BMW Motorrad

Rider's Manual (US Model)

C 400 X

Motorcycle/Retailer Data

Motorcycle Data

Model

Vehicle identification number

Color number

Initial registration

License plate

Retailer Data

Contact in Service

Ms./Mr.

Phone number

Retailer's address/phone number (company stamp)

Welcome to BMW

Congratulations on choosing a motorcycle from BMW Motorrad and welcome to the community of BMW motorcycle owners and riders. Familiarize yourself with your new motorcycle so that you can ride it safely and confidently in all highway traffic situations.

About this Rider's Manual

Please read this Rider's Manual carefully before starting to use your new BMW. It contains important information on how to operate the controls and how to get the most benefit from your BMW's advanced technical features.

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

Documentation confirming performance of scheduled maintenance is a precondition for generous handling of out-of-warranty claims and goodwill warranty treatment.

Should you want to sell your BMW one day, please also remember to turn over the Ride's Manual to the new owner. it is an important part of your motorcycle.

Suggestions and complaints

If you have any questions concerning your motorcycle, your authorized BMW Motorrad retailer is always happy to provide advice and assistance.

We wish you many miles of safe and enjoyable riding on your BMW

BMW Motorrad.

01 40 8 403 527

Table of Contents

General instructions

Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your Scooter. All maintenance and repair work carried out on your vehicle will be documented in Chapter 12. Documentation confirming performance of scheduled maintenance is a precondition for generous handling of out-of-warranty claims and goodwill warranty treatment.

When the time comes to sell your Scooter, please remember to provide this Rider's Manual along with it – it is an important part of the vehicle.

Abbreviations and symbols

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

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

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

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

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

◀ Indicates the end of an item of information.

• Instruction.

» Result of an activity.

Reference to a page with more detailed information.

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

Tightening torque.

Technical data.

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

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

EWS Electronic immobilizer.

DWA Anti-theft alarm.

ABS Anti-Lock Brake System.

ASC Automatic Stability Control.

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

Equipment

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

Technical data

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

Notice concerning current status

The outstanding levels of safety and quality furnished by BMW Scooters are the result of continuous improvements in design, equipment, and accessories. For this reason, some aspects of your vehicle may vary from the descriptions in this Rider's Manual. In addition, BMW Motorrad cannot guarantee the total absence of errors. We hope you will appreciate that no claims can be recognized based on the data,

illustrations or descriptions in this manual.

Overviews

Overall view, left side

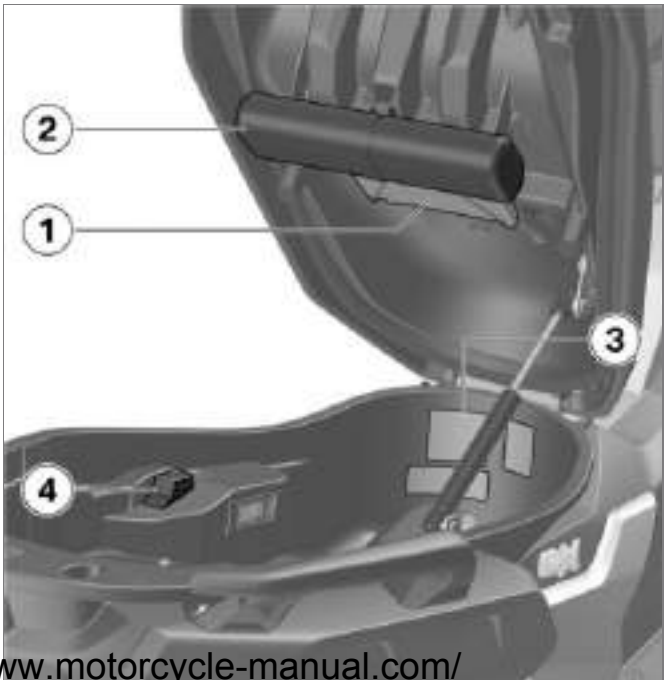
1 Brake fluid reservoir for the rear wheel brake (➠ 142)
2 Under the battery cover:
Battery (➠ 160)
Fuses (➠ 157)
Data link connector (➠ 167)
3 Adjustment of spring preload (➠ 114)
4 Fuel filler opening (➠ 125) (➠ 126)
5 Coolant expansion tank (under the left fairing side panel) (➠ 143)

Overall view, right side

1 Brake fluid reservoir for the front wheel brake (➡ 141)
2 Coolant level indicator (➡ 143)
3 Type plate (on right frame tube)
Vehicle identification number (on right frame tube)
4 Oil fill location and oil dipstick (➡ 138)
5 Emergency release for seat
Operating the seat (➡ 78).

Underneath seat

1 Rider's Manual (US Model)
2 Tool kit (➠ 136)
3 Load capacity table
Tire inflation pressure table
Note to calibrate ASC
4 Unlocking BMW flexcase (➠ 80)



Multifunction switch, left

1 High beam and headlight flasher (➠ 64)

2 Hazard warning lights system (➠ 64)

3 Turn indicators (➠ 65)

4 Horn

5 Rocker button MENU
Select displays. (➠ 66)
Call up the SETUP menu. (➠ 67)
Operate the TFT display. (➠ 85)

6 Multi-Controller
Operating elements (➠ 85)

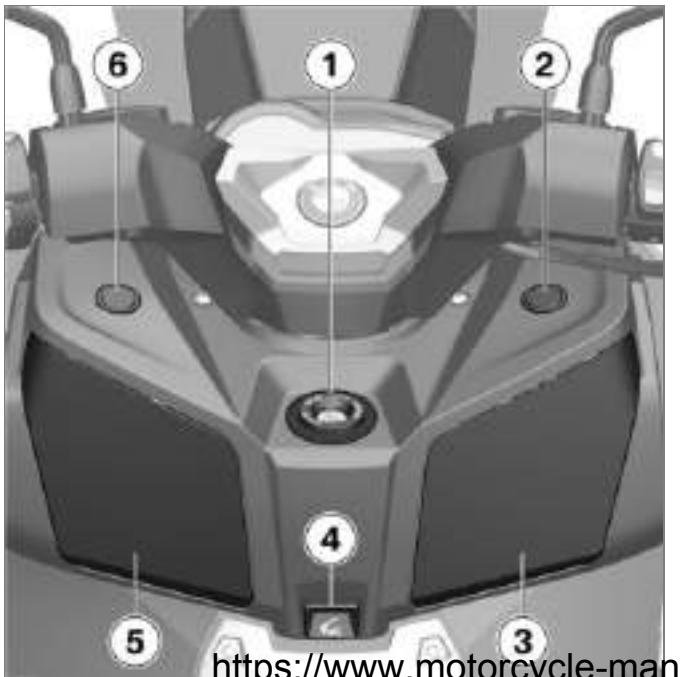
Multifunction switch, right

1 – with heated grips OE
Operating heated grips (➡ 76).
Heated grips

2 – with seat heating OE
Operating the rider's seat heating (➡ 77).
Seat heating

3 Emergency on/off switch (kill switch) (➡ 63)

4 Starter button (➡ 120)



Dashboard

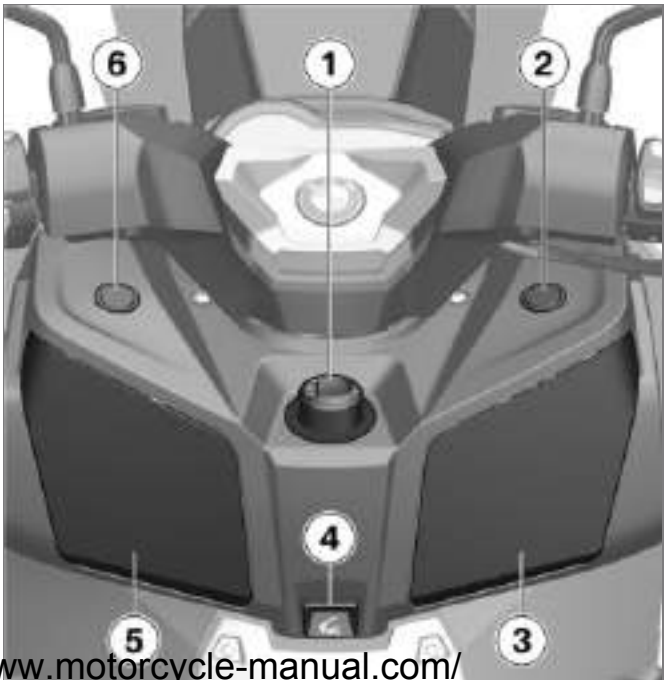
– without Keyless Ride[OE]

1 Steering and ignition lock (➠ 58)
2 Unlock right storage compartment (➠ 80)
3 Right storage compartment (➠ 80)
Power socket (in storage compartment) (➠ 170)
4 Unlock seat (➠ 78)
5 Left storage compartment (➠ 80)
6 Unlock left storage compartment (➠ 80)

Dashboard

– with Keyless Ride[OE]

1 Control module for Keyless Ride (➠ 59)
2 Unlock right storage compartment (➠ 80)
3 Right storage compartment (➠ 80)
Power socket (in storage compartment) (➠ 170)
4 Unlock seat (➠ 78)
5 Left storage compartment (➠ 80)
6 Unlock left storage compartment (➠ 80)



Instrument panel

– without Connectivity[OE]

1 Speedometer
2 Indicator and warning lights
3 Multifunction display

Instrument cluster with connectivity

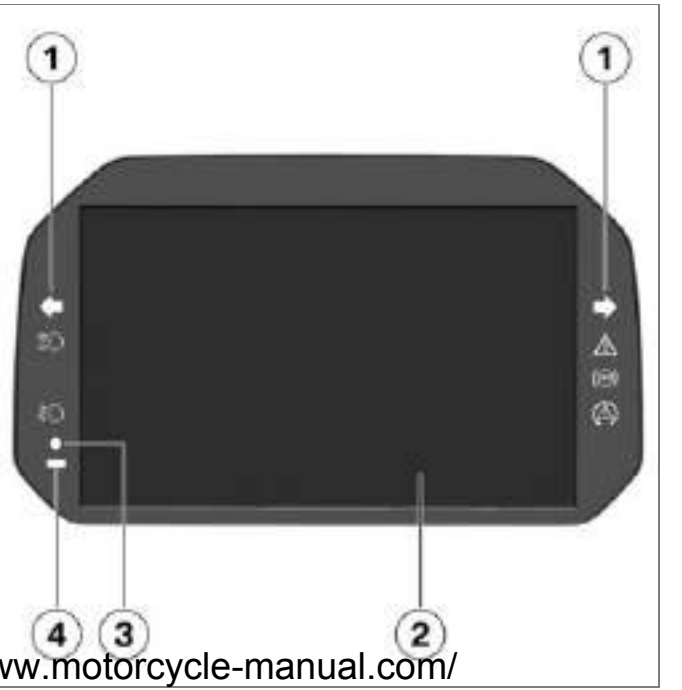
– with Connectivity[OE]

1 Indicator and warning lights with connectivity (➡ 37)

2 TFT display (➡ 38) (➡ 39)

3 Alarm system LED
– with anti-theft alarm system (DWA)[OE]
Alarm signal (➡ 109)
– with Keyless Ride[OE]
Indicator light for radio-operated key
Switching on ignition (➡ 60).

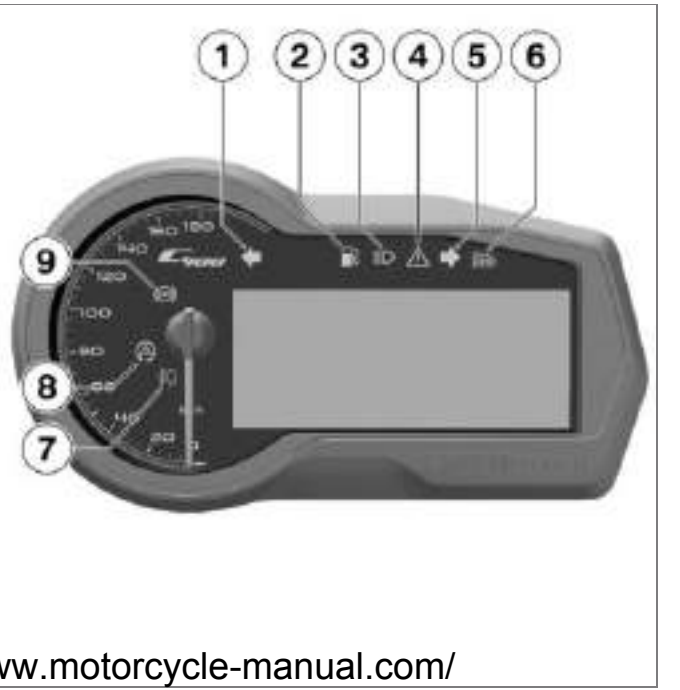
4 Photosensor (for adjusting brightness of instrument lighting)

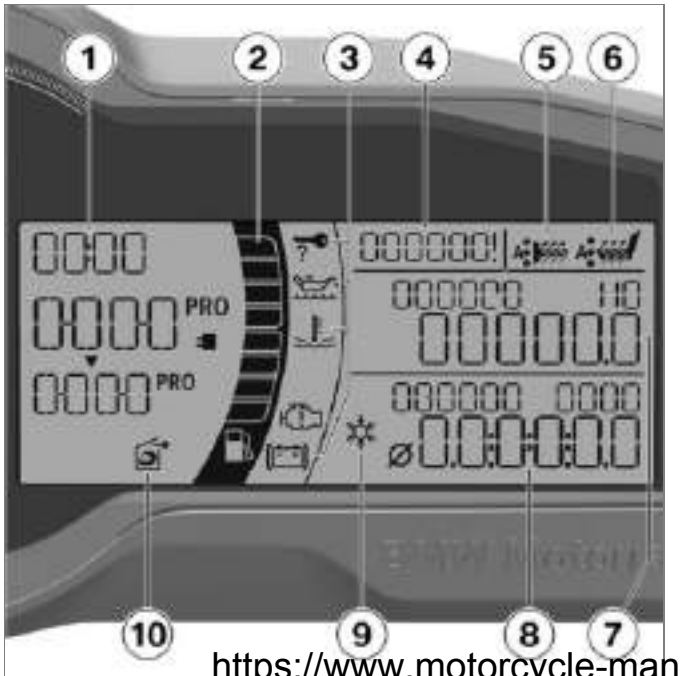


Displays

Indicator and warning lights

1 Turn indicator, left
2 Fuel reserve (➠ 34)
3 High beam
4 General warning light (➠ 24)
5 Turn indicator, right
6 Alarm system LED (➠ 109)
7 - with auxiliary headlamp OA Additional headlight
8 ASC (➠ 32)
9 ABS (➠ 31)





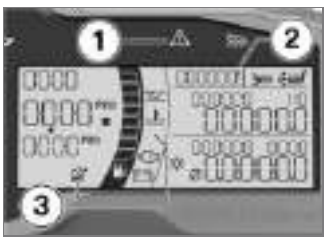
Multifunction display

1 Time (➠ 73)
2 Fuel fill level indicator
3 Warning symbols (➠ 24)
4 Text field for warnings (➠ 24)
5 Set heating stage (➠ 76)
6 Set heating stage (➠ 77)
7 Trip odometer (➠ 67)
Service display (➠ 34)
8 Displays of the onboard computer (➠ 66)
9 Outside temperature warning (➠ 36)
10 BMW flexcase (➠ 80)

Warning lights

Displays

Warnings are displayed with appropriate warning lights.



Warnings for which no separate warning light is available are indicated by the 'universal' warning light **1** in conjunction with a warning notice at position **2** such as `LAMPF!` or a warning symbol **3** in the multifunction display. The universal warning light lights up in either yellow or red depending on the urgency of the warning.

If several warnings are active, all corresponding warning lights and warning symbols are displayed; warnings are alternated in the display.
You will find an overview of the potential warnings on the following pages.

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
	 appears on the display	Outside temperature warning (➠ 28)
 lights up yellow	 EWS warning symbol is displayed	EWS active (➠ 28)
 lights up yellow	 appears on the display	Radio-operated key outside reception range (➠ 28)
 lights up red	 appears on the display	Coolant temperature too high (➠ 29)
 lights up yellow	 appears on the display	Low engine oil level (➠ 29)
	OIL CHECK is displayed	
 lights up yellow	 appears on the display	Engine in emergency-operation mode (➠ 29)
 lights up yellow	 flashes	Serious fault in the engine control (➠ 30)

Indicator and warning lights	Display text	Meaning
 lights up yellow	LAMPR! is displayed	Faulty tail lamp or rear turn signal (➠ 30)
 lights up yellow	LAMPF! is displayed	Faulty headlight, additional high-beam headlight or front turn signal (➠ 31)
 lights up yellow	LAMPS! is displayed	Multiple front and rear lights faulty (➠ 31)
 flashes		ABS self-diagnosis not completed (➠ 31)
 lights up		ABS fault (➠ 31)
 flashes rapidly		ASC intervention (➠ 32)
 flashes slowly		ASC self-diagnosis not completed (➠ 32)
 lights up		ASC switched off (➠ 32)

Indicator and warning lights	Display text	Meaning
 lights up		ASC error (➠ 32)
 lights up	CAL flashes	The ASC calibration is not yet completed (➠ 33)
 lights up yellow	 appears on the display	BMW flexcase is open (➠ 33)
	DWALO! is displayed	Anti-theft alarm battery low charge (➠ 33)
 lights up yellow	DWALO! is displayed	Anti-theft alarm system battery discharged (➠ 33)
 lights up red	 appears on the display	Insufficient battery charge current (➠ 34)
 lights up		Fuel down to reserve (➠ 34)

Outside temperature warning


Ice crystal symbol is displayed.

Possible cause:

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

WARNING

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

Accident hazard

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

EWS active


General warning light lights up yellow.


EWS warning symbol is displayed.

Possible cause:

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

- Remove any other ignition keys on the key fob.
- Use the second ignition key.
- Have the faulty ignition key replaced, preferably by an authorized BMW Motorrad retailer.

Radio-operated key outside reception range

– with Keyless Ride OE


General warning light lights up yellow.


appears on the display.

Possible cause:

Communication between the key fob transmitter and the engine electronics is disrupted.

- Check the battery in the key fob transmitter.

– with Keyless Ride OE

- Replacing the battery of the key fob transmitter (62).
- Use reserve key for further driving.

– with Keyless Ride OE

- Battery of the key fob transmitter is empty or the key fob transmitter is lost (62).
- Should the warning symbol appear while driving, keep calm. You can continue driving; the engine will not turn off.
- Have the defective key fob transmitter replaced by an authorized BMW Motorrad retailer.

Coolant temperature too high


General warning light shows red.


Temperature symbol is displayed.

ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.◀

Possible cause:

Coolant level is too low.

- Checking the coolant level (➡ 143).

If coolant level is too low:

- Have the cooling system checked at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Possible cause:

The coolant or engine oil temperature is too high.

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

Low engine oil level


General warning light lights up yellow.


The oil level symbol is displayed.

OIL CHECK is displayed.

Possible cause:

The electronic oil level sensor has detected that the engine's oil level is too low. Check the engine oil level with the dipstick the next time you stop to refuel:

- Checking the engine oil level (➡ 138).

If oil level is too low:

- Top up engine oil.

Engine in emergency-operation mode


General warning light lights up yellow.


Engine symbol appears on the display.

WARNING

Unusual handling when the engine is in emergency operation

Accident hazard

- Avoid rapid acceleration and passing maneuvers.◀

Possible cause:

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

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

» If the pollutant emission is above the setpoint values, the malfunction indicator lamp also lights up.

» In exceptional cases, the engine stops and can no longer be started.

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

Serious fault in the engine control

General warning light lights up yellow.

Engine symbol flashes.

WARNING

Damage to engine during emergency operation

Accident hazard

- Drive slowly and avoid rapid acceleration and passing maneuvers.
- If possible, have the vehicle picked up and the fault eliminated at a specialist workshop, preferably an authorized BMW Motorrad retailer.◀

Possible cause:

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

- Avoid high load and engine speed ranges if possible.

» We recommend that you stop riding.

» If the pollutant emission is above the setpoint values, the malfunction indicator lamp also lights up.

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

Faulty tail lamp or rear turn signal

General warning light lights up yellow.

`LAMPR!` is displayed.

Possible cause:

LED tail light is faulty.

- The rear LED light must be replaced. Please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

Possible cause:

Rear turn signal is faulty.

- Replacing the light source for the rear turn signal (158).

Faulty headlight, additional high-beam headlight or front turn signal


General warning light lights up yellow.

LAMPF! is displayed.

Possible cause:

LED headlamp is faulty.

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

Possible cause:

LED side light is faulty.

- The LED side light must be replaced. Please contact a specialist service facility, preferably an authorized BMW Motorrad Retailer.

Multiple front and rear lights faulty


General warning light lights up yellow.

LAMPS! is displayed.

Possible cause:

Multiple front and rear lights are faulty.

- Please read the fault description provided earlier in these instructions.

ABS self-diagnosis not completed


ABS indicator light flashes.

Possible cause:

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

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

ABS fault


ABS indicator light lights up.

Possible cause:

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

- It is possible to continue riding if you make allowance for the failed ABS function. You should also observe the additional information on situations that can lead to an ABS fault (➡ 133).
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

ASC intervention


ASC indicator and warning light flashes rapidly.

