result

in damage to the catalytic converter.

Do not run the fuel tank dry.◀

Possible cause:

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



- Refuelling (► 70).

Coolant temperature too high



General warning light shows red.



Temperature symbol appears on the display.



Riding when the engine is overheated could result in engine damage.

Compliance with the information set out below is essential.◀

Possible cause:

If the coolant level is too low.

- Checking coolant level (► 95).

If the coolant level is too low:

- Top up the coolant and have the coolant system checked by a specialist workshop, preferably by an authorised BMW Motorrad dealer.

Possible cause:

The coolant or engine-oil temperature is too high.

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

Engine in emergency-operation mode



Engine symbol appears on the display.



The engine is running in 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 refuses to start. Otherwise, the engine runs in emergency operating mode.

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

an authorised BMW Motorrad dealer.

Engine-oil level too low



General warning light shows yellow.



Oil-level symbol appears on the display.

OIL CHECK appears on the display.

Possible cause:

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

- Checking engine oil level (▶ 88).

If the oil level is too low:

- Top up the engine oil.

ABS self-diagnosis not completed



ABS warning light flashes.

Possible cause:

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

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

ABS fault



ABS warning light shows.

Possible cause:

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

- You can continue to ride the vehicle, but make due provision for the fact that the ABS function is not available. Bear in mind the more detailed information on situations that can lead to an ABS fault (► 77).
- Have the fault rectified as quickly as possible by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Rear light defective



General warning light shows yellow.



+ LAMP ! appears on the display.



A bulb failure on the motorcycle is a safety risk, because it is easy for other road users to overlook the vehicle. Replace defective bulbs as soon as possible; always carry a

complete set of spare bulbs if possible. ◀

Possible cause:

Rear light or brake light defective.

- Identify defective bulb by visual check.

If the rear light is defective:

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

If the brake light is defective:

- Replacing bulb for brake light (► 107).

Bulb for headlight defective



General warning light shows yellow.



+ LAMP ! appears on the display.



A bulb failure on the motorcycle is a safety risk, be-

cause it is easy for other road users to overlook the vehicle. Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible. ◀

Possible cause:

Low-beam or high-beam headlight defective.

- Replacing bulbs for low-beam headlight and high-beam headlight (► 106).

Possible cause:

Parking light defective.

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

Rear light and bulb for headlight are defective



General warning light shows yellow.



+ LAMP ! appears on the display.

Possible cause:

The rear light and a headlight bulb are defective.

- See the fault descriptions above.

Outside temperature warning



Ice-crystal symbol appears on the display.

Possible cause:

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



The ambient temperature warning does not mean that there is no risk of ice forming at measured temperatures above 3 °C.

Always take extra care when temperatures are low; remember that the danger of black ice form-

ing is particularly high on bridges and where the road is in shade.◀

- Ride carefully and think well ahead.

Tyre pressure, front, outside permitted tolerance

– with tyre pressure monitoring (RDC)OE



General warning light flashes red.



Tyre symbol with arrow pointing up appears on the display.

The critical tyre pressure flashes. Possible cause:

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

- Check the tyre for damage and to ascertain whether the

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

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



Incorrect tyre pressures impair the Scooter's handling characteristics.

If tyre pressure is incorrect it is essential to adapt your style of riding accordingly.◀

- Correct the tyre pressure at the earliest possible opportunity.



Before you adjust tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details".◀

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

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

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

Tyre pressure, rear, outside permitted tolerance

– with tyre pressure monitoring (RDC)^{OE}



General warning light flashes red.



Tyre symbol with arrow pointing down appears on the display.

The critical tyre pressure flashes. Possible cause:

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

- Check the tyre for damage and to ascertain whether the

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

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



Incorrect tyre pressures impair the Scooter's handling characteristics.

If tyre pressure is incorrect it is essential to adapt your style of riding accordingly. ◀

- Correct the tyre pressure at the earliest possible opportunity.



Before you adjust tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details". ◀

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

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

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

Tyre pressure, both tyres, outside permitted tolerance

– with tyre pressure monitoring (RDC)^{OE}



General warning light flashes red.



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

The tyre pressure readings flash. Possible cause:

Measured tyre pressure in both tyres is outside permitted tolerance.

- Check the tyre for damage and to ascertain whether the

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

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



Incorrect tyre pressures impair the Scooter's handling characteristics.

If tyre pressure is incorrect it is essential to adapt your style of riding accordingly.◀

- Correct the tyre pressure at the earliest possible opportunity.



Before you adjust tyre pressure, read the information on temperature compensation and adjusting pressure in the section entitled "Engineering details".◀

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

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

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

Signal transmission disrupted

– with tyre pressure monitoring (RDC)^{OE}

"--" or "-- : --" is displayed.
Possible cause:

The vehicle has not yet accelerated past the threshold of approximately 30 km/h. The RDC sensors do not start transmitting signals until the vehicle reaches a speed above this threshold for the first time (► 78).

- Increase speed above this threshold and observe the RDC readings. Assume that a permanent fault has not occurred unless the 'General' warning light comes on to accompany

the symptoms. Under these circumstances:

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

Possible cause:

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

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

an authorised BMW Motorrad dealer.

Sensor defective or system error

- with tyre pressure monitoring (RDC)^{OE}



General warning light shows yellow.



Tyre symbol appears on the display.

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

Possible cause:

Vehicle is fitted with wheels not equipped with RDC sensors.

- Fit wheels and tyres equipped with RDC sensors.

Possible cause:

One or two RDC sensors have failed.

- Have the fault rectified by a specialist workshop, preferably

an authorised BMW Motorrad dealer.

Possible cause:

A system error has occurred.

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

Battery of tyre-pressure sensor weak

- with tyre pressure monitoring (RDC)^{OE}



General warning light shows yellow.

RDC ! appears on the display.

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

Possible cause:

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

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

Anti-theft alarm battery weak

- with anti-theft alarm (DWA)^{OE}

DWA ! appears on the display.

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

Possible cause:

The integral battery in the anti-theft alarm has lost a significant proportion of its original capacity. There is no assurance of how

long the anti-theft alarm can remain operational if the vehicle's battery is disconnected.

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

Anti-theft alarm battery flat

– with anti-theft alarm (DWA)^{OE}



General warning light shows yellow.

DWA ! appears on the display.



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

Possible cause:

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

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

Battery charge voltage insufficient



General warning light shows red.



Battery symbol appears on the display.



A discharged battery can render various systems unavailable, for example the lights, the engine or the ABS. This can result in dangerous situations. Do not continue your journey.◀

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

Possible cause:

Alternator or alternator drive defective.

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

Operation

Ignition switch/steering lock	38
Date and time	39
Reading.....	40
Lights.....	41
Turn indicators.....	43
Hazard warning flashers.....	43
Emergency off switch (kill switch).....	44
Grip heating.....	44
Seat heating	45
Brakes	46
Mirrors.....	47
Windscreen	47
Stowage compartments	47
Spring preload	48

Tyres	49
Headlight	49
Seat	49

Ignition switch/steering lock

Keys

You receive two vehicle keys.

– with topcase^{OA}

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

Switching on ignition



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

- » Parking lights and all function circuits switched on.
- » Engine can be started.
- » Pre-ride check is performed. (▶▶ 66)
- » ABS self-diagnosis is performed. (▶▶ 67)

Switching off ignition



- Turn the key to the **OFF** position.
- » The lights are switched off, the side light and light on the rear stowage compartment remain illuminated briefly.
- » Handlebars not locked.

- » Key can be removed.

Locking handlebars

- Turn the handlebars all the way to left



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

Date and time

Setting time

- Switch off the engine and switch on the ignition.



- Repeatedly press button **1** (TRIP) until odometer reading **3** appears on the display.
- Press and hold down button **1** (TRIP) until the first time value **4** to be changed starts to flash.
- Set the flashing value by pressing buttons **1** (TRIP) and **2** (INFO).

- Press and hold down button **1** (TRIP) until the next value starts to flash.
 - Set the flashing value by pressing buttons **1** (TRIP) and **2** (INFO).
 - Press and hold down button **1** (TRIP) until the reading stops flashing.
- » This completes the process.

You can exit the process at the end of each step:

- Without pressing any buttons, wait until the reading stops flashing.
- » The settings already made are accepted.

Setting date and time

- Switch off the engine and switch on the ignition.

▶ Date and time are set one immediately after the other.◀



- Repeatedly press button **2** (INFO) until the date **3** appears on the display.

▶ The sequence in which day, month and year are shown can vary from country to country.◀

- Press and hold down button **2** (INFO) until the first date value **3** to be changed starts to flash.
- Set the flashing values by pressing buttons **1** (TRIP) and **2** (INFO).

- Press and hold down button **2** (INFO) in each case until the next value starts to flash.
 - After setting the time, press and hold down button **2** (INFO) until the reading stops flashing.
 - » This completes the process.
- You can exit the process at the end of each step:
- Without pressing any buttons, wait until the reading stops flashing.
 - » The settings already made are accepted.

Reading

Selecting readings

- Switch on the ignition.



- Press button **1** (TRIP) to select the reading in panel **3**.

The following values can be displayed:

- Total distance covered
- Tripmeter 1 (Trip 1)
- Tripmeter 2 (Trip 2)
- The 'automatic' tripmeter (Trip A) is reset automatically five hours after the ignition is switched off and the date has changed
- Distance travelled after fuel down to reserve



- Press button **2** (INFO) to select the reading in panel **4**.

The following values can be displayed:

- Ambient temperature (TEMP)
- Average speed (ØSPEED)
- Average fuel consumption (ØFUEL)
- Current consumption (FUEL)
- Date (Date)
- Oil-level reminder (OIL)
- with tyre pressure monitoring (RDC)^{OE}

Tyre pressures (RDC) <

Resetting tripmeter

- Switch on the ignition.
- Select a tripmeter.



- Press and hold down button **1** (TRIP) until the tripmeter reading in panel **3** has reset.

Resetting average values

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



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

Lights

Low-beam headlight and sidelights

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

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

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

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

– with daytime riding lights^{OE}
In daytime the daytime riding lights can be switched on as an alternative to the low-beam headlight.

High-beam headlight and headlight flasher



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

Parking light

- Switch off the ignition.



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

Daytime riding lights

- with daytime riding lights^{OE}
- Start the engine.



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



The daytime riding lights symbol appears on the display.

