BMW Motorrad

The Ultimate Riding Machine

Rider's Manual (US Model)

R 1200 GS Adventure

Motorcycle/Dealer Data

Motorcycle data

Model

Vehicle identification number

Color number

Initial registration

License plate

Dealer Data

Contact in Service

Ms./Mr.

Phone number

Dealer's address/phone number (company stamp)

Welcome to BMW

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 vehicle's reliability and safety, as well as its value.

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 41 8 558 987

Table of Contents

General instructions

Overview

This Rider's Manual has been designed to provide quick and efficient orientation. The quickest way for you to find information on specific topics is to consult the comprehensive index at the back of the manual. If you would like to start with a quick overview of your motorcycle, this information has been provided in chapter 2. All maintenance and repair work carried out on your motorcycle will be documented in chapter 11. 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 BMW, remember to hand over this Rider's Manual; it is an important part of the motorcycle.

Abbreviations and symbols


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


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

◀ Indicates the end of an item of information.

• Instruction.

» Result of an activity.

Reference to a page with more detailed information.

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


Tightening torque.


Technical data.

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

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

EWS Electronic immobilizer.

DWA Anti-theft alarm.

ABS Anti-Lock Brake System.

ASC Automatic Stability Control.

ESA Electronic Suspension Adjustment.

TPC Tire Pressure Control (TPC).

Equipment

When you ordered your BMW motorcycle, 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 motorcycle might not be exactly as illustrated in this manual on account of country-specific differences.

If your motorcycle comes with equipment not described here, you can find the descriptions in a separate manual.

Technical data

All dimensions, weights and outputs in the Rider's Manual relate 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 every BMW motorcycle are the result of ongoing advanced development focusing on continuous improvement in design and engineering as well as equipment and accessories. For this reason, some aspects of your motorcycle may vary from the descriptions in this Rider's Manual. In addition, BMW Motorrad cannot guarantee the total absence of errors. For this reason BMW is unable to recognize any claims stemming from the information, illustrations and descriptions in this manual.

Overviews


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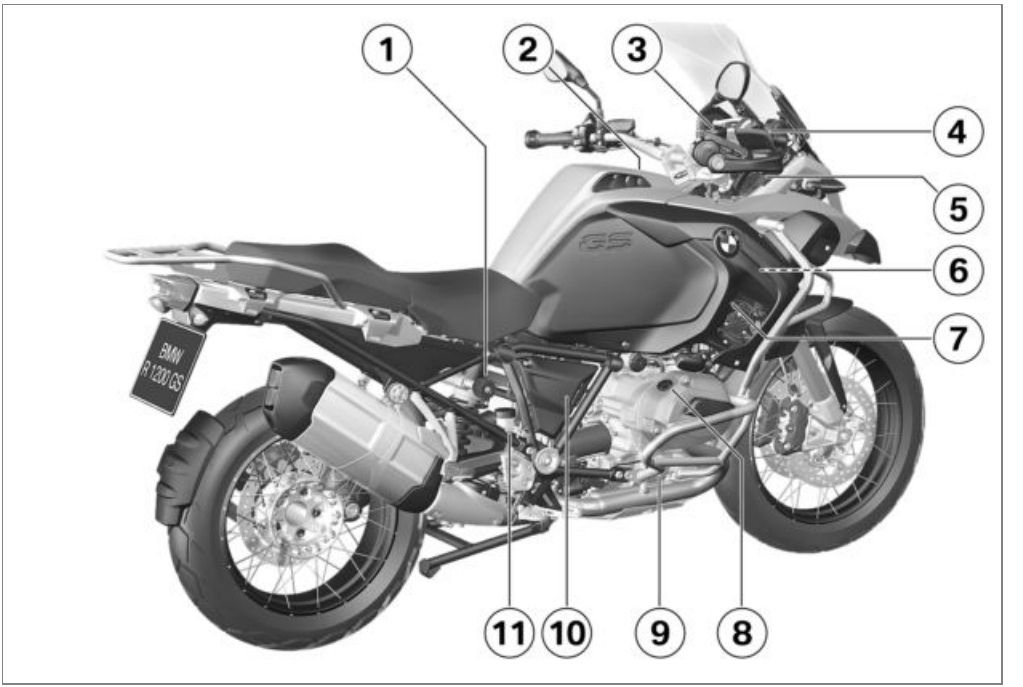
General view, left side

1 Fuel filler opening (➠ 89)
2 Seat lock (➠ 76)
3 Adjuster for rear damping (at the bottom on the spring strut) (➠ 68)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BMW
R 1200 GS

General view, right side

1 Adjuster for spring preload, rear (➠ 67)
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6 Vehicle Identification Number (at fork bearing)
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7 Coolant level indicator (➠ 112)
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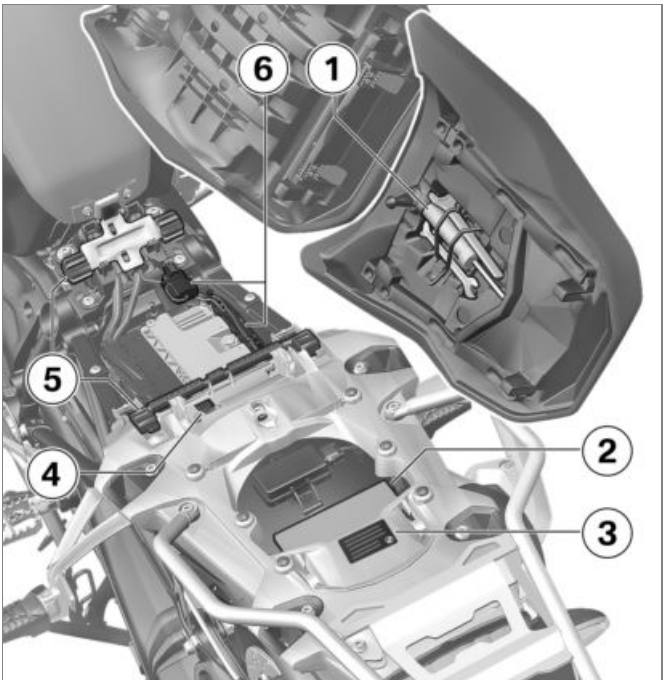
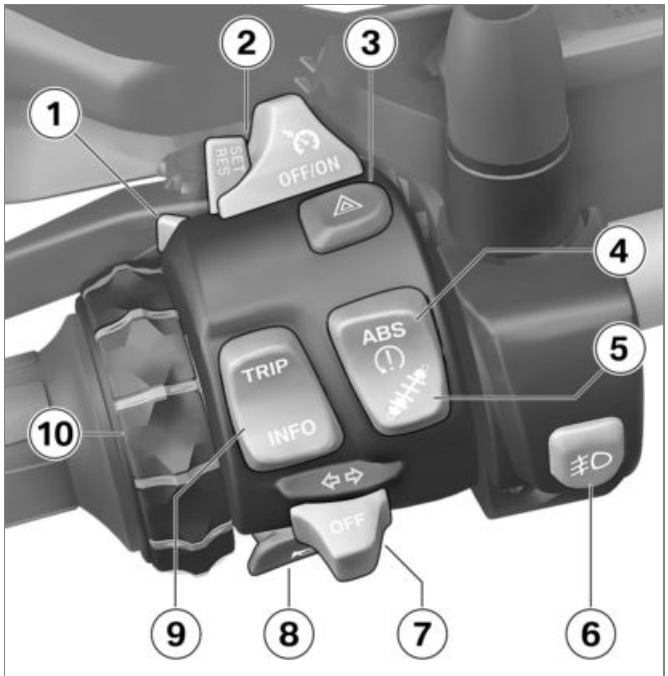
2 Rider's Manual (US Model)
3 Tire inflation pressure table
4 Load capacity table
5 Adjuster for the rider's seat height (➠ 77)
6 Fuses (➠ 132)





Multifunction switch, left

1 High-beam headlight and headlight flasher (➠ 57)

2 – with cruise control[OE]
Cruise control (➠ 65)

3 Hazard warning flashers (➠ 59)

4 ABS (➠ 59)
ASC (➠ 60)

5 – with dynamic ESA[OE]
ESA (➠ 69)

6 – with additional LED headlight[OA]
Additional LED headlight (➠ 58)

7 Turn indicator (➠ 58)

8 Horn

9 Multifunction display (➠ 48)

10 – with preparation for navigation system[OE]
Navigation system (➠ 138)

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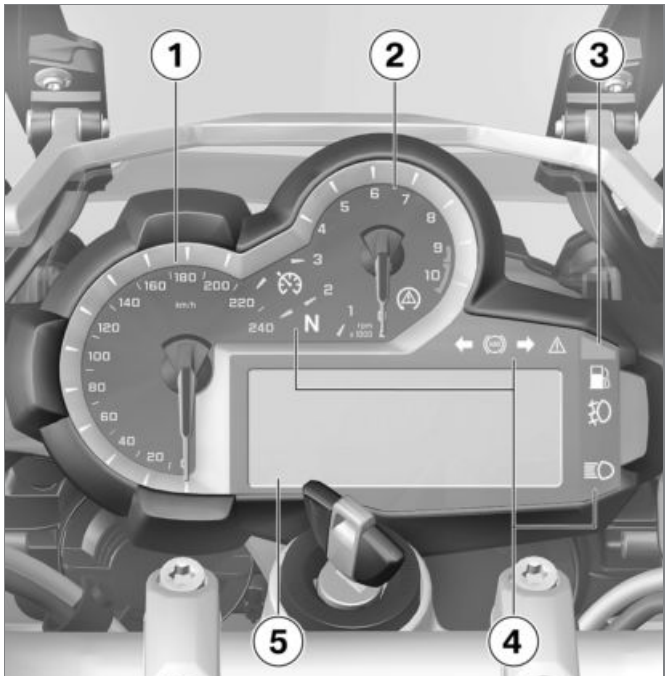
Heated handlebar grips (➠ 74)
2 Riding mode (➠ 61)
3 Emergency on/off switch (kill switch) (➠ 56)
4 Starting the engine (➠ 82)



Instrument cluster

1 Speedometer
2 Tachometer
3 Ambient light sensor (for brightness adjustment of instrument lighting)
– with anti-theft alarm OE
Anti-theft alarm indicator light
– with Keyless Ride OE
Indicator light for radio-operated key
4 Warning and indicator lights (➠ 20)
5 Multifunction display (➠ 21)

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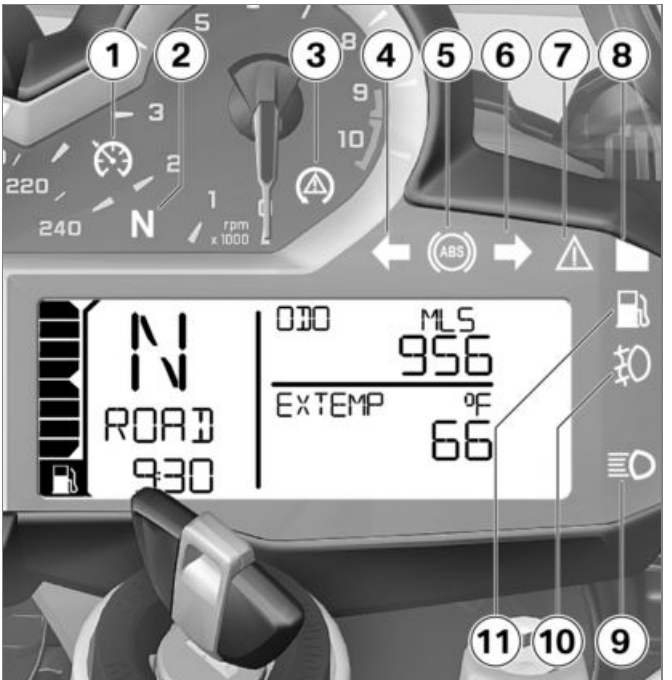
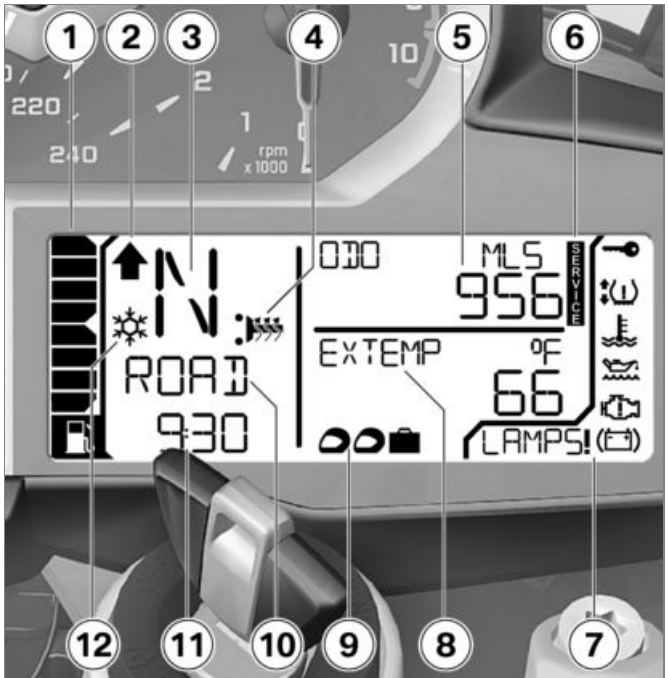
10 – with additional LED headlight[OA]
Auxiliary headlight (➠ 58)
11 Fuel reserve (➠ 37)

The ABS symbol can be shown differently depending on the country.◀





Multifunction display

1 Fuel level

2 Upshift recommendation (➠ 39)

3 Gear indicator, shows "N" in neutral (idling)

4 – with heated handlebar grips[OE]
Heated grip settings (➠ 74)

5 Odometer (➠ 48)

6 Service display (maintenance interval) (➠ 169)

7 Warning symbols (➠ 23)

8 Onboard computer

9 – with dynamic ESA[OE]
ESA setting (➠ 69)

10 Riding mode (➠ 61)

11 Clock (➠ 50)

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Warning symbols in the display panel

1 – with Tire Pressure Control (TPC/RDC) OE
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3 Coolant temperature (➠ 29)
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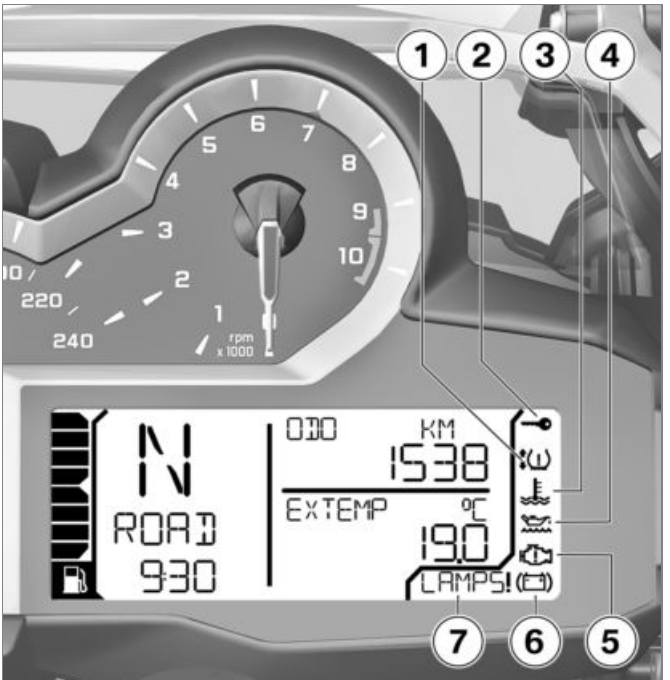
6 Battery charging (➠ 129)
7 Warnings (➠ 23)



Warning lamps

Display

Warnings are displayed with appropriate warning lights.

Warnings for which no separate warning light is provided are signaled by the general warning light **1** and are accompanied by a warning symbol in area **2** or by a warning notice in area **3**. 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.