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

ASC self-diagnosis not completed


ASC indicator and warning light flashes slowly.

Possible cause:

 ASC self-diagnosis routine not completed
The Scooter must reach a specified minimum speed with the engine running before the system can check operation of the wheel speed sensors:
min 3 mph (min 5 km/h)

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

ASC switched off


ASC indicator and warning light lights up.

Possible cause:

The ASC system has been deactivated by the rider.

- Switch on ASC (➡ 70).

ASC error


ASC indicator and warning light lights up.

Possible cause:

The ASC control unit has detected a fault.

- It remains possible to continue riding. It must be noted that the ASC function is not available. You should also observe the additional information on situations that can lead to a ASC fault (➡ 134).
- Have the malfunction corrected as soon as possible at an authorized service facility,

preferably an authorized BMW Motorrad Retailer.

The ASC calibration is not yet completed


ASC indicator and warning light lights up.

CAL flashes.

Possible cause:

The ASC calibration is not yet completed

- Finish the ASC calibration or repeat it.
- Calibrating ASC (➨ 71).
- Cancel the ASC calibration: switch the ignition off and on.

BMW flexcase is open


General warning light lights up yellow.

The storage compartment symbol is displayed.

Possible cause:

The BMW flexcase is open.

- Close the BMW flexcase.
- Using the BMW flexcase (➨ 80).

Anti-theft alarm battery low charge

– with anti-theft alarm system (DWA) OE

DWALO! is displayed.

NOTICE

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

Possible cause:

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

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

Anti-theft alarm system battery discharged

– with anti-theft alarm system (DWA) OE


General warning light lights up yellow.

DWALO! is displayed.

NOTICE

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

Possible cause:

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

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

Insufficient battery charge current

General warning light shows red.

Battery symbol is displayed.

WARNING

Failure of vehicle systems
Accident hazard
• Do not continue riding.◀

The battery is not being charged. If the journey is continued, the vehicle electronics will discharge the battery.
Possible cause:

Alternator or alternator drive faulty.
• Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

Fuel down to reserve

Fuel reserve symbol lights up.

WARNING

Rough engine running or switching off of the engine due to a fuel shortage
Accident hazard, damage to catalytic converter
• Do not drive to the extent that the fuel tank is completely empty.◀

Possible cause:

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

Reserve quantity	
Approx. 1.1 gal (Approx. 4 l)	

– without Keyless Ride OE
• Refueling (➡ 125).
– with Keyless Ride OE
• Refueling (➡ 126).

Service display

If service is due within a month, SERVT! **1** and the service date **2** are displayed. It is briefly displayed following the Pre-Ride-Check.

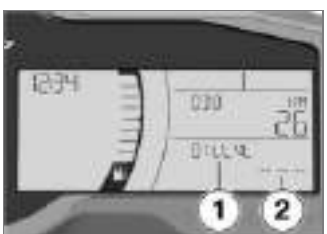
If the service is due within 700 miles, SERVD! **3** and the remaining distance **4** are displayed and counted down in steps of 100 miles. It is briefly displayed following the Pre-Ride-Check.

When a service date elapses without service, the general warning light lights up in yellow, appearing together with the date and mileage (kilometerage) display. SERVD! or SERVT! is displayed permanently.

NOTICE

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

Oil level indicator



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

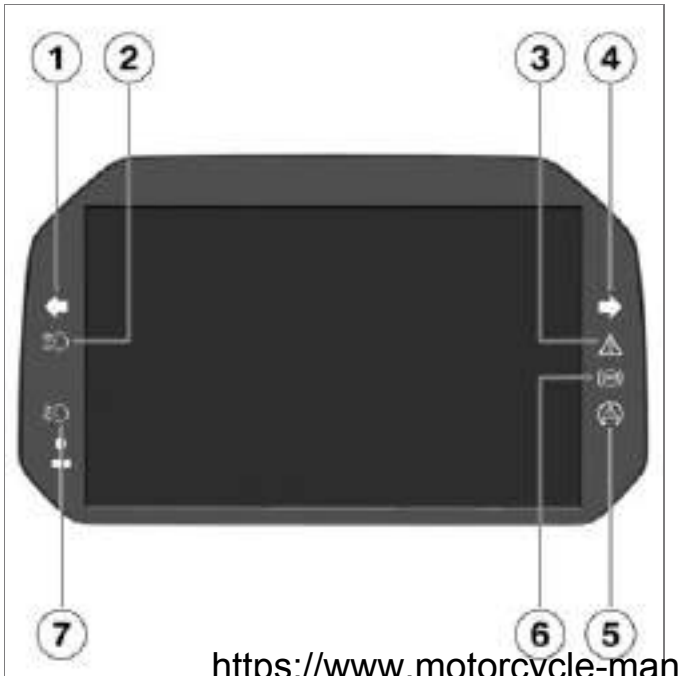
The conditions required for using the oil level display are as follows:
- Engine at normal operating temperature.
- Engine idling for at least ten seconds.
- Side stand retracted.
- The Scooter is standing upright.

The possible displays at locations **1** and **2** mean:
OILLVL OK: the oil level is correct.
OILLVL CHECK: check the oil level during the next refueling stop.
OILLVL -- -- --: no measurement possible (above-mentioned conditions not met).

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

Ambient temperature

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



Indicator and warning lights with connectivity

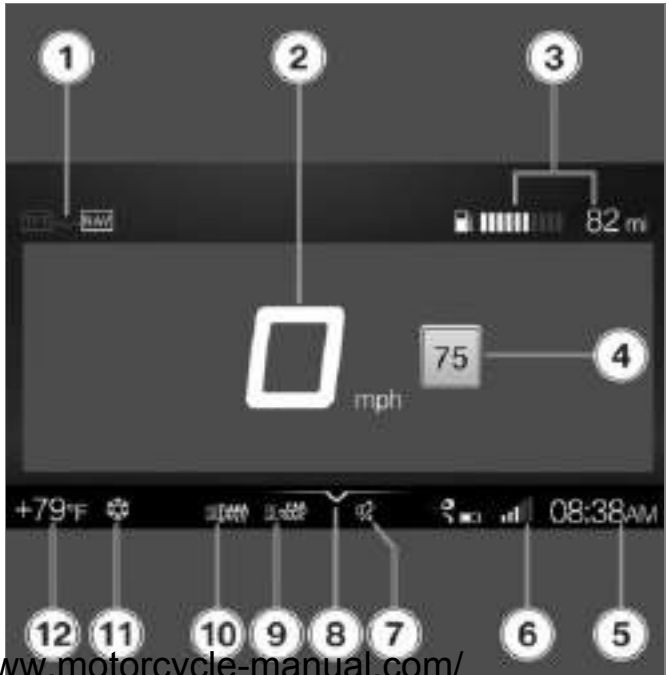
– with Connectivity[OE]

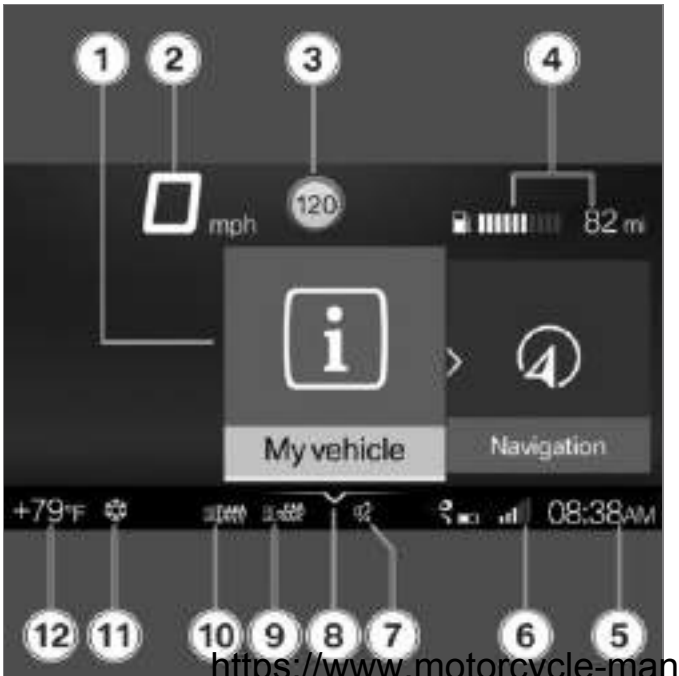
1 Turn indicator, left
Operating turn signals (➠ 65).
2 High beam (➠ 64)
3 General warning light (➠ 40)
4 Turn indicator, right
5 ASC (➠ 32)
6 ABS (➠ 31)
7 - with auxiliary headlamp[OA]
Additional headlight

TFT display in Pure view

– with Connectivity[OE]

1 Operating focus change (➠ 89)
2 Speedometer
3 Rider info status line (➠ 89)
4 Road sign detection (➠ 91)
5 Time (➠ 92)
6 Connection status (➠ 95)
7 Muting (➠ 92)
8 User help
9 Set heating stage, heated grips (➠ 76)
10 Set heating stage, seat heating (➠ 77)
11 Outside temperature warning (➠ 47)
12 Ambient temperature





TFT display in menu view

– with Connectivity[OE]

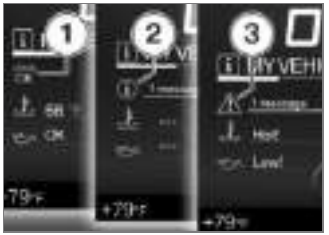
1 Menu panel
2 Speedometer
3 Road sign detection (➡ 91)
4 Rider info status line (➡ 89)
5 Time
Set clock (➡ 92).
6 Connection status
Pairing Bluetooth (➡ 95).
7 Muting (➡ 92)
8 User help
9 Set heating stage, heated grips (➡ 76)
10 Set heating stage, seat heating (➡ 77)
11 Outside temperature warning (➡ 47)
12 Ambient temperature

Indicator lights with connectivity

Displays

Warnings are displayed with appropriate warning lights.
Warnings are indicated by the general warning light in conjunction with a dialog in the TFT display. The universal warning light lights up in either yellow or red depending on the urgency of the warning.

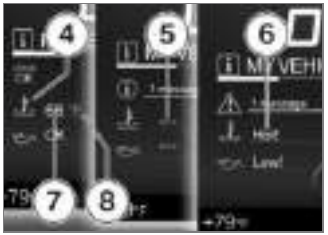
The universal warning light lights up for the most urgent warning.
You will find an overview of the potential warnings on the following pages.



Check Control display

The messages in the display are shown differently in the display. Different colors and characters are used depending on the priority:

- Green CHECK OK **1**: no message, values optimal.
- White circle with small "i" **2**: information.
- Yellow warning triangle **3**: warning message, value not optimal.
- Red warning triangle **3**: warning message, value critical



Value display

The symbols **4** differ in their display. Different colors are used depending on the assessment of value. Instead of numerical values **8** with units **7**, texts **6** are also displayed:

Color of the symbol

- Green: (OK) current value is optimal.
- Blue: (Cold!) current temperature is too low.
- Yellow: (Low! /High!) current value is too low or too high.
- Red: (Hot! /High!) current temperature or value is too high.

– White: (---) there is no valid value. Instead of the value, dashes **5** are displayed.

NOTICE

The evaluation of the individual values is possible in part only after a certain riding duration or speed. If a measured value cannot yet be displayed due to unfulfilled measurement conditions, dashes are displayed instead as placeholders. As long as no valid measured value is available, no evaluation is carried out in the form of a colored symbol.◀

Check Control dialog

Messages are output as Check Control dialog **1**.

– If several Check Control messages of the same priority are present, the messages change in the order in which they occur, until they are acknowledged.
– If the symbol **2** is active, this can be acknowledged by tilting the Multi-Controller to the left.
– Check Control messages are dynamically attached as additional tabs to the pages in the Vehicle menu (➡ 87). The

edly as long as the error persists.

Overview of warning indicators

Indicator and warning lights	Display text	Meaning
	 appears on the display	Outside temperature warning (➠ 47)
 lights up yellow	 `Remote key not in range.`	Radio-operated key outside reception range (➠ 47)
 lights up yellow	 `Remote key battery at 50%.`	Replacing the battery of the key fob transmitter (➠ 48)
	 `Remote key battery low.`	
 lights up yellow	 is displayed in yellow	Vehicle voltage too low (➠ 48)
	 `Vehicle voltage low.`	
 lights up red	 is displayed in red	Vehicle voltage critical (➠ 48)
	 `Vehicle voltage critical!`	

Indicator and warning lights	Display text	Meaning
 lights up yellow	 The faulty light source is displayed.	Light source defect (➠ 49)
	 `Anti-theft alarm batt. capacity low.`	Anti-theft alarm battery low charge (➠ 50)
 lights up yellow	 `Anti-theft alarm battery discharged.`	Anti-theft alarm system battery discharged (➠ 50)
	 `Oil level too low! Check oil level.`	Low engine oil level (➠ 51)
 lights up red	 `Coolant temperature too high!`	Coolant temperature too high (➠ 51)
 lights up yellow	 `No communication with engine control.`	Engine control failure (➠ 51)
 lights up yellow	 `Fault in the engine control.`	Engine in emergency-operation mode (➠ 52)

Indicator and warning lights	Display text	Meaning
 General warning light flashes yellow.	 `Serious fault in the engine control.`	Serious fault in the engine control (➠ 52)
	 `Side stand monitoring faulty`	Side stand monitoring faulty (➠ 53)
 flashes		ABS self-diagnosis not completed (➠ 53)
 ABS indicator light lights up.	 `Limited ABS availability!`	ABS fault (➠ 53)
 ABS indicator light lights up.	 `ABS failure!`	ABS failure (➠ 53)
 flashes rapidly		ASC intervention (➠ 32)
 flashes slowly		ASC self-diagnosis not completed (➠ 32)
 lights up	 `Off!`	ASC switched off (➠ 54)

Indicator and warning lights	Display text	Meaning
	 Traction control deactivated.	ASC switched off (➡ 54)
 lights up	 Traction control failure!	ASC fault (➡ 54)
	 Engine start not poss. BMW flexcase open. Close BMW flexcase.	BMW flexcase is open (➡ 55)
	 Fuel reserve reached.Drive to filling station soon.	Fuel down to reserve (➡ 55)
 Left turn signal indicator light flashes green.		Hazard warning lights system switched on (➡ 55)
 Right turn signal indicator light flashes green.		

Indicator and warning lights	Display text	Meaning
	 is displayed in white `Service due!`	Service due (➠ 56)
 lights up yellow	 is displayed in yellow `Service overdue!`	Service date missed (➠ 56)

Ambient temperature

The outside temperature is shown in the status line of the TFT display.

Engine heat can lead to spurious readings of ambient temperature when the motorcycle is stationary. When the effects of engine heat on the monitored temperature become excessive, dashes instead of the value are displayed.

 If the outside temperature drops below the following limit value, there is a risk of black ice forming.

 Limit value for outside temperature
Approx. 37 °F (Approx. 3 °C)

The first time the temperature drops below this value, the outside temperature display and ice crystal symbol will flash in the status line of the TFT display.

Outside temperature warning

 Ice crystal symbol is displayed.

Possible cause:

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

WARNING

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

Accident hazard

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

Radio-operated key outside reception range

– with Keyless Ride OE

 General warning light lights up yellow.

 `Remote key not in range. Do not stop engine. No engine restart possible.`

Possible cause:

Communication between the key fob transmitter and the engine electronics is disrupted.

- Check the battery in the key fob transmitter.

– with Keyless Ride OE

- Replacing the battery of the key fob transmitter (➡ 62).
- Use reserve key for further driving.

– with Keyless Ride OE

- Battery of the key fob transmitter is empty or the key fob communication is lost (➡ 62).

- Should the Check Control dialog appear while riding, keep calm. You can continue driving; the engine will not turn off.
- Have the defective key fob transmitter replaced by an authorized BMW Motorrad retailer.

Replacing the battery of the key fob transmitter


General warning light lights up yellow.


Remote key battery at 50%. No functional limitation.


Remote key battery low. Limited central locking function. Change battery.

Possible cause:

- The battery for the key fob transmitter is no longer charged to full capacity. Operation of the key fob transmitter is only ensured for a limited time.

– with Keyless Ride[OE]

- Replacing the battery of the key fob transmitter (➡ 62).

Vehicle voltage too low


General warning light lights up yellow.


is displayed in yellow.


Vehicle voltage low. Switch off unneeded consumers.

WARNING

Failure of vehicle systems

Accident hazard

- Do not continue riding.◀

The battery is not being charged. If the journey is continued, the vehicle electronics will discharge the battery.

NOTICE

If the 12 V battery is installed incorrectly, or if the terminals are swapped (e.g. when jump-starting), the fuse for the alternator regulator may blow.◀

Possible cause:

Alternator or alternator drive faulty.

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

Vehicle voltage critical


General warning light shows red.


is displayed in red.


Vehicle voltage critical! Consumers were

switched off Check battery condition.

WARNING

Failure of vehicle systems
Accident hazard
• Do not continue riding.◀

The battery is not being charged. If the journey is continued, the vehicle electronics will discharge the battery.

NOTICE

If the 12 V battery is installed incorrectly, or if the terminals are swapped (e.g. when jump-starting), the fuse for the alternator regulator may blow.◀

Possible cause:

Alternator or alternator drive faulty.
• Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

Light source defect

General warning light lights up yellow.

The faulty light source is displayed:

High beam faulty!

Turn indicator front left faulty! or Turn indicator front right faulty!

Low beam faulty!

Front parking lamp faulty!

Daytime running light faulty!

Tail light faulty!

Brake light faulty!

Rear left turn signal faulty! or Rear right turn signal faulty!

– Have checked by a specialist workshop.

WARNING

Overlooking the vehicle in traffic due to a defective light source on the vehicle
Safety risk
• Replace defective bulbs as soon as possible; it is best always to carry a complete set of spare bulbs on the motorcycle.◀

Possible cause:

Multiple front and rear lights are faulty.

- Please read the fault description provided earlier in these instructions.

Anti-theft alarm battery low charge

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

Anti-theft alarm batt. capacity low. No limitations. Arrange an appointment at a specialist workshop.

NOTICE

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

Possible cause:

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

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

Anti-theft alarm system battery discharged

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

General warning light lights up yellow.

Anti-theft alarm battery discharged. No independent alarm. Arrange an appointment at a specialist workshop.

NOTICE

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

Possible cause:

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

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

Electronic oil level check

The electronic oil-level check evaluates the oil level in the engine with OK or Low!

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

– Engine at normal operating temperature.
– Engine idling for at least ten seconds.
– Side stand retracted.
– Motorcycle standing vertically on level surface.

If the stated conditions are not met, no oil level measurement is possible. Dashes are displayed instead of the information.

Low engine oil level

`Oil level too low! Check oil level.`

Possible cause:

The electronic oil level sensor has detected that the engine's oil level is too low. Check the engine oil level with the dipstick the next time you stop to refuel:

- Checking the engine oil level (➡ 138).

If oil level is too low:

- Top up engine oil.

Coolant temperature too high

General warning light shows red.

`Coolant temperature too high! Check coolant level. Carry on at moderate pace to cool.`

ATTENTION

Riding with overheated engine

Engine damage

- Be sure to observe the measures listed below.◀

Possible cause:

Coolant level is too low.

- Checking the coolant level (➡ 143).

If coolant level is too low:

- Have the cooling system checked at a specialist workshop, preferably an authorized BMW Motorrad retailer.

Possible cause:

The coolant or engine oil temperature is too high.

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

Engine control failure

General warning light lights up yellow.

`No communication with engine control. Multiple sys. affected. Ride carefully to the next specialist workshop`

Engine in emergency-operation mode


General warning light lights up yellow.


Fault in the engine control. Onward journey possible. Ride carefully to next specialist workshop.

WARNING

Unusual handling when the engine is in emergency operation

Accident hazard

- Avoid rapid acceleration and passing maneuvers.◀

Possible cause:

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

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

Serious fault in the engine control


General warning light flashes yellow.


Serious fault in the engine control. Onward journey possible. Engine damage possible. Have checked by workshop.

WARNING

Damage to engine during emergency operation

Accident hazard

- Drive slowly and avoid rapid acceleration and passing maneuvers.
- If possible, have the vehicle picked up and the fault eliminated at a specialist workshop, preferably an authorized BMW Motorrad retailer.◀

Possible cause:

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

- Avoid high load and engine speed ranges if possible.

» We recommend that you stop riding.

» If the pollutant emission is above the setpoint values, the malfunction indicator lamp also lights up.

- Have the malfunction corrected as soon as possible at an authorized service facility,

preferably an authorized BMW Motorrad Retailer.

Side stand monitoring faulty

`Side stand monitoring faulty To avoid breakdown do not stop engine. Have checked by spec. workshp.`

Possible cause:

The side-stand switch or its wiring is damaged.

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

ABS self-diagnosis not completed

ABS indicator light flashes.

Possible cause:

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

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

ABS fault

ABS indicator light lights up.

`Limited ABS availability! Onward journey possible. Ride carefully to next specialist workshop.`

Possible cause:

The ABS control unit has detected an error. The ABS function is limited.

- It remains possible to continue riding. Observe additional information on special situations which can lead to ABS fault messages (➠ 133).
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

ABS failure

ABS indicator light lights up.