- » The low-beam headlight and the background lighting of the instrument panel are switched off.
- In the dark or in tunnels: Press button **1** again to switch off the daytime riding lights and switch on the low-beam headlight.

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

Turn indicators

Operating flashing turn indicators

- Switch on the ignition.



- Push button **1** to the left to switch on the left flashing turn indicators.

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

Hazard warning flashers

Operating hazard warning flashers

- Switch on the ignition.

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

▶ If you press a turn-indicator button with the ignition switched on, the turn-indicator function is activated instead of the hazard warning flashers, and remains active until you release the button. The hazard warning

flashers recommence flashing as soon as the button is released.◀



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

Emergency off switch (kill switch)



- 1** Emergency off switch (kill switch)



Operating the kill switch when riding can cause the rear wheel to lock and thus cause a fall.

Do not operate the kill switch when riding. ◀

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



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

Grip heating

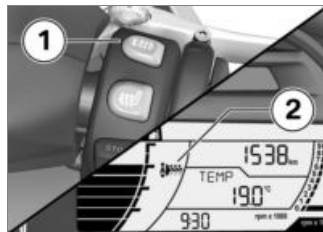
– with heated handlebar grips^{OE}

Operating grip heating

- Start the engine.



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



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

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



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



100% heating power



50% heating power

Seat heating

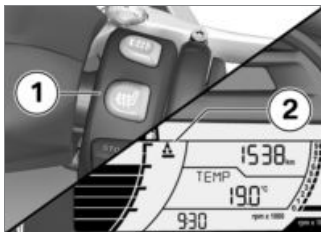
– with seat heating^{OE}

Operating front-seat heating

- Start the engine.



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



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

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



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



100% heating power



50% heating power

Operating rear-seat heating

- Start the engine.

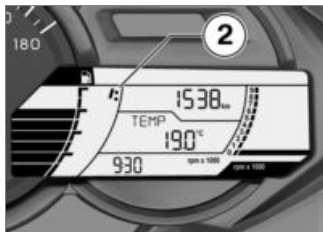


Seat heating can be activated only when the engine is running.◀



- Press the side of button **1** with two dots to switch the heating to HIGH.

- Press the side of button **1** with one dot to switch the heating to LOW.
- Centre button **1** to switch off the seat heating.



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

 50% heating power

 100% heating power

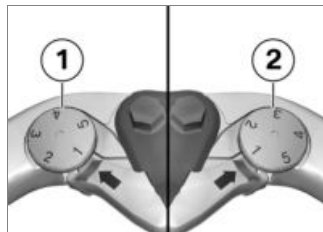
Brakes

Adjusting handbrake lever

 Changing the position of the brake-fluid reservoir can allow air to penetrate the brake system.

Do not twist the handlebar fitting or the handlebars.◀

 Attempting to adjust the handbrake lever while riding the vehicle can lead to accidents. Do not attempt to adjust the handbrake lever unless the Scooter is at a standstill.◀



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

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

- » Adjustment options:
- From position 1: widest span between handlebar grip and clutch lever
 - To position 5: narrowest span between handlebar grip and handlebar lever

Mirrors

Adjusting mirrors



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

Windscreen

Adjusting windscreen

- Start the engine.



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

Stowage compartments

Using front stowage compartments



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

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

Opening/closing rear stowage compartment

- Open the seat.

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



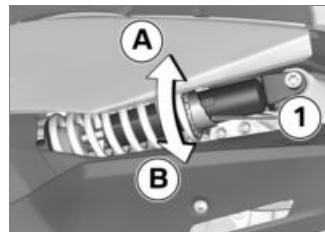
- To stow two helmets in the stowage compartment, position the helmets as shown here.
- Close the seat.

Spring preload Setting

It is essential to set 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 for rear wheel

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



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



Basic setting of spring preload, rear

Increase 4 clicks from the lowest preload setting (Full load of fuel, with rider 85 kg)

Tyres

Checking tyre pressure



Incorrect tyre pressures impair the Scooter's handling characteristics and increase the rate of tyre wear.

Always check that the tyre pressures are correct.◀



At high road speeds, tyre valves installed perpendicular to the wheel rim have a tendency to open as a result of centrifugal force.

Fit valve caps with rubber seals and screw them on firmly to prevent sudden deflation.◀

- Make sure the ground is level and firm and place the Scooter on its stand.
- Check tyre pressures against the data below.

	Tyre pressure, front
	2.4 bar (Tyre cold)
	Tyre pressure, rear
	2.5 bar (one-up, tyre cold)
	2.9 bar (two-up and/or with luggage, tyre cold)

If tyre pressure is too low:

- Correct tyre pressure.

Headlight

Adjusting headlight for driving on left/driving on right

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

prevent the headlight beam from dazzling oncoming traffic.

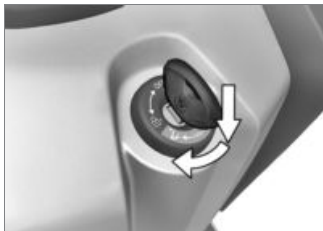
Headlight beam throw and spring preload

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

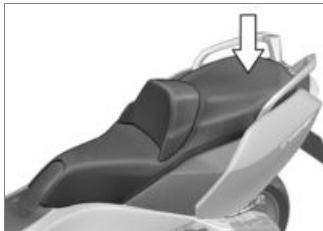
Seat

Opening/closing seat

- Switch off the ignition.



- Push the ignition key down and turn it clockwise.

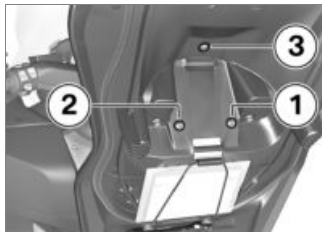


- If the action is stiff press down on the seat at the rear and then lift it slightly at the rear.

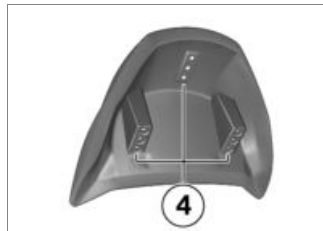
- To close, press the rear of the seat down until it latches shut.

Adjusting pelvic support

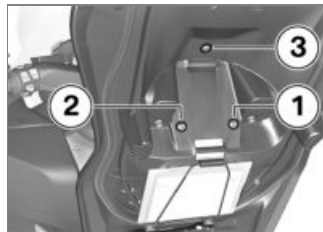
- Open the seat.



- Slacken screw **1** ten full turns.
- Slacken screw **2** ten full turns.
- Slacken screw **3** ten full turns.
- Repeat this sequence until the pelvic support can be removed. Do not remove the screws from the seat.



- Align mounts **4** in the pelvic support in the desired position above the screws in the seat.



- Tighten screw **1** five full turns.
- Tighten screw **2** five full turns.
- Tighten screw **3** five full turns.

- Repeat this sequence until the pelvic support is installed. Tighten the screws only until hand-tight.
- Pelvic support to seat (122).
- Close the seat.

Anti-theft alarm DWA

Overview	54
Activation	54
Alarm function	56
Deactivation	57
Programming	57
Registration of the remote control	59
Synchronisation.....	60
Battery.....	61

Overview

– with anti-theft alarm (DWA)^{OE}

General information about the anti-theft alarm (DWA)

Any attempt to move the vehicle, change its position, start it without an authorised key or disconnect the starter battery will trigger the alarm. The sensitivity of the system is parameterised so that slight vibrations will not trigger the alarm. Once the system has been activated, any attempt to tamper with the vehicle is indicated acoustically by the siren and visually by all four turn indicators flashing in unison.

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

Conserving power in the vehicle's starter battery

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

Radio interference

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

Controls



- 1 LED (➡ 21)
- 2 Right button (➡ 56)
- 3 Left button (ribbed) (➡ 55)

Activation

– with anti-theft alarm (DWA)^{OE}

Activation with motion sensor



The alarm function is activated

- by pressing button **1** on the remote control once, or
- by switching off the ignition (if programmed); when the ignition is switched off 30 seconds elapse before the start of the activation phase

Activation is confirmed

- by the turn indicators flashing twice and
- by the alarm tone sounding twice.

If you want to activate the alarm function more than one minute after switching off the ignition, you must press button **1** for longer than one second.

Activation phase

The anti-theft alarm needs 15 seconds to achieve fully active status. No alarm is triggered during this time.

Conserving battery power



If it remains deactivated for approximately one hour, the anti-theft alarm shuts down in order not to draw power unnecessarily

from the battery. If you want to activate the alarm function after the anti-theft alarm has shut down in this way, you have to switch the ignition on and then off again.

Motion sensor when the Maxi-Scooter is to be transported

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

Deactivating motion sensor



- Press button **1** on the remote control a second time during the activation phase.
 - » Turn indicators flash three times.
 - » Alarm tone sounds three times.
 - » Motion sensor is deactivated.

Alarm function

- with anti-theft alarm (DWA)^{OE}

Alarm triggers

An alarm can be triggered by:

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

Alarm



An alarm lasts for 26 seconds. The system is active again another 12 seconds later. You can interrupt an alarm at any time by pressing button **1** on the remote

control. This function does not change the status of the anti-theft alarm.

While an alarm is in progress an alarm tone sounds and the turn indicators flash. You can program the type of alarm tone.

Reason for an alarm

Once you have deactivated the alarm function, the anti-theft alarm status indicator is active for a period of one minute to show you reasons for alarms, if any, that were triggered in your absence:

- Flashes 1x: Motion sensor; motorcycle was rocked forward/back
- Flashes 2x: Motion sensor; motorcycle was rocked to the side
- Flashes 3x: Ignition switched on with unauthorised key

- Flashes 4x: Disconnection of the anti-theft alarm from the vehicle's battery

Information on alarm triggering

If an alarm was triggered after the last activation of the alarm function, the rider is notified accordingly by an alarm tone sounding once when the ignition is switched on.

Deactivation

- with anti-theft alarm (DWA)^{OE}

Deactivating alarm function



- Press button **1** on the remote control once **or** switch on the ignition with an authorised key.

▶ Note that you can deactivate the alarm function with the ignition key only when the kill switch is in the RUN position.◀

▶ If the alarm function is deactivated by the remote control and the ignition is not subsequently switched on, the alarm function automatically goes active again after 30 seconds if

"Activation after ignition OFF" is programmed.◀

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

Conserving battery power

Approximately one hour after the alarm is armed, the receiver for the remote control in the anti-theft alarm shuts down in order not to draw power unnecessarily from the battery. If you want to deactivate the alarm function after the receiver has shut down in this way, you have to switch the ignition on.