Overview of warning indicators

Warning and indicator lamps	Warning symbols in the display panel	Meaning
	 appears on the display	Outside temperature warning (➠ 28)
 lights up yellow	 appears on the display	Electronic immobilizer is active (➠ 28)
 lights up yellow	 appears on the display	Radio-operated key outside reception range (➠ 28)
 lights up yellow		Replace battery of radio-operated key (➠ 29)
 lights up red	 appears on the display	Coolant temperature too high (➠ 29)
 lights up yellow	 appears on the display	Engine in emergency-operation mode (➠ 29)
 lights up yellow	`!LAMP_` is indicated	Bulb defect (➠ 30)
	`DWALO !` is indicated	Anti-theft alarm battery low charge (➠ 30)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 lights up yellow	DWA ! is indicated	Anti-theft alarm system battery discharged (➠ 31)
 lights up yellow	 indicated with one or two arrows and critical tire-inflation pressure also flashes.	Tire inflation pressure is at limit of approved range (➠ 31)
flashes red	indicated with one or two arrows and critical tire-inflation pressure also flashes.	Tire inflation pressure is outside approved range (➠ 31)
 lights up yellow	 appears with one or two arrows.	Sensor defective or system error (➠ 32)
	"– –" or "– – – –" is indicated.	
	"– –" or "– – – –" is indicated.	Transmission error (➠ 32)
 lights up yellow	RDC ! is indicated.	Battery of tire-inflation pressure sensor weak (➠ 33)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 flashes		ABS self-diagnosis not completed (➠ 33)
 lights up		ABS error (➠ 34)
 lights up		ABS deactivated (➠ 34)
 flashes rapidly		ASC intervention (➠ 34)
 flashes slowly		ASC self-diagnosis not completed (➠ 34)
 lights up		ASC deactivated (➠ 34)
 lights up		ASC error (➠ 35)
 lights up yellow	ESA! is indicated	ESA error (➠ 35)

Warning and indicator lamps	Warning symbols in the display panel	Meaning
 lights up		Fuel down to reserve (➠ 35)
 flashes yellow	 flashes	Severe fault in the engine management system (➠ 35)
	 appears on the display	Engine oil level too low (➠ 36)
	OILLVL CHECK is indicated	
 lights up red	 appears on the display	Battery charging voltage insufficient (➠ 36)

Outside temperature warning

The ice crystal symbol is displayed.

Possible cause:

The outside temperature measured on the motorcycle is less than:
Approx. 37 °F (Approx. 3 °C)

The outside temperature warning does not mean that there is no risk of icy conditions at measured temperatures above 37 °F (3 °C).

At a low outside temperature, icy conditions must especially be expected on bridges and in shady road areas.◀

- Think well ahead when driving.

Electronic immobilizer is active

The general warning lamp lights up yellow.

The EWS warning symbol appears on the display.

Possible cause:

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

- Remove other motorcycle keys from the ignition key ring.
- Using emergency key.
- Have the defective key replaced, preferably by an authorized BMW Motorrad retailer.

Radio-operated key outside reception range

– with Keyless Ride OE

The general warning lamp lights up yellow.

appears on the display.

Possible cause:

Communication between the radio-operated key and the engine electronics is disrupted.

- Check battery in radio-operated key.

– with Keyless Ride OE

- Replace battery of radio-operated key (➠ 47).
- Use reserve key for further driving.

– with Keyless Ride OE

- Battery of radio-operated key is completely drained or radio-operated key has been lost (➠ 46).
- Should the warning symbol appear while driving, keep calm. Driving can be continued; the engine will not switch off.

- Have the defective radio-operated key replaced by an authorized BMW Motorrad retailer.

Replace battery of radio-operated key


The general warning lamp lights up yellow.


The battery symbol is displayed.

Possible cause:

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

– with Keyless Ride OE

- Replace battery of radio-operated key (➠ 47).

Coolant temperature too high


The general warning lamp lights up red.


The temperature symbol is displayed.


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

Possible cause:

Coolant level is too low.

- Check coolant level (➠ 112).

If coolant level is too low:

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

Possible cause:

The coolant temperature is too high.

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

Engine in emergency-operation mode


The general warning lamp lights up yellow.


The engine symbol is displayed.


The engine is in the emergency operating mode. Unusual engine response is a possibility.
Adapt your style of riding accord-

ingly. Avoid accelerating sharply and overtaking.◀

Possible cause:

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

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

Bulb defect

The general warning lamp lights up yellow.

! LAMP_ is indicated.

– ! LAMPR: Brake light, taillight, turn indicator or license plate illumination defective.
– ! LAMPF: Low-beam headlight, high-beam headlight, parking lights or front turn indicator defective.
– ! LAMPS: Several bulbs defective.

Failure of a bulb on the motorcycle is a safety risk because it potentially makes the motorcycle less noticeable to other road users.

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

Possible cause:

One or more bulbs are defective.

- Determine defective bulbs via visual inspection.
- Replacing bulbs for dipped and main-beam headlights (➠ 122).
- Replacing bulb for parking light (➠ 123).
- Replacing the LED headlight (➠ 126).
- Replacing bulb for front and rear turn indicator (➠ 124).
- Replacing LED tail light (➠ 126).

Anti-theft alarm battery low charge

– with anti-theft alarm OE

DWALO ! is indicated.

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

Possible cause:

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

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

Anti-theft alarm system battery discharged

– with anti-theft alarm OE


The general warning lamp lights up yellow.

DWA ! is indicated.

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

Possible cause:

The anti-theft alarm system battery has no capacity. The operation of the anti-theft alarm system is no longer ensured with the vehicle battery disconnected.

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

Tire inflation pressure is at limit of approved range

– with Tire Pressure Control (TPC/RDC) OE


The general warning lamp lights up yellow.


The tire symbol with one or two arrows appears. The critical tire-inflation pressure also flashes.

The up arrow indicates an inflation pressure problem on the front wheel. The down arrow indicates an inflation pressure problem on the rear wheel.
Possible cause:

The measured tire inflation pressure is in the limit area of the permissible tolerance.

- Correct tire inflation pressure in accordance with instructions on back of cover of Rider's Manual.

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

Tire inflation pressure is outside approved range

– with Tire Pressure Control (TPC/RDC) OE


The general warning lamp flashes red.


The tire symbol with one or two arrows appears. The critical tire-inflation pressure also flashes.


A tire inflation pressure outside the permissible tolerance result in poorer handling of the motorcycle.
Adapt your style of riding accordingly.◀

The up arrow indicates an inflation pressure problem on the front wheel. The down arrow indicates an inflation pressure problem on the rear wheel.
Possible cause:
The measured tire inflation pressure is outside the approved tolerance range.
- Check tire for damage and suitability for continued use.

If it is still possible to drive with tire:
- Correct tire inflation pressure at the next opportunity.

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

▷ The RDC warning message can be deactivated in the off-road mode.◀

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

If you are unsure about the tire's suitability for continued riding:
- Do not continue riding.
- Contact roadside service.

Sensor defective or system error

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


The general warning lamp lights up yellow.


The tire symbol with one or two arrows appears.

"– –" or "– – – –" is indicated.
Possible cause:
Wheels without installed TPC/RDC sensors are mounted.
- Retrofit wheel set with TPC/RDC sensors.

Possible cause:
1 or 2 TCP/RDC sensors have failed or a system error has occurred.
- Have fault eliminated at a specialist service facility, preferably an authorized BMW Motorrad retailer.

Transmission error

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

"– –" or "– – – –" is indicated.
Possible cause:
The motorcycle has not reached the minimum speed (➠ 102).

 RDC sensor is not active
min 19 mph (min 30 km/h) (The RDC sensor does not transmit a signal to the motorcycle until this minimum speed has been exceeded.)

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

Possible cause:

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

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

Battery of tire-inflation pressure sensor weak

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

The general warning lamp lights up yellow.

RDC ! is indicated.

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

Possible cause:

The battery of the tire inflation pressure sensor no longer has its full capacity. The operation of the tire inflation pressure control is only ensured for a limited time.

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

ABS self-diagnosis not completed

ABS warning light flashes.

Possible cause:

 ABS self-diagnosis routine not completed
ABS is not available because the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel sensors: min 3 mph (min 5 km/h))

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

ABS error

ABS warning light lights up.

Possible cause:

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

- It remains possible to continue riding. Observe additional information on special conditions that can lead to an ABS error message (➠ 100).
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

ABS deactivated

ABS warning light lights up.

Possible cause:

The ABS system has been deactivated by the rider.

- Switch on ABS function.

ASC intervention

ASC warning light flashes rapidly.

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

ASC self-diagnosis not completed

ASC warning light flashes slowly.

Possible cause:

	ASC self-diagnosis routine not completed
ASC is not available because the self-diagnosis routine was not completed. (The motorcycle must reach a specified minimum speed before the system can check operation of the wheel sensors: min 3 mph (min 5 km/h))	

- Ride off slowly. The ASC warning lamp must go out after a few meters.

If the ASC warning lamp continues to flash:

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

ASC deactivated

ASC warning light lights up.

Possible cause:

The ASC system has been deactivated by the rider.

- Activating the ASC function.

ASC error

ASC warning light lights up.

Possible cause:

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

- It remains possible to continue riding. Please be aware that ASC functionality is no longer available. Observe additional information on situations which can lead to an ASC error (➠ 101).
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

ESA error

The general warning lamp lights up yellow.

ESA! is indicated.

Possible cause:

The ESA control unit has detected an error. Motorcycle damping is in this condition very firm and riding is rather uncomfortable - in particular on rough roads.

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

Fuel down to reserve

Fuel-reserve warning lamp lights up.

A fuel shortage can cause irregular engine operation or engine shut-off (accident hazard) and the catalytic converter can be damaged.

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

Possible cause:

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

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

- Refueling procedure (➠ 89).

Severe fault in the engine management system

The general warning lamp flashes yellow.

The engine symbol flashes.

The engine is in its emergency operation mode.

There is a potential risk of damage to the engine.

Adapt riding style: Ride slowly, avoid accelerating and overtaking.

If possible, have motorcycle picked up and the malfunction source eliminated by a specialized service facility, preferably an authorized BMW Motorrad Dealer.◀

Possible cause:

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

- Continued driving is possible, however it is not recommended.
- Avoid high load and engine speed ranges if possible.
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Engine oil level too low


The oil can symbol is displayed.

OILLVL CHECK is indicated.
Possible cause:

The electronic oil level sensor has detected a low engine oil level. At next refueling stop:

- Check engine oil level (➠ 107).

If oil level is too low:

- Topping up engine oil (➠ 108).

If the oil level is correct:

- Contact an authorized workshop, preferably an authorized BMW Motorrad retailer.

Battery charging voltage insufficient


The general warning lamp lights up red.


The battery symbol is displayed.

A discharged battery will lead to the failure of various motorcycle systems such as lighting, engine or ABS. This can result in dangerous driving situations.
Do not continue riding.◀

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

If the 12 V battery is installed incorrectly, or if the terminals are interchanged (during jump-starting, etc.), the fuse for the voltage regulator may burn through.◀

Possible cause:

Defect in alternator or the alternator drive assembly, or the voltage regulator fuse has been triggered.

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

preferably an authorized BMW Motorrad Dealer.

Outside temperature

Engine heat can lead to spurious readings of outside temperature when the motorcycle is stationary. When the effects of engine heat on the monitored temperature become excessive the display responds by temporarily reverting to −− as the display reading.

When outside temperatures are below 37 °F (3 °C), there is a risk of black ice forming. The display automatically switches from any other mode to outside temperature reading **1**, when the temperature drops below this threshold for the first time. The displayed value flashes.

In addition, the ice crystal symbol **2** is displayed.

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

Fuel reserve

The fuel level in the fuel tank, when the fuel warning lamp switches on, depends on the driving dynamics. The more the fuel is moved within the tank (due to frequently changing inclined positions, frequent braking and accelerating), the more difficult it is to determine the reserve quantity. For this reason, the reserve quantity cannot be accurately indicated.

After the fuel warning lamp is switched on, the range is automatically displayed.
The distance, which can still be driven with the reserve quantity,

depends on the driving style (on the consumption) and on the fuel level when the warning lamp was initially activated (see the explanation above).
The odometer for the fuel reserve is reset if the fuel level after refueling is greater than the reserve quantity.

Oil level indicator

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

The conditions for the oil level indicator are as follows:
– Engine at operating temperature
– Engine idling for at least ten seconds
– Side stand retracted
– Motorcycle standing vertically on a level surface.

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

If the oil level must be checked, symbol **2** is displayed, until the oil level is detected again as correct.

Service display

If the time remaining until the next service is less than a month, or if the next service is due within 1000 km, the service date **1** and the remaining kilometers **2** appear for a short period of time after the Pre-Ride Check.

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

If the service display appears more than a month before the service date, the stored date must be adjusted in the instrument cluster. This situation can occur if the battery has been disconnected for a longer time.
Consult a certified workshop, preferably an authorized BMW Motorrad retailer, for setting of the date.◀

Tire inflation pressure

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

The figure on the left side **1** indicates the front tire's inflation pressure, while the figure on the right **2** shows the inflation pressure in the rear tire. Immediately after switching on the ignition, "-- --" is indicated. The tire pressures are not signaled until the road speed exceeds 30 kph for the first time. The tire pressures indicated relate to a tire air temperature of 68 °F (20 °C).

If the **3** symbol appears at the same time, the display is a warning. The critical tire-inflation pressure flashes.

If the level concerned is borderline in terms of the permissible tolerance, the general warning light also lights up yellow. If the monitored tire inflation pressure is outside the specified range the general warning light will flash red.

Additional information on the BMW Motorrad Tire Pressure Control is provided starting on page (➠ 102).

Upshift recommendation

The upshift recommendation must be switched on in the display settings (➠ 49).

Upshift recommendation **1** signals the economically best point in time for upshifting.

Operation

Ignition

Keys

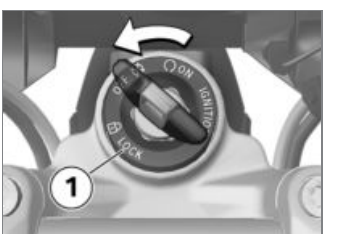
You are provided with 2 ignition keys.
Should you lose your keys, refer to the information regarding the electronic immobilizer (EWS) (➠ 43).
A single key fits the steering and ignition lock, the fuel filler cap and the seat lock.

The cases and the topcase can also be ordered with locks for the same key on request. Please contact an authorized workshop for this purpose, preferably an authorized BMW Motorrad retailer.

Locking handlebars

If the motorcycle is on the side stand, the surface of the ground will determine whether it is better to turn the handlebars to the left or right. However, the motorcycle is more stable on a level surface with the handlebars turned to the left than with the handlebars turned to the right.
On level ground, always turn the handlebars to the left to set the steering lock.◀

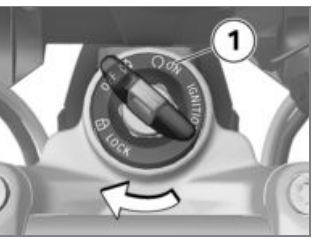
- Turn handlebars to full left or right lock position.



- Turn key to position **1** while moving handlebars slightly.

» Ignition, lights and all electrical circuits switched off.
» Handlebars are locked.
» Key can now be removed.

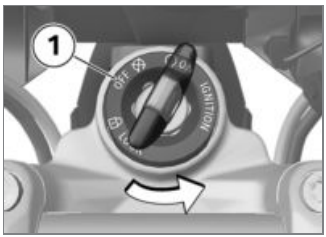
Switching on ignition



- Insert key into the steering and ignition lock. Turn key to position **1**.

» Parking lights and all function circuits are switched on.
» Pre-Ride-Check is carried out. (➠ 83)
» ABS self-diagnosis is performed. (➠ 83)
» ASC self-diagnosis in progress. (➠ 84)

Switch off ignition



- Turn key to position **1**.