`ABS failure! Onward journey possible. Ride carefully to next specialist workshop.`

Possible cause:

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

- It is possible to continue riding if you make allowance for the failed ABS function. You

should also observe the additional information on situations that can lead to an ABS fault (➡ 133).
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

ASC intervention


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

ASC self-diagnosis not completed


ASC indicator and warning light flashes slowly.

Possible cause:

 ASC self-diagnosis routine not completed
The Scooter must reach a specified minimum speed with the engine running before the system can check operation of the wheel speed sensors:
min 3 mph (min 5 km/h)

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

ASC switched off


ASC indicator and warning light lights up.

– with Connectivity[OE]


`Off!`

– with Connectivity[OE]


`Traction control deactivated.`

Possible cause:

The rider has switched off the ASC system.
- Switch on ASC (➡ 70).

ASC fault


ASC indicator and warning light lights up.


`Traction control failure! Onward journey possible. Ride carefully to the next specialist workshop.`

Possible cause:

The ASC control unit has detected a fault.
- It remains possible to continue riding. It must be noted that

the ASC function is not available. You should also observe the additional information on situations that can lead to a ASC fault (➨ 134).
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

BMW flexcase is open

Engine start not poss.
BMW flexcase open.
Close BMW flexcase.

Possible cause:

The BMW flexcase is open.
- Close the BMW flexcase.
- Using the BMW flexcase (➨ 80).

Fuel down to reserve

Fuel reserve reached.
Drive to filling station soon.

WARNING

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

Accident hazard, damage to catalytic converter
- Do not drive to the extent that the fuel tank is completely empty.◀

Possible cause:

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

Reserve quantity	
Approx. 1.1 gal (Approx. 4 l)	

– without Keyless Ride[OE]
- Refueling (➨ 125).

– with Keyless Ride[OE]
- Refueling (➨ 126).

Hazard warning lights system switched on

Left turn signal indicator light flashes green.

Right turn signal indicator light flashes green.

Possible cause:

The hazard warning lights system was switched on by the rider.
- Operating hazard warning flashers (➨ 64).

Service display

When a service date elapses without service, the general warning light lights up in yellow, appearing together with the date and mileage (kilometerage) display.

If the service time is exceeded, a yellow Check Control message is displayed. In addition, the displays for service, a service appointment and the remaining

distance are highlighted with exclamation points in the menu screens MY VEHICLE and SERVICE REQUIREMENTS.

NOTICE

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

Service due

 is displayed in white.

Service due! Have BMW Motorrad Retailer perform service.

Possible cause:

Service is due because of the driving performance or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.

» The operating and road safety of the vehicle remains unchanged.

» The best-possible value retention of the vehicle is ensured.

Service date missed

 General warning light lights up yellow.

 is displayed in yellow.

Service overdue! Have BMW Motorrad Retailer perform service.

Possible cause:

Service is overdue because of the riding performance or the date.

- Have service performed regularly by a specialist workshop, preferably an authorized BMW Motorrad retailer.

» The operating and road safety of the vehicle remains unchanged.

» The best-possible value retention of the vehicle is ensured.

Operation

Steering and ignition lock

Ignition key

You are provided with two ignition keys.

– with topcase Light OA

You can use the same ignition key for the topcase if you wish. Please contact an authorized workshop for this purpose, preferably an authorized BMW Motorrad retailer.

Locking handlebars

- Turn handlebars to left.

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

» Ignition, lights and all electrical circuits are switched off.

» Handlebars are locked.

» Ignition key can now be removed.

Switching on ignition

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

» Parking lights and all function circuits switched on.

» Engine can be started.

» Pre-Ride-Check is carried out. (➡ 120)

» ABS self-diagnosis is performed. (➡ 121)

» ASC self-diagnosis is performed. (➡ 121)

Switch off ignition

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

» The light is switched off, but parking lights and lighting of the rear storage compartment remain illuminated briefly.
» Handlebars not locked.
» Ignition key can now be removed.

Ignition with Keyless Ride

– with Keyless Ride[OE]

Vehicle keys

NOTICE

The indicator light for the radio-operated key flashes as long as the radio-operated key is being searched for.
If the radio-operated key or the emergency key is detected, it goes out.
If the radio-operated key or the emergency key is not detected, it lights up briefly.◀

You are provided with one radio-operated key and one emergency key. Should you lose your keys, refer to the information regarding the electronic immobilizer (EWS) (61).
The ignition, tank filler cap and [illegible] trolled with the radio-operated key. The seat locking mechanism and topcase can be operated manually.

NOTICE

If the range of the key remote (e.g. in the topcase) is exceeded, the vehicle cannot be started.
If the key remote continues to be absent, the ignition is switched off after approx. 1.5 minutes to spare the battery.
Do not store the key remote in the luggage compartment.
The antenna may not be able to receive the key remote signal and it will not be possible to open the seat.
It is advisable to carry the radio-operated key directly on your person (e.g. in a jacket pocket) and to also carry the emergency key as an alternative.◀

Range of Keyless Ride radio-operated key
– with Keyless Ride[OE]
Approx. 3.3 ft (Approx. 1 m)◁

Locking handlebars

Requirement

Handlebars are turned to the left. Key remote is within reception range.

- Press and hold button **1**.
» Steering lock audibly locks.
» Ignition, lights and all electrical circuits switched off.
- To unlock the steering lock, briefly press button **1**.

Switching on ignition

Requirement

Key remote is within reception range.

- The ignition can be activated in **two** ways.

Version 1:

- Briefly press button **1**.
» Parking light and all function circuits are switched on.
» Pre-Ride-Check is carried out. (➡ 120)
» ABS self-diagnosis is performed. (➡ 121)
» ASC self-diagnosis is performed. (➡ 121)

Version 2:

- Steering lock is locked, press and hold button **1**.
» Steering lock is unlocked.
» Parking lights and all function circuits switched on.
» Pre-Ride-Check is carried out. (➡ 120)
» ABS self-diagnosis is performed. (➡ 121)
» ASC self-diagnosis is performed. (➡ 121)

Switch off ignition

Requirement

Key remote is within reception range.

- The ignition can be deactivated in **two** ways.

Version 1:

- Briefly press button **1**.

» Light is switched off.

» Handlebars are not locked.

Version 2:

- Turn handlebars to left.
- Press and hold button **1**.

» Light is switched off.

» Steering lock is locked.

EWS Electronic immobilizer

The motorcycle's electronic circuitry monitors the data stored in the radio-operated key through a ring antenna in the radio-operated lock. The engine management system does not enable engine starting until the radio-operated key has been recognized as "authorized" for your motorcycle.

NOTICE

A further key attached to the same ring as the radio-operated key used to start the engine could "irritate" the electronics, in which case the enabling signal for starting is not issued. The warning with the key symbol appears in the multifunction display. Always store further vehicle keys separately from the radio-operated key.◀

If you lose a radio-operated key, you can have it disabled by your authorized BMW Motorrad retailer. When having a key disabled you should also bring all of the motorcycle's remaining keys with you.

The engine can no longer be started using a disabled radio-operated key; however, a disabled radio-operated key can be enabled again.

Emergency and spare keys are only available through an authorized BMW Motorrad retailer. As the radio-operated keys are part of an integrated security system, the retailer is under an obligation to check your legitimacy.

Battery of the key fob transmitter is empty or the key fob transmitter is lost

- Should you lose your keys, refer to the information regarding the electronic immobilizer (**EWS**).
- Should you loose the radio-operated key while driving, the motorcycle can be started by using the emergency key.
- If the battery of the key remote is empty, the vehicle can be started by touching the battery cover with the key remote.
- Hold the emergency key **1** or the empty key remote **2** against the battery cover at the level of the antenna **3**.

NOTICE

The wallet key or the empty key remote must **rest against** the battery cover.◀

Period in which the engine must be started. Then unlocking must be repeated.	
30 s	

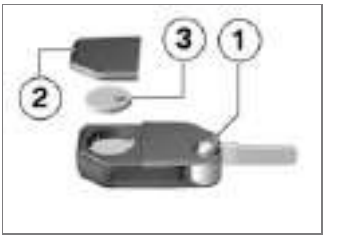
» Pre-Ride Check in progress.
– Key has been detected.
– Engine can be started.
- Starting engine (➡ 120).

Replacing the battery of the key fob transmitter

If the key fob transmitter fails to react when the button is pressed briefly or is pressed and held:

- The battery of the key fob transmitter no longer has its full charging capacity.

» `KEYLO!` appears in the multi-function display.
» Replace battery.



- Press button **1**.

» Key bit folds open.

- Press battery cover **2** upward.
- Remove battery **3**.

- Dispose of the old battery in accordance with legal regulations. Do not dispose of the battery in the household waste.

ATTENTION

Unsuitable or improperly inserted batteries

Component damage

- Use a battery compliant with the manufacturer's specifications.
- When inserting the battery, make sure that the polarity is correct.◀
- Insert the new battery with the positive terminal up.

Battery type
for Keyless Ride radio-operated key
CR 2032

- Install battery cover **2**.
» Red LED in instrument panel flashes.
» The key fob transmitter is working again.

Emergency on/off switch (kill switch)

1 Emergency on/off switch (kill switch)

WARNING

Operation of the emergency ON/OFF switch when riding

Danger of falling due to blocking [illegible]

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

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

a Engine is switched off
b Operating position

Lights

Low-beam headlight and parking lights

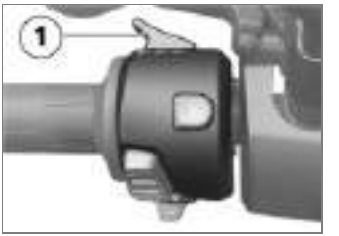
The parking lights come on automatically when the ignition is switched on.
After the ignition is switched off, the parking lights remain on for a brief period.

NOTICE

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

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

High beam and headlight flasher



- Press switch **1** toward front to switch on high beam.
- Pull switch **1** toward rear to actuate headlight flasher.

Parking lights

- Turn off ignition.

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

Hazard warning lights system

Operating hazard warning flashers

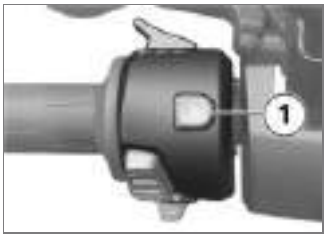
- Switch on the ignition.

NOTICE

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

NOTICE

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



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

» Ignition can be switched off.

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

Turn indicators

Operating turn signals

- Switch on the ignition.

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

NOTICE

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

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

Multifunction display

Selecting display at the top

• Switch on the ignition.

• Briefly press the top of the MENU rocker button **1** repeatedly to select the display in area **3**.

The following data can be displayed:
– Odometer ODO
– Trip distance 1 TRIP 1
– Trip distance 2 TRIP 2
– The automatic trip distance TRIP A is automatically reset if at least 5 hours have passed since the ignition was switched off and the date has changed.
– Open the settings menu: SETUP ENTER (only displayed if the Scooter is stationary)

Selecting the onboard computer display

• Switch on the ignition.

• Briefly press the bottom of the MENU rocker button **2** repeatedly to select the display of the onboard computer **4**.

NOTICE

If the fuel reserve has been reached, RANGE always appears on the display after the ignition is switched on.◀

The following data can be displayed:
– Cruising range RANGE
– Average fuel consumption CONS 1
– Average fuel consumption CONS 2
– Current fuel consumption CONS C
– Oil level indicator OILLVL
– Outside temperature EXTEMP
– Coolant temperature ENGTMP
– Average speed SPEED Ø
– Battery voltage VOLTGE
– Riding time RDTIME
– Date DATE

Resetting the trip odometer

- Switch on the ignition.
- Select the trip recorder.

» The desired trip recorder is displayed.

- Press and hold the top of the MENU rocker button **1** until trip recorder **3** is reset.

» Trip mileage = `0.0`

Resetting average data

- Switch on the ignition.
- Briefly press the bottom of the MENU rocker button repeatedly until the average fuel consumption or the average speed is displayed, as desired.

- Press and hold the bottom of the MENU rocker button **2** until the displayed average value **4** is reset.

» Average value = `-- -- --`

Resetting riding time

- Switch on the ignition.
- Briefly press the bottom of the MENU rocker button repeatedly until the riding time `RDTIME` is displayed.

- Press and hold the bottom of the MENU rocker button **2** until the riding time `RDTIME` **3** is reset.

» The riding time starts at `00:00:00`

SETUP

Selecting SETUP

Requirement

The Scooter is stationary.

- Briefly press the top of the MENU rocker button **1** repeatedly until SETUP ENTER **3** is displayed.
- Press and hold the top of the MENU rocker button **1** to start SETUP.

» SETUP ASC is displayed.

- Briefly press the top of the MENU rocker button **1** repeatedly to select the following parameters in SETUP:

– Switch ASC off or on ASC OFF/ ASC ON or calibrate ASC ASC CAL
– with anti-theft alarm system (DWA)[OE]
– Automatically activate the alarm function of the anti-theft alarm system after switching off the ignition DWA ON or leave deactivated DWA OFF.◁
– Set time display CLOCK.
– Set date DATE.
– Adjust the brightness of the backlighting for the instrument cluster BRIGHT.
– Adjust the units UNIT.
– Reset the displays RESET.
– Exit SETUP EXIT.

Exiting SETUP

Requirement

There are 4 ways to exit SETUP.

- Press and hold the top of the MENU rocker button **1**.

» SETUP ENTER is displayed.

- Alternative: Briefly press the top of the MENU rocker button **1** repeatedly until SETUP EXIT is displayed.
- Press and hold the bottom of the MENU rocker button **2**.

» SETUP ENTER is displayed.

- Alternative: turn the ignition off and on again.

» SETUP ENTER is displayed.

- Alternative: Ride off.

Speed for using SETUP
max 6 mph (max 10 km/h)

» When the permissible speed for operation is exceeded, SETUP is exited.
» ODO is displayed.
» All settings are stored, regardless of how SETUP is exited.

Automatic Stability Control (ASC)

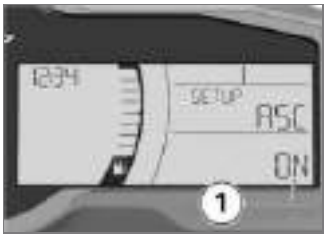
Deactivating ASC

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (➡ 67).

» SETUP ASC is displayed.



- Briefly press the bottom of the MENU rocker button to change between ASC ON **1** and ASC OFF.

» SETUP ASC OFF is displayed.

ASC indicator and warning light lights up.

» ASC is switched off.

- Press and hold the top of the MENU rocker button to exit SETUP.

» SETUP ENTER is displayed.

Deactivating ASC – with Connectivity[OE]

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Call up menu item Settings, Vehicle settings, ASC, Activate ASC.

- Switch off ASC.

ASC indicator and warning light lights up.

» ASC is switched off.

- Press and hold the top of the MENU rocker button to exit `Settings`.

» Pure is displayed.

Switch on ASC

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (➡ 67).

» `SETUP ASC` is displayed.

- Briefly press the bottom of the MENU rocker button to change between `ASC ON` and `ASC OFF` **1**.

» `SETUP ASC ON` is displayed.

The ASC indicator and warning light stays out or flashes while self-diagnosis is still in progress.

» ASC is switched on.

- Press and hold the top of the MENU rocker button to exit `SETUP`.

» `SETUP ENTER` is displayed.

- Alternative: turn the ignition off and on again.

» If the ASC indicator and warning light lights up after the ignition is switched off and on, an ASC error has occurred.

Switch on ASC

– with Connectivity[OE]

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Call up menu item `Settings`, `Vehicle settings`, `ASC`, `Activate ASC`.

- Switch on ASC.

The ASC indicator and warning light stays out or flashes while self-diagnosis is still in progress.

» `ASC` is switched on.

- Press and hold the top of the MENU rocker button to exit `Settings`.

» Pure is displayed.

Calibrating ASC

Requirement

Lower stability reserves of the ASC control after a tire change.

NOTICE

Calibration means that the control is adapted to the effective tire radii of the front and rear wheels.

The effective tire radii depend on the tire brand, tread depth, tire pressure and payload.

Every time the tires are changed, calibrate the ASC control to adapt it to the new tire radii.

As tire wear progresses, calibrate the ASC control regularly to keep it functioning optimally.◀

- **Before calibration, the ignition must have been switched off for at least 1 minute.**
- Switch on ASC (➡ 70).

» SETUP ASC ON is displayed.

- Press and hold the bottom of the MENU rocker button **2** to start calibration.

» CAL **3** flashes.

ASC indicator and warning light begins to light up.

» Rocker buttons MENU **1** and **2** have no function.

» The menu item can only be exited if the ignition is switched off and on again.

» The calibration has been started and waits for the Scooter to be ridden.

ATTENTION

ASC is not available until calibration is completed

Accident hazard

- Carry out calibration on a flat and straight stretch of road that has good adhesion.◀
- Ride straight ahead and remain in the following speed range for 6 seconds, keeping your speed as constant as possible.

Speed range for ASC calibration
The Scooter must be ridden straight ahead within a certain speed range:
19...31 mph (30...50 km/h)

» ASC is calibrated.

ASC indicator and warning light goes out.

» ODO is displayed.

» ASC calibration has been completed.
» The trip can be resumed.

Calibrating ASC

– with Connectivity[OE]

Requirement

Lower stability reserves of the ASC control after a tire change.

NOTICE

Calibration means that the control is adapted to the effective tire radii of the front and rear wheels.
The effective tire radii depend on the tire brand, tread depth, tire pressure and payload.
Every time the tires are changed, calibrate the ASC control to adapt it to the new tire radii.
As tire wear progresses, calibrate the ASC control regularly to keep it functioning optimally.◀

- **Before calibration, the ignition must have been switched off for at least 1 minute.**

– with Connectivity[OE]
- Switch on ASC (70).

» `ASC` is activated.

- Call up `Start ASC calibration` and start the calibration.

» The calibration has been started and waits for the Scooter to be operated.

ASC indicator and warning light begins to light up.

» The menu item can only be exited if the ignition is switched off and on again.

ATTENTION

ASC is not available until calibration is completed

Accident hazard

- Carry out calibration on a flat and straight stretch of road that has good adhesion.◀
- Ride straight ahead and remain in the following speed range for 6 seconds, keeping your speed as constant as possible.

Speed range for ASC calibration
The Scooter must be ridden straight ahead within a certain speed range:
19...31 mph (30...50 km/h)

» ASC is calibrated.

ASC indicator and warning light goes out.

» ASC calibration has been completed.
» The trip can be resumed.

Time and date

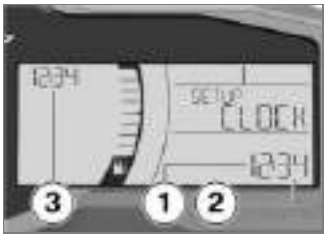
Set clock

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (67).

» `SETUP CLOCK` is displayed.



- Press and hold the bottom of the MENU rocker button to set the hours.

» The hours **1** flash.

- Briefly press the top of the MENU rocker button to increase the hours setting.
- Briefly press the bottom of the MENU rocker button to decrease the hours setting.
- After the hours are set, press and hold the bottom of the MENU rocker button.

» The minutes **2** flash.

- Briefly press the top of the MENU rocker button to increase the minutes setting.
- Briefly press the bottom of the MENU rocker button to decrease the minutes setting.
- After the minutes are set, press and hold the bottom of the MENU rocker button.

» The minutes **2** no longer flash.

- Check the setting on the time display **3**.

» The clock is now set.

- Press and hold the top of the MENU rocker button.

» `SETUP ENTER` is displayed.

Setting the date

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (67).

» `SETUP DATE` is displayed.

- Press and hold the bottom of the MENU rocker button.

» Month **1** flashes.

- Briefly press the top of the MENU rocker button to increase the month setting.
- Briefly press the bottom of the MENU rocker button to decrease the month setting.
- After the month is set, press and hold the bottom of the MENU rocker button.

» Day **2** flashes.

- Briefly press the top of the MENU rocker button to increase the day setting.
- Briefly press the bottom of the MENU rocker button to decrease the day setting.
- After the day is set, press and hold the bottom of the MENU rocker button.

» Year **3** flashes.

- Briefly press the top of the MENU rocker button to increase the year setting.
- Briefly press the bottom of the MENU rocker button to decrease the year setting.
- After the year is set, press and hold the bottom of the MENU rocker button.

» Year **3** stops flashing.
» The clock is now set.

- Press and hold the top of the MENU rocker button.

» `SETUP ENTER` is displayed.

General settings in the multifunction display

Adjusting the brightness of the backlighting for the instrument cluster

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (67).
- Briefly press the top of the MENU rocker button repeatedly until `SETUP BRIGHT` is displayed.

- Briefly press the bottom of the MENU rocker button **2** repeatedly until the desired brightness of the backlighting is adjusted.
- Press and hold the top of the MENU rocker button **1** to exit SETUP.

» SETUP ENTER is displayed.

Setting the units

Requirement

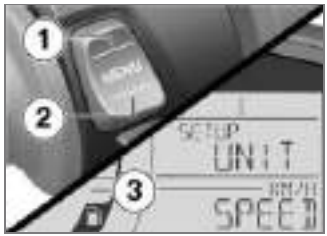
The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (➡ 67).
- Briefly press the top of the MENU rocker button repeatedly until SETUP UNIT ENTER is displayed.
- Press and hold the bottom of the MENU rocker button to activate SETUP UNIT.

» SETUP UNIT SPEED is displayed.