Programming

- with anti-theft alarm (DWA)^{OE}

Programming options

You can customise the following parameters of your anti-theft alarm:

- Confirmation alarm tone after activation/deactivation of the anti-theft alarm in addition to visual confirmation by turn indicators flashing
- Rising and falling or intermittent alarm tone
- Automatic activation of the alarm function after the ignition is switched off

Default settings

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

- Confirmation alarm tone after activation/deactivation of the anti-theft alarm: No
- Alarm tone: Intermittent
- Automatic activation of the alarm function after the ignition is switched off: No

Programming anti-theft alarm



- Deactivate the alarm function.
- Switch on the ignition (III 38).
- Press button **1** three times.
 - » Acknowledgement tone sounds once.
- Within ten seconds, switch off the ignition.
- Press button **2** three times.
 - » Acknowledgement tone sounds once.
- Within ten seconds, switch on the ignition.
 - » Acknowledgement tone sounds three times.

» The programming function is active.

Programming is a four-step process, although no function is allocated to step 2. The number of times the anti-theft alarm status-indicator light on the vehicle flashes corresponds to the active programming step. An alarm tone sounds by way of confirmation when button **1** is pressed, and an acknowledgement tone sounds when button **2** is pressed.

- **Step 1:** Do you want a confirmation tone to sound after activation/deactivation of the anti-theft alarm?

Yes:

- Press button **1**.

No:

- Press button **2**.

- **Step 2:**

No function allocated to this step.

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

- **Step 3:** Which alarm tone would you like the alarm to sound?

Rising and falling:

- Press button **1**.

Intermittent:

- Press button **2**.

- **Step 4:** Do you want to have the alarm function activated automatically when you switch off the ignition?

Yes:

- Press button **1**.

No:

- Press button **2**.

Under what circumstances is programming aborted?

Programming is aborted

- if the ignition is switched off before completion of the last step in the programming sequence
- **or** automatically if more than 30 seconds are allowed to elapse between any two consecutive steps in the programming routine.

The new settings are not saved if programming is aborted.

Saving programming

Programming is saved

- if the ignition is switched off after completion of the last step in the programming sequence
- **or** automatically 30 seconds after completion of the last

step in the programming routine.

The anti-theft alarm status indicator light stops flashing and four acknowledgement tones sound.

Registration of the remote control

- with anti-theft alarm (DWA)^{OE}

When is it necessary to register a remote control?

If you want to register an additional remote control or register a remote control as a replacement for one that has been mislaid, you must always register all the remote control units with the anti-theft alarm. You can register a maximum of four remote control units.

Registering remote control



- Deactivate the alarm function.
- Switch on the ignition (III 38).
- Press button **2** three times.
- » Acknowledgement tone sounds once.
- Within ten seconds, switch off the ignition.
- Press button **2** three times.
- » Acknowledgement tone sounds once.
- Within ten seconds, switch on the ignition.

» Acknowledgement tone sounds twice.

You can now register a maximum of four remote control units with the anti-theft alarm. Registration is a three-step process and has to be repeated for each remote control unit.

- Press and hold down 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 has been registered.
- Repeat this three-step procedure for each additional remote control.

Termination of registration

Registration is terminated when

- four remote control units have been registered
- the ignition is switched off
- 30 seconds elapse without a button being pressed after the ignition has been switched off
- 30 seconds elapse without a button being pressed after a remote control unit has been registered

When registration terminates the LED flashes and the acknowledgement tone sounds three times.

Synchronisation

- with anti-theft alarm (DWA)^{OE}

When is it necessary to synchronise the remote control?

The remote control has to be synchronised if the buttons of the remote control have been pressed more than 256 times outside the receiver's range. Once this limit has been reached, the receiver on the vehicle will no longer react to the signals from the remote control.

Synchronising remote control



- Press and hold down 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 has been synchronised.

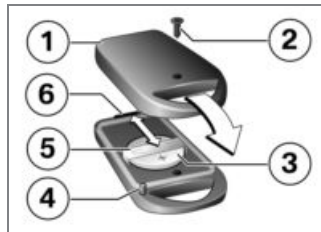
Battery

– with anti-theft alarm (DWA)^{OE}

When does the battery have to be changed?

The battery in the remote control is due to be changed after approximately 2 - 3 years. You can tell that the battery is weak if the LED does not light up or lights up only briefly when a button is pressed.

Changing battery



- Remove screw **2** and remove bottom part of housing **1**.

- Slide old battery **3** forward from under retainer **5**.

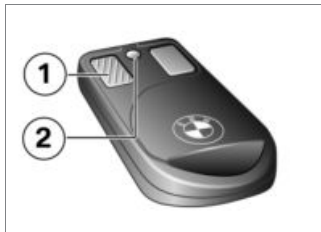


Using a battery of the wrong type or inserting the battery with the polarity reversed can cause irreparable damage to the device.

Use only the specified type of battery (see "Technical Data"). When inserting the battery, always make sure polarity is correct.◀

- Slip the new battery into position, making sure that the positive terminal of the battery is facing up.
- Position the bottom part of the housing at projection **6** of the front edge and close the housing, noting two guide pins **4**.
- Install screw **2**.
- » The LED on the remote control lights up, indicating that the

remote control has to be synchronised.



- To synchronise the remote control, make sure that it is within range of the receiver and press button **1** twice.
 - » LED **2** starts flashing and then goes out after a few seconds.
 - » The remote control is again ready for use.

Riding

Safety instructions	64
Checklist	65
Starting	66
Riding	67
Running in	67
Brakes	68
Maxi-Scooter Parking	69
Refuelling	70
Securing vehicle for transportation	72

Safety instructions

Rider's equipment

Do not ride without the correct clothing! Always wear:

- Helmet
- Motorcycling jacket and trousers
- Gloves
- Boots

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

Loading



Overloading and imbalanced loads can adversely affect the Maxi-Scooter's handling.

Do not exceed the permissible gross weight and be sure to

comply with the instructions on loading. ◀

- Adjust spring preload and tyre pressures to suit total weight.
- with luggage carrier^{OA}
- Note the maximum permissible payload of the luggage carrier.



Payload of luggage carrier

max 9 kg◀

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



Payload of topcase

max 5 kg



Maximum permissible speed for riding with topcase fitted to the motorcycle

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 the spring-strut and shock-absorber system
- Imbalanced load
- Loose clothing
- Insufficient tyre pressure
- Poor tyre tread
- Etc.

Risk of poisoning

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

 Inhaling the 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 an enclosed space.◀

Risk of burn injury

 Engine and exhaust system become very hot when the vehicle is in use. There is a risk of burn injuries by contact with hot surfaces, particularly at the silencer.

When you park the Maxi-Scooter make sure that no-one 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 attempt to start or run the engine with a spark-plug cap disconnected.
- Stop the engine immediately if it misfires.
- Use only unleaded fuel.
- Comply with all specified maintenance intervals.

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

Risk 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. Ride away immediately after starting the engine.◀

Tampering

 Tampering with the Maxi-Scooter's settings (e.g. electronic engine management unit, throttle valves, clutch) can cause damages to the components in question and lead to failure of safety-relevant functions. Damage caused in this way is not covered by the warranty. Do not tamper with the vehicle in any way that could result in tuned performance.◀

Checklist

Use the following checklist to check important functions, settings and wear limits before you ride off.

- Brakes
- Brake fluid levels for front-wheel and rear-wheel brakes

- Spring preload
- Tyre-tread depth and tyre pressures
- Security of the luggage

At regular intervals:

- Engine oil level (every refuelling stop)
- Brake-pad wear (every third refuelling stop)

Starting

Starting engine

- Switch on the ignition.
 - » Pre-ride check is performed. (➡ 66)
 - » ABS self-diagnosis is performed. (➡ 67)
- Operate the brake.



- Press starter button **1**.

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

- » The engine starts.
- » Consult the troubleshooting chart below if the engine refuses to start. (➡ 120)

Pre-ride check

The instrument panel runs a test of the instruments and the telltale and warning lights when the ignition is switched on: this is the

"Pre-Ride-Check". The test is aborted if you start the engine before it completes.

Phase 1

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

Phase 2

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

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



Some malfunctions cannot be indicated if one of the warning lights fails to show. Make sure that all the warning and telltale lights come on in the pre-ride check.◀

- Have the fault rectified as quickly as possible by a

specialist workshop, preferably an authorised BMW Motorrad dealer.

ABS self-diagnosis

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

Phase 1

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



ABS warning light flashes.

Phase 2

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



ABS warning light flashes.

ABS self-diagnosis completed

- » The ABS warning light goes out.

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

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

Riding

At engine speeds below pullaway rpm (approx. 2000 rpm) the centrifugal clutch remains disengaged, the Maxi-Scooter is in neutral. When engine speed

increases past pullaway rpm the clutch engages and the Maxi-Scooter moves off.

At speeds from approx. 50 km/h to approx. 110 km/h the engine is running at constant speed and operating in its maximum torque band. Road speed is varied by the change in transmission ratio in the continuously variable transmission. Consequently, engine noise changes only slightly within this speed range.

Engine speed does not increase unless the vehicle is brought up a speed higher than approx. 110 km/h.

Running in Engine

- Until the first running-in check, vary the engine load range frequently as you ride.
- Try to do most of your riding during this initial period on

twisting, fairly hilly roads, avoiding high-speed main roads and highways if possible.

- Do not omit the first running-in check after 500 - 1200 km.

Brake pads

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



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

Apply the brakes in good time.◀

Tyres

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

cedure is essential if the tyres are to achieve maximum grip.



New tyres do not provide full grip straight away. Wet roads and extremely sharp inclines pose a risk of accident. Ride carefully and avoid extremely sharp inclines.◀

Brakes

How can stopping distance be minimised?

Load distribution shifts dynamically between the front and rear wheels when the vehicle brakes. The sharper the vehicle decelerates, the more load is shifted to the front wheel. The higher the wheel load, the more braking force can be transmitted without the wheel locking.

To optimise stopping distance, apply the front brakes rapidly and keep on increasing the force you apply to the brake lever.

This makes the best possible use of the dynamic increase in load at the front wheel. In the "panic braking situations" that are trained so frequently, braking force is applied as rapidly as possible and with the rider's full force applied to the brake levers; under these circumstances, the dynamic shift in load distribution cannot keep pace with the increase in deceleration and the tyres cannot transmit the full braking force to the surface of the road. Under these circumstances the front wheel can lock up.