» After the ignition is switched off, the instrument cluster remains switched on for a short period of time and indicates possibly present fault codes.

» Handlebars not locked.

» Electrically powered accessories remain operational for a limited period of time.

» Battery can be recharged via onboard socket.

» Key can now be removed.

– with additional LED headlight OA

- The supplementary LED headlights switch off shortly after the ignition is switched off.◁

EWS Electronic immobilizer

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

▷ A further key attached to the same ring as the ignition 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 ignition key.◀

If you lose one of your motorcycle keys, you can have it disabled by your authorized BMW motorcycle 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 key; however, a disabled key can be enabled again.

Emergency and spare keys are only available through an authorized BMW Motorrad retailer. The keys are part of an integrated security system, so the retailer is under an obligation to check the legitimacy of all applications for replacement/extra keys.

Ignition with Keyless Ride

– with Keyless Ride[OE]

Keys

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.◀

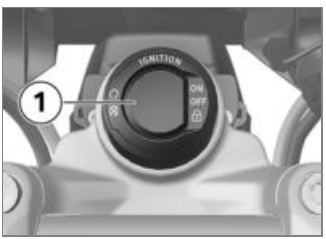
You are provided with one radio-operated key and one emergency key. Should you lose your keys, refer to the information regarding the electronic immobilizer (EWS) (➠ 43).
The ignition, tank filler cap and anti-theft alarm system are controlled with the radio-operated key. The seat lock, Topcase and case can be operated manually.

When the range of the radio-operated key is exceeded (e.g. in case or Topcase), the motorcycle cannot be started and the central locking system cannot be locked/unlocked.
If the range is exceeded, the ignition is switched off after approx. 1.5 minutes and the central locking system is **not** locked.
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

Condition: Handlebars are turned to left or right. Radio-operated key is within reception range.



If the motorcycle is on the side stand, the surface of the ground will determine whether it is better to turn the handlebars to the left or right. However, the motorcycle is more stable on a level surface with the handlebars turned to the left than with the handlebars turned to the right.
On level ground, always turn the

handlebars to the left to set the steering lock.◀

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

Switch on ignition

Condition: Radio-operated key is within reception range.

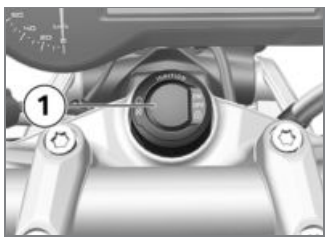
- The ignition can be activated in two ways.

Version 1:
- Briefly press button **1**.
» Parking lights and all function circuits are switched on.
– with additional LED headlight OA
» LED additional headlights are switched on.◁
» Pre-Ride-Check is carried out. (➠ 83)
» ABS self-diagnosis is performed. (➠ 83)
» ASC self-diagnosis in progress. (➠ 84)

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. (➠ 83)
» ABS self-diagnosis is performed. (➠ 83)
» ASC self-diagnosis in progress. (➠ 84)

Switch off ignition

Condition: Radio-operated key 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 full left or right lock position.
- Press and hold button **1**.

» Light is switched off.
» Steering lock is locked.

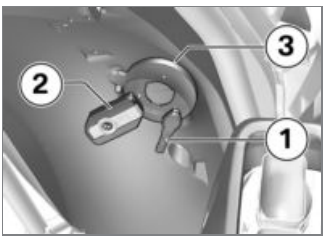
EWS Electronic immobilizer

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

▷ 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 radio-operated key is completely drained or radio-operated key has been 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 radio-operated key is completely drained, the motorcycle can be started by touching the rear wheel

cover with the radio-operated key.
- Hold emergency key **1** or completely drained radio-operated key **2** on rear wheel cover at level of antenna **3**.

The emergency key or the drained radio-operated key must **contact** the rear wheel cover.◀

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

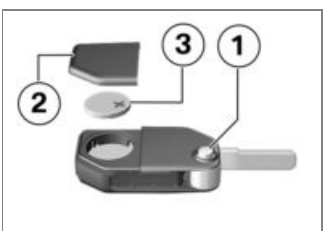
» Pre-Ride Check in progress.
– Key has been detected.
– Engine can be started.
- Starting the engine (➠ 82).

Replace battery of radio-operated key

If the radio-operated key fails to react when the button is pressed briefly or is pressed and held:
- The battery of the radio-operated key no longer has its full charging capacity.

» Replace battery.

The battery symbol is displayed.



- 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.

Incorrect batteries or polarity can destroy the device. 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 side up.

Battery type
for Keyless Ride radio-operated key
CR 2032

- Install battery cover **2**.

» Red LED in instrument cluster flashes.
» The remote-control is again ready to be used.

Multifunction display

Selecting display readings

• Switch on ignition (➠ 42).

• Press button **1** briefly to select the display in the top line of display **2**.

In the case of standard equipment, the following values can be displayed and selected per push of a button:

– Total mileage (ODO)
– Trip odometer 1 (TRIP I)
– Trip odometer 2 (TRIP II)
– Range (RANGE)
– SETUP menu (SETUP), while stationary only

– with onboard computer Pro[OE]

The following information is additionally displayed using the onboard computer Pro:

– Automatic odometer (TRIP A)
– Current fuel consumption (CONS C)
– Current speed (SPEED)◁

• Press button **1** briefly to select the display in the bottom line of display **2**.

In the case of standard equipment, the following values can be displayed and selected per push of a button:

– Outside temperature (EX-TEMP)
– Engine temperature (EN-GTMP)
– Average consumption 1 (CONS 1)
– Average consumption 2 (CONS 2)
– Average speed (Ø SPEED)

– with Tire Pressure Control (TPC/RDC)[OE]
– Tire inflation pressures (option) (TPM/RDC)◁

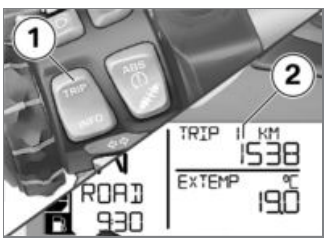
– Date (DATE)
– Oil level indicator (OILLVL)

– with onboard computer Pro[OE]
– Onboard electrical system voltage (VOLTGE)◁
– with onboard computer Pro[OE]
– Stopwatch overall time (ALTIME)◁

– with onboard computer Pro OE
– Stopwatch driving time (RDTIME)◁

Reset tripmeter

• Switch on ignition (➠ 42).



• Repeat pressing button **1** briefly, until the odometer to be reset is shown in the top line of the display **2**.
• Press and hold button **1** until displayed value has been reset.

Reset average data

• Switch on ignition (➠ 42).

• Repeat pressing button **1** briefly, until the average value to be reset is shown in the bottom line of the display **2**.
• Press and hold button **1** until displayed value has been reset.

Configuring functions

• Switch on ignition (➠ 42).

• Repeat pressing button **1** briefly, until in the top line of the display **2** SETUP ENTER is shown.
• Press and hold button **1** to start the SETUP menu.
» The following is indicated in the display depending on the equipment selected.

- Press button **1** briefly to respectively switch to the next menu item.
» The menu item appears in the top line of the display **2**.
» The adjusted value appears in the bottom line of the display **3**.
- Press button **4** briefly to change the adjusted value.

The following menu items can be selected:

– with anti-theft alarm[OE]
– DWA: Switches anti-theft alarm on (ON) or off (OFF)◁
– with preparation for navigation system[OE]
– GPS TM: If a navigation system is installed: apply GPS time and GPS date (ON) respectively do not apply them (OFF)◁
– CLOCK: Setting the clock
– DATE: Setting the date
– ECOSFT: Show upshift recommendation in the display (ON) respectively do not show it (OFF)
– BRIGHT: Adjust display brightness from normal (0) to bright (5)
– EXIT: Exit SETUP menu

– with onboard computer Pro[OE]
– BC CUSTOM: Starts display customization.◁

- In order to exit the SETUP menu, press and hold menu item SETUP EXIT, button **1**.
- In order to exit the SETUP menu at any time, press and hold button **2**.

Setting the clock

- Switch on ignition (➠ 42).

Attempting to set the clock while riding the motorcycle can lead to accidents.
Adjust the clock only when the motorcycle is stationary.◀

- In the SETUP menu, select the SETUP CLOCK menu item.

- Press and hold button **2**, until the hours flash in the bottom line of display **3**.

If "−− **:** −−" is indicated instead of the time, the power supply to the instrument cluster was interrupted (e.g., the battery was disconnected).◀

- Increase the flashing value using button **1** respectively decrease it using button **2**.
- Press and hold button **2**, until the minutes flash in the bottom line of display **3**.
- Increase the flashing value using button **1** respectively decrease it using button **2**.
- Press and hold button **2**, until the minutes stop flashing.

» The adjustment is completed.

- In order to cancel the adjustment at any time, press and hold button **1**, until the original value is displayed again.

The adjustment is canceled, if you ride off before the adjustment is completed.◀

Set date

- Switch on ignition (➠ 42).
- In the SETUP menu, select the SETUP DATE menu item.

- Press and hold button **2**, until the day flashes in the bottom line of display **3**.

If "−− **.** −− **.** −−" is indicated instead of the date, the power supply to the instrument cluster was interrupted (e.g., the battery was disconnected).◀

- Increase the flashing value using button **1** respectively decrease it using button **2**.
- Press and hold button **2**, until the month flashes in the bottom line of display **3**.

- Increase the flashing value using button **1** respectively decrease it using button **2**.
- Press and hold button **2**, until the year flashes in the bottom line of display **3**.
- Increase the flashing value using button **1** respectively decrease it using button **2**.
- Press and hold button **2**, until the year stops flashing.

» The adjustment is completed.

- In order to cancel the adjustment at any time, press and hold button **1**, until the original value is displayed again.

The adjustment is canceled, if you ride off before the adjustment is completed.◀

Customize display

– with onboard computer Pro OE

- Switch on ignition (➠ 42).

In the individualization menu it is possible to adjust, which information should be shown in which display line.

- In the SETUP menu, select the SETUP BC BASIC menu item.

- Press button **1** briefly to start the individualization menu.

» SETUP BC CUSTOM is indicated.

- Press button **1** briefly again to exit the individualization menu.

If SETUP BC BASIC is selected, the factory setting becomes active again. The CUSTOM individualization remains stored.◀

- Press and hold button **1** to display the first menu item.

» SETUP BC ODO is indicated.

- Press button **2** briefly to respectively switch to the next menu item.

» The menu item appears in the top line of the display **3**.

» The adjusted value appears in the bottom line of the display **4**. The following values can be adjusted.

– TOP: The value is indicated in the top line of the display.
– BELOW: The value is indicated in the bottom line of the display.
– BOTH: The value is indicated in both lines of the display.
– OFF: The value is not indicated.

- Press button **1** briefly to change the adjusted value.

The following menu items can be selected. The factory setting is indicated in parentheses. Some menu items are displayed only, if the respective optional equipment is installed.

– ODO: Odometer (TOP, setting OFF is not possible)
– TRIP 1: Tripmeter 1 (TOP)
– TRIP 2: Tripmeter 2 (TOP)
– TRIP A: Automatic tripmeter (TOP)
– EXTEMP: Outside temperature (BELOW)
– ENGTMP: Engine temperature (BELOW)
– RANGE: Range (TOP)
– CONS R: Average consumption for range calculation (OFF)
– CONS 1: Average consumption 1 (BELOW)
– CONS 2: Average consumption 2 (BELOW)
– CONS C: Current fuel consumption (TOP)
– ØSPEED: Average speed (BELOW)
– SPEED: Current speed (TOP)
– RDC: Tire inflation pressures (BELOW)
– VOLTGE: Onboard electrical system voltage (BELOW)
– ALTIME: Stopwatch overall time (BELOW)
– RDTIME: Stopwatch driving time (BELOW)
– DATE: Date (BELOW)
– SERV T: Date of next service (OFF)
– SERV D: Remaining mileage until next service (OFF)
– OILLVL: Oil level indicator (BELOW)
– EXIT: Closes individualization menu.

- In order to exit the individualization menu, press and hold menu item SETUP EXIT, button **1**.
- In order to exit the individualization menu at any point in time, press and hold button **2**.

» All adjustments applied until then will be stored.

Anti-theft alarm system (DWA)

– with anti-theft alarm OE

Activation

- Switch on ignition (➠ 42).
- Customize anti-theft alarm system settings (➠ 55).
- Switch off ignition.

» If DWA is activated, 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).
» Anti-theft alarm system is activated.

Alarm

The alarm can be set off by:
– motion sensor
– an attempt to use an unauthorized key to switch on the ignition
– disconnecting the alarm system from the motorcycle battery (alarm system battery takes over the power supply - alarm sound only, no illumination of the turn indicators).

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

An alarm lasts for approximately 26 seconds. During the alarm, an alarm tone sounds and the turn indicators flash. The alarm tone type can be adjusted by an authorized BMW Motorrad retailer.

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 anti-theft alarm system indi-

cator lamp then signals the reason for the alarm for one minute. The meanings of the flash codes are as follows:

– Flashes 1x: Motion sensor 1
– Flashes 2x: Motion sensor 2
– Flashes 3x: Ignition switched on with unauthorized key
– Flashes 4x: Alarm system is disconnected from the motorcycle battery
– Flashes 5x: Motion sensor 3

Deactivation

- Emergency on/off switch (kill switch) in normal operating position.
- Switch on ignition.

» Turn indicators light up once.
» Confirmation tone sounds once (if programmed).
» Anti-theft alarm system is deactivated.

Customize anti-theft alarm system settings

- Switch on ignition (➠ 42).

- Repeat pressing button **1** briefly, until in the top line of the display **2** SETUP ENTER is shown.
- Press and hold button **1** to start the SETUP menu.

- Press button **1** briefly to respectively select the DWA menu item.

» The top line of the display **2** shows DWA.
» The adjusted value appears in the bottom line of the display **3**.

- Press button **4** briefly to change the adjusted value.

The following settings are available:

– On: Anti-theft alarm system is activated respectively is activated automatically when the ignition is switched off.

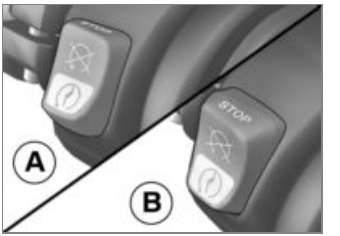
– Off: DWA is deactivated.

Emergency on/off switch (kill switch)

1 Emergency on/off switch (kill switch)

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

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



A Engine switched off
B Operating position

Headlight

Headlamp range and spring preload

The headlamp range generally remains constant due to the adjustment of the spring preload to the loading state.
Spring preload adjustment may only be insufficient when the motorcycle is very heavily loaded.
In this case, the headlamp range must be adjusted to the weight.

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

Headlight range adjustment

In the case of high payload, if the spring preload adjustment is not sufficient anymore to avoid blinding the oncoming traffic:

- Turn adjustment wheel **1** counterclockwise to lower the headlight beam.

If the motorcycle is ridden again with lower payload:

- Have the headlight default setting readjusted by an authorized workshop, preferably an authorized BMW Motorrad retailer.

– with LED headlights[OE]

- A swiveling lever is used for the headlight range adjustment.

– **A** Neutral position

– **B** Position with heavy payload◁

Lights

Lowbeam headlamp and parking lamps

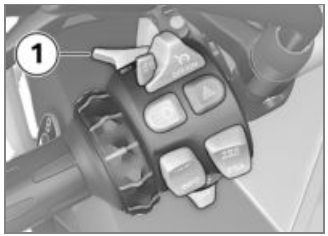
The parking lamps come on automatically when the ignition is switched on.

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

The lowbeam headlamp switches on automatically when the engine is switched on.

High-beam headlight and headlight flasher

- Switch on ignition (➠ 42).



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

Parking light

- Switch off ignition (➠ 43).

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

Auxiliary headlight

– with additional LED headlight OA

Precondition: The auxiliary headlight is only active, if the low-beam headlight is active.

- Starting the engine (➠ 82).