- Briefly press the top of the MENU rocker button **1** repeatedly to select the following parameters in SETUP UNIT:

– Change the speedometer unit, KMH or MPH
– Change the odometer unit, KM or MI
– Reset the units of the speedometer and odometer to the factory setting.



- Briefly press the bottom of the MENU rocker button **2** repeatedly until the desired unit **3** of the speedometer or the odometer is set.
- To exit the setting, briefly press the top of the MENU rocker button **1** repeatedly until SETUP UNIT EXIT is displayed.
- Press and hold the bottom of the MENU rocker button **2** to exit SETUP UNIT.

» SETUP RESET is displayed.

- To reset the units to the factory setting, briefly press the top of the MENU rocker button **1** repeatedly until SETUP UNIT RESET is displayed.
- Press and hold the bottom of the MENU rocker button **2** until the RESET **3** display flashes.

» The units have been reset to the factory setting.

» SETUP UNIT EXIT is displayed.

- Press and hold the bottom of the MENU rocker button **2** to exit SETUP UNIT.

» SETUP RESET is displayed.

Resetting SETUP

- Switch on the ignition.
- Selecting SETUP (➠ 67).
- Briefly press the top of the MENU rocker button repeatedly until SETUP RESET is displayed.

- Press and hold the bottom of the MENU rocker button **2** until SETUP **3** is reset.

NOTICE

The SETUP RESET function also resets the date and time to their standard values.◀

» The time 12:00 is displayed.

- Press and hold the top of the MENU rocker button **1** to exit SETUP.

» SETUP ENTER is displayed.

Heated grips

– with heated grips OE

Operating heated grips

- Start engine.

NOTICE

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

- Repeatedly press button **1** until the desired heating level appears in the display.

The grips have three-level heating. The third level is used for heating of the grips quickly. It is advisable to switch back to the second or first level as soon as the grips are warm. The following displays are available:

100 % heating output

Approx. 60 % heater output

Approx. 30 % heater output

– with Connectivity OE

- Repeatedly press button **1** until the desired heating level appears in the display.

The grips have three-level heating. The third level is used for fast heating of the grips; the switch should then be switched back to the second or first level. The following displays are available:

100 % heating output

Approx. 60 % heater output

Approx. 30 % heater output

Seat heating

– with seat heating OE

Operating the rider's seat heating

- Start engine.

NOTICE

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

- Repeatedly press button **1** until the desired heating level appears in the display.

The rider's seat has three-level heating. The third level is used for heating the seat quickly. It is advisable to switch back to the second or first level as soon as the seat is warm. The following displays are available:

100 % heating output

Approx. 60 % heater output

Approx. 30 % heater output

– with Connectivity[OE]

- Repeatedly press button **1** until the desired heating level appears in the display.

The rider's seat has three-level heating. The third level is used for heating the seat quickly. It is advisable to switch back to the second or first level as soon as the seat is warm. The following displays are available:

100 % heating output

Approx. 60 % heater output

Approx. 30 % heater output

Seat

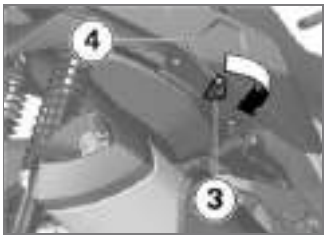
Operating the seat

- Switch on the ignition.

- Press button **1**.

» The seat is unlocked.

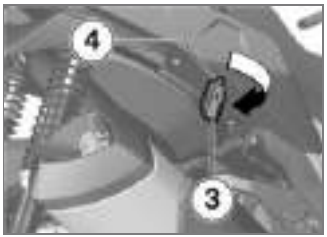
– without Keyless Ride[OE]



- The seat can also be unlocked without switching on the ignition. To do so, insert the ignition key **3** into the lock **4** on the right-hand side trim panel and turn clockwise.

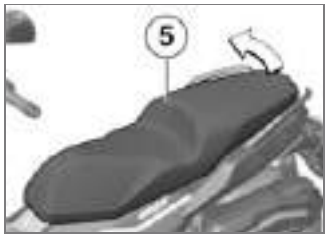
» The seat is unlocked.

– with Keyless Ride[OE]



- The seat can also be unlocked without switching on the ignition. To do so, insert the key remote **3**, which is folded open, into the lock **4** on the right-hand side trim panel and turn clockwise.

» The seat is unlocked.



- Raise the seat **5** at the rear and fold it open.

- To close, press the seat **5** into the locking mechanism at the rear.

Storage compartments

Operating the front storage compartments

– without Keyless Ride OE

- To open a storage compartment, press the corresponding button **1**.
- To close a storage compartment, press the corresponding flap into the locking mechanism.

NOTICE

The storage compartments cannot be locked.◀◁

Operating the front storage compartments

– with Keyless Ride OE

- Switch on the ignition.

- To open a storage compartment, press the corresponding button **1**.
- To close a storage compartment, press the corresponding flap into the locking mechanism.
- After the ignition is switched off, both storage compartments are locked after an after-running period.

After-running period for opening the storage compartments
10 s◁

Using the BMW flexcase

- Operating the seat (➡ 78).

NOTICE

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

- Pull the release lever **1** forward to enlarge the storage compartment, e.g. to stow a motorcycle helmet.

» The floor **2** lowers.

» The vehicle cannot be started while the floor is lowered.

When the ignition is switched on, the storage compartment symbol is displayed.

» - with connectivity

When the ignition is switched on, `Engine start not poss. BMW flexcase open. Close BMW flexcase.` is displayed.

- The BMW flexcase accommodates an integral helmet.

- A jet helmet can be stowed in the front part of the storage compartment as shown.
- Close the seat.

- To resume the trip, open the seat.

- Empty the luggage compartment.
- Pull the floor **2** up into the locking mechanism using the lever **3**.

 When the ignition is switched on, the storage compartment symbol is not displayed.

» - with connectivity

 When the ignition is switched on, `Engine start not poss. BMW flexcase open. Close BMW flexcase.` is not displayed.

- Close the seat.

» The trip can be resumed.

TFT display

General notes

Warnings

WARNING

Operation of a smartphone while riding or with the engine running

Accident hazard

- Observe the relevant road traffic regulations.
- Do not use while riding (except for applications without operation such as telephony via the hands-free system).◀

WARNING

Distraction from traffic conditions and loss of control

Risk of accident through the use of integrated information systems and communication devices during the journey

- Operate these systems or devices only if the traffic situation allows.
- If necessary, stop and operate the system or devices at a standstill.◀

Connectivity functions

Connectivity functions include media, telephony and navigation. Connectivity functions can be used if the TFT display is connected with a mobile end device and a helmet (95). You can find more information about the Connectivity functions at: **bmw-motorrad.com**

NOTICE

If the fuel tank is between the mobile end device and the TFT display, the Bluetooth connection may be restricted. BMW Motorrad recommends storing the mobile end device above the fuel tank (e.g. in the jacket pocket).◀

NOTICE

Depending on the mobile end device, the scope of the Connectivity functions may be limited.◀

BMW Motorrad Connected App

With the BMW Motorrad Connected App, you can call up information about the vehicle and usage. To use some features such as navigation, the app must be installed on the mobile end device and be connected to the TFT display. The app starts the route guidance and adapts the navigation.

NOTICE

On some mobile devices, e.g. with operating system iOS, the

BMW Motorrad Connected App must be called up before using.◀

Notice concerning current status

After the editorial deadline, there may be updates to the TFT display. For this reason, some aspects of your Scooter may vary from the descriptions in this Rider's Manual. Updated information at: **bmw-motorrad.com**

Principle

Operating elements

All contents of the display are controlled by the Multi-Controller **1** and the rocker button MENU **2**.
The following functions are possible depending on the context.

Functions of the Multi-Controller

Turn the Multi-Controller up:

– Move cursor up in lists.
– Make settings.
– Increase volume.

Turn the Multi-Controller down:

– Move cursor down in lists.
– Make settings.
– Reduce volume.

Tilt Multi-Controller to the left:

– Activate the function according to the operating feedback.
– Activate function to the left or back.
– After settings, return to menu view.
– In the menu view: move up one hierarchy level.
– In the My Vehicle menu: leaf to the next menu sheet.

Tilt Multi-Controller to the right:

– Activate the function according to the operating feedback.
– Confirm selection.
– Confirm settings.
– Leaf to the next menu step.

– Scroll to right in lists.
– In the My Vehicle menu: leaf to the next menu sheet.

Rocker button MENU functions

NOTICE

Instructions given by the navigation system are displayed as a dialog if the `Navigation` menu is not called up. The operation of the rocker button MENU is temporarily restricted.◀

Briefly press the MENU up:

– In the menu view: move up one hierarchy level.
– In the Pure view: change the display for the rider info status line.

MENU long press up:

– In the menu view: open the Pure view.
– In the Pure view: change the operating focus to the navigator.

MENU short press down:

– Change a hierarchy level down.
– No function when lowest hierarchy level is reached.

MENU long press down:

– Return to the last menu, after a menu change has been previously carried out by long press of the rocker button MENU at the top.

Operating instructions in the main menu

The operating instructions indicate whether and which interactions are possible.

Meaning of the operating instructions:

- Operating instruction **1**: the left end has been reached.
- Operating instruction **2**: you can leaf to the right.
- Operating instruction **3**: you can leaf down.
- Operating instruction **4**: you can leaf to the left.
- Operating instruction **5**: the right end has been reached.

Operating instructions in submenus

In addition to the operating instructions in the main menu, there are additional operating instructions in submenus.

Meaning of the operating instructions:

- Operating instruction **1**: the current display is in a hierarchical menu. One symbol indicates a submenu level. 2 symbols indicate 2 or more submenu levels. The color of the symbol changes depending on whether it is possible to return to the top.
- Operating instruction **2**: another submenu level can be called up.
- Operating instruction **3**: there are more entries than can be displayed.

Display Pure view

- Rocker button MENU long press up.

Switching functions on and off

Some items are preceded by a box. The box indicates whether the function is switched on or off. Action symbols after the menu items illustrate what is switched by briefly tilting the Multi-Controller to the right.

Examples for switching on and off:

– Symbol **1** indicates that the function is switched on.
– Symbol **2** indicates that the function is switched off.
– Symbol **3** indicates that the function can be switched off.
– Symbol **4** indicates that the function can be switched on.

Calling up the menu

- Display Pure view (➨ 87).
- Briefly press button **2** downward.

The following menus can be called up:

– `My vehicle`
– `Navigation`
– `Media`
– `Telephone`
– `Settings`

- Press Multi-Controller **1** repeatedly briefly to the right until the desired menu item is marked.
- Briefly press button **2** downward.

NOTICE

The `Settings` menu can only be called up while stationary.◀

Moving the cursor in lists

- Calling up the menu (➨ 88).
- To move the cursor down in lists, turn the Multi-Controller **1**

down until the desired entry is marked.
- To move the cursor up in lists, turn the Multi-Controller **1** up until the desired entry is marked.

Confirming the selection

- Select desired entry.
- Multi-Controller **1** short press to right.

Calling up the last menu used

- In the Pure view: press and hold the bottom of the MENU rocker button.

» The last used menu is called up. The last marked entry is selected.

Operating focus change

When the Navigator is connected, you can switch between the operation of the Navigator and the TFT display.

Changing the operating focus

– with navigation system OA
- Install navigation device (➠ 173).
- Display Pure view (➠ 87).
- Rocker button MENU long press up.

» Operating focus changes to the Navigator or the TFT display. The respectively active device is marked on the left in the upper status line. Operator actions apply to the respectively active device until the operating focus is changed again.

» Operating the navigation system. (➠ 174)

Changing the display for rider info status line

Requirement

The motorcycle is stopped. The Pure view is displayed.

- Switching on ignition (➠ 58).

» In the TFT display, all information necessary for operation on public roads is provided by the onboard computer. The information can be displayed in the upper status line.

- Selecting the content of the rider info status line (➠ 90).

- Press and hold button **1** to display the Pure view.
- Press button **1** briefly to select the value in the upper status line **2**.

The following values can be indicated:

– Odometer `Total`
– Trip distance 1 `Current`
– Trip distance 2 `Current`
– Current fuel consumption `Consumption`

Average fuel consumption 1

Average fuel consumption 2

Riding time 1

Riding time 2

Inactive period 1

Inactive period 2

Average speed 1

Average speed 2

Fuel gage.

Range

Selecting the content of the rider info status line

- Call up menu `Settings`, `Display`, `Status line content`.
- Turn on desired displays.

» You can switch between the selected displays in the rider info status line. If there are no displays selected, then only the range is displayed.

Making settings

- Select desired settings menu and confirm.

- Turn Multi-Controller **1** down until the desired setting is marked.
- If an operating instruction is present, tilt Multi-Controller **1** to the right.
- If no operating instruction is present, tilt Multi-Controller **1** to the left.

» The setting is saved.

Switching road sign detection on or off

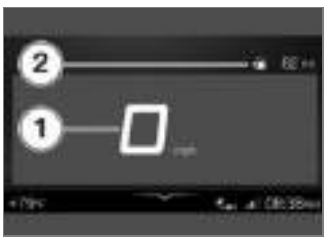
Requirement

The vehicle is connected to the Navigator or a compatible mobile end device. The BMW Motorrad Connected App is installed on the mobile end device.

- `Speed Limit Info` displays the currently permitted maximum speed.
- Call up menu `Settings`, `Display`.
- Switch `Speed Limit Info` on or off.

Pure and Urban views

Pure view



In the Pure view, all information required for operation on public roads is made available.

The speedometer **1** shows the current vehicle speed.

Pressing the top of the MENU rocker button briefly displays the range **2** instead of the fuel gage.

The range **2** indicates the distance that can still be traveled with the remaining fuel. This distance is calculated based on fuel quantity and average consumption.

- If the motorcycle is standing on its side stand, the motorcycle's inclined position will prevent the fuel level from being registered accurately. For this reason the range is only recalculated with the side stand retracted.
- The range is output together with a warning after the fuel reserve level is reached.
- After refueling, the range is recalculated provided the fuel quantity is greater than the fuel reserve.
- The determined range is an approximate reading.

Urban view

As additional information, the Urban display also shows the engine speed in a numerical display **1** and a bar display **2**. It can be opened via the main menu.

General settings

Adjusting the volume

- Connecting rider's and passenger's helmets (96).
- Increase volume: turn Multi-Controller up.
- Reduce volume: turn Multi-Controller down.
- Mute: turn Multi-Controller all the way down.

Setting the date

- Switching on ignition (58).
- Call up menu `Settings`, `System settings`, `Date and time`, `Set date`.
- Set `Day`, `Month` and `Year`.
- Confirm setting.

Setting the date format

- Call up menu `Settings`, `System settings`, `Date and time`, `Date format`.
- Select desired setting.
- Confirm setting.

Set clock

- Switching on ignition (58).

WARNING

Adjusting the clock while riding

Accident hazard

- Adjust the clock only when the motorcycle is stationary.◀

- Call up menu `Settings`, `System settings`, `Date and time`, `Set time`.
- Set `Hour` and `Minute`.

Switching the automatic time setting on or off

NOTICE

Depending on the equipment, the time of day is updated automatically.◀

WARNING

Adjusting the clock while riding

Accident hazard

- Adjust the clock only when the motorcycle is stationary.◀

- Call up menu Settings, System settings, Date and time.
- Switch Set time automatically on or off.

Setting the time format

WARNING

Adjusting the clock while riding

Accident hazard

- Adjust the clock only when the motorcycle is stationary.◀
- Call up menu Settings, System settings, Date and time, Time format.
- Select desired setting.
- Confirm setting.

Setting the unit of measurement

- Call up menu Settings, System settings, Units.

The following units of measurement can be set:

– Distance covered
– Pressure
– Temperature
– Consumption

Setting the language

- Call up menu Settings, System settings, Language.

The following languages can be set:

– Chinese
– German
– English
– Spanish
– French
– Italian
– Dutch
– Portuguese
– Russian
– Ukrainian

Adjusting brightness

- Call up menu Settings, Display, Brightness.
- Adjust brightness.

Resetting all settings

- All settings in the Settings menu can be reset to factory settings.
- Call up menu Settings.
- Select Reset all and confirm.

The settings of the following menus are reset:

– Vehicle settings
– System settings
– Connections
– Display
– Information

» Existing Bluetooth connections are not deleted.

Onboard computer with connectivity

– with Connectivity[OE]

Calling up the onboard computer

- Call up menu `My vehicle`.
- Scroll to the right until the `ONBOARD COMPUTER` menu screen is displayed.

Resetting the onboard computer

- Calling up the onboard computer (94).
- Press MENU rocker button down.
- Select `Reset all values` or `Reset individual values` and confirm.

The following values can be individually reset:

– `Break`
– `Journey`
– `Current`
– `Ø Speed`
– `Ø Consump.`

Calling up the travel onboard computer

- Calling up the onboard computer (94).
- Scroll to the right until the `TRIP COMPUTER` menu screen is displayed.

Resetting the travel onboard computer

- Calling up the travel onboard computer (94).
- Press MENU rocker button down.
- Select `Automatic reset` or `Reset everything` and confirm.

Bluetooth

Short-range radio technology

The Bluetooth function may not be offered depending on the country of use.

Bluetooth is a short-range radio technology. Bluetooth devices are short-range devices (transmitting with a limited range) on the license-free ISM band (Industrial, Scientific, Medical) between 2.402 GHz and 2.480 GHz. They can be operated anywhere in the world without requiring a license. Although Bluetooth is designed to establish robust links over a short distance, disturbances are possible, as they are with any wireless technology. Links may be disturbed, interrupted briefly or lost entirely. Especially when several devices are operated in one Bluetooth network, there is

no guarantee for smooth operation in every situation.

Possible sources of interference:

– Interference fields due to transmission towers and similar
– Devices with incorrectly implemented Bluetooth standard
– By nearby Bluetooth-capable devices

Bluetooth pairing

Before two Bluetooth devices can be linked to one another, they must recognize each other. This process of mutual recognition is known as "pairing". Because two devices that have been paired remember each other, the Bluetooth pairing process only needs to be conducted once, on initial contact.

NOTICE

On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.◀

During the Bluetooth pairing process, the TFT display searches for other Bluetooth-capable devices within its reception range. The conditions that have to be satisfied before the audio system can recognize another device are as follows:

– The Bluetooth function of the device must be activated
– The device must be "visible" to others
– The device must support the A2DP profile
– Other Bluetooth-capable devices must be OFF (e.g. mobile phones and navigation systems).

Please consult the operating instructions for your communication system.

Pairing Bluetooth

- Call up menu `Settings`, `Connections`.

» You can set up, manage and delete Bluetooth connections in the `CONNECTIONS` menu. The following Bluetooth connections are displayed:

– `Mobile device`
– `Rider's helmet`
– `Passenger helm.`

The connection status for mobile end devices is displayed.

Connecting a mobile end device

- Pairing Bluetooth (▪ 95).
- Activate the Bluetooth function of the mobile end device (refer to the operating instructions of the mobile end device).

- Select Mobile device and confirm.
- Select PAIR NEW MOBILE DEVICE and confirm.

Mobile end devices are searched for.

 During the Bluetooth pairing, the Bluetooth symbol flashes in the lower status line.

Visible mobile end devices are displayed.

- Select mobile end device and confirm.
- Follow the instructions on the mobile end device.
- Confirm that the codes match.

» The connection is established and the connection status is updated.

» If the connection cannot be established, the troubleshooting chart in the "Technical data" chapter may provide assistance. (➠ 182)

» Telephone data will be transferred to the vehicle automatically depending on the mobile end device.

» Telephone data (➠ 104)

» If the phone book is not displayed, the troubleshooting chart in the "Technical data" chapter may provide assistance. (➠ 183)

» If the Bluetooth connection does not work as expected, the troubleshooting chart in the "Technical data" chapter may provide assistance. (➠ 183)

Connecting rider's and passenger's helmets

- Pairing Bluetooth (➠ 95).
- Select Rider's helmet or Passenger helm. and confirm.
- Make communication system of the helmet visible.
- Select PAIR NEW RIDER'S HELMET or PAIR NEW PASSENG. HELMET and confirm.

Helmets are searched for.

 During the Bluetooth pairing, the Bluetooth symbol flashes in the lower status line.

Visible helmets are displayed.

- Select helmet and confirm.

» The connection is established and the connection status is updated.

» If the connection cannot be established, the troubleshooting chart in the "Technical data" chapter may provide assistance. (➠ 182)

» If the Bluetooth connection does not work as expected, the troubleshooting chart in the "Technical data" chapter may provide assistance. (➠ 183)

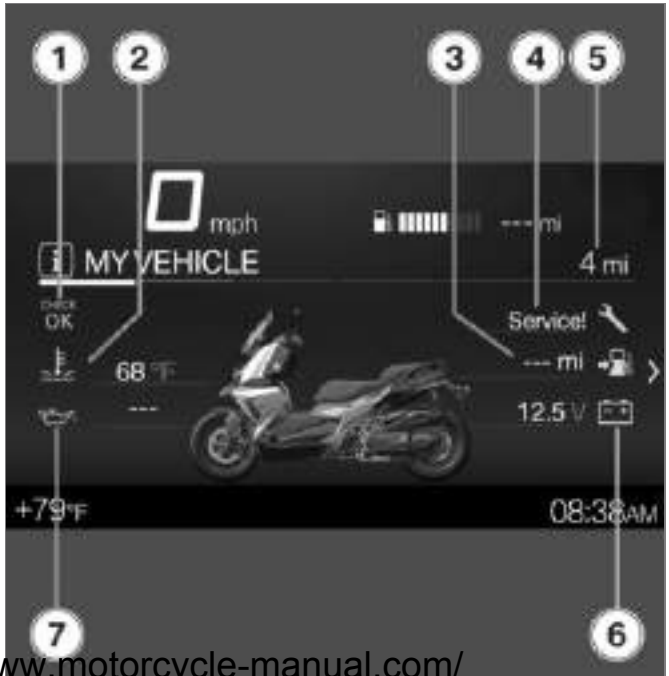
Deleting connections

- Call up menu `Settings`, `Connections`.
- Select `Delete connections`.
- To delete an individual connection, select the connection and confirm.
- To delete all connections, select `Delete all connections` and confirm.