BMW Motorrad ABS prevents the front wheel from locking up.

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 and dirty brakes

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

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

- Riding in the rain or through puddles of water.
- After the vehicle has been washed.

- Riding on salted or gritted roads.
- After work has been carried on the brakes, due to traces of oil or grease.
- Riding on dirt-covered surfaces or off-road.



Wetness and dirt result in poor braking efficiency.

Apply the brakes lightly while riding to remove wetness and dirt, or dismount and clean the brakes.

Think ahead and brake in good time until full braking efficiency is restored. ◀

Maxi-Scooter Parking

Side stand

- Switch off the 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 the side stand and prop the Maxi-Scooter on the stand.
 - » The parking brake prevents the vehicle from rolling away.



The side stand is designed to support only the weight of the vehicle.

Do not lean or sit on the vehicle with the side stand extended. ◀

- If the camber of the roadway permits, turn the handlebars all the way to the left.

Centre stand

- Switch off the 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 cause the centre stand to retract, and the vehicle would topple in consequence. Do not lean or sit on the vehicle with the centre stand extended.◀

- Extend the centre stand and lift the Maxi-Scooter on to the stand.

Refuelling

! Fuel is highly flammable. A naked flame close to the fuel tank can cause a fire or explosion.

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

! Fuel attacks plastics, which become dull or unsightly. Wipe plastic parts immediately after contact with fuel.◀

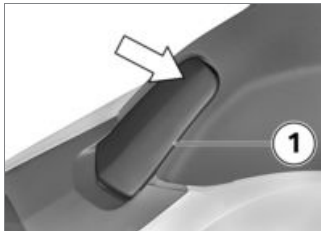
- Make sure the ground is level and firm and place the Maxi-Scooter on its centre stand.



- Push the ignition key down and turn it counter-clockwise.



- Open fuel filler cap **2**.



- If it is hard to open, push fuel-tank cover **1** to the rear then flick it forward to open.



! Fuel expands when hot. Fuel escaping from an overfilled tank could make its way onto the road surface. This could cause a fall.

Do not overfill the fuel tank.◀



Leaded fuel will destroy the catalytic converter.

Do not attempt to run the vehicle on leaded fuel or fuel with metallic additives, e.g. manganese or iron.◀

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



If filling occurs after the fuel level has gone below the reserve limit, the amount filled must be greater than the reserve amount for the new fuel level to be recognised and the warning light to switch off.◀



Recommended fuel grade

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



Usable fuel capacity

approx. 16 l



Fuel reserve

approx. 3 l



- Close fuel filler cap **2**.



- Push fuel-tank cover **1** until it latches shut.

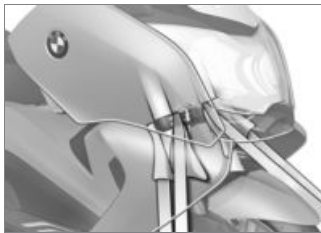
Securing vehicle for transportation

- Make sure that all components that might come into contact with straps used to secure the vehicle are adequately protected against scratching. Use adhesive tape or soft cloths, for example, for this purpose.



-  The Maxi-Scooter can topple and fall on its side. Secure Maxi-Scooter against toppling; this is best done with the support of a 2nd person.◀

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



-  Risk of damaging components. Take care not to trap components such as brake lines or wires.◀

- At the front, loop a strap over the bottom fork bridge on each side and tighten.



- At the rear right, loop the strap round the mount of the silencer and tighten.



- At the rear left, loop the strap round the spring strut mount and tighten.

- Tighten all the straps uniformly; the motorcycle's suspension should be compressed as tightly as possible front and rear.

Engineering details

Brake system with BMW Motorrad

ABS 76

Tyre pressure monitoring RDC 78

Brake system with BMW Motorrad ABS

How does ABS work?

The amount of braking force that can be transferred to the road depends on factors that include the coefficient of friction of the road surface. Loose stones, ice and snow or a wet road all have much lower coefficients of friction than a clean, dry asphalt surface. The lower the coefficient of friction, the longer the braking distance.

If the rider increases braking pressure to the extent that braking force exceeds the maximum transferable limit, the wheels start to lock and the vehicle loses its directional stability; a fall is imminent. Before this situation can occur, ABS intervenes and adapts braking pressure to the maximum transferable braking force, so the wheels continue

to turn and directional stability is maintained irrespective of the condition of the road surface.

What are the effects of surface irregularities?

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

As soon as it registers the actual circumstances, the system reacts instantly and adjusts braking force accordingly to achieve optimum braking.

Rear wheel lift

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



Severe braking can cause the rear wheel to lift off the ground.

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

What is the design baseline for BMW Motorrad ABS?

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

Special situations

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

riding conditions can lead to a fault message being issued.

Exceptional riding conditions:

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

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

What significance devolves on regular maintenance?



Invariably, a technical system cannot perform beyond the abilities dictated by its level of maintenance.

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

Reserves for safety

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

Take care when cornering! When you apply the brakes on a corner, the vehicle's weight and mo-

mentum take over and even BMW Motorrad ABS is unable to counteract their effects.

Tyre pressure monitoring RDC

– with tyre pressure monitoring (RDC)^{OE}

Function

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

proximately 15 minutes after the vehicle comes to a stop.

Temperature compensation

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

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

the pressures shown by the multifunction display.

Pressure adaptation

Compare the RDC readings on the multifunction display with the value in the table on the back cover of the Rider's Manual. Then use the air line at a service station to compensate for the difference between the RDC reading and the value in the table.

Example: According to the Rider's Manual, tyre pressure should be 2.5 bar, but the reading in the multifunction display is 2.3 bar, so pressure is low by 0.2 bar.

The gauge on the air line shows 2.4 bar. You must now increase tyre pressure by the 0.2 bar difference between the value in the table and the RDC reading; when the air-line gauge shows 2.6 bar,

the tyre is inflated to the correct pressure.

Accessories

General instructions.....	82
Power sockets	82
Topcase	82
Scooter lock	85

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 vehicles without constituting a safety hazard. Country-specific official authorisation does not suffice as assurance. Tests conducted by these instances cannot make provision for all operating conditions experienced by BMW vehicles and, consequently, they are not sufficient in some circumstances.

Use only parts and accessories approved by BMW for your vehicle.◀

BMW has conducted extensive testing of the parts and accessory products to establish that they are safe, functional and suitable. Consequently, BMW accepts product liability. BMW

accepts no liability whatsoever for parts and accessories that it has not approved.

Whenever you are planning modifications, comply with all the legal requirements. Make sure that the vehicle does not infringe the national road-vehicle construction and use regulations applicable in your country. Your BMW Motorrad dealer can offer expert advice on the choice of genuine BMW parts, accessories and other products.

You can examine all the optional accessories from BMW Motorrad by visiting our website:

"www.bmw-motorrad.com".

Power sockets

Notes on use of power sockets:

Operating electrical accessories

Battery capacity is not monitored while one or more sockets are

in use. Running add-on devices for a lengthy period without the engine running can completely drain the battery. Under these circumstances there is no guarantee that the Maxi-Scooter will start.

Cable routing

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

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

Topcase

- with topcase^{OA}

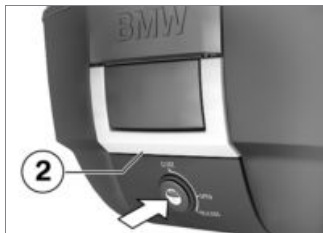
Opening topcase



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



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



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

Closing topcase

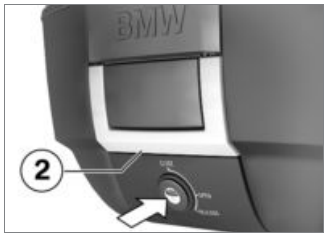


- Make sure that topcase handle **2** is extended.
- Close the topcase lid and push it down until it latches shut. Check that nothing is trapped between the lid and the case.
- Close topcase handle **2**.
- If applicable, turn the key in the topcase lock to the CLOSE position and remove the key from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

Removing topcase



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



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



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

Installing topcase



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

Scooter lock

– with Scooter lock^{OA}

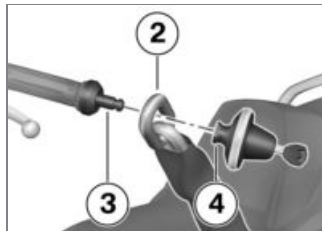
Securing vehicle



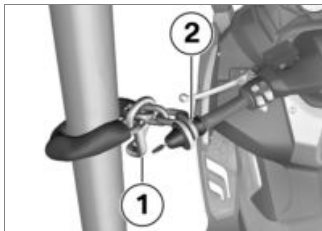
- From below, work the rear endpiece **1** of the Scooter lock into the rear connector.
- Then turn the endpiece forward.



- Turn the handlebars to the left and bring the end of the Scooter lock up to the end of the handlebar.



- Slip first chain link **2** on to handlebar connector **3** and slip locking piece **4** into position.
- Lock the Scooter lock and remove the key.



Alternatively, the Maxi-Scooter can be secured to a fixed object such as a post.

- Pass the Scooter lock round the post and slip the chain through endpiece **1**. Then secure first chain link **2** to the handlebar as described above.

Maintenance

General instructions.....	88
Standard toolkit	88
Engine oil	88
Brake system	91
Coolant	95
Rims and tyres.....	97
Wheels	97
BMW Motorrad front-wheel stand	104
Fuses.....	105
Lighting.....	106
Jump-starting.....	110
Battery.....	110
Body panels	112

General instructions

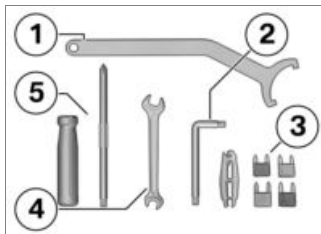
The Maintenance chapter describes straightforward procedures for checking and replacing certain wear parts.

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

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

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

Standard toolkit



- 1** Hook wrench
 - Adjusting spring preload for rear wheel (➡ 48).
- 2** Torx wrench, T30
 - Checking engine oil level (➡ 88).
 - Topping up coolant (➡ 96).
- 3** Spare fuses with puller tool Minifuses, 4 A, 7.5 A, 10 A and 15 A
 - Replace the fuses.