- Press button **1** to switch on the auxiliary headlights.

The indicator lamp for the auxiliary headlight lights up.

- Press button **1** again to switch off the auxiliary headlights.

Turn indicator

Operate turn indicator

- Switch on ignition (➠ 42).

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

Turn indicator cancellation
The turn indicators automatically switch off when the defined driving time and distance have been reached.

Hazard warning flashers

Operating hazard warning flashers

- Switch on ignition (➠ 42).

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

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

» Ignition can be switched off.

- To switch off the hazard warning flashers, switch on the ignition as required, then press the button **1** once again.

BMW Motorrad Integral ABS

Switching off ABS function

- Switch on ignition (➠ 42).

- Press and hold button **1** until the ABS warning lamp's display changes.

» First the ASC symbol changes its display behavior. Press and hold button **1** until ABS warning lamp reacts. In this case, the ASC setting does not change.

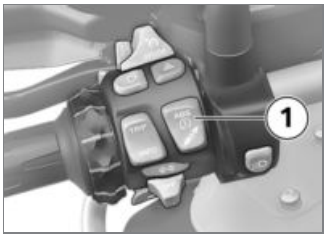
ABS warning light lights up.

- Release button **1** within two seconds.

ABS warning light remains on.

» ABS function is deactivated, integral function continues to be active.

Switching on ABS function



- Press and hold button **1** until the ABS warning lamp's display changes.

ABS warning light goes out; if self-diagnosis has not been completed, it begins to flash.

- Release button **1** within two seconds.

ABS warning light remains off or continues to flash.

» The ABS function is switched on.

- As an alternative, the ignition can also be switched off and then on again.

If the ABS warning light lights up after switching the ignition off and on and then continued driving over 4 mph (5 km/h), an ABS error has occurred.◀

More detailed information on the BMW Motorrad Integral ABS braking system can be found in the section "Technology in detail".◀

ASC Automatic Stability Control

Deactivate ASC function

- Switch on ignition (➠ 42).

- Press and hold button **1** until the ASC warning lamp's display changes.

The ASC function can also be deactivated while driving.◀

ASC warning light lights up.

- Release button **1** within two seconds.

ASC warning light continues to light up.

» The ASC function is switched off.

Activate ASC function

- Press and hold button **1** until the ASC warning lamp's display changes.

The ASC warning light does not light up anymore; if self-diagnosis has not been completed, it begins to flash.

- Release button **1** within two seconds.

The ASC warning light still does not light up respectively continues flashing.

» The ASC function is switched on.

- As an alternative, the ignition can also be switched off and then on again.

If the ASC warning light lights up after switching the ignition off and on and then continued driving over 4 mph (5 km/h), an ASC error has occurred.◀

More detailed information on the BMW Motorrad Automatic Stability Control (ASC) system can be found in the section "Technology in detail".◀

Riding mode

Use of the riding modes

BMW Motorrad has developed 5 riding scenarios for your motorcycle from which you can select the one matching your situation:

– Riding on wet roads
– Riding on dry roads
– with Pro driving modes OE
– Brisk riding on dry roads
– Moderate off-road riding
– Challenging off-road riding

For each of those 5 scenarios, the optimum balance between engine torque, throttle response, ABS control and ASC control for the situation concerned is provided.

– with dynamic ESA OE

The suspension settings is adjusted to the selected scenario as well.

Setting riding mode

- Switch on ignition (➠ 42).

• Press button **1**.

Details on the selectable driving modes are provided in the chapter "Technology in Detail".◀

The selection arrow **1** and the first selectable riding mode **2** are displayed.

Off-road mode (Enduro and Enduro Pro) is not intended for normal road operation. Switching the off-road mode (Enduro and Enduro Pro) on during road operation can result in unstable riding conditions when braking in ABS or accelerating in ASC. This results in a danger of falling.
Switch off-road mode (Enduro and Enduro Pro) during off-road riding on only.◀

• Press button **1** repeatedly, until the selection arrow is shown next to the desired riding mode.

When selecting the Enduro PRO mode, remember the restrictions on ABS control intervention at the rear wheel (see the chapter "Technology in detail").◀

The following riding modes can be selected:
– RAIN: When riding on wet roads.

– ROAD: When riding on dry roads.

– with Pro driving modes OE
» The following driving modes can also be selected:
– DYNA: When riding dynamically on dry roads.
– Enduro: When driving off-road.
– Enduro PRO: When riding sporty off-road (with coding plug installed only).◁
» When the vehicle is stationary, the selected riding mode is activated after approx. 2 seconds.
» The new riding mode is activated during operation under the following conditions:
– Throttle grip in neutral position
– Clutch disengaged
» After the new riding mode is activated, the clock is displayed again.
» The configured riding mode with the corresponding adaptations of the engine characteristics, ABS, ASC and dynamic ESA is maintained, even after the ignition is switched off.

Switching off TCP/RDC in off-road mode

– with Pro driving modes OE

If you want to ride off-road with a reduced tire inflation pressure, it is possible to deactivate the TCP/RDC warning for the Enduro and Enduro Pro driving modes.

• Switch on ignition (➠ 42).

• Repeat pressing button **1** briefly, until in the top line of the display **2** SETUP ENTER is shown.
• Press and hold button **1** to start the SETUP menu.

- Press button **1** briefly to respectively select the RDC menu item.
» The top line of the display **2** shows RDC.
» The adjusted value appears in the bottom line of the display **3**.
- Press button **4** briefly to change the adjusted value.
» The following settings are available:
– ON: the RDC warning symbol is no longer shown on the display. The tire pressure outside permissible tolerance warning is shown in the Enduro and Enduro Pro riding modes.
– OFF: the RDC warning symbol is displayed and in addition the tire pressure outside permissible tolerance warning is shown in the Enduro and Enduro Pro riding modes.

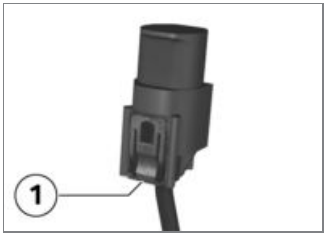
Install coding plug

– with Pro driving modes OE

- Switch off ignition (➠ 43).
- Remove rider's seat (➠ 77).

Dirt and moisture can get into the open plug and cause malfunctions.
After removing the encoding plug, refit the cover cap.◀

- Remove cover cap of the plug connection **1**.



- To do so, press in locking device **1** and pull off cap.
- Insert the coding plug.
- Switch on ignition.

Symbol **1** for the coding plug appears on the display. Riding mode **2** Enduro PRO can be selected.

» The selected riding mode remains active even after the ignition is switched off.
- Install rider's seat (➠ 77).

Cruise control

– with cruise control[OE]

Switching on cruise control

The cruise-control system is not available again until after the Enduro or Enduro Pro driving mode has been deactivated.

- Push switch **1** to right.

» Button **2** is unlocked.

Setting road speed

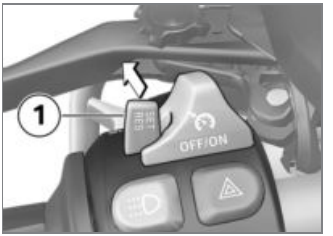
- Briefly press button **1** forward.

Adjustment range for cruise control
19...130 mph (30...210 km/h)

Indicator lamp for cruise-control system lights up.

» The motorcycle maintains your current cruising speed and the setting is saved.

Acceleration



- Briefly press button **1** forward.
» Speed is increased by 1.2 mph (2 km/h) each time button is pressed.
- Press button **1** forward and hold.
» The motorcycle accelerates steplessly.
» If the button **1** is no longer pressed, the speed achieved is maintained and saved.

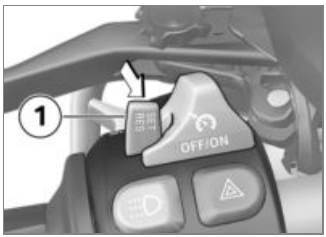
Decreasing speed

- Briefly press button **1** backward.
» Speed is decreased by 1.2 mph (2 km/h) each time button is pressed.
- Press button **1** back and hold.
» The motorcycle decelerates steplessly.
» If the button **1** is no longer pressed, the speed achieved is maintained and saved.

Deactivate cruise control

- Actuate brakes, clutch or throttle grip (take back throttle beyond back position) to deactivate cruise-control system.
» Cruise control indicator lamp goes out.

Resuming former cruising speed

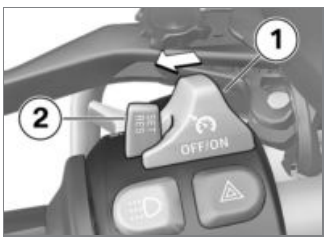


- Briefly push button **1** back to return to the speed saved beforehand.

Opening the throttle does not deactivate the cruise-control system. If you release the throttle grip, the motorcycle will decelerate only to the cruising speed saved in memory, even though you might have intended slowing to a lower speed.◀

Indicator lamp for cruise-control system lights up.

Switching off cruise control



- Push switch **1** to left.

» The system is deactivated.

» Button **2** is locked.

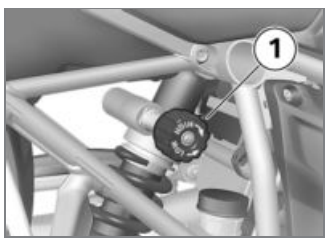
Spring preload

Setting

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

Adjusting spring preload at rear wheel

- Park the motorcycle, ensuring that the support surface is firm and level.



Your motorcycle's handling will suffer if you do not match the spring-preload and damping-characteristic settings. Adjust damping characteristic to changed spring preload.◀

Adjusting the spring preload while the motorcycle is being ridden can lead to accidents. Adjust the spring preload only when the motorcycle is stationary.◀

- To increase the spring preload, turn the adjustment wheel **1** in the direction of the arrow HIGH.
- To decrease the spring load, turn the adjustment wheel **1** in the direction of the arrow LOW.

Basic setting of spring preload, rear
– without dynamic ESA OE
Turn adjustment wheel as far as possible into LOW direction (One-up without load)
Turn adjuster wheel as far as possible in LOW direction, then rotate 15 turns in HIGH direction (One-up with load)

Basic setting of spring preload, rear
Turn adjuster wheel as far as possible in LOW direction, then rotate 30 turns in HIGH direction (Two-up and load)◁

Damping

Setting

The damping must be adjusted to the road conditions and the spring preload.

– A rough road surface requires softer damping than a smooth road surface.
– An increase in spring preload requires firmer damping, a reduction in spring preload requires softer damping.

Adjusting damping on rear wheel

- Park the motorcycle, ensuring that the support surface is firm and level.
- Adjust damping from the left side of the vehicle.

- To increase damping, turn adjustment screw **1** clockwise.
- To decrease damping, turn adjustment screw **1** counterclockwise.

Basic setting of rear wheel rear-wheel damping
– without dynamic ESA OE
Turn adjuster wheel as far as possible clockwise, then 8 clicks counterclockwise (One-up without load)
Turn adjuster wheel as far as possible clockwise, then 4 clicks counterclockwise (One-up with load)
Turn adjuster wheel as far as possible clockwise, then 4 clicks counterclockwise (Two-up with load)◁

Dynamic ESA, Electronic Suspension Adjustment

– with dynamic ESA OE

Adjustment options

Using the electronic suspension adjustment Dynamic ESA you can conveniently adjust your motorcycle to the load.

Using leveling sensors, Dynamic ESA detects movements of the running gear and responds to them by adjusting the damper valves. As a result, the running gear is adjusted to the conditions of the ground.

Based on the NORMAL default setting, damping can be additionally adjusted harder (HARD) or softer (SOFT).

– with Pro driving modes OE

The running gear adjustment as well as the number of selectable damping variants depend on the selected riding mode. Damping set by the riding mode can be changed by the rider.

If the coding plug is not installed, the default set by the riding mode is set after every mode change. If the coding plug is installed, the rider's adjustments for every mode are maintained.

Display suspension setting

• Switch on ignition (➠ 42).

- Press button **1** briefly to display current adjustment.

Damping is displayed in the multifunction display in area **1**, and spring preload is indicated in area **2**.

» The display is automatically hidden again after a short time.

Adjust chassis

- Switch on ignition (➠ 42).

- Press button **1** briefly to display current adjustment.

To set the damping rate:

- Repeat pressing button **1** briefly until desired setting is displayed.

The damping cannot be adjusted while the motorcycle is being ridden.◀

The following settings are available:

– SOFT: Comfortable damping
– NORMAL: Normal damping
– HARD: Sporty, performance-oriented damping

– with Pro driving modes OE

In the ENDURO and ENDURO PRO modes two adjustments are possible only:

– SOFT: Comfortable damping
– HARD: Sporty, performance-oriented damping

To set the spring preload:

- Starting the engine (➠ 82).
- Press and hold button **1** repeatedly until desired setting is displayed.

The spring preload cannot be adjusted while the motorcycle is being ridden.◀

The following settings are available:

One-up

One-up with luggage

Two-up (with luggage)

- Wait for the adjustment routine to finish before starting off again.

» If the button **1** is not pressed for an extended period, the damping rate and the spring preload will be adjusted to the displayed settings. The ESA display flashes during the adjustment routine.

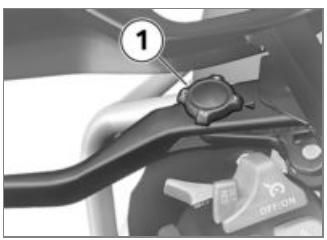
- At very low temperatures, unload the motorcycles before increasing the spring preload, and have the passenger dismount if necessary.

» The ESA display disappears once the adjustment procedure has been completed.

Clutch

Adjusting clutch lever

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



- Turn adjusting wheel **1** into desired position.

The adjustment wheel can be turned more easily if you press the clutch lever forward when doing so.◀

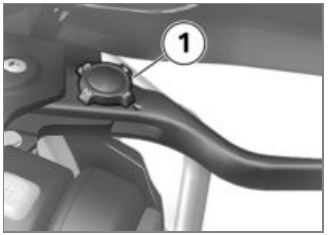
» Four settings are available:

– Position 1: smallest distance between handlebar grip and clutch lever
– Position 4: largest distance between handlebar grip and clutch lever

Brakes

Adjusting handbrake lever

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



- Turn adjusting wheel **1** into desired position.

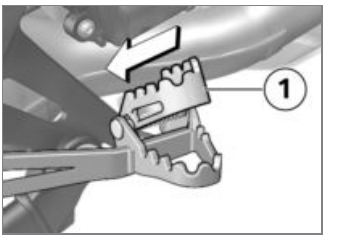
▷ The adjustment wheel can be turned more easily if you press the handbrake lever forward when doing so.◀

» Four settings are available:

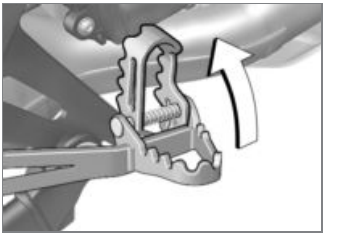
– Position 1: smallest distance between handlebar grip and brake lever
– Position 4: largest distance between handlebar grip and brake lever

Adjusting footbrake lever

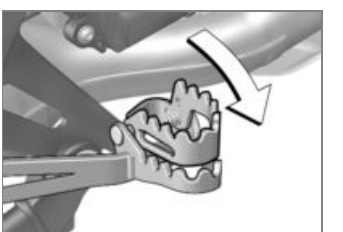
- Make sure ground is level and firm and park motorcycle.



- Slide treadplate **1** of footrest sideways to the left to unlock.



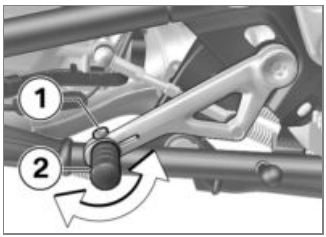
- Fold step plate upward up to detent when riding while seated.



- Fold step plate downward down to detent when riding while standing.