My Vehicle

Start screen

1 Check Control display Displays (➡ 40)
2 Coolant temperature (➡ 51)
3 Range (➡ 91)
4 Service display (➡ 55)
5 Vehicle mileage/km
6 Vehicle voltage (➡ 160)
7 Oil-level check (➡ 50)



Operating instructions

– Operating instruction **1**: tab that shows how far to the left or right you can leaf.
– Operating instruction **2**: tab that shows the position of the current menu screen.

Leafing through menu sheets

- Call up menu `My vehicle`.
- Short press Multi-Controller **1** to the right to leaf to the right.
- Short press Multi-Controller **1** to the left to leaf to the left.

The following screens are included in the My Vehicle menu:

– `MY VEHICLE`
– Check Control messages (if present)
– `ONBOARD COMPUTER`
– `TRIP COMPUTER`
– `SERVICE REQUIREMENTS`

- For more information on tire pressure and Check Control messages, please refer to the "Displays" chapter.

NOTICE

Check Control messages are dynamically added as additional tabs to the menu screens in the My Vehicle menu.◀

Onboard computer and travel onboard computer

The `ONBOARD COMPUTER` and `TRIP COMPUTER` menu screens show data about the vehicle and the trip, such as average values.

Service display

If the remaining time until the next service is less than a month, or the next service is due in less than 700 mi (1000 km), a white Check Control message is displayed.

Navigation

Warnings

WARNING

Operation of a smartphone while riding or with the engine running

Accident hazard

- Observe the relevant road traffic regulations.
- Do not use while riding (except for applications without operation such as telephony via the hands-free system).◀

WARNING

Distraction from traffic conditions and loss of control

Risk of accident through the use of integrated information systems and communication devices during the journey

- Operate these systems or devices only if the traffic situation allows.
- If necessary, stop and operate the system or devices at a standstill.◀

Prerequisite

The vehicle is connected to a compatible mobile end device.

Prerequisite

The BMW Motorrad Connected App is installed on the mobile end device.

NOTICE

On some mobile devices, e.g. with operating system iOS, the BMW Motorrad Connected App must be called up before using.◀

Entering destination address

- Connecting a mobile end device (95).
- Call up the BMW Motorrad Connected App and start the route guidance.
- In the TFT display, call up the `Navigation` menu.

» Active route guidance is displayed.

» If the active route guidance is not displayed, the troubleshooting chart in the "Technical data" chapter may provide assistance. (183)

Selecting a destination from previous destinations

- Call up menu `Navigation`, `Recent destinations`.
- Select destination and confirm.
- Select `Start route guidance`.

Selecting a destination from favorites

- The FAVORITES menu shows all destinations that have been saved as favorites in the BMW Motorrad Connected App. No new favorites can be created on the TFT display.
- Call up menu Navigation, Favorites.
- Select destination and confirm.
- Select Start guidance.

Entering special destinations

- Special destinations such as places of interest can be shown on the map.
- Call up menu Navigation, POIs.

The following places can be selected:

– At current location
– At destination
– Along the route

- Select in which location you want to search for special destinations.

For example, the following special destination can be selected:

– Filling station

- Select special destination and confirm.
- Select Start route guidance and confirm.

Specifying route criteria

- Call up menu Navigation, Route criteria.

The following criteria can be selected:

– Route type
– Avoid

- Select desired Route type.
- Switch desired Avoid on or off.

The number of switched on avoidances is displayed in parentheses.

Ending route guidance

- Call up menu Navigation, Active route guidance.
- Select End route guidance and confirm.

Switching spoken instructions on or off

- Connecting rider's and passenger's helmets (96).
- The navigation can be read aloud by a computer voice. The Spoken instructions must be switched on for this.
- Call up menu Navigation, Active route guidance.
- Switch Spoken instructions on or off.

Repeating the last spoken instruction

- Call up menu Navigation, Active route guidance.
- Select Current instruction and confirm.

Media

Prerequisite

The vehicle is connected to a compatible mobile end device and a compatible helmet.

Controlling music playback

- Call up menu `Media`.

NOTICE

BMW Motorrad recommends that the volume in the mobile end device is set to maximum before riding.◀

- Adjusting the volume (92).
- Next title: briefly tilt Multi-Controller **1** to the right.
- Last title or beginning of the current title: briefly tilt Multi-Controller **1** to the left.
- Fast forward: Multi-Controller **1** long tilt to the right.
- Fast backward: Multi-Controller **1** long tilt to the left.
- Open the context menu: press the bottom of button **2**.

NOTICE

Depending on the mobile end device, the scope of the Connectivity functions may be limited.◀

» The following functions can be used in the context menu:

– `Start playback` or `Pause playback`.

– For search and playback, select category `Now playing`, `All artists`, `All albums` or `All tracks`.

– Select `Playlists`.

The following settings can be created in the `Audio options` submenu:

– Switch `Shuffle` on or off.

– Select `Repeat`: `Off`, `One` (current track) or `All`.

Phone

Prerequisite

The vehicle is connected to a compatible mobile end device and a compatible helmet.

Making a phone call

- Call up menu `Telephone`.
- Accept call: tilt Multi-Controller **1** to the right.
- Reject call: tilt Multi-Controller **1** to the left.
- End call: tilt Multi-Controller **1** to the left.

Muting

The microphone in the helmet can be muted during active conversations.

Phone calls with several participants

During a phone call, you can accept a second call. The first call is put on hold. The number of active calls is displayed in the `Telephone` menu. You can switch between two calls.

Telephone data

Depending on the mobile terminal, telephone data will be automatically transferred to the vehicle after Bluetooth pairing (➠ 95).

`Phone book`: List of the contacts stored in the mobile terminal

`Call list`: List of the calls with the mobile terminal

`Favorites`: List of the favorites stored in the mobile terminal

Switching GPS synchronization on or off

- Call up menu `Settings`, `System settings`, `Date and time`.
- Switch `GPS synchronization` on or off.

Displaying the software version

- Call up menu `Settings`, `Information`, `Software version`.

Displaying license information

- Call up menu `Settings`, `Information`, `Licenses`.

Alarm system

Overview

– with anti-theft alarm system (DWA) OE

General information on DWA

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

Protection of motorcycle battery

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

Radio interference

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

Activation

– with anti-theft alarm system (DWA) OE

Activate DWA

• Switching on ignition (🔑 58).
• Adjust DWA (🔑 108).
– without Keyless Ride OE
• Turn off ignition.
» If the DWA is activated, the DWA is automatically activated after the ignition is switched off.
» Activation takes approximately 30 seconds to complete.
» Turn indicators are illuminated twice.
» Confirmation tone sounds twice (if programmed).
» The anti-theft alarm system is active.

– with Keyless Ride[OE]

- Turn off ignition.
- Press button **1** on the radio-operated key once.

» Activation takes approximately 30 seconds to complete.
» Turn indicators are illuminated twice.
» Confirmation tone sounds twice (if programmed).
» The anti-theft alarm system is active.

- To deactivate the movement sensor (for example if you are about to transport the scooter on a train and the swaying movement of the moving train could trip the alarm), press button **1** on the key remote again during the activation phase.

» Turn signals are illuminated three times.
» Confirmation tone sounds three times (if programmed).
» Movement sensor is deactivated.

Activation with Keyless Ride

– with Keyless Ride[OE]

- Turn off ignition.
- Press button **1** on the key remote.

» Activation takes approximately 30 seconds to complete.
» Turn indicators are illuminated twice.
» Confirmation tone sounds twice (if programmed).
» The anti-theft alarm system is active.

Motion sensor when transporting the motorcycle

If, for example, the motorcycle is to be transported by train, it is advisable to switch off the motion sensor. The strong movements could result in an accidental triggering of the alarm.

Deactivating the movement sensor

– with Keyless Ride[OE]

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

» Turn signals are illuminated three times.
» Confirmation tone sounds three times (if programmed).
» Movement sensor is deactivated.

Adjust DWA

Requirement

The Scooter is stationary.

- Switch on the ignition.
- Selecting SETUP (➡ 67).
- Briefly press the top of the MENU rocker button repeatedly until SETUP DWA is displayed.

- Briefly press the bottom of the MENU rocker button **2** to change between DWA ON **3** and DWA OFF.

The following settings are available:

– DWA ON: DWA is activated or is activated automatically when the ignition is switched off.
– DWA OFF: DWA is deactivated.

- Press and hold the top of the MENU rocker button **1** to exit SETUP.

» SETUP ENTER is displayed.

– with Connectivity OE

- Switch on the ignition.
- Call up menu Settings, Vehicle settings, Alarm system.

» The following settings are available:

– Adapt Warning signal
– Switch Tilt sensor on and off
– Switch Arming tone on and off
– Switch Arm automatically on and off

» Programming options (➡ 111)

Alarm function

– with anti-theft alarm system (DWA) OE

Alarm activation

The DWA alarm can be set off by:

– Motion sensor
– Switching on ignition with an unauthorized motorcycle key
– Disconnection of the DWA from the vehicle battery (DWA battery takes over the power supply)

Alarm signal

The DWA alarm can be set off by:

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

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

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

– with Keyless Ride[OE]

A triggered alarm can be canceled at any time by pressing the button **1** on the radio-operated key without deactivating the DWA.

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

Light signals on DWA LED:

– 1 flash: motion sensor 1
– 2 flashes: motion sensor 2
– 3 flashes: ignition turned on with unauthorized ignition key
– 4 flashes: alarm system disconnected from vehicle battery
– 5 flashes: motion sensor 3

Reason for triggering of the alarm

After the alarm function has been deactivated, the DWA LED indicates the reason for any alarm activation which may have occurred for one minute:

– 1x flash: movement sensor: motorcycle was tilted forward/back.
– 2x flashes: movement sensor: motorcycle was tilted to the side.
– 3x flashes: ignition was switched on using an unauthorized key.
– 4x flashes: anti-theft alarm system was disconnected from the vehicle battery.

Deactivation

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

Deactivating the alarm function

• Switch on the ignition with an authorized ignition key.

– with Keyless Ride[OE]

• Press button **1** on the radio-operated key once.

NOTICE

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

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

Programming

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

Programming options

The anti-theft alarm system can be adjusted by your BMW Motorrad retailer to your individual needs in the following areas:
– Confirmation alarm tone after activation/deactivation of the DWA in addition to the turn signals lighting up.
– Increasing and decreasing or intermittent alarm tone.

– with Connectivity[OE]

The anti-theft alarm system can be adjusted in the `Settings`, `Vehicle settings`, `Alarm system` menu.

Factory settings

The anti-theft alarm system is delivered with the following factory settings:
– Confirmation alarm tone after activation/deactivation of the DWA: no.
– Alarm tone: increasing.

Setting

Mirrors

Adjusting mirrors

- Move mirror into desired position by pressing it lightly.

Headlight

Headlight adjustment, right-hand/left-hand traffic

This vehicle is equipped with a symmetrical lowbeam headlight. No further measures are needed to ride in countries in which traffic moves on the other side of the road than in the country of registration.

Headlight range and spring preload

The headlight range generally remains constant due to the adjustment of the spring preload to the loading state.
If you are in doubt about the correct headlight range adjustment, please contact a specialist workshop, preferably an authorized BMW Motorrad retailer.

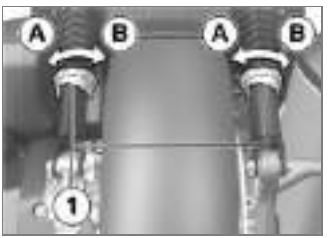
Spring preload

Setting

It is essential to set the spring preload on the rear wheel 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 the spring preload on the rear wheel

- Park the Scooter, making sure the ground is level and firm.



- To increase the spring preload, turn the adjustment rings **1** in arrow direction **A** using a tool from the on-board tool kit.
- To reduce the spring preload, turn the adjustment rings **1** in the arrow direction **B** using a tool from the on-board tool kit.

Basic setting of spring preload, rear
Stage 1 (With full fuel tank and 85 kg rider)
Stage 1 (One-up without load)
Stage 3 (One-up with load)
Stage 5 (Two-up with load)

- Make sure that the same values are set on both spring struts.

Riding

Safety information

Rider's Equipment

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

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

Load

WARNING

Reduced riding stability caused by overloading and uneven loading
Accident hazard

- Do not exceed the gross weight limit and observe the loading information.◀
- Adjust the spring preload settings to the gross vehicle weight.
- Comply with maximum payload of luggage rack.

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

- Observe the maximum payload of the topcase.

Payload of Topcase
max 11 lbs (max 5 kg)

Speed

If you ride at high speeds, always bear in mind that marginal conditions such as the following can adversely affect the handling of your motorcycle:
– Spring system setting
– Unevenly distributed load
– Loose clothing
– Insufficient tire inflation pressure
– Tire tread in poor condition

Risk of poisoning

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

WARNING

Harmful exhaust gas
Danger of suffocation
- Do not inhale exhaust fumes.
- Do not run the engine in closed rooms.◀

Burn hazard

CAUTION

Intense heating up of engine and exhaust system while riding

Burn hazard

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

Catalytic converter

There is a danger of overheating and damage if misfiring causes unburned fuel to enter the catalytic converter.

For this reason, observe the following points:

– Do not run the fuel tank dry.
– Engine has not been operated in the engine speed limit range for a longer period.
– Stop the engine immediately if it misfires.
– Use unleaded fuel only.
– Comply with all specified maintenance intervals.

ATTENTION

Unburned fuel in the catalytic converter

Damage to catalytic converter

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

Danger of overheating

ATTENTION

Engine idling for a lengthy period while at a standstill

Overheating due to insufficient cooling; in extreme cases vehicle fire

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

Modifications

ATTENTION

Manipulations on the Scooter (e.g. engine control unit, throttle valves, clutch)

Damage to the affected parts, failure of safety-relevant functions. Damage resulting from manipulations is not covered by the warranty.

- Do not make any modifications.◀

Observe checklist

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

Requirement

Before every journey:

- Check operation of the brake system.
- Check operation of the lighting and signal system.
- Check tire tread depth (➠ 145).
- Check secure hold of Topcase and luggage.

Requirement

At every third refueling stop:

- Adjusting the spring preload on the rear wheel (➠ 114).
- Checking the engine oil level (➠ 138).
- Checking the front brake pad thickness (➠ 139).
- Checking the rear brake pad thickness (➠ 140).
- Checking brake fluid level of the front wheel brake (➠ 141).
- Checking brake fluid level in rear wheel brake (➠ 142).
- Checking the coolant level (➠ 143).

Starting

Starting engine

- Switch on the ignition.

» Pre-Ride-Check is carried out. (➠ 120)

» ABS self-diagnosis is performed. (➠ 121)

» ASC self-diagnosis is performed. (➠ 121)

- Apply the brake.

NOTICE

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

- Press starter button **1**.

» Engine starts.

» Consult the troubleshooting chart if the engine refuses to start. (➠ 182)

Pre-Ride-Check

After the ignition is switched on, the instrument cluster performs a test of the instrument dials and the warning and indicator lights – the "Pre-Ride-Check". Starting the engine before the test routine is completed will cancel the remainder of the routine.

Phase 1

The needle of the speedometer is moved to the end stop. The warning and indicator lights are switched on.

Phase 2

The needle of the speedometer is returned to the original position. The lit warning and indicator lights are switched off.

If the needle fails to move or if one of the warning and indicator lights fails to light up:

WARNING

Defective warning lights

Lack of display of malfunctions

- Check the display of all indicator and warning lights.◀
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Retailer.

ABS self-diagnosis

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

Phase 1

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

ABS indicator light flashes.

Phase 2

» Check wheel sensors while starting off.

ABS indicator light flashes.

ABS self-diagnosis completed

» The ABS indicator and warning light goes out.

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

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

ASC self-diagnosis

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

Phase 1

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

ASC indicator and warning light flashes slowly.

Phase 2

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

ASC indicator and warning light flashes slowly.

ASC self-diagnosis completed

» The ASC symbol is no longer displayed.

- Watch all warning and indicator lights on the display.

 ASC self-diagnosis routine not completed
The Scooter must reach a specified minimum speed with the engine running before the system can check operation of the wheel speed sensors:
min 3 mph (min 5 km/h)

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

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

» If the ASC intervenes without it being necessary, too often or to early, the troubleshooting chart may be of assistance. (➡ 184)

Riding

At engine speeds below approx. 1500 rpm, the centrifugal clutch remains open and the Scooter is in idle mode. If the engine speed is increased, the clutch closes and the Scooter begins moving.

In the range from approx. 30 mph (50 km/h) to approx. 75 mph (120 km/h), the engine accelerates, with the throttle valve fully open, with a slightly increasing engine speed in the vicinity of maximum torque. The change in speed is achieved by the CVT. Therefore, the engine noise only changes slightly in this speed range.
Speeds above approx. 75 mph (120 km/h) are achieved by increasing the engine speed.

Running in

Engine

- Before the break-in service, ride with frequently changing load ranges.
- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding highways if possible.
- Have the break-in service performed after 300 – 750 mi (500 – 1200 km).

Brake pads

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

WARNING

New brake pads

Extension of the braking distance, accident hazard

- Brake early.◀

Tires

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

WARNING

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

Accident hazard

- Always think well ahead and avoid extreme angles.◀

Brakes

How do you achieve the shortest stopping distances?

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

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

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

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

Descending mountain passes

WARNING

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

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

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

Wet, soiled brakes

Moisture and dirt on the brake rotors and the brake pads result in a decrease in the braking action.

Delayed or poorer braking action must be expected in the following situations:

– When driving in the rain and through puddles.
– After washing the vehicle.
– When driving on roads spread with salt.
– After working on the brakes due to oil or grease residues.
– During riding on dirty roads.

WARNING

Poorer braking action due to moisture and dirt

Accident hazard

- Brake until brakes are dry or clean; clean if necessary.
- Brake early until the full braking action is available again.◀

Parking the Scooter

Side stand

- Switch off engine.

ATTENTION

Poor ground conditions in area of stand

Component damage cause by tipping over

- Always check that the ground under the stand is level and firm.◀
- Fold out the side stand and park the Scooter.

ATTENTION

Loading of the side stand with additional weight

Component damage cause by tipping over

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

Center stand

- Switch off engine.

ATTENTION

Poor ground conditions in area of stand

Component damage cause by tipping over

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

ATTENTION

Center stand folds if subject to sharp movements.

Component damage cause by tipping over

- Do not sit on the motorcycle while it is resting on the center stand.◀
- Fold out the center stand and prop up the Scooter.

Refueling

– without Keyless Ride OE

WARNING

Fuel is highly flammable

Fire and explosion hazard

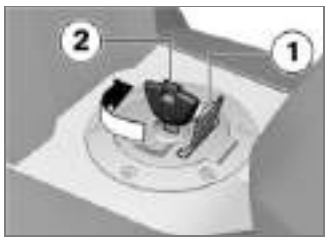
- Do not smoke. Never bring a naked flame near the fuel tank.◀

ATTENTION

Contact of fuel and plastic surfaces

Damage to surfaces (become unattractive or cloudy)

- Immediately clean plastic surfaces after contact with fuel.◀
- Place the Scooter on its center stand, ensuring that the ground is level and firm.



- Open the protective cap **1**.
- Unlock and open the gas cap in a clockwise direction using the ignition key **2**.

WARNING

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

Accident hazard

- Do not overfill the fuel tank.◀

ATTENTION

Refueling with leaded fuel

Damage to catalytic converter

- Do not refuel with leaded gasoline or gasoline with metallic additives, e.g. manganese or iron.◀
- Fill the tank with a fuel meeting the listed specifications, continuing until the fuel is no higher than the lower edge of the filler neck.

NOTICE

When refueling after running on fuel reserve, the resulting total fuel quantity must be greater than the fuel reserve, so that the new filling level is detected and the fuel warning light is switched off.◀

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

Fuel tank capacity
Approx. 3.4 gal (Approx. 12.8 l)

Reserve quantity
Approx. 1.1 gal (Approx. 4 l)

- Close the gas cap **2** with firm pressure.
- Remove vehicle key and close protective cap.

Refueling

– with Keyless Ride[OE]

Requirement

Steering lock is unlocked.

WARNING

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

WARNING

Escaping of fuel due to expansion under exposure to heat with overfilled fuel tank
Accident hazard
- Do not overfill the fuel tank.◀

ATTENTION

Contact of fuel and plastic surfaces
Damage to surfaces (become unattractive or cloudy)
- Immediately clean plastic surfaces after contact with fuel.◀
- Place motorcycle on center stand, ensuring that it is resting on a firm and level support surface.