- 4** Open-ended spanner
Width across flats 8/10
 - Removing battery (➡ 112).
- 5** Reversible screwdriver blade
With Phillips PH1 and Torx T25
 - Remove the body panels.
 - Removing battery (➡ 112).

Engine oil

Checking engine oil level

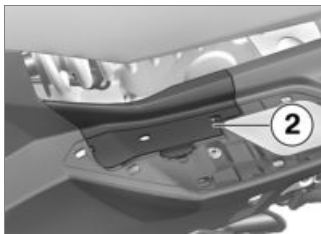
 Oil can collect in the sump if the Maxi-Scooter is out of use for an extended period of time; this oil has to be pumped into the oil tank before the level is read. The engine oil must be at operating temperature to do this. Checking the oil level with the engine cold or after no more than a short ride will lead to mis-

interpretation; this in turn, means that the engine will be operated with the incorrect quantity of oil. In order to ensure that the engine oil level is read correctly, check the oil level only after a lengthy trip.◀

- With the Maxi-Scooter at operating temperature place it on its centre stand, making sure that the ground is level and firm.
- Allow the engine to idle for one minute.
- Switch off the ignition.



- Remove footrest plate **1**.



- Lift cover **2** up to remove.
- Wipe the area around the oil filler neck clean.

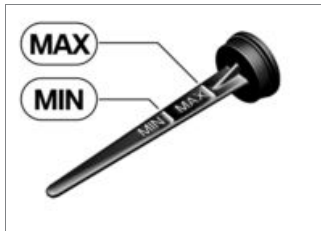


- Remove oil dipstick **1**.



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

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



Engine oil, specified level

Between MIN and MAX marks
(Engine at regular operating temperature)

If the oil level is below the MIN mark:

- Top up the engine oil to the specified level.

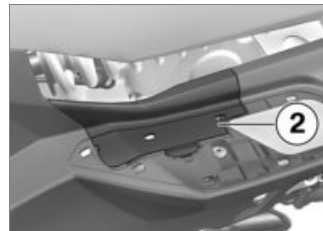


Engine oil, quantity for topping up

max 0.5 l (Difference between MIN and MAX)

If the oil level is above the MAX mark:

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



- Install cover **2**.



- Insert footrest plate **1**.

Brake system

Checking operation of the brakes

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

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

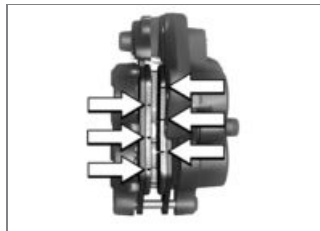
- Have the brakes checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Checking front brake pad thickness

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



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



 Brake-pad wear limit, front

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

If the wear indicating marks are no longer clearly visible:

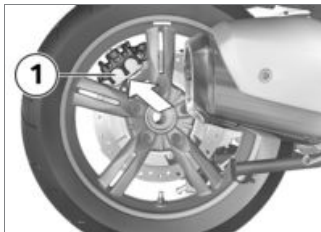
 Brake pads worn past the minimum permissible thickness can cause a reduction in braking efficiency and under certain circumstances they can cause damage to the brake system.

In order to ensure the dependability of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.◀

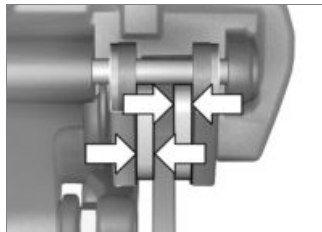
- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Check the rear brake pad thickness

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



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



Brake-pad wear limit,
rear

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

If the wear indicating marks are no longer visible:



Brake pads worn past the minimum permissible thickness can cause a reduction in braking efficiency and under certain circumstances they can cause damage to the brake system.

In order to ensure the dependab-

ility of the brake system, do not permit the brake pads to wear past the minimum permissible thickness.◀

- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad dealer.

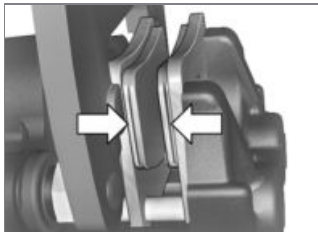
Checking brake-pad thickness, parking brake

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



- Visually inspect the brake pads to ascertain their thickness.

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



Brake-pad wear limit of parking brake

min 1.0 mm (The wear indicators (grooves) must be clearly visible.)

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



If the brake pads are permitted to wear past the minimum permissible thickness braking performance is reduced

and there is the possibility of the Maxi-Scooter moving even with the side stand extended.

In order to avoid the risk of the Maxi-Scooter toppling off its stand, do not permit the brake pads to wear past the specified minimum thickness.◀

- Have the brake pads replaced by a specialist workshop, preferably an authorised BMW Motorrad dealer.

Checking brake-fluid level, front brakes



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

Check the brake-fluid level at regular intervals.◀

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



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

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



Brake fluid level, front

Brake fluid, DOT4

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

If the brake fluid level drops below the permitted level:

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

Checking brake-fluid level, rear brakes



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

Check the brake-fluid level at regular intervals.◀

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



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

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



Brake fluid level, rear

Brake fluid, DOT4

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

If the brake fluid level drops below the permitted level:

- Have the defect rectified as quickly as possible by a spe-

cialist workshop, preferably an authorised BMW Motorrad dealer.

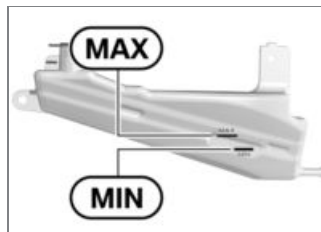
Coolant

Checking coolant level

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



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



Specified coolant level in expansion tank

Between MIN and MAX marks (engine cold)

If the coolant drops below the permitted level:

- Top up the coolant.

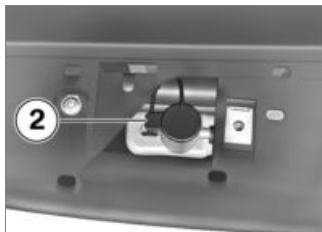
Topping up coolant



- Remove footrest plate **1**.



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



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



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



- Install footrest plate **1**.

Rims and tyres

Check the rims

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

Checking tyre tread depth



Your Maxi-Scooter's handling and grip can be impaired even before the tyres wear to the minimum tyre tread depth permitted by law.

Have the tyres changed in good time before they wear to the minimum permissible tread depth. ◀

- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Measure the tyre tread depth in the main tread grooves with wear marks.

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

If the tyre tread is worn to minimum:

- Replace tyre or tyres, as applicable.

Wheels

Tyre recommendation

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

BMW Motorrad recommends using only tyres tested by BMW Motorrad.

You can obtain detailed information from your authorised BMW Motorrad dealer or on the Internet at www.bmw-motorrad.com.

Effect of wheel size on ABS

Wheel size is very important as a parameter for the ABS. In particular, the diameter and the width of a vehicle's wheels are programmed into the control unit

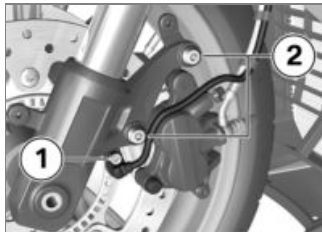
and are fundamental to all calculations. Any change in these influencing variables, caused for example by a switch to wheels other than those installed ex-works, can have serious effects on the performance of the system.

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

Removing front wheel



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



- Remove screw **1** and remove the ABS sensor from its bore.

- Mask off the parts of the wheel rim that could be scratched in the process of removing the 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 disc on reassembly.

Do not operate the handbrake lever when the brake calipers have been removed.◀

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



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

- Install the front-wheel stand (→ 104).



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

Install the front wheel

- ⚠ Malfunctions are possible when the ABS system intervenes if non-standard wheels are installed. See the information on the effect

of wheel size on the ABS system at the start of this chapter.◀

- ⚠ Threaded fasteners not tightened to the specified torque can work loose or their threads can suffer damage. Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

- ⚠ The front wheel must be installed right way round to rotate in the correct direction. Note the direction-of-rotation arrows on the tyre or the wheel rim.◀
- Roll the front wheel into position between the front forks.



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



Quick-release axle in axle holder

30 Nm

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



Clamping screws (quick-release axle) in telescopic forks

Tightening sequence: Tighten screws six times in alternate sequence

8 Nm

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



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



Brake caliper to fork leg

28 Nm



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

- Insert the ABS sensor into its bore and install screw **1**.

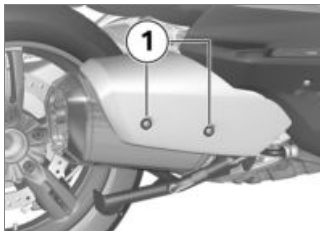
- Remove the adhesive tape from the wheel rim.
- Firmly pull the handbrake lever until the pressure point is perceptible, and repeat this operation several times.



- Hold the front-wheel cover in position and install screws **1** and **2** on left and right.

Remove the rear wheel

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



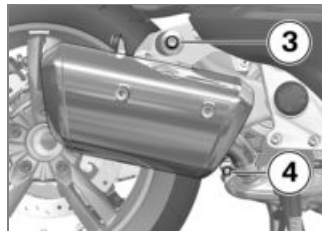
Risk of burns caused by the hot exhaust system.

Do not touch the exhaust system when it is hot; if necessary, allow the exhaust system ample time to cool before proceeding. ◀

- Remove screws **1**.



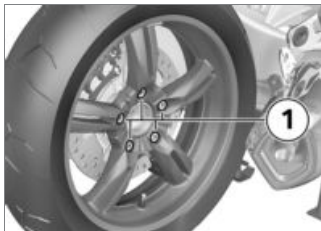
- Remove screw **2** and remove the cover.



- Remove screw **3**, counter-holding the nut on the back.
- Slacken screw **4**.



- Turn the end silencer out.
- Apply the rear brake or extend the side stand to activate the parking brake.



- Remove five screws **1** from the rear wheel, while supporting the wheel.
- Lower the rear wheel to the ground and roll it out to the rear.

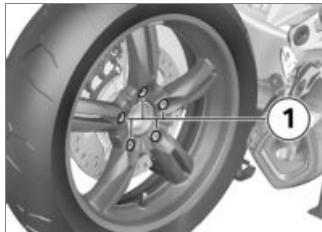
Install the rear wheel

 Malfunctions are possible when the ABS system intervenes if non-standard wheels are installed.