Shifting

Adjusting shift lever



- Slacken screw **1**.
- Turn foot piece **2** into desired position.

▷ A foot piece adjusted too high or too low can cause problems when shifting. In case of shifting problems, check the adjustment of the foot piece.◀

- Tighten screw **1** to specified torque.

Treadplate (fixing) on gear lever
6 lb/ft (8 Nm)

Tires

Check tire pressure

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

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

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

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

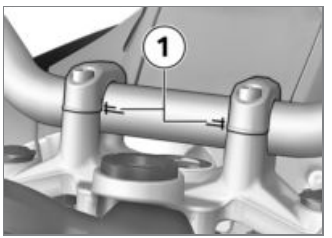
Tire pressure, rear
42.1 psi (2.9 bar) (with tire cold)

If tire pressure is too low:

- Correct tire pressure.

Handlebars

Adjustable handlebars



The inclination of the motorcycle handlebars can be adjusted within the **1** markings. Consult an authorized workshop, preferably an authorized BMW Motorrad retailer, for adjustment of the handlebars.

Heated handlebar grips

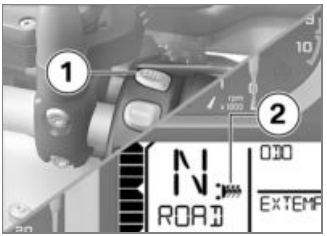
– with heated handlebar grips OE

Operating heated grips

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

▷ The increase in power consumption caused by the heated grips can drain the battery if you are riding at low engine speeds. If the battery is inadequately charged, the heated grips are switched off to ensure starting capability.◀

- Starting the engine (➠ 82).



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

The handlebar grips can be heated at two different levels.

50 % heating output

100 % heating output

» The 2nd heating level is used for fast heat-up of the grips; then the switch should be switched back to the 1st level.

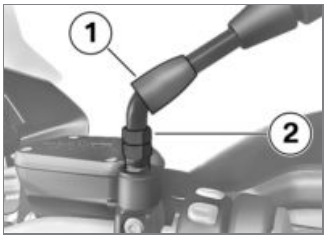
» If no further changes are made the selected heating level is adopted as the setting.
- To switch off heated grips, press button **1** until heated grip symbol **2** is no longer shown in the display.

Mirrors

Adjust mirrors

- Move mirror into desired position by twisting.

Adjust mirror arm



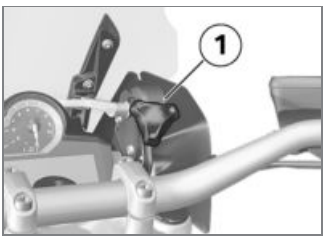
- Slide protective cap **1** up over screw connection on mirror arm.
- Loosen the nut **2**.
- Turn mirror arm into desired position.
- Tighten the nut to the specified torque while holding the mirror arm to ensure that it does not move out of position.

	Mirror (locknut) on adapter
16 lb/ft (22 Nm)	

- Slide protective cap over threaded fastener.

Windshield

Adjust windshield



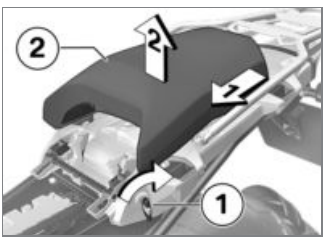
Windshield adjustments while riding represent an accident hazard.
Adjust windshield while stopped only.◀

- Turn adjustment wheel **1** clockwise to lower the windshield.
- Turn adjustment wheel **1** counterclockwise to raise the windshield.

Rider and passenger seats

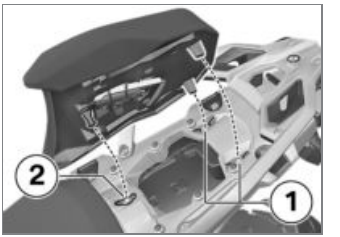
Remove passenger seat

- Remove rider's seat (➠ 77).

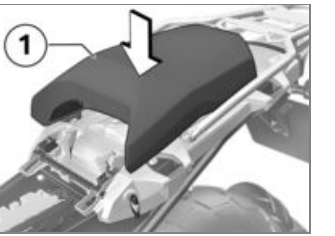


- Turn ignition key **1** clockwise.
- Slide pillion seat **2** forwards and lift up to remove.
- Place pillion seat on clean surface with the fabric side facing down.

Installing passenger seat



- Fit passenger seat centered in rear mounts **1** and in front mount **2**.
- Slide pillion seat to the rear.
- Check pillion seat is properly located.

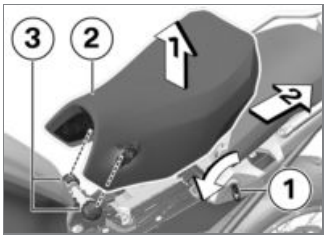


- Firmly press pillion seat **1** downwards.

» Passenger seat clicks audibly into place.

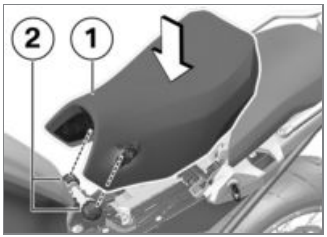
- Install rider's seat (➠ 77).

Remove rider's seat



- Turn vehicle key **1** counter-clockwise and hold while lifting driver's seat **2** in rear area.
- Remove driver's seat **2** from seat bracket **3** toward rear.
- Lay driver's seat on a clean surface with the upholstered side down.

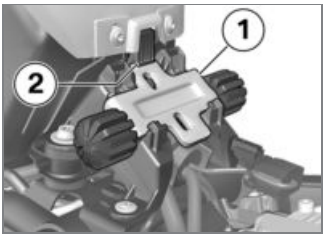
Install rider's seat



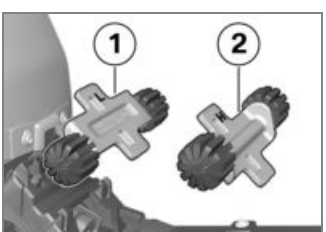
- Fit front seat **1** into seat mount **2** on left and right and place loosely on motorcycle.
- Press rider's seat slightly forward in rear area and then firmly downward until locking mechanism engages.

Adjust seat height and seat tilt

- Remove rider's seat (➠ 77).



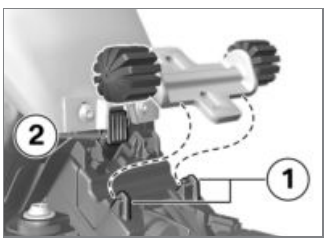
- In order to remove the front height adjustment **1**, press locking mechanism **2** down to remove the height adjustment upwards.



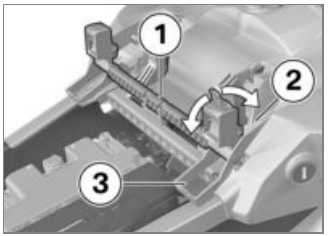
- In order to adjust the low seat position, install the front height

adjustment in orientation **1** (L marking).

- In order to adjust the high seat position, install the front height adjustment in orientation **2** (H marking).



- First, slide the front height adjustment under mounts **1**. Then press locking mechanism **2**, until it engages.



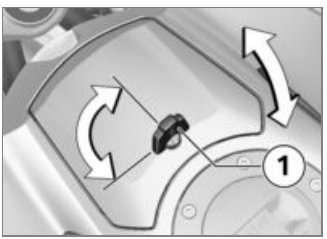
- In order to adjust the low seat position, swivel rear height adjustment **1** into position **3** (L marking).
- In order to adjust the high seat position, swivel rear height adjustment **1** into position **2** (H marking).

If seat tilt should be changed:

- Position the front and rear height adjustment differently.
- Install rider's seat (➠ 77).

Storage compartment

Opening and locking stow compartment



- To open the stow compartment **1**, turn knob 90° counterclockwise and pull upwards.
- To lock the stow compartment **1**, close the compartment lid, turn knob 90° clockwise and fold down forwards onto the stow compartment lid.

Riding

Safety instructions

Rider's Equipment

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

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

Reduced clearance in inclined position

Motorcycles with lowered running gear have less ground clearance in all positions than motorcycles with standard running gear.

When driving in curves with lowered motorcycles, motorcycle parts can contact the road surface soon than accustomed, which can lead to accidents.
Carefully try out the clearance of the motorcycle in an inclined position and adjust your driving style accordingly.◀

Test the clearance of your motorcycle at an angle in safe situations. Remember to take the limited ground clearance of your motorcycle into account when driving over curbs and similar obstacles.

The lowering of the motorcycle shortens the spring travel (see the chapter "Technical Data"). A possible reduction in the accustomed driving comfort may result. Especially when riding with a passenger, the spring preload should be adjusted accordingly.

Loading

Overloading and imbalanced loads can adversely affect driving stability.
Do not exceed the gross weight limit and observe the loading information.◀

- Adjust spring preload and damping rate for the current gross vehicle weight.
- Ensure that case volumes on left and right are equal.
- Make sure that weight is uniformly distributed between right and left.
- Pack heavy pieces of luggage and cargo as low and as close to the center of the motorcycle as possible.
- Observe maximum payload and top speed as indicated on label in case.
- Observe maximum payload and top speed as indicated on label in topcase.

– with tank rucksack OA
• Observe maximum payload of tank rucksack and corresponding top speed.

 Payload of tank rucksack
max 11 lbs (max 5 kg)◁

Speed

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

Maximum speed with massive-bar tires

The maximum speed specified for the motorcycle may be higher than the maximum speed permissible for the tires. Excessively high speeds can lead to tire damage and accidents. Observe the maximum permissible speed for the tires.◀

With massive-bar tires, the top speed permissible for the tire must be observed.
Attach maximum permissible speed decal in field of view.

Risk of poisoning

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

Inhaling exhaust fumes therefore represents a health hazard and can even cause loss of consciousness with fatal consequences.
Do not inhale exhaust fumes. Do not run the engine in closed rooms.◀

Burn hazard

Engine and exhaust system become very hot when the motorcycle is in use. There is a risk of burn injuries by contact with hot surfaces.
After parking the motorcycle, make sure that no one comes into contact with the engine and exhaust system.◀

Catalytic converter

If misfiring causes unburned fuel to enter the catalytic converter, there is a danger of overheating and damage.
For this reason, observe the following points:
– Do not run the fuel tank dry
– Do not run the engine with the spark-plug cap removed

– Stop the engine immediately if it misfires
– Use unleaded fuel only
– Comply with all specified maintenance intervals.

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

Danger of overheating

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

Modifications

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

Checklist

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

Before every journey

– Brakes
– Front and rear brake fluid levels
– Coolant level
– Clutch function
– Damping setting and spring preload
– Tread depth and tire inflation pressure
– Firm seating of cases and luggage

At regular intervals

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

Starting

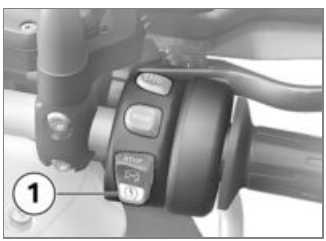
Starting the engine

• Switch on ignition.
» Pre-Ride-Check is carried out. (➠ 83)
» ABS self-diagnosis is performed. (➠ 83)
» ASC self-diagnosis in progress. (➠ 84)
• Engage neutral, or pull back clutch lever if a gear is engaged.

You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch itself off if

it is started with the transmission in neutral and then a gear is engaged before retracting the side stand.◀

- In the case of cold start or under cold temperatures: Pull back clutch lever.



- Press starter button **1**.

The starting attempt is automatically interrupted if battery voltage is too low. Recharge the battery before you attempt to start the engine again, or use jumper cables and a donor battery to start.

More detailed information can be found in the "Maintenance" chapter under "Jump-starting."◀

» Engine starts.

» If the engine fails to start, the troubleshooting table in the chapter "Technical Data" may provide assistance. (➠ 152)

Pre-Ride Check

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

Phase 1

All warning and indicator lights are switched on.

Phase 2

The universal warning light changes from red to yellow.

Phase 3

At the same time, the previously activated warning and indicator lamps are now switched off in reverse sequence.

If one of the warning and indicator lights was not switched on:

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

ABS self-diagnosis

The self-diagnosis routine checks whether the BMW Motorcycle Integral ABS is ready for operation. The self-diagnosis routine runs automatically when you switch on the ignition. To check the wheel speed sensors, the motorcycle must be driven a few meters (minimum speed 5 kph).

Phase 1

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

ABS warning light flashes.

Phase 2

» Check wheel sensors while starting off.

ABS warning light flashes.

ABS self-diagnosis completed

» ABS warning light goes out.

- Watch all warning and indicator lights on the display.

An ABS error is indicated following completion of the ABS self-diagnosis routine.

- It remains possible to continue riding. Please be aware that neither the ABS nor the integral function are available.
- Have the malfunction corrected as soon as possible at an authorized service facility, preferably an authorized BMW Motorrad Dealer.

ASC self-diagnosis

The self-diagnosis routine checks whether the BMW Motorcycle 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 the diagnostic system while vehicle is parked.

ASC warning light flashes slowly.

Phase 2

» Check of diagnosable system components while motorcycle is moving (minimum speed 5 kph).

ASC warning light flashes slowly.

ASC self-diagnosis completed

» ASC warning lamp goes out.

- Watch all warning and indicator lamps on the display.

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

- It remains possible to continue riding. Please be aware that ASC functionality is no longer available.
- Have the malfunction corrected as soon as possible at an authorized workshop, preferably an authorized BMW Motorrad retailer.

Breaking in

Engine

- While running in the motorcycle, vary the throttle opening and engine-speed range frequently; avoid driving for long periods at a constant speed.
- Choose curvy, slightly hilly sections of road if possible.
- Observe the engine run-in speeds.

 Engine break-in speeds
<5000 min^{-1} (Odometer reading 0...621 miles (0...1000 km))
no full throttle (Odometer reading 0...621 miles (0...1000 km))

- Observe mileage, after which the running-in check should be performed.

 Mileage until running-in check
311...746 miles (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.

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

Tires

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

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

Shifting gears

– with gearshift assistance Pro OE

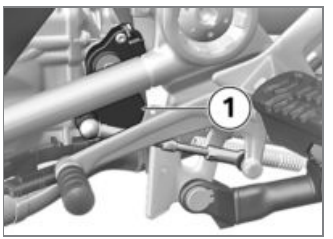
Pro Gear Shift Assistant

The gearshift assistant provides help with upward and downward gear shifts without the clutch or the accelerator having to be operated. This is not an automatic transmission. The rider is an essential part of the system and makes the decision as to when to change gear.

More detailed information on Pro Gear-shift Assis-

tance can be found in the section "Technology in detail".◀

▷ When changing gear using the Pro Gear-shift Assistance function, the cruise control is automatically deactivated for safety reasons.◀



- The gears are shifted into as usual with foot force on the shift lever.

» The sensor **1** on the gear-lever shaft detects the intention to change gear and initiates gear-shift assistance.

» When driving at constant speed in low gears at high revs, changing gear without using the clutch can result in major load change reactions. BMW Motorrad recommends only changing gear using the clutch in such situations. The Pro shifting assistant should not be used in the area of the rev-limiter.

» No shifting support is provided in the following situations:

– If the clutch is operated
– If the gear lever is not in the zero position
– When changing up with the throttle closed (overrunning mode) or when decelerating.

- To be able to make another gear shift using Pro Gear Shift Assistant, the gear lever must be fully released after the first gear change.

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 at 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 increasing force. This procedure provides ideal exploitation of the extra weight transfer to the front wheel. The clutch should also be disengaged at the same time.

With the "forced braking" often practiced in which the brake pressure is generated as quickly

as possible and with great force, the dynamic load distribution cannot follow the increased deceleration and the braking force cannot be completely transferred to the road surface.
Locking up of the front wheel is prevented by the BMW Motorrad Integral ABS.

Descending mountain passes

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

Wet, soiled brakes

Moisture and dirt on the brake 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.
– When driving on soiled roads or offroad.