– with Keyless Ride OE
- Switch off ignition (➡ 60).

NOTICE

After the ignition is switched off, the fuel filler cap can be opened within the specified run-on time even without the radio-operated key being within the reception area.◀

After-running period for opening the fuel filler cap
2 min

» There are **2 ways** to open the fuel filler cap:
– Within the after-running period.
– After the after-running period expires.

Version 1

– with Keyless Ride OE

Requirement

Within the after-running period

- Slowly pull the lug **1** of the gas cap upward.

» Fuel filler cap unlocked.
- Open fuel filler cap completely.

Version 2

– with Keyless Ride OE

Requirement

After run-on time expires

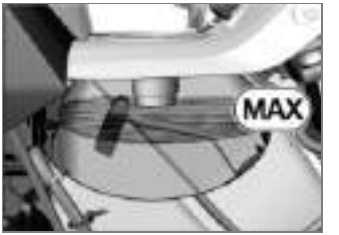
- Bring radio-operated key into reception range.
- Slowly pull the lug **1** upward and let it go again.

» The indicator light for the radio-operated key flashes as long as the radio-operated key is being searched for.

- Slowly pull the lug **1** of the gas cap upward again.

» Fuel filler cap unlocked.

- Open fuel filler cap completely.



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

NOTICE

When refueling after running on fuel reserve, the resulting total fuel quantity must be greater than the fuel reserve, so that the new filling level is detected and the fuel warning light is switched off.◀

NOTICE

The "usable fuel quantity" specified in the technical data is the fuel quantity, which can be refueled if the fuel tank was completely emptied, i.e., if the engine dies off due to lack of fuel.◀

Fuel tank capacity
Approx. 3.4 gal (Approx. 12.8 l)

Reserve quantity
Approx. 1.1 gal (Approx. 4 l)

- Pull the lug of the gas cap upward.
- Press the gas cap down firmly.

» Fuel filler cap audibly engages.

» Fuel filler cap automatically locks after run-on time expires.

» The engaged fuel filler cap locks immediately when the steering lock is locked or during starting.

Securing the vehicle for transport

- Protect all components along which straps are routed. For example, use adhesive tape or soft cloths to protect against scratching.

ATTENTION

Motorcycle tips to the side when raising

Component damage cause by tipping over

- Secure the motorcycle against tipping to the side, preferably with the assistance of a second person.◀
- Push the vehicle onto the transport surface, and do not place on the side stand or center stand.

ATTENTION

Pinching of components

Component damage

- Do not pinch components, e.g. brake lines or wiring harnesses.◀
- Lay straps on both sides crosswise over the fork bridge at the front and tighten.
- Ensure that you do not exert pressure on the brake lines.
- Protect the front wheel cover with soft cloths.

- Lay straps around the passenger grab handle at the back and tighten.
- Tension all straps evenly; the motorcycle should be pulled down against its springs with the suspension compressed as much as possible.

Technology in detail

General notes

More information on the topic of technology is available at:
bmw-motorrad.com/technology

Antilock Brake System (ABS)

How does ABS work?

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

What happens when rough roads are encountered?

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

Lifting off rear wheel

On high-friction road surfaces, the front wheel will not block or will block very late, even if the brakes are applied forcefully. As a result, the ABS control intervenes very late or not at all. In this case, the rear wheel may rise up and cause the Scooter to roll over.

WARNING

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

What are the design features of the BMW Motorrad ABS?

The BMW Motorrad ABS ensures stability on all surfaces, within the limits set by driving dynamics. The system is not optimized for the special conditions encountered under extreme weather during off-road and racetrack use.

Special situations

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

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

Unusual riding conditions

– Rear wheel rotating with the vehicle held stationary by applying the front brake (burnout).
– Rear wheel slipping over a smooth roadway over a longer period, e.g. when decelerating with the braking effect of the engine.

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

How important is regular maintenance?

WARNING

Brake system not regularly serviced

Accident hazard

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

Reserves for safety

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

Be careful in curves! When you apply the brakes in curves, the laws of driving dynamics

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

Automatic Stability Control (ASC)

How does ASC work?

BMW Motorrad ASC compares the wheel speeds of the front and rear wheels. Differences in the relative rotation speeds allow the system to determine the slip rate, and thus the stability reserves at the rear wheel. The engine management system adapts the engine torque when the slip limit is exceeded.

Special situations

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

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

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

Never abruptly turn the throttle grip all the way back while on a smooth road surface. The engine's braking torque could cause the rear wheel to lock, resulting in unstable motorcycle conditions. This case cannot be controlled by BMW Motorrad ASC.

Slippery roadway

On very loose surfaces (e.g. a gravel bed at a racetrack) the control interventions of the ASC can reduce the drive force at the rear wheel to such a degree that the rear wheel no longer turns sufficiently. In this case, BMW Motorrad recommends switching off the ASC temporarily.

Note that the rear wheel will spin on the loose surface, and close the throttle in a timely manner before reaching a solid surface. Then switch on ASC again.

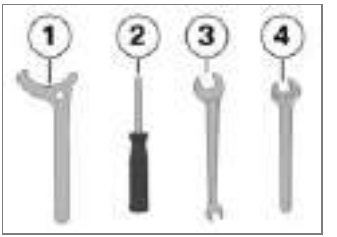
Maintenance

General notes

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

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

Standard tool kit



1 Hook wrench
– Adjusting the spring preload on the rear wheel (➡ 114).

2 Reversible screwdriver insert
Phillips PH1 and Torx T25
– Remove body panels.
– Remove battery cover (➡ 166).
– Replacing the light source for the rear turn signal (➡ 158).

3 Open-ended wrench
Wrench size: 10/15 mm
– Removing battery (➡ 164).

4 Open-ended wrench
Wrench size: 14
– Release/fasten the mirror.

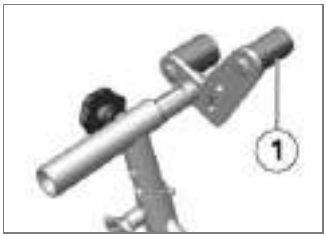
Front wheel stand

Mount front wheel stand

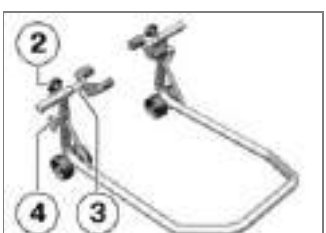
Requirement

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

- Place the Scooter on its center stand, ensuring that the ground is level and firm.
- Use basic stand with front wheel mount.



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



- Release the mounting bolts **2** on the left and right.
- Push the mounts **3** on the left and right outward, counter-

until the front suspension fits between them.
- Use retaining pins **4** on the left and right to set the front wheel stand to the desired height.
- Center front wheel stand relative to front wheel and push it against front axle.

- Align the mounts **3** on the left and right so that front suspension rests securely on them.
- Tighten the mounting bolts **2** on the left and right.

ATTENTION

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

Component damage cause by tipping over

- When raising the motorcycle, make sure that the center stand remains on the ground.
- Adjust the height of the front wheel stand if necessary.◀
- Apply uniform pressure to push front wheel stand down and raise the Scooter.

- Ensure that Scooter is standing securely.

Engine oil

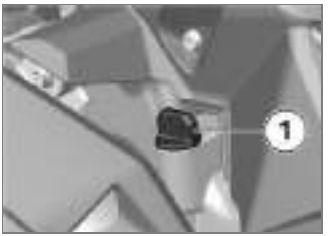
Checking the engine oil level

ATTENTION

Misinterpretation of the oil filling quantity, as the oil level is temperature-dependent (the higher the temperature, the higher the oil level)

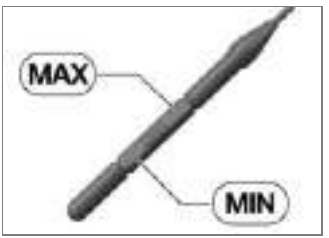
Engine damage

- Only check the oil level after a longer journey or when the engine is warm.◀
- After switching off the engine, wait for one minute before the oil level can be read.
- Place the warm Scooter on its center stand, ensuring that the ground is level and firm.
- Wipe area around oil fill location to clean it.



- Remove the oil dipstick **1**.

- Clean the measuring scale **2** of the oil dipstick with a dry cloth.
- Position the oil dipstick on the oil filler opening but do not screw it in.
- Remove oil dipstick and read fluid level.



Specified level of engine oil
Between the **MIN** and **MAX** marks (Engine at operating temperature; only insert the oil dipstick, **do not screw it in**.)

If the oil level is below the **MIN** mark:

- Add engine oil up to specified level.

Engine oil, quantity for topping up
max 0.4 quarts (max 0.4 l) (Difference between **MIN** and **MAX**)

If the oil level is above the **MAX** mark:

- Have oil level corrected at an authorized service facility, preferably an authorized BMW Motorrad retailer.
- Install the oil dipstick and tighten it by hand.

Brake system

Check brake operation

- Operate right brake lever.

» Pressure point must be clearly perceptible.

- Operate left brake lever.

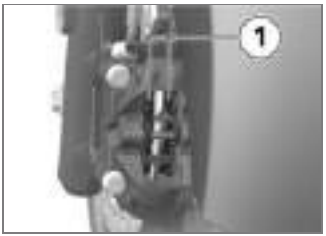
» Pressure point must be clearly perceptible.

If no clear pressure points are perceptible:

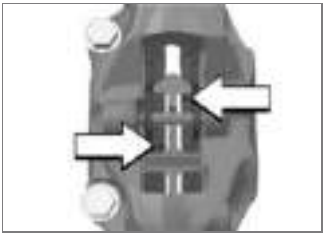
- Have the brakes checked at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Checking the front brake pad thickness

- Park the Scooter, making sure the ground is level and firm.



- Conduct a visual inspection of the brake pad thickness. Turn the handlebars to the right.
- Direction of view: from rear, looking at brake pads **1**.
- Turn the handlebars to the left and check the brake pad thickness on the right side in the same manner.



Front brake-pad wear limit	
≥0.04 in (≥1 mm) (Only friction material without carrier plate. The wear markings (grooves) must be clearly visible.)	

If the wear indicators are no longer clearly visible:

WARNING

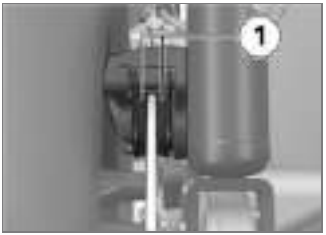
Dropping below the minimum pad thickness

Reduced braking action, damage to the brake

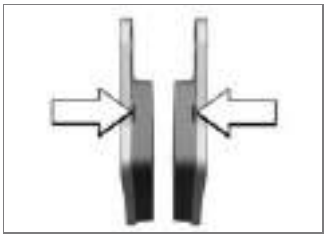
- In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.◀
- Have brake pads replaced at an authorized service facility, preferably an authorized BMW Motorrad retailer.
- BMW Motorrad recommends only installing original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

Checking the rear brake pad thickness

- Park the Scooter, ensuring that the ground is level and firm.



- Conduct a visual inspection of the brake pad thickness. Direction of view: from rear, looking at brake pads **1**.



Rear brake-pad wear limit
min 0.04 in (min 1 mm) (Only friction material without carrier plate. Groove in coating material indicates wear limit.)

If the wear marks have been reached:

WARNING

Dropping below the minimum pad thickness
Reduced braking action, damage to the brake

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

Checking brake fluid level of the front wheel brake

WARNING

Insufficient brake fluid in the brake-fluid reservoir
Considerably reduced braking performance caused by air in the brake system

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

- Read the brake fluid level on the sight glass **1** of the right-hand brake fluid reservoir.

NOTICE

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

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

If brake fluid level falls below the approved level:

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

Checking brake fluid level in rear wheel brake

WARNING

Insufficient brake fluid in the brake-fluid reservoir

Considerably reduced braking performance caused by air in the brake system

- Adjust the riding mode immediately until the fault is rectified.
- Check brake fluid level regularly.◀

- Place the Scooter on its center stand, ensuring that the ground is level and firm.
- Align handlebars so that brake-fluid reservoir is positioned horizontally.

- Read the brake fluid level on the sight glass **1** of the left-hand brake fluid reservoir.

NOTICE

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

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

If brake fluid level falls below the approved level:

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

Coolant

Checking the coolant level

- Place the Scooter on its center stand, ensuring that the ground is level and firm.

- Direction of view: from the front, underneath the front trim panel. Read the coolant level on the coolant expansion tank **1**.

Target coolant level in the expansion tank
Between the **MIN** and **MAX** marks (with cold engine)

If coolant level drops below approved level:

- Add coolant.

Top up coolant

- Removing fairing side panel (166).

- Open the cap **1** of the coolant expansion tank and top up coolant to the target level.
- Checking the coolant level (➨ 143).
- Close the cap **1** of the coolant expansion tank.
- Install fairing side panel (➨ 167).

Tires

Checking the tire pressure

WARNING

Incorrect tire inflation pressure.

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

- Ensure proper tyre inflation pressure.◀

WARNING

Automatic opening of vertically installed valve inserts at high speeds

Sudden loss of tire inflation pressure

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

- Park the Scooter, making sure the ground is level and firm.
- Check tire pressures against data below.

Tire pressure, front
31.9 psi (2.2 bar) (One-up, with cold tires)
34.8 psi (2.4 bar) (Two-up mode with cargo; with cold tires)

Tire pressure, rear
34.8 psi (2.4 bar) (One-up, with cold tires)
37.7 psi (2.6 bar) (Two-up mode with cargo; with cold tires)

If tire pressure is too low:

- Correct tire pressure.

Rims and tires

Checking rims

- Park the Scooter, making sure that the ground is level and firm.

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

Check tire tread depth

WARNING

Riding with heavily worn tyres
Risk of accident due to poorer rideability

- If necessary, replace the tyres before the legally specified minimum tread depth is reached.◀
- Park the Scooter, making sure the ground is level and firm.
- Measure tire tread depth in main tread grooves with wear indicators.

NOTICE

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

When the minimum tread depth is reached:

- Replace the worn tires.

Wheels

Tire recommendation

For every size of tire, BMW Motorrad has tested and approved certain makes as roadworthy. BMW Motorrad cannot evaluate the suitability of other tires, and can therefore take no responsibility for their driving safety.

BMW Motorrad recommends only using the tires tested and approved by BMW Motorrad. Detailed information can be obtained from your authorized BMW Motorrad retailer or online at:

bmw-motorrad.com

Influence of the wheel sizes on the ABS

The wheel sizes play an important role in the ABS system. The diameter and width of the wheels stored in the control unit have particular significance as the basis for all necessary calculations. A change in these sizes resulting from fitting wheels other than those fitted as standard equipment can seriously affect the control efficiency of this system. The sensor rings are essential for correct wheel speed detection; they too must match the vehicle's built-in system and con-

sequently are not permitted to be replaced.
If you wish to equip your Scooter with different wheels, please contact a specialist workshop, preferably a BMW Motorrad retailer. In some cases, the data stored in the control unit can be adapted for the new wheel sizes.

Effect of wheel sizes on the ASC

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

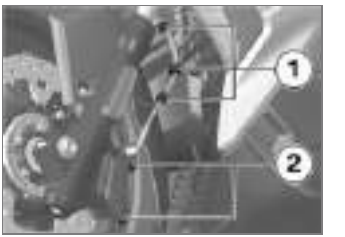
ATTENTION

Faults in the ASC caused by changing tire radii
The ASC grips despite good adhesion
- Check the wear and pressure of both tires.
- Calibrate the ASC after every tire change.
- If there are an unexpectedly large number of ASC interventions: Recalibrate the ASC.◀

ATTENTION

Loss of the adaptation values for the radii of the tires in the Digital Motor Electronics
Accident hazard
- Recalibrate the ASC after every software update.◀

Removing front wheel

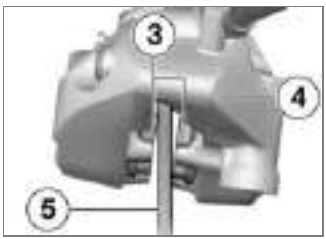


- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.
- Release the brake line from the holders **1**.

ATTENTION

Unintentional pressing together of brake pads
Component damage when mounting the brake caliper or when pressing the brake pads apart

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



- Push the brake pads **3** apart slightly by turning the brake caliper **4** against the brake disc **5**.
- Carefully pull brake calipers back and outward to remove them from brake rotors.
- Raise the front of the Scooter until the front wheel rotates freely, preferably using a BMW Motorrad front wheel stand.
- Mount front wheel stand (➠ 136).

- Remove screw **1**.
- Release the clamping bolt **2**.

- Release the clamping bolt **3**.
- Press the quick-release axle **4** inward slightly on the left side for a better grip on the right side.
- Remove the quick-release axle **4** while supporting the wheel.
- Roll front wheel forward to remove it.

Installing the front wheel

WARNING

Use of a wheel which does not comply with series specifications

Malfunctions during control interventions by ABS and ASC

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

ATTENTION

Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

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

- If applicable, insert the spacer bushing **5** on the left side in the wheel hub.

ATTENTION

Front wheel installation opposite the running direction

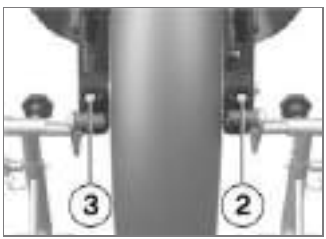
Accident hazard

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

- Raise the front wheel and install the quick-release axle **4**.

- Mount the screw **1** with the appropriate torque. Brace quick-release axle on the right side at the same time.

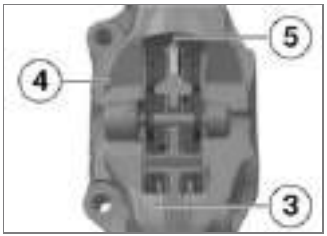
Screw in the quick-release axle, front
24 lb/ft (32 Nm)



- Tighten the clamping bolts **3** and **2** to the appropriate torque.

Clamping bolts (quick-release axle) in telescopic forks
14 lb/ft (19 Nm)

- Remove front-wheel stand.



- Mount the brake caliper **4** on the brake disc, ensuring that the brake disc **5** is installed between the brake pads **3**.
- Install the brake caliper on the other side in the same manner.

- Mount the screws **2** on the left and right until the screw head is in contact, but **do not tighten**.
- Activate the brake several times until the brake pads are in contact, and secure the **brake lever with a rubber band**.
- Tighten the screws **2** on the left and right with the appropriate torque.

Brake caliper on fork leg
24 lb/ft (32 Nm)

- Secure the brake line in the holders **1**.
- Release the brake lever.
- Retighten the screws **2** on the left and right with the appropriate torque.

	Brake caliper on fork leg
24 lb/ft (32 Nm)	

- Remove adhesive tape from wheel rim.

Note on removing the rear wheel

Removing the rear wheel requires technical knowledge and special tools. If you are not sure whether this work is within your skill range, please contact a specialist workshop, preferably a BMW Motorrad retailer.

Removing rear wheel

CAUTION

Hot engine or hot exhaust system

Burn hazard

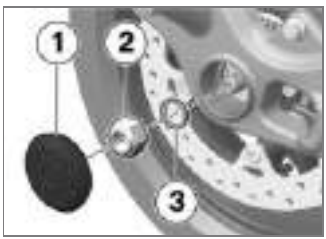
- Let the engine and exhaust system cool before beginning work.◀
- Place the Scooter on its center stand, ensuring that the ground is level and firm.

- Remove screw **1**.
- Raise the trim for the silencer **2**.

- Push the trim for the silencer **2** back and remove it.

- Release the screw **3** of the silencer.

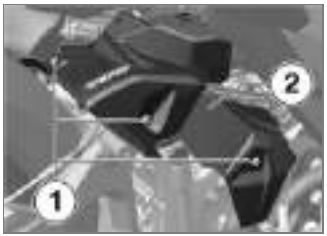
- Remove the screws **5** with washers.
- Pull the silencer **6** off of the exhaust manifold and remove.



- Block the rear wheel brake with a rubber band.

» The rear wheel cannot turn.

- Carefully pry out the lid **1** and remove it.
- Remove the nut **2** and spacer bushing **3**.
- Remove the rubber band from the rear wheel brake.



- Remove screws **1**.
- Raise the rear wheel cover **2**.

- Release the brake hose from the holder **3**.

- Remove the screw **4** and release the holder for the brake hose **5**.
- Press the brake caliper **6** against the brake disc.

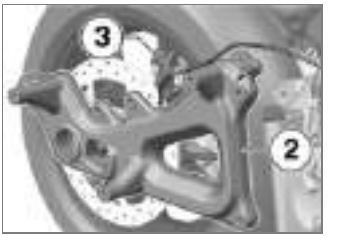
» The brake piston is pushed back.

- Remove screws **7**.
- Pull the brake caliper **6** upward off of the brake disc and let it hang to one side.

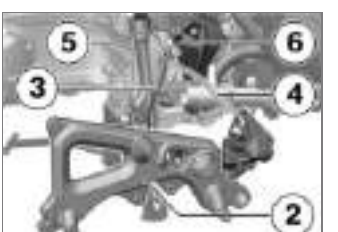
- Release the nut **1** of the top spring strut screw connection, bracing the screw **2** with an L-shaped wrench.

- Remove the screw **3**.
- Swivel the spring strut **4** toward the rear.