See the information on the effect of wheel size on the ABS system at the start of this chapter.◀

 Threaded fasteners not tightened to the specified torque can work loose or their threads can suffer damage. Always have the security of the fasteners checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

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



- Install five screws **1** and tighten to the specified torque in diagonally opposite sequence.



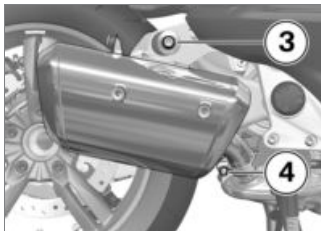
Rear wheel to output shaft

Tightening sequence: Tighten in diagonally opposite sequence

60 Nm



- Turn the end silencer to the initial position and align in such a way that the screwdriver handle from the on-board tool-kit fits between rear wheel and silencer.



- Install screw **3** and tighten to the specified torque while counter-holding the nut at the back.



Silencer to bracket

20 Nm

- Tighten screw **4** to the specified tightening torque.

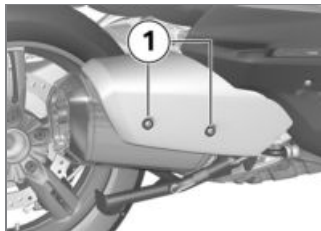


End silencer to front silencer

19 Nm



- Place the cover in position and install screw **2**.

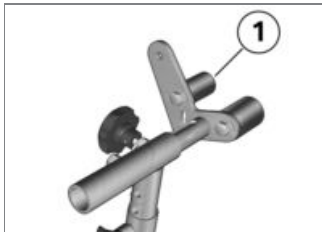


- Install screws **1**.

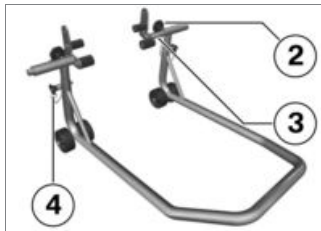
BMW Motorrad front-wheel stand

Install the front-wheel stand

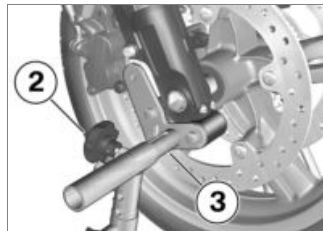
- Make sure the ground is level and firm and place the Maxi-Scooter on its centre stand.
- Use basic stand with tool number (83 30 0 402 241) in combination with front-wheel adapter (83 30 0 402 242).



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



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



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



! If the Maxi-Scooter is raised too far the centre stand will lift clear of the ground and the Maxi-Scooter could topple to one side.

When raising the vehicle, make sure that the centre stand remains on the ground. If necessary, adjust the height of the front-wheel stand. ◀

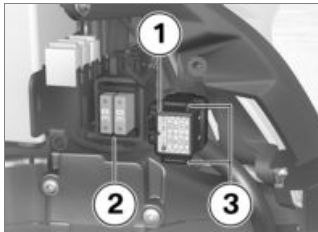
- Apply uniform pressure to push the front-wheel stand down and raise the Maxi-Scooter.
- Make sure the Maxi-Scooter is standing firmly.

Fuses

Removing fuse

! Any attempt to jumper a defective fuse gives rise to the risk of a short-circuit and fire. Always replace a defective fuse with a new fuse of the same amperage. ◀

- Switch off the ignition.
- Remove the right side panel.



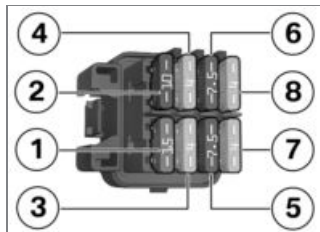
- Using the tool from the on-board toolkit, remove the defective fuse from fuse box **1** or

from fuse carrier **2**, as applicable.

- To open the fuse box, squeeze latches **3** together and remove the fuse cover.

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

Installing fuse



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

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

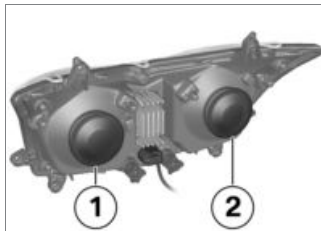
- Close the fuse cover.
- » The latch engages with an audible click.
- Installing side panel (▶ 113).

Lighting

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

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

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



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



- Disconnect plug 3.



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

- Replace the defective bulb.



Bulbs for the low-beam headlight

H7 / 12 V / 55 W



Bulb for high-beam headlight

H7 / 12 V / 55 W

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

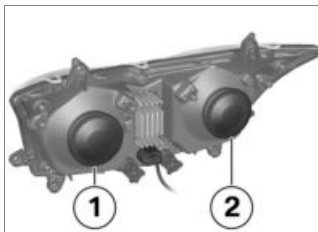


- Insert bulb **5**, making sure that tab **6** is correctly positioned.

- Engage spring retainer **4** in the catches.



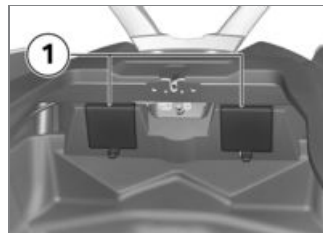
- Close plug **3**.



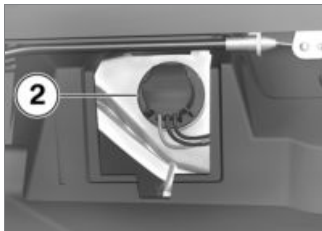
- Install cover **1** or cover **2**, as applicable.
- Installing side panel (→ 113).

Replacing bulb for brake light

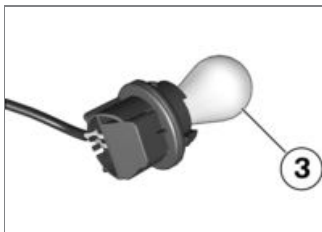
- Open the seat.



- Pull the retainer at the bottom edge of cover **1** up and remove the cover.



- Turn socket **2** counter-clockwise and remove it from the tail-light housing.



- Turn bulb for brake light **3** counter-clockwise and remove it from the socket.

- Replace the defective bulb.



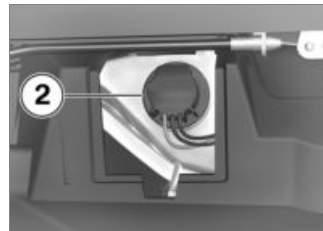
Bulbs for flashing turn indicators, front

LED

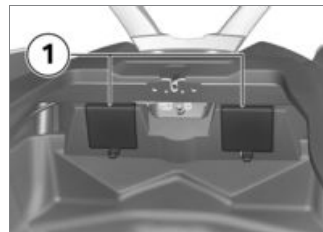
- Use a clean, dry cloth to hold the new bulb in order to keep the glass free of foreign matter.



- Turn bulb **3** clockwise to secure it in the socket.



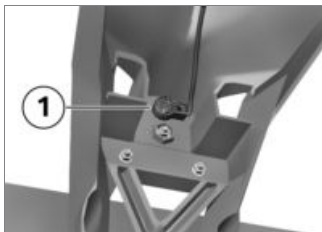
- Turn socket **2** clockwise to install it in the light housing.



- Close cover **1**.

Replacing number-plate light

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



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



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



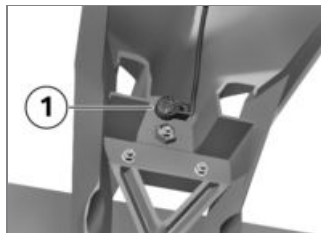
Bulb for number-plate light

W5W / 12 V / 5 W

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



- Insert the bulb into the socket.



- Insert socket **1** into the light housing.

Jump-starting



The wires leading to the charging socket do not have a load-capacity rating adequate for jump-starting the engine of the Maxi-Scooter. Excessively high current can lead to a cable fire or damage to the vehicle electronics.

Do not use the charging 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 vehicle electronics.

Make sure that the battery of the

donor vehicle has a voltage rating of 12 V. ◀

- Make sure the ground is level and firm and place the Maxi-Scooter on its stand.
- Remove the right side panel.
- Begin by connecting one end of the red jump lead to the vehicle's battery positive terminal and the other end to the positive terminal of the donor vehicle's battery.
- Connect one end of the black jump lead to the vehicle's battery negative terminal and the other end to a suitable grounding point on or the negative terminal of the donor vehicle's battery.
- Run the engine of the donor vehicle during jump-starting.
- Start the engine of the vehicle with the discharged battery in the usual way; if the engine does not start, wait a few minutes before repeating the

attempt in order to protect the starter motor and the donor battery.

- Allow both engines to idle for a few minutes before disconnecting the jump leads.
- Disconnect the jump lead from the negative terminal and the ground point first, then disconnect the second jump lead from the positive terminal and the battery connection point.



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

- Installing side panel (➡ 113).

Battery

Maintenance instructions

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

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

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

 If the battery is not disconnected, the on-board electronics (e.g. clock, etc.) gradually drain the battery. This can cause the battery to run flat. If this happens, warranty claims will not be accepted.

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

Charging battery when connected

 Charging the connected battery directly at the battery terminals can damage the vehicle electronics.

Always disconnect the battery from the on-board circuits before recharging it with a charger connected directly to the battery posts.◀

 If you switch on the ignition and the multifunction display and indicator lights fail to light up, the battery is completely flat (battery voltage is less than 9 V). Attempting to charge a completely flat battery via the extra socket can cause damage to the motorcycle's electronics. If a battery has discharged to the extent that it is completely flat, it has to be disconnected from the on-board circuits and charged

with the charger connected directly to the battery posts.◀

- With the battery connected to the vehicle's on-board electrical system, charge only via the extra socket. The extra socket is available as an optional accessory only.
- Comply with the operating instructions of the charger.

Charging battery when disconnected

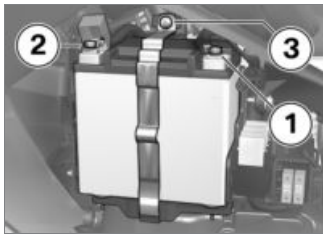
- Charge the battery using a suitable charger.
- Comply with the operating instructions of the charger.
- Once the battery is fully charged, disconnect the charger's terminal clips from the battery terminals.