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

Parking your motorcycle

Side stand

- Switch off engine.

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

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

- Fold out side stand and park motorcycle.
- If the slope of the road permits, turn the handlebars to the left.
- On slopes point the motorcycle uphill and engage 1st gear.

Center stand

- Switch off engine.

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

The center stands could respond to excessively forceful motion by folding back and allowing the vehicle to fall over. Do not sit on the motorcycle while it is resting on the center stand.◀

- Fold out center stand and jack up motorcycle.
- On a grade, the motorcycle should always face uphill; select 1st gear.

Off-road riding

After driving offroad

BMW Motorrad recommends that the following be observed after driving offroad:

Tire inflation pressure

A tire inflation pressure reduced for offroad driving leads to poorer handling of the motorcycle on paved roads and can result in accidents.
Ensure proper tire inflation pressure.◀

Brakes

When the motorcycle is ridden on loose surfaces or muddy roads, the brakes may fail to take effect immediately because of dirt or moisture on the disks or brake pads.
Brake early until the brakes are braked clean.◀

Driving on unpaved or dirty roads leads to increased brake pad wear.
Check the brake pad thickness more often and replace the brake pads sooner.◀

Spring preload and damping

Spring preload and damping values that have been changed for offroad use reduce handling characteristics on paved surfaces.
Before returning to on-road use, reset correct spring preload and correct damping.◀

Rims

BMW Motorrad recommends checking the rims for possible damage after riding offroad.

Air cleaner insert

Engine damage due to soiled air filter insert.
When driving in dusty terrain,

check air filter insert for soiling at short intervals and clean or replace if necessary.◀

Use under very dusty conditions (deserts, savannas, etc.) requires the use air cleaner inserts specially developed for these kinds of applications.

Refueling

Fuel specifications

For optimal fuel economy, the gasoline should be sulfur-free or very low in sulfur content.

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

Ethanol E85 might damage the engine and fuel supply system.
Do not refuel with E85, i.e. fuel with an ethanol content of 85 %, or with Flex Fuel.◀

- Fuels with a maximum ethanol content of 10 %, meaning "E10," may be used for refueling. Ethanol should satisfy the quality standards for US (ASTM 4806–xx) and Canada (CGSB-3.511–xx). “xx” - comply with the current standard in each case.

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

 Alternative fuel quality
Regular unleaded (restrictions with regard to power and fuel consumption. If the engine should for example be operated with 91 RON in countries with lower fuel quality, the motorcycle must be respectively programmed first by your authorized BMW Motorrad retailer.) (max. 10 % ethanol, E10) 87 AKI (91 ROZ/RON) 87 AKI

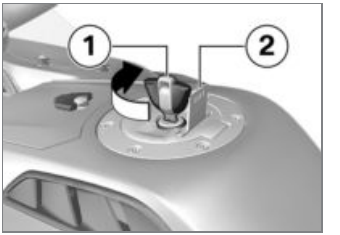
Refueling procedure

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

Fuel expands when exposed to heat. When the tank is overfilled, fuel can escape and get onto the road. This results in a danger of falling.
Do not overfill the fuel tank.◀

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

- Place motorcycle on the center stand, ensuring that it is resting on a firm and level support surface.



- Open protective cap **2**.
- Unlock cap of fuel tank **1** with ignition key by turning it clockwise, and fold it up.

- Do not fill the tank past the bottom edge of the filler neck.

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

The "usable fuel quantity" indicated 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.◀

Usable fuel quantity
Approx. 7.9 gal (Approx. 30 l)

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

- Press fuel tank cap down firmly to close.
- Remove key and close protective cap.

Refueling procedure

– with Keyless Ride[OE]

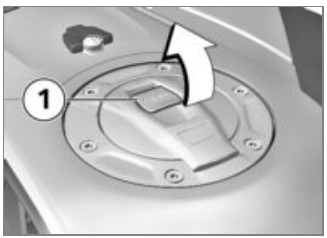
Steering lock is unlocked.

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

⚠ Fuel expands when exposed to heat. When the tank is overfilled, fuel can escape and get onto the road. This results in a danger of falling. Do not overfill the fuel tank.◀

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

- Place motorcycle on center stand, ensuring that it is resting on a firm and level support surface.



- There are two ways to open the fuel filler cap:

Version 1

- Switch off ignition (➠ 43).
- **Slowly** pull lug **1** of fuel filler cap upward.

» Red LED in instrument cluster flashes as long as the radio-operated key is being searched for.

- **Slowly** pull lug **1** upward a second time.

» Fuel filler cap unlocked.

Version 2

- Switch off ignition (➠ 43).
- After the ignition is switched off, the fuel filler cap can be opened within the specified run-on time.

	Open fuel filler cap
2 min	

- **Slowly** pull lug **1** of fuel filler cap upward.

» Fuel filler cap unlocked.

- Open fuel filler cap completely.

- Do not fill the tank past the bottom edge of the filler neck.

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

The "usable fuel quantity" indicated 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.◀

Usable fuel quantity
Approx. 7.9 gal (Approx. 30 l)
Reserve fuel quantity
Approx. 1.1 gal (Approx. 4 l)

- Press fuel filler cap of fuel tank down firmly.

» Fuel tank cap audibly locks.

Fastening motorcycle for transport

- Protect all components over which straps are run against abrasion, e.g. using adhesive tape or soft cloths.

When jacking up the vehicle it can tip away to the side and fall over.
Secure motorcycle against tipping to the side, preferably with the assistance of a second person.◀

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

Components can be damaged.

Do not squeeze components such as brake lines or wiring harnesses.◀

- Fasten front straps to both sides of the handlebars.
- Guide straps through leading link and then tension.
- Fasten rear straps on both sides to the passenger footpegs and then tighten them.
- Tension all straps evenly; the vehicle should be pulled down against its springs with the suspension compressed as much as possible.

Technology in detail

Riding mode

Selection

In order to adjust the motorcycle to the road condition, one of 5 riding modes can be selected:
– RAIN
– ROAD (standard mode)

– with Pro driving modes OE
– DYNAMIC
– Enduro
– Enduro PRO (if coding plug is installed only)

For each of the 5 riding modes, adapted settings for the ABS and ASC systems and for the throttle response are available.

– with dynamic ESA OE
The Dynamic ESA alignment depends on the selected riding mode as well.

ABS and/or ASC can be switched off in each mode; the following explanations always refer to the activated systems.

Throttle response
– In RAIN and ENDURO modes: restrained
– In ROAD and ENDURO PRO modes: direct
– In DYNAMIC mode: dynamic

ABS
– The rear wheel lift assistant is active in all modes.
– In the RAIN, ROAD and DYNAMIC modes, ABS is aligned to road operation.
– In the ENDURO mode, ABS is aligned to off-road operation using street tires.
– In the ENDURO PRO mode, no ABS control is applied to the rear wheel, if the foot-brake lever is actuated. ABS is aligned to off-road operation using massive-bar tires.

ASC
– The front wheel lift assistant is active in all modes.
– In the RAIN, ROAD and DYNAMIC modes, ASC is aligned to road operation.
– In the ENDURO, and ENDURO PRO modes, ASC is aligned to off-road operation.

– with dynamic ESA OE

Dynamic ESA
– In the RAIN, ROAD and DYNAMIC modes, damping variants HARD, NORMAL and SOFT can be selected.
– RAIN mode default setting: SOFT
– ROAD mode default setting: NORMAL
– DYNAMIC mode default setting: HARD

– In the ENDURO and ENDURO PRO modes, damping variants HARD and SOFT can be selected.
– ENDURO mode default setting: SOFT
– ENDURO PRO mode default setting: HARD

Switchover

The driving modes can only be changed while driving under the following condition:
– No drive torque at rear wheel
– No brake pressure in the braking system.

This operating mode is active when the motorcycle is stopped with the ignition switched ON. As an alternative, the following steps must be carried out:
– Turn throttle twist-grip back
– Do not actuate brake lever
– Actuate clutch.

First the desired riding mode is preselected. The switchover does not take place until the affected systems are in the required state.
The selection menu does not disappear in the display until the driving mode has been switched over.

Gearshift assistant

– with gearshift assistance Pro OE

Pro Gear Shift Assistant

Your motorcycle is equipped with a Pro Gear Shift Assistant originally developed for racing but now specially adapted for touring use. It allows you upshift and downshift under almost any load conditions and in virtually all engine-speed ranges without operating the clutch or accelerator.

Benefits
– 70-80 % of all gear changes can be performed without using the clutch.
– Less movement between pilot and pillion due to shorter gearchange intervals.
– Throttle does not have to be closed when changing gear under acceleration.
– During deceleration and downshifts (throttle plate closed) the system blips the throttle to obtain the correct engine speed.
– Shifting times are faster than when the clutch is used to change gears.

For the system to detect the rider's intention to change gear, the previously stationary gear lever must be moved in the desired direction against the force of the spring and with a certain amount of "overtravel" at a standard to rapid travel speed, and

then maintained in this position until execution of the shift is completed. No additional increase in shifting force is necessary during the gear shifting process. After the gear change is completed, the gear lever must be fully released before the Pro Gear Shift Assistant can execute a new gear change. The load factor (throttle grip position) should remain constant both prior to and during execution of shifts using the Pro Gear Shift Assistant. Changing the position of the throttle grip while the shift is in progress can lead to cancellation of the function and/or shifting errors. No support is provided by the Pro Gear Shift Assistant during gear changes made using the clutch.

Downshifts

– Downshifts are assisted up to the speed at which the engine reaches maximum rpm in the gear to be engaged. Overrevving is thus prevented.

 Maximum engine speed
max 9000 min^{-1}

Upshifts

– The Pro Gear Shift Assistant does not provide added support when the engine speed would fall below idle in the new gear.

 Idle speed
1150 min^{-1} (Engine at operating temperature)

Brake system with BMW Motorrad Integral ABS

Partially integral brake

Your motorcycle is equipped with a partially integral brake configuration. Both front and rear brakes are applied simultaneously when you pull the handbrake lever.
The footbrake lever acts only on the rear brake.
The BMW Motorrad Integral ABS adapts the braking force distribution between the front and rear wheel brake to the loading of the motorcycle during braking with ABS control.

Spinning of the rear wheel with the front brake applied (Burn Out) is prevented by the integral function. The result may be damage to the rear wheel brake and the clutch.
Do not attempt Burn Outs.◀

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 lower 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 braking force is exceeded when the rider increases the brake pressure, the wheels begin to lock and driving stability is lost, and a fall can result. Before this situation occurs, ABS is activated and the brake pressure is adjusted to the maximum transferable braking force. This enables the wheels to continue to turn and maintains driving stability regardless of the road surface condition.

What happens when rough roads are encountered?

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

How is the BMW Motorrad Integral ABS noticeable to the rider?

If the ABS system must reduce the braking forces due to the conditions described above, then vibrations can be felt at the handbrake lever.
If the handbrake lever is pulled, then braking pressure is built up at the rear wheel with the integral function. If the footbrake lever is first actuated after this, the brake pressure already built up can be felt earlier than the counter-pressure, than when the footbrake lever is actuated before or together with the handbrake lever.

Lifting off rear wheel

However, during extremely heavy and rapid deceleration it is possible that the BMW Motorrad Integral ABS will not prevent the rear wheel from lifting off the ground.

In these cases, the motorcycle can also flip end over end.

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

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

The BMW Motorrad Integral ABS ensures driving stability on any surface within the limits of driving physics. The system is not optimized for special requirements resulting under extreme weather conditions offroad or on the racetrack. Handling should be adopted to driving skills and road conditions.

Special situations

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

– Heating up on the main or auxiliary stand at idle or with gear engaged
– Rear wheel locked-up for a longer period of time by engine brake, e.g. when riding downhill on slippery surfaces.

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?

Any technical system is always only as good as its maintenance.
To ensure that the ABS is in a properly maintained condition, it is vital that the specified service intervals be observed.◀

Reserves for safety

But remember: the potentially shorter braking distances which BMW Motorrad Integral 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 a curve, the motorcycle's weight and momentum take over and even ABS is unable to counteract their effects. The rider is always responsible for adapting his/her driving style.
Do not reduce the system's extra safety margin with careless riding or unnecessary risks.◀

Engine management with BMW Motorrad ASC

How does ASC work?

BMW Motorrad ASC compares the wheel speeds of the front and rear wheels. From the speed difference the slip, and with it the stability reserves on the rear wheel are determined. When a slip limit is exceeded, the engine torque is adapted by the engine management system.

What are the design characteristics of the BMW Motorrad ASC?

BMW Motorrad ASC is an assistance system for the rider and is designed for riding on public roads. The extent to which the rider affects ASC control can be considerable (weight shifts when cornering, loose luggage on the motorcycle), especially when approaching the limits imposed by the laws of physics.
The ENDURO riding mode should be activated for off-road riding. In this mode the controlling intervention by the ASC is carried out later, enabling controlled drifting.
The system is not optimized for the special conditions encountered under extreme weather during off-road and race-track use. BMW Motorrad ASC can be switched off under these conditions.

Even with ASC, the laws of physics cannot be overridden. The rider is always responsible for adapting his/her driving style.
Do not reduce the additional safety provided with risky driving.◀

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.

To detect spinning or slipping away of the rear wheel, the speeds of the front and rear wheel are compared. If implausible values are detected over a longer period of time, the ASC function is deactivated for safety reasons and an ASC fault is indicated. The condition for a

fault code is the completed self-diagnosis.
The following unusual riding conditions may lead to automatic deactivation of BMW Motorrad ASC:
– Driving on the rear wheel (wheelie) for a longer period with ASC deactivated
– Rear wheel spinning in place with front brake engaged (burn out)
– Heating up on the main or auxiliary stand at idle or with gear engaged

Switching the ignition off and on again and then riding the motorcycle at a speed of over 10 kph reactivates the ASC.

With extremely massive-bar tires, an ASC intervention can occur before the optimum propulsion is achieved due to the greater slip involved. In these cases the BMW Motorrad ASC should be deactivated.

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. In this case, BMW Motorrad recommends turning back the throttle grip somewhat to achieve a stable driving state again as quickly as possible.

On a slippery surface, the throttle grip should never be suddenly turned back completely without pulling the clutch at the same time. The engine braking torque can cause the rear wheel to block, resulting in an unstable driving state. This situation cannot be controlled by the BMW Motorrad ASC.

Tire Pressure Control TCP/RDC

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

Function

A sensor is located in each tire, which measures the air temperature and the inflation pressure inside the tire and sends these values to the control unit.
The sensors are equipped with a centrifugal controller, which does not enable the transmission of the measured values until after a speed of approx. 18.5 mph (30 km/h) is exceeded for the first time. Before initial reception of the tire inflation pressure, –– is shown in the display for each tire. The sensors continue to transmit the measured values for approx. 15 minutes after the vehicle comes to a stop.
If a TCP/RDC control unit is installed, however the wheels have

no sensors, then a fault code is output.

Tire inflation pressure ranges

The TCP/RDC control unit distinguishes between 3 inflation pressure ranges matched to the motorcycle:

– Inflation pressure within the permissible tolerance
– Inflation pressure at the limits of the permissible tolerance
– Inflation pressure outside the permissible tolerance

Temperature compensation

The tire inflation pressure is temperature dependent, i.e., it increases or decreases together with the tire temperature. The tire temperature is dependent on the outside temperature and on the driving style and duration.

The tire inflation pressures are shown temperature-compensated in the multifunction display; they refer to a tire temperature of 68 °F (20 °C). No temperature compensation takes place in the inflation pressure testers at filling stations, meaning that the measured tire inflation pressure varies according to tyre temperature. As a result, in most cases the values displayed there do not match the values shown in the multifunction display.