- Remove screws **1**.



- Release the rear wheel swinging arm **2**, ensuring that the cable **3** for the wheel speed sensor is not damaged.



- Route the cable **3** for the wheel speed sensor and the brake hose **4** toward the rear filler neck **5** and rear wheel cover **6**.

» The cable **3** must not be under tension.

- Set down the rear wheel swinging arm **2**.

- Remove the spacer bushing **1**.
- Pull the rear wheel **2** off of the output shaft and remove it.

Installing rear wheel

ATTENTION

Tightening of screwed connections with incorrect tightening torque

Damage or loosening of screwed connections

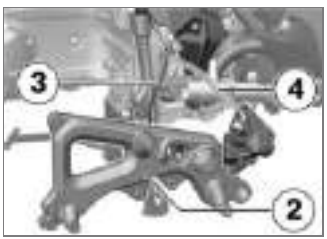
- Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.◀

- Lubricate the gearing of the output shaft.

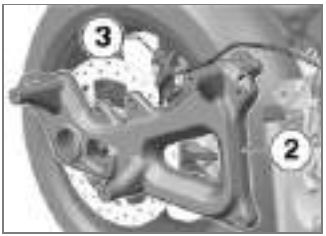
Lubricant
Staburags NBU 30 PTM

» Do not apply lubricant to the thread of the output shaft.

- Slide the rear wheel **2** onto the output shaft and allow the gearing to engage by rotating the wheel.
- Install the spacer bushing **1**.



- Reposition the rear wheel swinging arm **2** with the cable **3** for the wheel speed sensor and the brake hose **4**.



- Position the rear wheel swinging arm **2**, ensuring that the cable **3** for the wheel speed sensor is properly routed.

- Install the screws **1** and tighten to the appropriate torque.

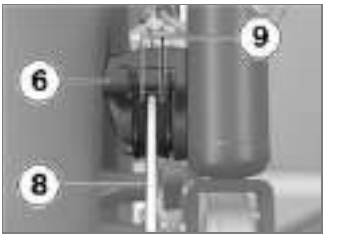
Swinging arm on the right on the drivetrain swinging arm
28 lb/ft (38 Nm)

- Pivot the spring strut **4** forward and position it.
- Install the screw **3** and tighten to the appropriate torque.

Spring strut on the swinging arm
28 lb/ft (38 Nm)

- Brace the screw **2** with an L-shaped wrench and tighten the nut **1** to the appropriate torque.

Spring strut on the frame
Thread-locking compound: mechanical
28 lb/ft (38 Nm)



- Mount the brake caliper **6** on the brake disc, ensuring that the brake disc **8** is installed between the brake pads **9**.

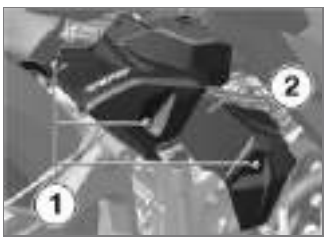
- Position the brake caliper **6**, install the screws **7** and tighten to the appropriate torque.

Rear brake caliper on rear wheel swinging arm
Thread-locking compound: micro-encapsulated
24 lb/ft (32 Nm)

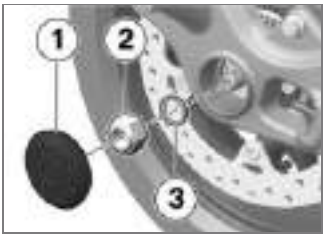
- Position the holder for the brake hose **5**, install the screw **4** and tighten to the appropriate torque.

Brake hose holder on swinging arm
6 lb/ft (8 Nm)

- Fasten the brake hose to the holder **3**.



- Position the rear wheel cover **2**.
- Install screws **1**.



- Activate the rear wheel brake several times until the brake pads are in contact and block it with a rubber band.

» The rear wheel cannot turn.

- Install the spacer bushing **3**.
- Install the nut **2** and tighten to the appropriate torque.

Rear wheel to output shaft
Thread-locking compound: mechanical
85 lb/ft (115 Nm)

- Install the lid **1**.

- Remove the rubber band from the rear wheel brake.

- Mount the silencer **6** on the exhaust manifold and position it.
- Install the screws **5** with washers and tighten to the appropriate torque.

Silencer on swinging arm
15 lb/ft (21 Nm)

- Tighten the screw **3** of the clamp **4** with the appropriate torque.

End muffler on exhaust manifold
18 lb/ft (25 Nm)

- Position the bush **7** if applicable.

- Hook the trim for the silencer **2** onto the holders.

- Position the trim for the silencer **2**.
- Install screw **1**.

Fuses

Removing the fuse

Requirement

The fuses are located under the battery compartment cover by the leg shield.

ATTENTION

Bypassing defective fuses

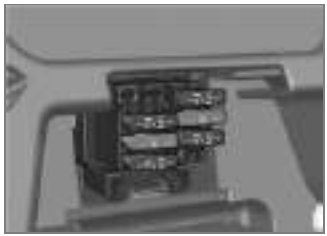
Risk of short circuit and fire

- Do not bypass defective fuses.
- Replace defective fuses with new fuses.◀

- Turn off ignition.
- Remove battery cover (➡ 166).

- To remove the main fuse, pull fuse **1** out of the fuse holder.

- To remove the fuses of slots 2 to 7, press the locks **2** and remove the lid **3** from the fuse box.



- Pull the affected fuse out of the fuse box.

Installing fuse

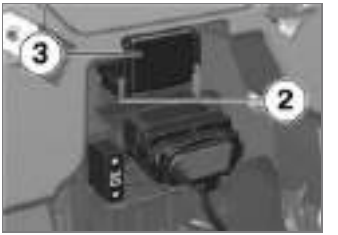
- Replace the faulty fuses in the fuse box with a fuse with the required current level.

NOTICE

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

NOTICE

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



- Install the lid **3**.

» The locks **2** engage audibly.

- Replace the faulty main fuse **1** with a fuse with the required current level.

Main fuse
30 A (Voltage regulator)

- Installing battery cover (➡ 166).

Light sources

LED light source

Except for the rear turn signals, all light sources in the Scooter are equipped with LED technology. Light sources cannot be renewed separately.

– Contact a BMW Motorrad partner.

Replacing the light source for the rear turn signal

- Park the Scooter, ensuring that the ground is level and firm.
- Turn off ignition.

- Remove screw **1**.

- Pull the headlight diffuser out of the light housing.

- Remove the light source **2** from the light housing by pressing it in and turning it counterclockwise.
- Replace defective light source.

Bulbs for flashing turn indicators, rear
RY10W / 12 V / 10 W

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

- Install the light source **2** by pushing it into the socket and turning clockwise.

- Insert the headlight diffuser in the light housing.

• Install screw **1**.

Battery

Maintenance instructions

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

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

ATTENTION

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

Total discharge of battery leading to a rejection of warranty claims

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

Jump-starting

ATTENTION

Excessively high current during jump-starting of the Scooter

Cable fire or damage to the vehicle electronics

• Do not jump-start the Scooter using the power socket; only use the battery terminals.◀

ATTENTION

Contact between crocodile clips of jump leads and motorcycle

Danger of short circuit

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

ATTENTION

Jump-starting with a voltage higher than 12 V

Damage to the motorcycle's electronics

• The battery of the donor motorcycle must have a voltage of 12 V.◀

• Park the Scooter, making sure that the ground is level and firm.

- Remove battery cover (166).
- Removing the battery carrier (163).
- Begin by clamping one end of the red jumper cable to the positive terminal of the own vehicle and clamping the other end to the positive terminal of the battery of the second vehicle.
- Use the black jumper cable to connect the negative terminal of the own vehicle with a suitable grounding point or the negative terminal of the battery of the second vehicle.
- Allow engine on support motorcycle to run while jump-starting.

NOTICE

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

- Start engine of motorcycle with discharged battery in usual way; if engine does not start, wait a few minutes before repeating attempt in order to protect starter motor and donor battery.
- Allow both engines to idle for a few minutes before disconnecting the jumper cables.
- Disconnect the jumper cables first from negative terminal and then from the positive terminal.
- Installing the battery carrier (165).
- Installing battery cover (166).

Charging a connected battery

ATTENTION

Charging the battery connected to the vehicle using the battery terminals

Damage to the motorcycle's electronics

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

ATTENTION

Charging a fully discharged battery via the power socket or additional onboard socket

Damage to the motorcycle's electronics

- Always charge a fully discharged battery (battery voltage below 9 V; with the ignition switched on, the indicator lights and the multifunction display remain off) directly at the poles of the **disconnected** battery.◀
- Only charge the connected battery via the power socket in the right storage compartment.

ATTENTION

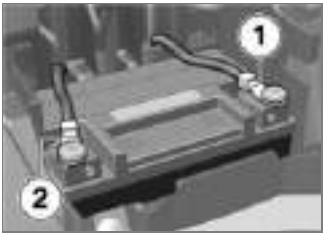
Commercially available chargers connected to the onboard socket.

Damage to charger and chassis electronics

- Only uses chargers that have been approved by BMW Motorrad.◀
- Comply with operating instructions of charger.

Charging a disconnected battery

- Remove battery cover (166).
- Removing the battery carrier (163).



ATTENTION

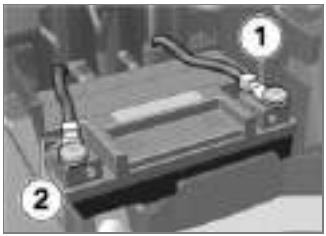
Incorrect battery disconnection

Danger of short circuit

- Follow the disconnection sequence.◀
- First disconnect the negative battery cable **1**.
- Then disconnect the positive battery cable **2**.
- Charge battery using a suitable charger.
- Comply with operating instructions of charger.
- Once battery is fully charged, disconnect charger's terminal clips from battery terminals.

NOTICE

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



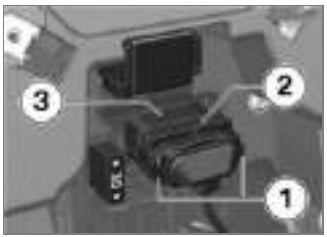
ATTENTION

Incorrect battery connection

Danger of short circuit

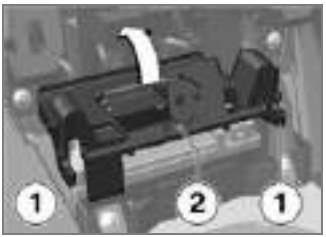
- Follow the installation sequence.◀
- First connect the positive battery cable **2**.
- Then connect the negative battery cable **1**.
- Installing the battery carrier (➡ 165).
- Installing battery cover (➡ 166).

Removing the battery carrier



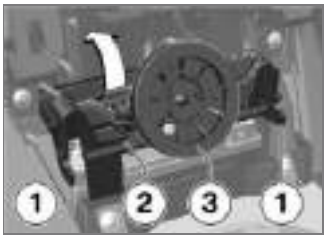
- Push in the locks **1**.
- Release the data link connector **2** from the holder **3** and let it hang to one side.

– without Keyless Ride[OE]



- Press the locks **1** on the left and right and fold the battery carrier **2** upward.
- Unhook the battery carrier **2** from the battery compartment at the back and remove it.◁

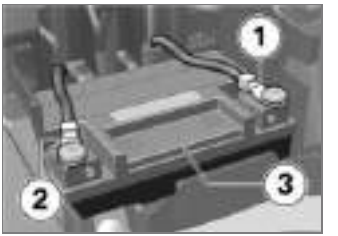
– with Keyless Ride[OE]



- Press the locks **1** on the left and right and fold the battery carrier **2** upward.
- Unhook the battery carrier **1** from the battery compartment at the back, pull it out with the low-frequency antenna **3** and set it aside.◁

Removing battery

- Turn off ignition.
- Switch off anti-theft alarm system if necessary.
- Remove battery cover (🡆 166).
- Removing the battery carrier (🡆 163).



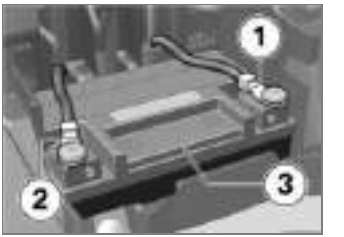
ATTENTION

Incorrect battery disconnection

Danger of short circuit

- Follow the disconnection sequence.◀
- First remove negative battery cable **1**.
- Then remove positive battery cable **2**.
- Take the battery **3** out of the battery compartment.

Install battery



- Place the battery **3** into the battery compartment with the positive terminal on the left side.

ATTENTION

Incorrect battery connection

Danger of short circuit

- Follow the installation sequence.◀
- First install the positive battery cable **2**.
- Then install the negative battery cable **1**.

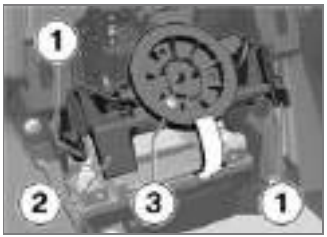
- Installing the battery carrier (➡ 165).
- Installing battery cover (➡ 166).
- Set clock (➡ 73).
- Setting the date (➡ 73).

Installing the battery carrier

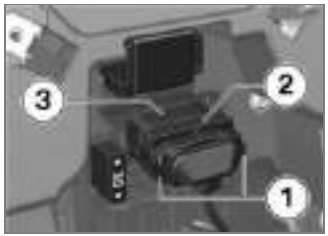
– without Keyless Ride[OE]

- Position the battery carrier **2** and hook it into the battery compartment at the back.
- Fold the battery carrier **2** downward while pressing the locks **1** and letting it engage.◁

– with Keyless Ride[OE]



- Position the battery carrier **2** with the low-frequency antenna **3** and hook it into the battery compartment at the back.
- Fold the battery carrier **2** downward while pressing the locks **1** and letting it engage.◁



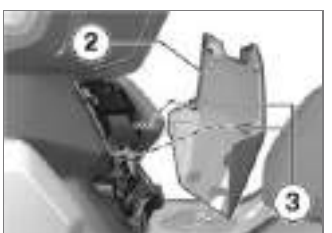
- Plug the data link connector **2** into the bracket **3**.

» The locks **1** engage.

Fairings and panels

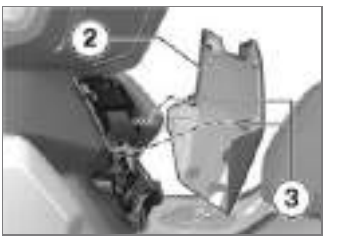
Remove battery cover

- Remove screws **1**.



- Lift the battery cover **2** slightly at the edges.
- Pull the mounting clips **3** of the battery cover **2** out of the holders.

Installing battery cover



- Check whether all mounting clips **3** are mounted on the battery cover **2**.
- Attach the battery cover **2** at the bottom and push the mounting clips **3** evenly into the mounts.

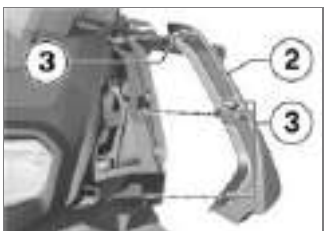
- Install screws **1**.

Removing fairing side panel

- Remove the screws **1** for the fairing side panel.

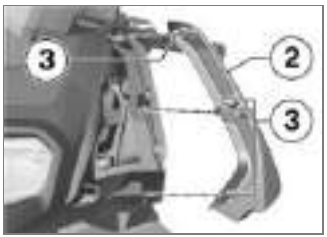
NOTICE

The operation described here for the left fairing side panel applies analogously to the right side.◀



- Lift the fairing side panel **2** slightly at the edges.
- Pull the mounting clips **3** of the fairing side panel **2** as evenly as possible out of the mounts.

Install fairing side panel



- Check whether all mounting clips **3** are installed on the fairing side panel **2**.
- Position the fairing side panel **2** and push the mounting clips **3** evenly into the mounts.

NOTICE

The operation described here for the left fairing side panel applies analogously to the right side.◀

- Install the screws **1** for the fairing side panel.

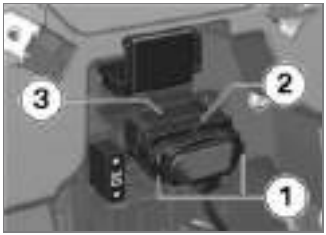
Data link connector

Removing the diagnostic connector

Requirement

The data link connector is located under the battery compartment cover by the leg shield.

- Remove battery cover (➡ 166).

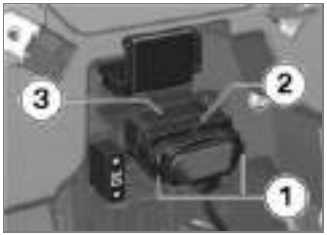


- Push in the locks **1**.
- Release the data link connector **2** from the bracket **3**.

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

Installing the data link connector

- Disconnect the diagnosis and information system interface.



- Plug the data link connector **2** into the bracket **3**.

» The locks **1** engage.

- Installing battery cover (166).

Accessories

General notes

CAUTION

Use of products from other manufacturers

Safety risk

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

The safety, operation and suitability of the parts and accessory products of BMW have been checked extensively. Therefore, BMW assumes responsibility for these products. BMW is not be liable for unapproved parts and accessory products of any kind. Comply with legal requirements for any modifications. The motorcycle must not violate the regulations governing motorcycle approval for highway use applicable in your own country.

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

bmw-motorrad.com/accessories

Power socket

Notes on use of power socket:

Connecting electrical devices

– The ignition must be switched on before electrical devices connected to the power socket can be operated.

Cable routing

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

– Cables must not hinder the rider's movement.
– Cables must not restrict the steering angle and driving characteristics.
– Cables must not become trapped.

Automatic deactivation

– The onboard socket is automatically switched off during starting.

– These sockets are switched off approx. 15 minutes after switching off the ignition to reduce the strain on the onboard electrical system. Additional devices with low power consumption are possibly not detected by the vehicle electronics. In these cases, onboard sockets are already switched off shortly after the ignition is switched off.
– In case of insufficient battery voltage, the onboard socket is switched off to maintain the starting capability of the vehicle.
– If the maximum loadability specified in the technical data is exceeded, the onboard socket is switched off.

Topcase

– with topcase Light [OA]

Open topcase

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

• Press Topcase lock forward.
» The topcase handle **2** pops up.

• Pull the release lever behind the cover **3** toward the back.
» Topcase lid opens.
• Open Topcase cover.

Close topcase

- Be sure that the topcase handle **2** is folded out.
- Close Topcase cover and press into lock. Ensure that no items are trapped between cover and case.
- Close the topcase handle **2**.
- If necessary, turn the key in topcase lock to the CLOSE position and remove it.

Remove topcase

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

- Press Topcase lock forward.

» The topcase handle **2** pops up.

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

Mount topcase

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

Maximum payload

Observe the maximum payload on the sign in the topcase.
If you cannot find your combination of motorcycle and topcase on the label, contact your BMW Motorrad Retailer.
The following values apply to the combination described here:

Payload of Topcase
max 11 lbs (max 5 kg)

Navigation system

Install navigation device

– with navigation system OA

- Place the navigation device **1** in the mount **2**.

- Pivot the navigation device **1** forward and press the upper edge into the detent **3**.

» The navigation device engages.

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

» The red mark for unlocking is not visible.

Remove navigation device

– with navigation system OA

- Press the release **2**.

» The red mark **3** identifies the release.

- Remove the navigation device **1**.

Operating the navigation system.

NOTICE

The following description refers to the Navigator V. The Navigator IV does not offer all options described.◀

NOTICE

Only the latest version of the BMW Motorrad communication system is supported. A software update may be required for the BMW Motorrad communication system. In this case, please contact your authorized BMW Motorrad retailer.◀

If the BMW Motorrad Navigator is installed and the operating focus is switched to the Navigator (➠ 89), several of its functions can be operated directly from the handlebar.

The navigation system can be operated using the Multi-Controller **1** and the rocker button MENU **2**.

Turn Multi-Controller 1 up and down

In the compass and Mediaplayer page: increase or decrease the volume of Bluetooth-connected BMW Motorrad communication system.
In the BMW special menu: select menu items.

Briefly tilt Multi-Controller 1 to the left and right

Switch between the main pages of the Navigator:
- Map view
- Compass
- Mediaplayer
- BMW special menu
- My motorcycle page

Long tilt the Multi-Controller 1 to the left and right

Activate specific functions on the Navigator display. These functions are indicated with an arrow to the right or the left above the corresponding touch field.


The function is triggered by long actuation to the right.


The function is triggered by long actuation to the left.

Press rocker button MENU 2 down

Change the operating focus to the Pure view.

In detail, the following functions can be operated:

Map view
- Turning upward: increase size of map section (Zoom in).
- Turn downward: reduce size of map section (Zoom out).

Compass page
- Turning increases or reduces volume of a BMW Motorrad communication system connected via Bluetooth.

BMW special menu
- Speak: Repeat last navigation announcement.
- Way point: Save current way point as favorite.
- Navigate home: Starts navigation to the home address (is grayed-out if no home address is set).
- Mute: Switch automatic navigation announcements (off: the top line in the display shows a crossed-out lip icon). Navigation announcements can still be output via "Speak". All other sound outputs remain switched on.
- Switching off display: Switch off display.
- Call home: Calls the phone number stored in the navigator (only displayed when a phone is connected).
- Detour: Activates the detour function (only displayed if a route is active).
- Skip: Skips the next way point (only displayed if route is provided with way points).