 The battery has to be recharged at regular intervals in the course of a lengthy period of disuse. See the instructions

for caring for your battery. Always fully recharge the battery before restoring it to use.◀

Removing battery

- Switch off the ignition.
 - with anti-theft alarm (DWA)^{OE}
- If applicable, switch off the anti-theft alarm.◀
- Remove the right side panel.



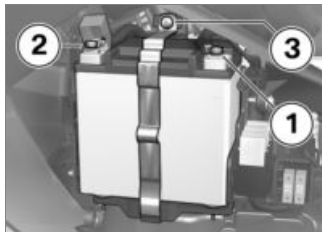
Disconnection in the wrong sequence increases the risk of short-circuits.

Always proceed in the correct sequence.◀

- Disconnect negative lead **1** first.
- Then disconnect positive lead **2**.
- Remove screw **3** and remove the retainer.
- Remove the battery from the holder.

Installing battery

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



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



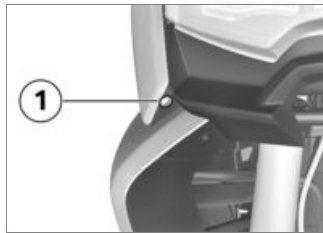
Installation in the wrong sequence increases the risk of short-circuits.

Always proceed in the correct sequence.◀

- Connect positive lead **2** first.
- Then connect negative lead **1**.
- Installing side panel (➡ 113).
- Setting date and time (➡ 39).

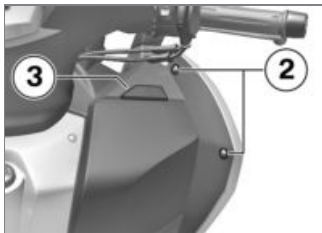
Body panels

Removing side panel



- Remove screw **1**.

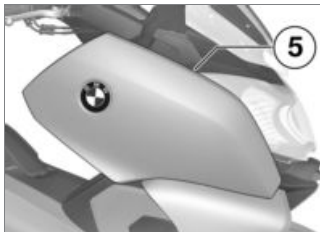
▶ The procedure for the right side panel is described here, but the description applies by analogy to the left side panel.◀



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



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



- Ease the side panel out of its holder at position **5** at the top edge.

- Then slightly raise the side panel and remove.

Installing side panel



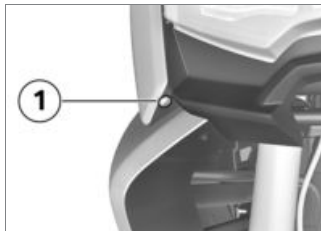
- Seat the side panel in mounts **6**.

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

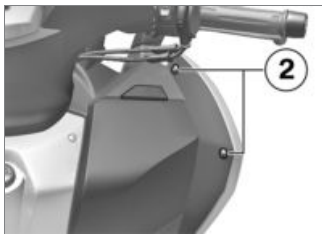
- Tilt the side panel up and push it into holder **5**.



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



- Install screw **1**.



- Install screws **2**.

Care

Care products	116
Washing the vehicle	116
Cleaning easily damaged components.....	116
Paint care	117
Maxi-Scooter Laying up.....	118
Protective wax coating	118
Restore the Maxi-Scooter to use	118

Care products

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

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

 The use of unsuitable cleaning and care products can damage vehicle components. Do not use solvents such as cellulose thinners, cold cleaners, fuel or the like, and do not use cleaning products that contain alcohol.◀

Washing the vehicle

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

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

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

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

 After the Scooter has been washed, ridden through water or ridden in the rain, the brake discs and pads might be wet and the brakes might not take effect immediately.

Apply the brakes in good time

until the brake discs and brake pads have dried out.◀

 Warm water intensifies the effect of salt.

Use only cold water to wash off road salt.◀

 The high pressure of high-pressure cleaners (steam cleaners) can damage seals, the hydraulic brake system, the electrical system, and the seat. Do not use a steam jet or high-pressure cleaning equipment.◀

Cleaning easily damaged components

Plastics

 The use of unsuitable products to clean plastic parts can damage the surface. Do not use cleaning agents that contain alcohol, solvents or abrasives to clean plastic parts.

Even insect-remover pads or cleaning pads with hard surfaces can produce scratches.◀

Body panels

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

Windscreens and lens made of plastic

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

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

Chrome

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

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.

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

Rubber

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



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

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

Paint care

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

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

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

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

Maxi-Scooter Laying up

- Fully refuel the Maxi-Scooter.
- Clean the Maxi-Scooter.
- Removing battery (▮▮▮ 112).
- Spray the brake-lever, side-stand and centre-stand pivot mounts with a suitable lubricant.
- Coat bright metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).
- Stand the vehicle in a dry room in such a way that there is no load on either wheel.

Protective wax coating

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

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

Restore the Maxi-Scooter to use

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

Technical data

Troubleshooting chart	120
Threaded fasteners	121
Engine	123
Fuel.....	124
Engine oil	125
Clutch	125
Transmission	126
Rear-wheel drive.....	126
Running gear	127
Brakes	127
Wheels and tyres	128
Electrics	129
Frame	132
Dimensions	132
Weights.....	133

Riding specifications	133
Anti-theft alarm	133
Remote control	134

Troubleshooting chart

Engine does not start or is difficult to start.

Possible cause	Rectification
Side stand extended	Retract the side stand.
Starting without brake application	Operate a brake lever when starting.
No fuel in tank	Refuelling ( 70).
Battery flat	Recharge the battery.

Threaded fasteners

Front wheel	Value	Valid
Quick-release axle in axle holder		
M18 x 1,5	30 Nm	
Clamping screws (quick-release axle) in telescopic forks		
M6 x 30	Tighten screws six times in alternate sequence	
	8 Nm	
Brake caliper to fork leg		
M8 x 32	28 Nm	
Rear wheel	Value	Valid
Rear wheel to output shaft		
M10 x 1.25 x 40	Tighten in diagonally opposite sequence	
	60 Nm	
Silencer to bracket		
M8 x 30	20 Nm	

Rear wheel		Value	Valid
End silencer to front silencer			
M8 x 30		19 Nm	
Seat		Value	Valid
Pelvic support to seat			
Middle screw, M6 x 30		2 Nm	
Outer screws, M6 x 40		2 Nm	

Engine

Location of engine number	Crankcase, left, below alternator
Engine type	652EA
Engine design	Two-cylinder four-stroke DOHC engine, 4 valves actuated by bucket tappets, two balancing shafts, liquid cooling, dry-sump lubrication
Displacement	647 cm ³
Cylinder bore	79 mm
Piston stroke	66 mm
Compression ratio	11.6:1
Nominal output	44 kW, - at engine speed: 7500 min ⁻¹
Torque	66 Nm, - at engine speed: 6000 min ⁻¹
Maximum engine speed	max 8500 min ⁻¹

Fuel

Recommended fuel grade	Super unleaded (max. 10 % ethanol, E10) 95 ROZ/RON 89 AKI
Usable fuel capacity	approx. 16 l
Fuel consumption	approx. 4.2 l/100 km
Fuel reserve	approx. 3 l
Exhaust emissions standard	EU 3

BMW recommends BP fuels



Engine oil

Engine oil, capacity	approx. 3.1 l, with filter change
Viscosity class	
Specification	SAE 15W-50, API SJ / JASO MA2, Additives (e.g. molybdenum-based) are not permissible because they can attack coated components of the engine, BMW Motorrad recommends BMW Motorrad High Performance oil SAE 15W-50, API SJ / JASO MA2

BMW recommends 

Clutch

Clutch type	Centrifugal clutch
-------------	--------------------

Transmission

Gearbox type	CVT (Continuously Variable Transmission)
Primary transmission ratio	1:1.06
Transmission ratio, secondary transmission	1:2.72
Transmission ratio, CVT	1:10.7...4.6

Rear-wheel drive

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

Running gear

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

Brakes

Type of front brake	Hydraulically actuated twin-disc brake with 2-piston floating calipers
Brake-pad material, front	Sintered metal
Brake disc thickness, front	min 4.5 mm, wear limit
Play of brake controls (Front brake)	approx. 11.5 mm, at end of lever
Type of rear brake	Hydraulically actuated disc brake with 2-piston floating caliper, brake for riding Bowden-cable-actuated disc brake with 1-piston floating caliper, parking brake
Brake-pad material, rear	Organic material
Brake disc thickness, rear	min 4.5 mm, wear limit

Play of brake controls (Rear brake)	approx. 11 mm, at end of lever
-------------------------------------	--------------------------------

Wheels and tyres

Recommended tyre sets	You can obtain an up-to-date list of approved tyres from your authorised BMW Motorrad dealer or on the Internet at " www.bmw-motorrad.com ".
-----------------------	--

Front wheel

Front wheel type	Cast aluminium, MT H2
Front wheel rim size	3.50" x 15"
Tyre designation, front	120/70 R15
Wheel load, front, at unladen weight	129 kg
Permissible wheel load, front	max 170 kg
Permissible front-wheel imbalance	max 5 g

Rear wheel

Rear-wheel type	Cast aluminium, MT H2
Rear wheel rim size	4.50" x 15"
Tyre designation, rear	160/60 R 15
Wheel load, rear, at unladen weight	132 kg
Permissible wheel load, rear	max 275 kg

Tyre pressure

Tyre pressure, front	2.4 bar, tyre cold
Tyre pressure, rear	2.5 bar, one-up, tyre cold 2.9 bar, two-up and/or with luggage, tyre cold

Electrics**Battery**

Battery type	AGM (Absorbent Glass Mat) battery
Battery rated voltage	12 V
Battery rated capacity	10 Ah

Spark plugs

Electrode gap of spark plug	0.8 $\pm$ 0.1 mm
-----------------------------	------------------

Lighting

Bulbs for the low-beam headlight	H7 / 12 V / 55 W
Bulb for high-beam headlight	H7 / 12 V / 55 W
Bulb for parking light	LED
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	LED
Bulb for tail light/brake light	LED / PR-21W / 12 V / 21 W
Bulb for number-plate light	W5W / 12 V / 5 W

Fuses

Fuse holder	30 A, Fuse 9: Control unit, instrument panel / ignition switch 30 A, Fuse 10: Control unit, anti-lock brake system (ABS)
Fuse box	15 A, Fuse 1: DME main relay 10 A, Fuse 2: Control unit, digital engine electronics (DME) 4 A, Fuse 3: Control unit, anti-theft alarm (DWA) / tyre pressure monitoring (RDC) 5 A, Fuse 4: Brake light switches, front brake / rear brake / plug for optional accessories / socket in front stowage compartment 7.5 A, Fuse 5: Fan 5 A, Fuse 6: Socket in rear stowage compartment 4 A, Fuse 7: Number-plate light 4 A, Fuse 8: Control unit, digital engine electronics (DME) / anti-lock brake system (ABS) / instrument panel