Adjusting inflation pressure

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

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

Maintenance

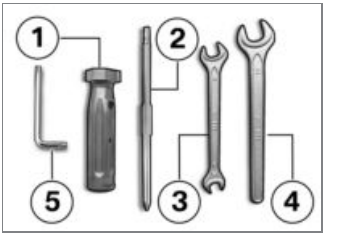
General instructions

The "Maintenance" chapter describes work involving the checking and replacement of wear parts that can be performed with a minimum of effort.
If special tightening torques are to be taken into account for assembly, these are listed. An overview of all required tightening torques is contained in the chapter "Technical Data".
Further information about maintenance and repair work can be obtained on DVD through your authorized BMW Motorrad retailer.

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

Onboard tool kit

Onboard toolkit



1 Screwdriver handle
– Use with screwdriver bit.
– Topping up engine oil (➠ 108).

2 Reversible screwdriver insert
Phillips PH1 and Torx T25
– Remove bulb for front and rear turn indicator (➠ 124).
– Remove battery cover (➠ 130).
– Topping up coolant (➠ 113).

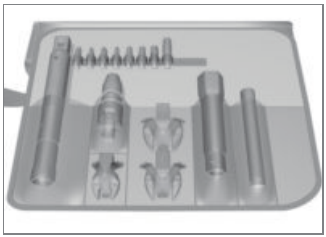
3 Open-ended wrench
Wrench size: 8/10 mm
– Remove battery (➠ 130).

4 Open-ended wrench
Wrench size: 14
– Adjust mirror arm (➠ 75).

5 Torx wrench T30
– Lower gear lever adjustment.

Service tool kit

– with service toolkit[OA]



For more extensive service operations (such as wheel removal and installation), BMW Motorrad has put together a service tool kit matched to your motorcycle. You can purchase this tool kit from your authorized BMW Motorrad retailer.

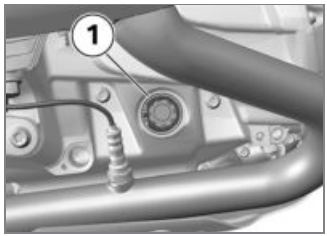
Engine oil

Check engine oil level

The oil level varies with the temperature of the oil. The higher the temperature, the higher the level of oil in the sump. Checking the oil level with the engine cold or after a short trip leads to misinterpretations of the oil fill quantity.

To ensure that the display of the engine oil level is correct, only check the oil level with the engine at operating temperature.◀

- Switch off engine at operating temperature.
- Make sure ground is level and firm and place motorcycle on center stand.
- Wait five minutes to allow oil to drain to the oil pan.



- Read the oil level in the display **1**.

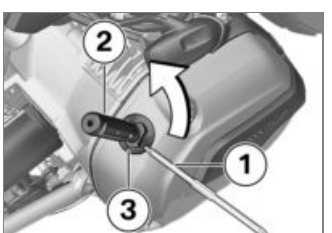
Specified level of engine oil	
between MIN- and MAX mark	

If the oil level is below MIN mark:
- Topping up engine oil (➠ 108).

If oil level is above MAX mark:
- Have the oil level corrected at an authorized service facility, preferably an authorized BMW Motorrad retailer.

Topping up engine oil

- Park the motorcycle, ensuring that the support surface is firm and level.



- Wipe area around oil fill location to clean it.
- To be able to apply force more easily, insert the interchangeable screwdriver bit **1**, Torx end first, into the screwdriver handle **2** (from motorcycle toolkit).
- Locate the specified tool from the vehicle toolkit on the oil fill location **3** and turn counterclockwise.
- Check engine oil level (➠ 107).

⚠ Both too little and too much engine oil can lead to engine damage.
Always make sure that the oil level is correct.◄

- Add engine oil up to specified level.

Engine oil, quantity for topping up
max 1 quarts (max 0.95 l) (Difference between MIN and MAX)

- Check engine oil level (➠ 107).
- Install cap of oil fill location.

Brake system

Checking brake operation

- Actuate the handbrake lever.
» Pressure point must be clearly perceptible.
- Actuate the footbrake lever.
» Pressure point must be clearly perceptible.

If no clear pressure points are perceptible:

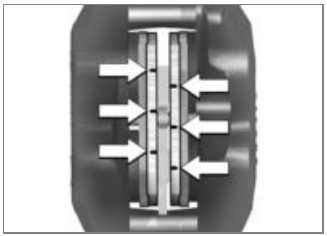
⚠ Incorrect working practices endanger the reliability of the brakes.
Have all work on the brake system carried out by specialists.◄

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

Checking front brake pad thickness

- Park the motorcycle, ensuring that the support surface is firm and level.

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



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

If the wear indicators are no longer clearly visible:

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

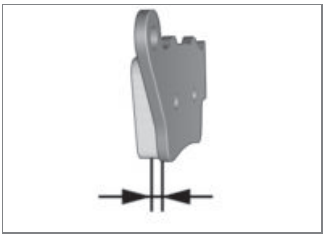
In order to ensure the operating reliability of the brake system, make sure that the brake pads are not worn beyond their minimum thickness.◀

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

Checking rear brake pad thickness

- Park the motorcycle, ensuring that the support surface is firm and level.

- Conduct a visual inspection of the brake pad thickness. Viewing direction: between splash guard and rear wheel toward brake pads **1**.



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

If wear limit is reached:

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

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

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

Check front brake fluid level

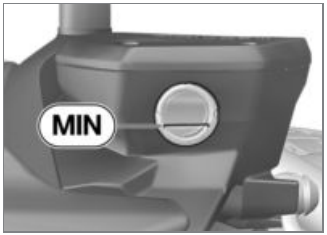
WARNING A low fluid level in the brake reservoir can allow air to penetrate the brake system. This significantly reduces braking efficiency.

Check brake fluid level regularly.◀

- Make sure ground is level and firm and place motorcycle on its center stand.
- Move handlebars into straight-ahead position.

- Check brake fluid level in front brake-fluid reservoir **1**.

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



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

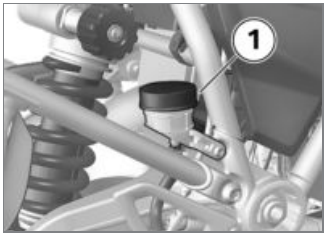
If brake fluid level falls below the approved level:

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

Checking rear brake fluid level

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

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



- Check level of brake fluid in rear brake-fluid reservoir **1**.

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

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

If brake fluid level falls below the approved level:

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

Coolant

Check coolant level

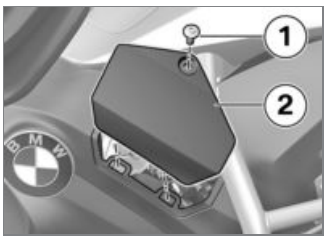
There is a risk of scalding if working on the cooling system when it is hot.
Do not carry out work on the cooling system until it has cooled down.◀

- Make sure ground is level and firm and park motorcycle.

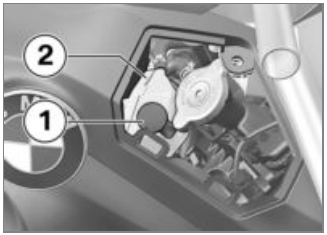
- Read off coolant level on expansion tank **1**.

If coolant level drops below approved level:
- Add coolant.

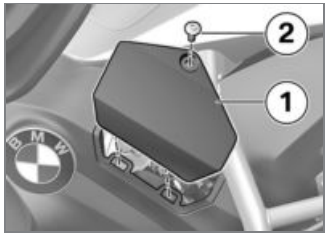
Topping up coolant



- Remove screw **1** and remove cover **2**.



- Open cap **1** of coolant expansion tank **2** and add coolant up to specified level.
- Check coolant level (➠ 112).
- Close cap of coolant expansion tank.



- Place cover **1** in position.
- Install screw **2**.

Clutch

Check clutch function

- Pull back the clutch lever.

» Pressure point must be clearly perceptible.

If no clear pressure point can be felt:
- Have the clutch checked by an authorized workshop, preferably an authorized BMW Motorrad retailer.

Wheel rims and tires

Check wheel rims

- Make sure ground is level and firm and park motorcycle.
- Subject wheel rims to visual inspection for defects.
- Have damaged rims checked and, if necessary, replaced by a specialist service facility, preferably an authorized BMW Motorrad retailer.

Checking spokes

- Make sure ground is level and firm and park motorcycle.
- Sweep across spokes with a screwdriver handle or similar item, paying attention to the sound that they emit as you proceed.

If the tone does not remain consistent:

- Have spokes checked by an authorized service facility, preferably an authorized BMW Motorrad retailer.

Checking tire tread depth

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

- Make sure ground is level and firm and park motorcycle.
- Measure tire tread depth in main tread grooves with wear indicators.

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

When the minimum tread depth is reached:

- Replace the worn tires.

Wheels

Tire recommendation

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

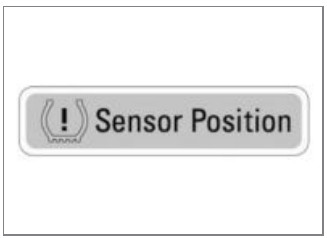
Affect of wheel sizes on chassis control systems

The wheel sizes play a major role in the ABS and ASC chassis control systems. Especially the diameter and width of the wheels are stored in the control unit as the basis for all necessary calculations. A change in these sizes due to conversion to others than the wheels installed as standard equipment can seriously affect the control comfort of these systems.

The sensor wheels required for wheel speed detection must also match the control systems installed and may not be replaced. If you want to equip your motorcycle with different wheels, please speak to a specialist service facility, and preferably a BMW Motorrad retailer. In some cases the data stored in the control units can be adapted to the new wheel sizes.

TPC/RDC sticker

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

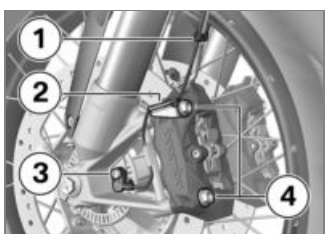


If tires are inexpertly removed, the RDC sensors may be damaged.
Inform the authorized BMW Motorrad retailer or the specialist service facility on the fact that the wheel is equipped with a RDC sensor.◀

On motorcycles equipped with TPC/RDC, a corresponding sticker is located on the wheel rim at the position of the TPC/RDC sensor. During a tire change it must be ensured that the TPC/RDC sensor is not damaged. Inform the BMW Motorrad retailer or the authorized workshop of the TPC/RDC sensor.

Removing front wheel

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

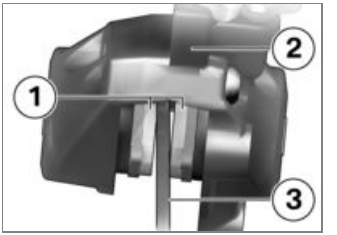


- Detach wheel speed sensor lead from retaining clips **1** and **2**.

- Remove screw **3** and take wheel speed sensor out of bore.
- Mask off areas of wheel rim that could be scratched in the process of removing the brake calipers.

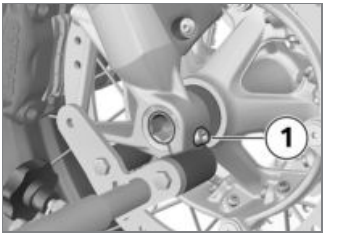
⚠ Once the calipers have been removed, there is a risk of the brake pads being pressed together to the extent that they cannot be slipped back over the brake rotor on reassembly.
Do not operate the handbrake lever when the brake calipers have been removed.◀

- Remove securing screws **4** of left and right brake calipers.

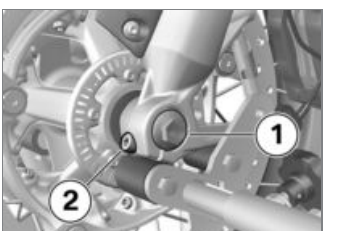


- Push brake pads **1** slightly apart by turning the brake caliper **2** back and forth against the brake rotor **3**.
- Carefully pull brake calipers back and outward to remove them from the brake rotors.

- Raise front of motorcycle, preferably using a BMW Motorrad front wheel stand, continuing until the wheel rotates freely.
- Mounting front wheel stand (➠ 120).

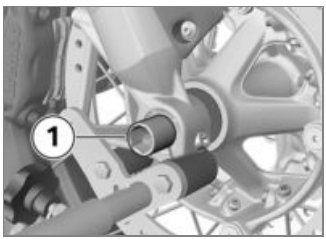


- Remove right-hand axle clamping screw **1**.



- Remove screw **1**.
- Remove left axle clamping screw **2**.

- Slightly press the quick-release axle inward for a better grip on the right side.



- Pull quick-release axle **1** out while supporting the front wheel.
- Place front wheel down and roll it forward out of the front suspension.

- Remove spacer bushing **1** from the wheel hub.

Installing front wheel

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

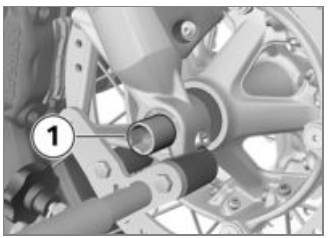
Threaded fasteners not tightened to the specified torque can work loose or their threads can suffer damage. Always have the tightening torques checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.◀

- Mount spacing bushing **1** on left side in wheel hub.

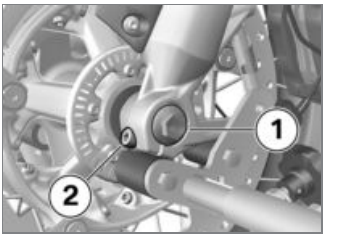
The front wheel must be installed right way round to rotate in the correct direction. Observe the direction of rota-

tion arrows on the tires or on the rim.◀

- Roll front wheel into front suspension.



- Lift front wheel and install quick-release axle **1**.
- Remove front wheel stand and firmly compress front forks. Do not actuate handbrake lever at the same time.
- Mounting front wheel stand (➠ 120).

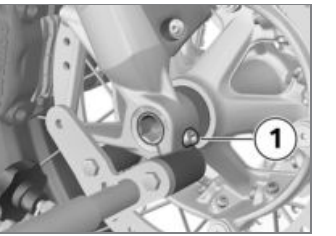


- Install screw **1** with specified torque. Brace quick-release axle on the right side at the same time.

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

- Tighten left axle clamping screw **2** with appropriate torque.

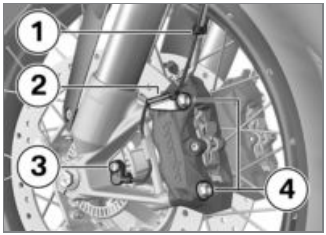
Clamping screw for quick-release axle in telescopic fork
14 lb/ft (19 Nm)



- Tighten the right-hand axle clamping screw **1** with the specified torque.

Clamping screw for quick-release axle in telescopic fork
14 lb/ft (19 Nm)

- Remove front wheel stand.
- Slide the brake calipers on the left-hand and right-had side onto the brake rotors.



- Install securing screws **4** on left and right with specified torque.

Brake caliper on telescopic forks
28 lb/ft (38 Nm)

- Remove adhesive tape from wheel rim.

Braking efficiency is impaired if the brake pads are not correctly bedded against the disks.
Before driving off, check that the braking effect kicks in without any delay.◀

- Engage the brakes repeatedly, continuing until the brake pads seat against the rotors.
- Locate wheel speed sensor lead in the retaining clips **1** and **2**.
- Insert wheel speed sensor in bore and install screw **3**.

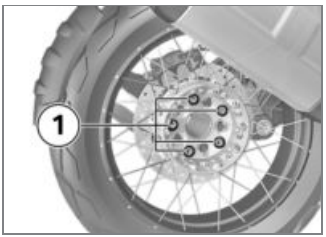
Wheel speed sensor on fork
Joint compound: Micro-encapsulated or medium-strength screw lock
6 lb/ft (8 Nm)

Removing rear wheel

- Make sure ground is level and firm and place motorcycle on its center stand.
- Shift into first gear.

Risk of skin burns from hot exhaust system.
Do not touch hot parts of the exhaust system.◀

- Let rear muffler cool down.