My Motorcycle
- Turn: changes the amount of data displayed.

– By tapping on a data field on the display, a menu opens where data can be selected.
– The values available for selection are dependent on the optional extras installed.

NOTICE

The Mediaplayer function is only available when using a Bluetooth device in accordance with the A2DP standard, e.g. a BMW Motorrad communication system.◀

Mediaplayer

– Long actuation to left: play previous title.
– Long actuation to right: play next title.
– Turning increases or reduces volume of a BMW Motorrad communication system connected via Bluetooth.

Care

Care products

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

ATTENTION

Use of unsuitable cleaning and care agents

Damage to motorcycle parts

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

Washing your motorcycle

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

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

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

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

WARNING

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

Poorer braking action, accident hazard

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

ATTENTION

Increased effect of salt caused by warm water

Corrosion

- Only use cold water to remove road salt.◀

ATTENTION

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

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

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

Cleaning sensitive motorcycle parts

Plastics

ATTENTION

Use of unsuitable cleaning agents

Damage to plastic surfaces

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

Fairings and panels

Clean fairings and panels with water and BMW plastic cleaner.

Plastic windshields and lenses

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

NOTICE

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

Chrome

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

Radiator

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

ATTENTION

Bending of radiator fins

Damage to radiator fins

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

Rubber

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

ATTENTION

Use of silicone sprays for care of rubber seals

Damage to rubber seals

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

Paint

Washing the motorcycle regularly will help counteract the long-term effects of substances that damage the paint, especially if your

motorcycle is ridden in areas with high air pollution or natural sources of dirt, e.g. tree resin or pollen.
At the same time, you should remove particularly aggressive materials immediately; otherwise changes in the paint and discoloration can occur. These include spilled fuel, oil, grease and brake fluid as well as bird droppings.
It is advisable to use BMW Car Polish or BMW Paint Cleaner in this case.
Contamination on the paint finish is particularly easy to see after the motorcycle has been washed. Remove this type of soiling with cleaning naphtha or spirit on a clean cloth or cotton ball. BMW Motorrad recommends using BMW tar remover for removing tar spots. Then add a protective wax coating to the paint at these locations.

Paint preservation

BMW Motorrad recommends applying BMW car wax or products containing carnauba wax or synthetic wax to preserve your paintwork.
When water fails to form beads on the paint surface this indicates it is time to apply wax.

Removing the Scooter from operation

- Clean the Scooter.
- Fully refuel the Scooter.
- Removing battery (164).
- Spray the brake lever, tilt and side stand mounting with suitable lubricant.
- Preserve bare metal and chrome-plated parts with an acid-free grease (Vaseline).
- Park Scooter in a dry room, raising it to relieve the weight from both wheels.

Putting theScooter into operation

- Remove the protective wax coating.
- Clean the Scooter.
- Install battery (164).
- Observe checklist (119).

Technical data

Troubleshooting chart

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

Possible cause	Remedy
Side stand folded out	Fold in side stand.
Start without applying brake	Start with brake applied.
BMW flexcase open	Close the BMW flexcase.
No fuel in tank	Refuel.
Battery drained	Charging the battery (➡ 162).

Bluetooth connection is not established.

Possible cause	Remedy
Necessary steps for Bluetooth pairing were not performed.	Refer to the operating instructions of the communication system for the necessary steps for Bluetooth pairing.
The communication system is not connected automatically despite successful Bluetooth pairing.	Switch off the communication system of the helmet and connect again after one to two minutes.
Too many Bluetooth devices are stored in the helmet.	Delete all Bluetooth pairing entries in the helmet (see the operating instructions of the communication system).
There are additional vehicles with Bluetooth-capable devices nearby.	Avoid simultaneously performing Bluetooth pairing on multiple vehicles.

Bluetooth connection is disrupted.

Possible cause	Remedy
Bluetooth connection to the mobile end device is interrupted.	Switch off energy saving mode.
Bluetooth connection to the helmet is interrupted.	Switch off the communication system of the helmet and connect again after one to two minutes.
Volume in the helmet cannot be adjusted.	Switch off the communication system of the helmet and connect again after one to two minutes.

Phone book is not displayed in the TFT display.

Possible cause	Remedy
Phone book was has not yet been transferred to the vehicle.	During Bluetooth pairing to the mobile terminal, confirm the transfer of the telephone data (104).

Active route guidance is not displayed in the TFT display.

Possible cause	Remedy
Navigation from the BMW Motorrad Connected App was not transferred.	Call up the BMW Motorrad Connected App on the connected mobile end device before riding.
Route guidance cannot be started.	Ensure that there is a data connection to the mobile end device and check the map data on the mobile end device.

ASC intervenes without it being necessary, too often or too early.

Possible cause	Remedy
Different tires fitted and tire radii changed	Calibrating ASC (➡ 71).
Insufficient tire pressure in front and rear; tire pressure or payload changed	Checking the tire pressure (➡ 144).
No propulsion on very loose surfaces (e.g. sand or snow)	Switch off ASC to overcome extremely poor road surfaces (➡ 69).
Loss of adaptation values for the tire radii in the Digital Motor Electronics after a software update	Calibrating ASC (➡ 71).

Screw connections

Brakes	Value	Valid
Brake caliper on fork leg		
M8 x 50 - 10.9	24 lb/ft (32 Nm)	
Rear brake caliper on rear wheel swinging arm		
M8 x 30 - 10.9, Replace bolt Micro-encapsulated	24 lb/ft (32 Nm)	
Brake hose holder on swinging arm		
M6 x 12	6 lb/ft (8 Nm)	

Front wheel	Value	Valid
Screw in the quick-release axle, front		
M12 x 20	24 lb/ft (32 Nm)	
Clamping bolts (quick-release axle) in telescopic forks		
M8 x 30	14 lb/ft (19 Nm)	

Rear wheel	Value	Valid
Rear wheel to output shaft		
M16, Replace nut mechanical	85 lb/ft (115 Nm)	
Swinging arm on the right on the drivetrain swinging arm		
M10 x 50	28 lb/ft (38 Nm)	
Spring strut on the swinging arm		
M10 x 50	28 lb/ft (38 Nm)	
Spring strut on the frame		
M10 x 50, Replace nut mechanical	28 lb/ft (38 Nm)	

Exhaust system	Value	Valid
Silencer on swinging arm		
M8 x 50	15 lb/ft (21 Nm)	
End muffler on exhaust manifold		
Clamp, M8 x 40	18 lb/ft (25 Nm)	

Fuel

Recommended fuel quality	Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI
Fuel tank capacity	Approx. 3.4 gal (Approx. 12.8 l)
Reserve quantity	Approx. 1.1 gal (Approx. 4 l)
Fuel consumption	67 mpg (3.51 l/100 km), according to WMTC

Engine oil

Engine oil, capacity	Approx. 1.9 quarts (Approx. 1.8 l), with filter replacement
Specification	SAE 5W-40, API SJ/JASO MA2, Additives (for instance, molybdenum-based substances) are prohibited, because they would attack the coatings on engine components, BMW Motorrad recommends BMW Motorrad ADVANTEC Ultimate oil.
Engine oil, quantity for topping up	max 0.4 quarts (max 0.4 l), Difference between **MIN** and **MAX**

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Engine

Engine number location	Crankcase, on left next to oil filter
Engine type	A85A03M0
Engine design	1-cylinder, 4-cycle
Displacement	350 cc (350 cm^3)
Cylinder bore	3.1 in (80 mm)
Piston stroke	2.7 in (69.6 mm)
Compression ratio	11.5 : 1
Rated output	34 hp (25 kW), at engine speed: 7500 min^{-1}
Torque	26 lb/ft (35 Nm), at engine speed: 6000 min^{-1}
Maximum engine speed	max 8800 min^{-1}
Idle speed	$1450^{\pm 50}$ min^{-1}, Engine at operating temperature
Emission standard	EU4

Clutch

Clutch design	Centrifugal clutch

Transmission

Transmission design	CVT (continuously variable transmission)

Rear-wheel drive

Type of final drive	CVT with belt and downstream reduction gear unit in oil bath
Gear ratio of rear-wheel drive	8.71

Frame

Frame design	Steel bridge frame
Location of the vehicle identification number	Frame at front right on steering head
Location of type plate	Front frame, steering head

Chassis and suspension

Type of front suspension	Telescopic forks
Spring travel, front	4.3 in (110 mm), On front wheel
Type of rear suspension	Drivetrain swinging arm with screwed-on auxiliary swinging arm
Design of rear-wheel suspension	Two directly linked spring struts with adjustable spring preload
Spring travel on the rear wheel	4.4 in (112 mm), On the rear wheel

Brakes

Front wheel	
Type of front brake	Two-rotor disk brake, rigid, diameter 265 mm, 4-piston fixed caliper
Front brake pad material	Organic
Front brake-disk thickness	0.2 in (5.0 mm), New 0.18 in (4.5 mm), Wear limit

Rear wheel	
Type of rear brake	Single-disc brake, diameter 265 mm, 1-piston floating caliper
Rear brake pad material	Sintered metal
Rear brake-disk thickness	0.2 in (5.0 mm), New 0.18 in (4.5 mm), Wear limit

Wheels and tires

Recommended tire combinations	An overview of the current tire approvals is available from your authorized BMW Motorrad retailer or on the Internet at bmw-motorrad.com.
Speed category of front/rear tires	S
Front wheel	
Front wheel design	Aluminum cast wheel
Front-wheel rim size	3.50" x 15"
Front tire designation	120/70-15
Load index for front tire	56
Permissible front-wheel imbalance	max 0.2 oz (max 5 g)

Rear wheel	
Rear wheel design	Aluminum cast wheel
Rear-wheel rim size	4.25" x 14"
Rear tire designation	150/70-14
Load index for rear tire	66
Permissible rear-wheel imbalance	max 0.2 oz (max 5 g)
Tire pressure	
Tire pressure, front	31.9 psi (2.2 bar), One-up, with cold tires
	34.8 psi (2.4 bar), Two-up mode with cargo; with cold tires
Tire pressure, rear	34.8 psi (2.4 bar), One-up, with cold tires
	37.7 psi (2.6 bar), Two-up mode with cargo; with cold tires

Electrical system

Electrical rating of onboard socket	max 5 A, Power socket in front right storage compartment
Battery	
Battery design	Absorbent Glass Mat
Battery voltage	12 V
Battery capacity	9 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8J-9E
Electrode gap of spark plug	$0.04^{\pm 0}$ in ($0.9^{\pm 0.1}$ mm)
Light sources	
Bulbs for low-beam headlight	LED
Bulb for high-beam headlight	LED
Bulb for parking light	LED
Bulbs for flashing turn indicators, front	LED
Bulbs for flashing turn indicators, rear	RY10W / 12 V / 10 W
Bulb for taillight/brake light	LED
Light source for license plate light	Integrated in tail lamp

Fuses	
Main fuse	30 A, Voltage regulator
Fuse 1	Not in use
Fuse 2	7.5 A, Diagnostic socket, ignition lock, Keyless Ride, anti-theft alarm system
Fuse 3	7.5 A, Left multifunction switch, tail lamp, helmet compartment lighting, storage compartment lock, function satellite
Fuse 4	4 A, Brake light switch
Fuse 5	4 A, Fuel pump relay
Fuse 6	7.5 A, Fan relay
Fuse 7	7.5 A, Ignition coil, fuel injection valve, tank vent valve

Alarm system

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

Activation time	Approx. 30 s
Alarm duration	Approx. 26 s
Activation time between two alarms	15 s
Battery type (For control unit)	CR 123 A

Keyless Ride

– with Keyless Ride[OE]

Range of Keyless Ride radio-operated key	
– with Keyless Ride[OE]	Approx. 3.3 ft (Approx. 1 m)
Battery type (for Keyless Ride radio-operated key)	
– with Keyless Ride[OE]	CR 2032

Dimensions

Motorcycle length	87 in (2210 mm), over license-plate carrier
Motorcycle height	min 51.4 in (min 1305 mm), over windshield, at DIN unladen weight
Motorcycle width	32.9 in (835 mm), with mirrors
Rider's seat height	30.5 in (775 mm), without rider, at DIN unladen weight
Rider's inside-leg arc, heel to heel	69.3 in (1760 mm), without rider, at DIN unladen weight

Weights

Vehicle curb weight	450 lbs (204.3 kg), DIN unladen weight, ready for road, 90 % full tank of gas, without OE
Permissible front wheel load	max 353 lbs (max 160 kg)
Permissible rear wheel load	max 617 lbs (max 280 kg)
Axle-load distribution	121 kg + 158 kg = 279 kg, With rider (75 kg)
	142 kg + 263 kg = 405 kg, With permissible gross vehicle weight
Permissible gross weight	893 lbs (405 kg)
Maximum payload	443 lbs (201 kg)

Performance data

Top speed	86 mph (139 km/h)

Service

Reporting safety defects

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

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

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

BMW Motorrad Service

With its worldwide retailer network, BMW Motorrad can attend to you and your Scooter in over 100 countries around the globe. The BMW Motorrad retailers have the technical information and expertise needed to conduct reliable maintenance and repairs covering every aspect of your BMW Scooter.
You will find the nearest authorized BMW Motorrad retailer to you at our website:
bmw-motorrad.com

WARNING

Improperly performed maintenance and repair work
Risk of accident as a result of damage
- BMW Motorrad recommends having corresponding work on your Scooter carried out by a specialist workshop, preferably by an authorized BMW Motorrad retailer.◀

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

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

BMW Motorrad Mobility Services

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

Maintenance procedures

BMW pre-delivery check

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

BMW Running-in Check

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

BMW Service

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

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

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

	500–1 200 km 300–750 mls	10 000 km 6 000 mls	20 000 km 12 000 mls	30 000 km 18 000 mls	40 000 km 24 000 mls	50 000 km 30 000 mls	60 000 km 36 000 mls	70 000 km 42 000 mls	80 000 km 48 000 mls	90 000 km 54 000 mls	100 000 km 60 000 mls	12 months	24 months
①	X												
②		X	X	X	X	X	X	X	X	X	X	X[a]	
③		X	X	X	X	X	X	X	X	X	X	X[a]	
④		X	X	X	X	X	X	X	X	X	X		
⑤		X	X	X	X	X	X	X	X	X	X		
⑥			X		X		X		X		X		
⑦			X		X		X		X		X		
⑧			X		X		X		X		X		
⑨			X		X		X		X		X		
⑩			X		X		X		X		X		
⑪					X				X				
⑫												X[b]	X[b]

Maintenance schedule

1 BMW Running-in check (including oil change)
2 BMW Service Standard Scope
3 Engine oil change with filter
4 Clean/check filter for CVT
5 Replace air cleaner insert
6 Replace CVT belt with rollers, check sliding blocks and replace if necessary
7 Replace all spark plugs
8 Check valve clearance
9 Replace fixture for rubber mount
10 Telescopic fork oil change
11 Checking the clutch (clutch removed)
12 Change brake fluid in entire system

[a] annually or every 6000 miles (10000 km) (whichever comes first)

[b] for the first time after one year, then every two years

Maintenance confirmations

BMW Service standard scope

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

- Checking charging state of battery
- Performing the vehicle test using the BMW Motorrad diagnosis system
- Visually inspect the brake lines, brake hoses and connections
- Checking the front/rear brake fluid level
- Checking front brake pads and brake disks for wear
- Checking the rear brake pads and brake disk for wear
- Checking steering-head bearing
- Checking the coolant level
- Checking the throttle cable for play
- Checking the tire pressure and tread depth
- Checking the lighting and signal system
- Functional check for engine starting suppression
- Final inspection and road safety check
- Setting the service due date and remaining distance
- Confirm the BMW service in the vehicle literature

BMW pre-delivery check

performed

on_____

Stamp, signature

BMW Running-in Check

performed

on_____

at km_____

Next service

latest

on_____

or, if reached earlier

at km_____

Stamp, signature

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Stamp, signature

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

BMW Service
performed

on_____
at km_____

Next service
latest
on_____
or, if reached earlier
at km_____

Work performed

	Yes	No
BMW Service	☐	☐
Engine oil change with filter	☐	☐
Replacing air cleaner element	☐	☐
Replace CVT belt	☐	☐
Replacing all spark plugs	☐	☐
Checking valve clearance	☐	☐
Replacing stand for rubber mount	☐	☐
Checking clutch (clutch removed)	☐	☐
Changing brake fluid in entire system	☐	☐

Information

Stamp, signature

Service confirmations

The table serves to provide evidence of maintenance and repair work, as well as installed optional accessories and special campaigns performed.

Work performed	at km	Date

Work performed	at km	Date

Appendix

FCC Approval

Ring aerial in the ignition switch

To verify the authorization of the ignition key, the electronic immobilizer exchanges information with the ignition key via the ring aerial.

This device complies with Part 15 of the FCC rules. 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. ◀

Approbation de la FCC

Antenne annulaire présente dans le commutateur d'allumage

Pour vérifier l'autorisation de la clé de contact, le système d'immobilisation électronique échange des informations avec la clé de contact via l'antenne annulaire.
Le présent dispositif est conforme à la partie 15 des règles de la FCC. Son utilisation est soumise aux deux conditions suivantes :

(1) Le dispositif ne doit pas produire d'interférences nuisibles, et
(2) le dispositif doit pouvoir accepter toutes les interférences extérieures, y compris celles qui pourraient provoquer une activation inopportune.

Toute modification qui n'aurait pas été approuvée expressément par l'organisme responsable de l'homologation peut annuler l'autorisation accordée à l'utilisateur pour utiliser le dispositif. ◀

Certifications

BMW Keyless Ride ID Device

USA, Canada

Product name: BMW Keyless Ride ID Device FCC ID: YGOHUF5750 IC: 4008C-HUF5750

Canada:
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.

USA:
This device complies with Part 15 of the FCC rules. 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration Of Conformity

We declare under our responsibility that the product

BMW Keyless Ride ID Device (Model: HUF5750)

camplies with the appropriate essential requirements of the article 3 of the R&TIE and the other relevant provisions, when used for its intended purpose. Applied Standards:

1. Health and safety requirements contained in article 3 (1) a)
   - EN 60950-1:2006+A11:2009+A1:2010+A12:2011; Information technology equipment- Safety
2. Protection requirements with respect to electromagnetic compatibility article 3 (1) b)
   - EN 301 489-1 (V1 .9.2, 09/2011), Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
   - EN 301 489-3 (V1.4.1, 08/2002) Electromagnetic compatibility and radio spectrum matters (ERM); Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for short range devices (SRD) operating on frequencies between 9 kHz and 40 GHz
3. Means of the efficient use of the radio frequency spectrum article 3 (2)
   - EN 300 220-1 & -2 (V2.4.1, 05/2012), electromagnetic compatibility and radio spectrum matters (ERM); Short range devices (SRD); Radio equipment tobe used in the 25 MHz to 1000 MHz frequency range with power leveis ranging up to 500 mW; Part 1: Technical characteristics and test methods. Part 2: Harmonized EN covering essential requirements under article 3.2 ofthe R&TIE directive

The product is labeted wilh the CE marking: CE

Velbert, October 15th, 2013

Benjamin A. Müller

Product Development Systems
Car Access and Immobilization – Electronics
Huf Hülsbeck & Fürst GmbH & Co. KG
Steeger Straße 17, D-42551 Velbert

Declaration of Conformity

Radio equipment TFT instrument cluster

For all Countries without EU

Technical information
BT operating frq. Range: 2402 – 2480 MHz
BT version: 4.2 (no BTLE)
BT output power: < 4 dBm
WLAN operating frq. Range: 2412 – 2462 MHz
WLAN standards: IEEE 802.11 b/g/n
WLAN output power: < 20 dBm

Manufacturer and Address
Manufacturer:
Robert Bosch Car Multimedia GmbH
Adress: Robert Bosch Str. 200,
31139 Hildesheim, GERMANY

Turkey
Robert Bosch Car Multimedia GmbH, ICC6.5in tipi telsiz sisteminin 2014/53/EU nolu yönetmeliğe uygun olduğunu beyan eder. AB Uygunluk Beyanı'nın tam metni, aşağıdaki internet adresinden görülebilir: http://cert.bosch-carmultimedia.net

Brazil
Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canada
This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Mexico
La operación de este equipo está sujeta a las siguientes dos condiciones:
(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Taiwan, Republic of
根據 NCC 低功率電波輻射性電機管理辦法 規定:
第十二條
經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，
指依電信法規定作業之無線電通信。
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Thailand

เครื่องโทรคมนาคมและอุปกรณ์นี้

มีความสอดคล้องตามข้อกำหนดของ กทช.

(This telecommunication equipments is in compliance with NTC requirements)

United States (USA)

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

Original Rider's Manual, printed in Germany.

Important data for refueling:

Fuel	
Recommended fuel quality	Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI
Fuel tank capacity	Approx. 3.4 gal (Approx. 12.8 l)
Reserve quantity	Approx. 1.1 gal (Approx. 4 l)
Tire pressure	
Tire pressure, front	31.9 psi (2.2 bar), One-up, with cold tires
	34.8 psi (2.4 bar), Two-up mode with cargo; with cold tires
Tire pressure, rear	34.8 psi (2.4 bar), One-up, with cold tires
	37.7 psi (2.6 bar), Two-up mode with cargo; with cold tires

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

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Order No.: 01 40 8 403 [illegible]
11.2017, 1st edition, 07