Frame

Frame type	Bridge-type steel frame with cast light-alloy bolt-on side parts
Position of the Vehicle Identification Number	Frame tube, front right
Type plate location	Steering head, front right

Dimensions

Length of motorcycle	2218 mm
Height of motorcycle	1250 mm, to top edge of mirror
Width of motorcycle	825 mm, without mirrors
Front-seat height	805 mm, without rider
– with low seat ^{OE}	785 mm, without rider
Rider's inside-leg arc, heel to heel	1910 mm, without rider
– with low seat ^{OE}	1855 mm, without rider

Weights

Unladen weight	261 kg, DIN unladen weight, ready for road, 90 % load of fuel, without optional extras
Permissible gross weight	445 kg
Maximum payload	184 kg

Riding specifications

Starting capability on uphill gradients (at permissible gross weight)	20 %
Top speed	175 km/h

Anti-theft alarm

– with anti-theft alarm (DWA)^{OE}

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

Remote control

– with anti-theft alarm (DWA)^{OE}

Range of the remote control	10 m
Reception standby for signal from 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

BMW Motorrad Service	136
BMW Motorrad Mobility services	136
Maintenance work	136
Confirmation of maintenance work	138
Confirmation of service	143

BMW Motorrad Service

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

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



If maintenance and repair work is performed inexpertly, it could result in consequential damage and thus constitute a safety risk.

BMW Motorrad recommends you to have all the associated work on your Maxi-Scooter car-

ried out by a specialist workshop, preferably an authorised BMW Motorrad dealer.◀

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

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

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

BMW Motorrad Mobility services

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

Maintenance work

BMW Pre-delivery Check

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

BMW Running-in Check

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

BMW Service

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

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

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

Confirmation of maintenance work

BMW Pre-delivery Check

Completed

on _____

Stamp, signature

BMW Running-in Check

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

BMW Service

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature**BMW Service**

Completed

on _____

Odometer reading _____

Next service
at the latest

on _____

or, if logged beforehand,

Odometer reading _____

Stamp, signature

Confirmation of service

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

Item	Odometer reading	Date

[illegible]

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 expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

A

- Abbreviations and symbols, 6
- ABS
 - Engineering details, 76
 - Self-diagnosis, 67
 - Warnings, 30
- Accessories
 - General instructions, 82
- Actuality, 7
- Alarm
 - triggering, 56
- Alarm function
 - Deactivating, 57
 - Motion sensor, activating, 55
- Ambient temperature
 - Outside temperature warning, 32
 - Reading, 23
- Anti-theft alarm
 - Telltale light, 21
 - Warning, 36
- Average values
 - Resetting, 41

B

- Battery
 - change, 61
 - Charging battery when connected, 111
 - Charging battery when disconnected, 111
 - Installation, 112
 - Maintenance instructions, 110
 - Position on the motorcycle, 13
 - Removal, 112
 - Technical data, 129
 - Warning for battery charge current, 36
- Brake fluid
 - Checking fill level, front brake, 93
 - Checking fill level, rear brake, 94
 - Fluid reservoir, front brake, 13
 - Fluid reservoir, rear-wheel brake, 11

Brake pads

- Checking front, 91
- Checking parking brake, 93
- Checking rear, 92
- Running in, 68

Brakes

- Adjusting handlebar lever, 46
- Checking function, 91
- Checking operation, 91
- Safety instructions, 68
- Technical data, 127

C

- Checklist, 65
- Clock
 - adjusting, 39
- Clutch
 - Technical data, 125
- Confirmation of maintenance work, 138

Coolant

- Checking fill level, 95
- Filler neck, 13
- Fill-level indicator, 13
- Topping up, 96
- Warning for overtemperature, 29

D**Date**

- adjusting, 39

Deactivating

- Alarm, 57
- Motion sensor, 56

Default settings, 58**Dimensions**

- Technical data, 132

E**Electrics**

- Technical data, 129

Emergency off switch (kill switch), 15

- Operation, 44

Engine

- starting, 66
- Technical data, 123
- Warning for engine electronics, 30

Engine oil

- Checking fill level, 88
- Filler neck, 11
- Oil dipstick, 11
- Oil level, 24
- Technical data, 125
- Topping up, 88
- Warning for engine oil level, 30

Equipment, 7**F****Frame**

- Technical data, 132

Front-wheel stand

- Installing, 104

Fuel

- Filler neck, 11
- Refuelling, 70
- Reservoir release , 16
- Technical data, 124

Fuel reserve

- Distance covered, 23
- Warning, 29

Fuses

- Position on the motorcycle, 13
- Replacing, 105
- Technical data, 131

G**General views**

- Cockpit, 16
- Left multifunction switch, 14
- Left side of vehicle, 11
- Multifunction display, 20
- Right multifunction switch, 15
- Right side of motorcycle, 13
- Underneath the seat, 17
- Warning and telltale lights, 21

H**Hazard warning flashers**

- Control, 14
- Operation, 43

Headlight
 Beam throw, 49
 Driving on right/driving on left, 49

Heated handlebar grips
 Operation, 44

Horn, 14

I

Ignition
 Switching off, 38
 Switching on, 38

Immobiliser
 Warning, 29

Instrument panel
 Overview, 16

J

Jump starting, 110

K

Keys, 38

L

Lighting
 Replacing bulb for brake light, 107
 Replacing bulb for high-beam headlight, 106
 Replacing bulb for low-beam headlight, 106
 Replacing number-plate light, 109
 Technical data, 130
 Warning for defective bulb, 31

Lights

 Control, 14
 Headlight flasher, operating, 42
 High-beam headlight, operating, 42
 Low-beam headlight, 41
 Parking lights, operating, 42
 Side light, 41
 Using daytime riding lights, 42

Luggage

 Instructions for loading, 64

M

Maintenance
 General instructions, 88
 Maintenance intervals, 136

Maxi-Scooter
 Care, 115
 Cleaning, 115
 Lashing, 72
 Laying up, 118
 Parking, 69
 Restoring to use, 118

Mirrors
 adjusting, 47

Mobility services, 136

Motion sensor
 Deactivating, 56

Multifunction display
 Overview, 20
 Select display, 40

Multifunction switch
 General view, left side, 14
 General view, right side, 15

O

Odometer and tripmeters
 Resetting, 41

P

- Parking, 69
- Power socket
 - Notes on use, 82
 - Position on the motorcycle, 16
- Pre-Ride-Check, 66
- Programming, 58

R

- RDC
 - Engineering details, 78
- Rear-wheel drive
 - Technical data, 126
- Refuelling, 70
- Registration
 - Remote control, 60
- Remote control
 - registration, 60
 - synchronising, 61
- Rev. counter, 20
- Rider's Manual
 - Position on the vehicle, 17
- Running gear
 - Technical data, 127
- Running in, 67

S

- Safety instructions
 - For brake, 68
 - For riding, 64
- Seat
 - Adjusting pelvic support, 50
 - Operation, 49
 - Unlocking, 16
- Seat heating
 - Operation, 45
- Service, 136
- Service-due indicator, 22
- Spark plugs
 - Technical data, 129
- Speedometer, 16
- Spring preload
 - Adjuster, 11
 - adjusting, 48
- Starting, 66
 - Control, 15
- Steering lock
 - Locking, 38
- Stowage compartment
 - Operation, 47
 - Position on the motorcycle, 16

T

- Technical data
 - Battery, 129
 - Brakes, 127
 - Clutch, 125
 - Dimensions, 132
 - Electrics, 129
 - Engine, 123
 - Engine oil, 125
 - Frame, 132
 - Fuel, 124
 - Lighting, 130
 - Rear-wheel drive, 126
 - Running gear, 127
 - Spark plugs, 129
 - Standards, 7
 - Transmission, 126
 - Tyres, 128
 - Weights, 133
 - Wheels, 128
- Telltale lights
 - Overview, 21
- Toolkit
 - Contents, 88
 - Position on the vehicle, 17

- Topcase
 - Operation, 82
- Torques, 121
- Transmission
 - Technical data, 126
- Troubleshooting chart, 120
- Turn indicators
 - Control, 14
 - Operation, 43
- Type plate
 - Position on the motorcycle, 16
- Tyre pressure monitoring RDC
 - Reading, 23
- Tyres
 - Checking inflation pressure, 49
 - Checking tread depth, 97
 - Pressures, 129
 - Recommendations, 97
 - Running in, 68
 - Table of tyre pressures, 17
 - Technical data, 128

V

- Vehicle Identification Number
 - Position on the motorcycle, 13

W

- Warning lights
 - Overview, 21
- Warnings
 - ABS, 30
 - Anti-theft alarm, 36
 - Battery charge current, 36
 - Bulb faulty, 31
 - Coolant temperature, 29
 - Engine electronics, 30
 - Engine oil level, 30
 - Fuel reserve, 29
 - Immobiliser, 29
 - Mode of presentation, 24
 - Outside temperature warning, 32
- Warnings, overview, 26
- Weights
 - Payload table, 17
 - Technical data, 133
- Wheels
 - Change of size, 97
 - Install the front wheel, 99
 - Install the rear wheel, 102
 - Remove the rear wheel, 101

- Removing front wheel, 98
- Technical data, 128
- Windscreen
 - Operation, 47

Details described or illustrated in this booklet may differ from the vehicle's actual specification as purchased, the accessories fitted or the national-market specification. No claims will be entertained as a result of such discrepancies.

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

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

Errors and omissions excepted.

Original rider's manual, printed in Germany.

© 2014 Bayerische Motoren
Werke Aktiengesellschaft
80788 Munich, Germany
Not to be reproduced by any
means whatsoever, wholly or
in part, without the written permission of BMW Motorrad, After Sales.

Important data for refuelling:

Fuel

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

Usable fuel capacity	approx. 16 l
----------------------	--------------

Fuel reserve	approx. 3 l
--------------	-------------

Tyre pressure

Tyre pressure, front	2.4 bar, tyre cold
----------------------	--------------------

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

BMW recommends 

Order No.: 01 41 8 550 601
12.2013, 4th edition, 01