- Remove bolts **1** of rear wheel, holding wheel as you do so.
- Roll rear wheel out toward rear.

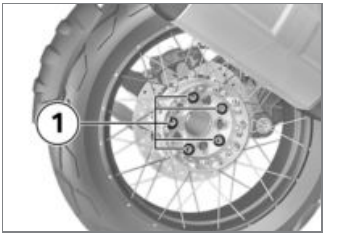
Install rear wheel

Malfunctions may occur during control interventions by ABS or ASC if a wheel other than the standard wheel is installed.
Please see the information on the effect of wheel sizes on the

ABS and ASC chassis control systems at the beginning of this chapter.◀

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

- Place rear wheel on rear wheel support.



⚠ The lengths of the lug bolts used with cast wheels and wire wheels vary. Mixing up sets of lug bolts or using the wrong lug bolts would mean that the rear wheel would not be correctly secured and this, in turn, could result in an accident.
Use only wheel studs with the same permitted length code numbers. Do not lubricate the lug bolts.◀

- Install wheel studs **1** with specified torque.

Tighten rear wheel on wheel flange
Tightening sequence: tighten diagonally
44 lb/ft (60 Nm)

Front wheel stand

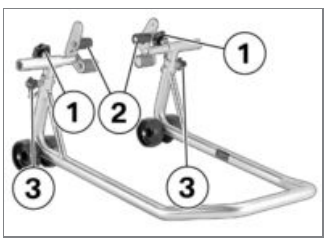
Mounting front wheel stand

⚠ The BMW Motorrad front wheel stand is not designed for holding motorcycles without a center or other auxiliary stands. A motorcycle standing on the front wheel stand and the rear wheel alone can fall over.
Place the motorcycle on the center stand or an auxiliary stand before lifting it with the BMW Motorrad front wheel stand.◀

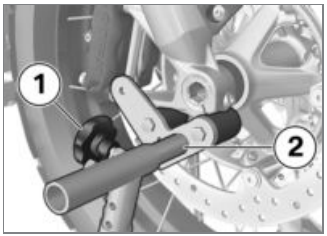
- Place motorcycle on the center stand, ensuring that it is resting

on a firm and level support surface.

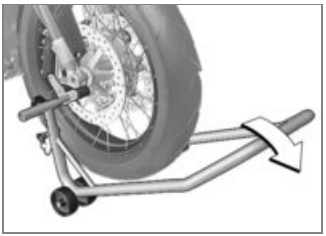
- Use basic stand with front wheel mount. The base stand and its accessories are available through your authorized BMW Motorrad retailer.



- Loosen screws **1**.
- Push the two mounts **2** outward, continuing until the front suspension fits between them.
- Use locating pins **3** to set front wheel stand to desired height.
- Center front wheel stand relative to front wheel and push it against front axle.



- Align two mounts **2** so that front suspension rests securely on them.
- Tighten screws **1**.



If the motorcycle is resting on the center stand: The motorcycle is raised too far at the front, the center stand lifts off the ground and the motorcycle can tip over to the side.
When raising the vehicle, make sure that the center stand remains on the ground.◀

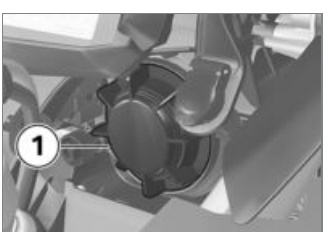
- Apply uniform pressure to push front wheel stand down and raise motorcycle.

Bulbs

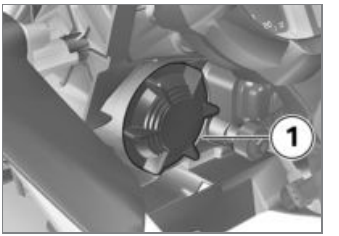
Replacing bulbs for dipped and main-beam headlights

▷ The alignment of connector, spring wire strap and bulb may differ from that shown in the following illustrations.◀

- Make sure ground is level and firm and park motorcycle.
- Switch off ignition.

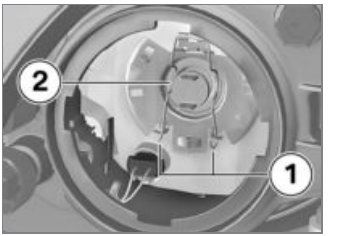


- To replace main-beam headlight bulb, remove cover **1** by turning it counterclockwise.



- Remove cover **1** by turning it counterclockwise to replace high-beam headlight bulb.

- Disconnect plug **1**.



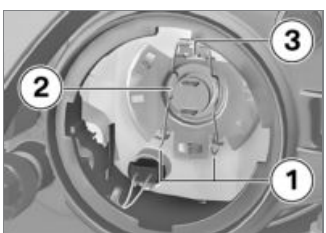
- Remove spring strap **1** from detent and fold to side.
- Remove bulb **2**.
- Replace defective bulb.

Bulbs for low-beam headlight
H7 / 12 V / 55 W
– with LED headlights[OE]
LED◁

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

Bulb for high-beam headlight
– with LED headlights[OE]
LED◁

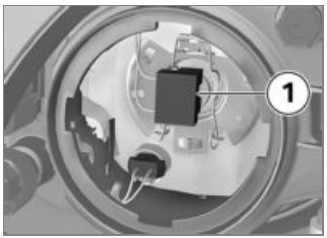
- To avoid contamination of the glass of the new bulb, only hold the bulb by its metal cap.



- Insert bulb **2** while ensuring that the lug **3** is in the correct position.

The alignment of the bulb may differ from the illustration.◀

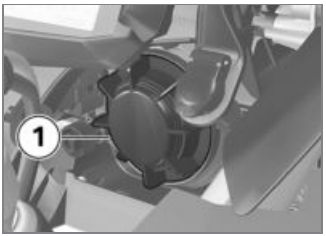
- Insert spring clip **1** into catch.



- Insert plug **1**.
- Position cover panel and install it by turning clockwise.

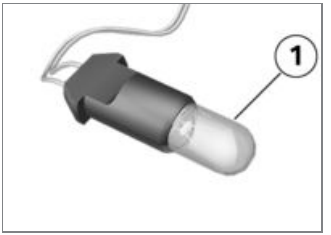
Replacing bulb for parking light

- Make sure ground is level and firm and park motorcycle.
- Switch off ignition.



- Remove cover panel **1** by turning counterclockwise.

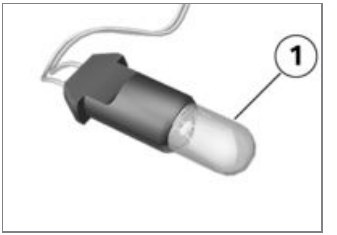
- Remove bulb holder **1** from the headlight housing.



- Remove bulb **1** from the socket.
- Replace defective bulb.

Bulb for parking light
W5W / 12 V / 5 W
– with LED headlights OE
LED◁

- To protect the bulb glass from contamination, hold it with a clean, dry cloth.



- Insert bulb **1** in bulb socket.

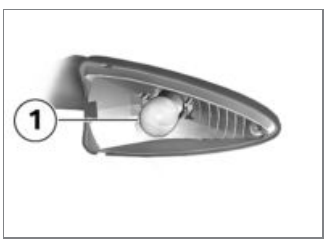
- Insert bulb holder **1** into the headlight housing.
- Position cover panel and install it by turning clockwise.

Replacing bulb for front and rear turn indicator

- Make sure ground is level and firm and park motorcycle.
- Switch off ignition.

- Remove screw **1**.

- Pull glass on screw connection side out of mirror housing.



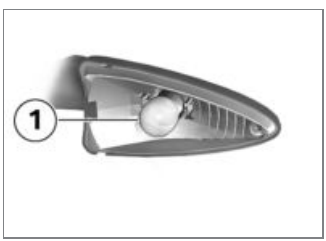
- Remove bulb **1** from mirror housing by turning it counter-clockwise.

- Replace defective bulb.

Bulbs for flashing turn indicators, front
RY10W / 12 V / 10 W

Bulbs for flashing turn indicators, rear
RY10W / 12 V / 10 W

- To protect the bulb glass from contamination, hold it with a clean, dry cloth.



- Fit bulb **1** in mirror housing by turning it clockwise.

- Locate lens in mirror housing inner side first and close.

- Install screw **1**.

Replacing LED tail light

The LED tail light can only be completely replaced.

- Please contact a specialist service facility for this purpose, preferably an authorized BMW Motorrad retailer.

Replacing the LED headlight

– with LED headlights OE

- LED headlights can be completely replaced only. Please contact a specialist service facility for this purpose, preferably an authorized BMW Motorrad retailer.◁

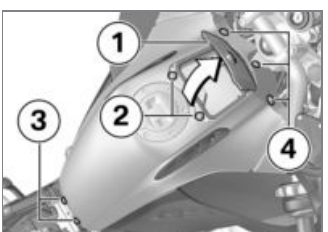
Replace additional LED headlight

– with additional LED headlight OA

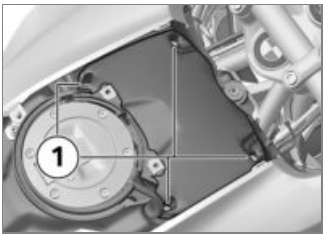
The LED additional headlights can only be completely replaced; it is not possible to replace individual LEDs.
Please contact a specialized workshop, preferably an authorized BMW Motorrad retailer.

Air filter

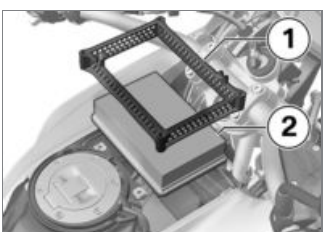
Replacing air cleaner insert



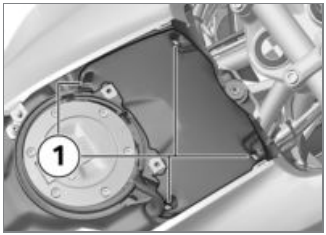
- Remove rider's seat (➠ 77).
- Open stow compartment lid **1**.
- Remove screws **2**, **3** and **4**.
- Remove fuel tank cover.



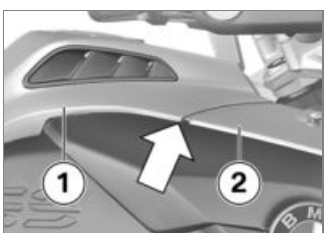
- Remove screws **1**.
- Remove air cleaner housing cover.



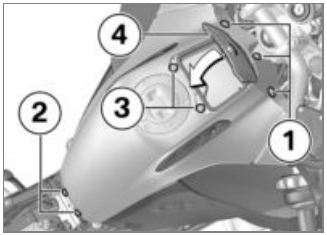
- Remove frame **1** and air filter element **2**.
- Insert new air filter element **2** and frame **1**.



- Attach air cleaner housing cover.
- Install screws **1**.



- Place fuel tank cover **1** in position, taking care that the guide **arrowed** is underneath the upper front-wheel fairing **2**.



- Install screws **1**, **2** and **3**.
- Close stow compartment lid **4**.
- Install rider's seat (➠ 77).

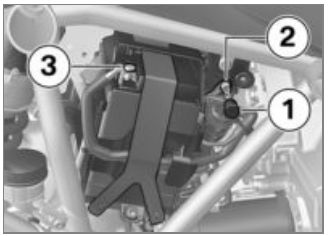
Jump-starting

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

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

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

- Park the motorcycle, ensuring that the support surface is firm and level.
- Remove battery cover (➠ 130).
- Do not disconnect the battery from the onboard electrical system when jump-starting the engine.



- Remove the protective cap **1**.
- Begin by connecting one end of the red jumper cable to the positive terminal **2** on the discharged battery and the other end to the positive terminal of the donor battery.

If the 12 V battery is installed incorrectly, or if the terminals are interchanged (during jump-starting, etc.), the fuse for the voltage regulator may burn through.◀

- Connect the black jumper cable to negative terminal on the donor battery and then to negative terminal **3** of the discharged battery.
- Run engine of donor vehicle during jump-starting procedure.
- Start engine of the vehicle with discharged battery in usual way; if engine does not start, wait a few minutes before repeating the attempt in order to protect the starter motor and donor battery.
- Allow both engines to idle for a few minutes before disconnecting jumper cables.
- Disconnect jumper lead from negative terminal first, then from positive terminal.

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

- Install the protective cap.
- Installing battery cover (➠ 131).

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.
– Do not open the battery.
– Do not top up with water.
– Be sure to read and comply with the instructions for charging the battery on the following pages.
– Do not turn the battery upside down.

If the battery is not disconnected, the onboard electronics (clock etc.) will drain the battery. This can cause the battery to run flat. If this happens,

warranty claims will not be accepted.
During driving breaks of more than 4 weeks, a trickle-charger should be connected to the battery.◀

BMW Motorrad has developed a trickle-charger specially designed for compatibility with the electronics of your motorcycle. Using this charger, you can keep the battery charged during long periods when the motorcycle is not being used without having to disconnect the battery from the motorcycle's onboard systems. Additional information is available at your authorized BMW Motorrad retailer.◀

Charge connected battery

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

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

Charging the battery via the onboard socket is only possible with suitable chargers. Unsuitable chargers can result in damage to the motorcycle electronics.
Use suitable BMW chargers. The correct charger is available through your authorized BMW Motorrad retailer.◀

- Charge disconnected battery via onboard socket.

The motorcycle's onboard electronics know when the battery is fully charged. The onboard socket is switched off when this happens.◀

- Comply with operating instructions of charger.

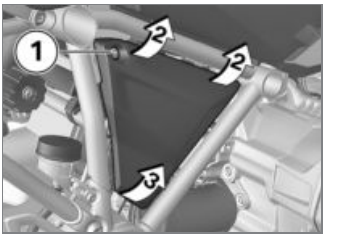
If you are unable to charge the battery via the onboard socket, you may be using a charger that is not compatible with your motorcycle's electronics. In this case, charge the battery directly at the terminals of the disconnected battery.◀

Charging disconnected battery

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

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

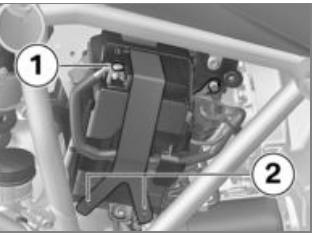
Removing and installing battery



- Switch off ignition.
- Remove screw **1**.
- Pull battery cover at top slightly forward at the positions **2**.
- In order not to damage the battery cover and the mount, remove the battery cover upward at position **3**.

– with anti-theft alarm OE

- Switch off anti-theft alarm system if necessary.◁



- Remove negative battery cable **1** and rubber strap **2**.

- Pull mounting plate on position **1** outward and remove it upward.

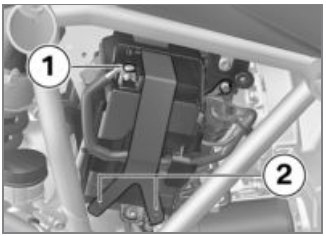
- Slightly lift and remove battery from holder until positive terminal becomes accessible.

- Remove positive cable **1**.

▷ If the 12 V battery is installed incorrectly, or if the terminals are interchanged (during jump-starting, etc.), the fuse for the voltage regulator may burn through.◀

- Install positive cable **1**.
- Slide battery into holder.

- First, insert mounting plate into supports **1**. Next, press it under the battery at position **2**.



- Fasten negative battery cable **1**.
- Fasten battery with rubber strap **2**.

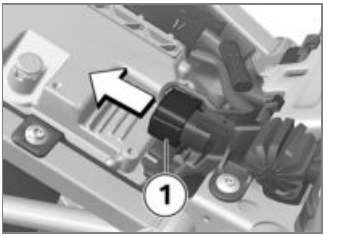
- Insert battery cover into mount **1** and press it into mounts **2**.

- Install screw **1**.

- Setting the clock (➠ 50).
- Set date (➠ 51).

Fuses

Replace fuses



- Switch off ignition.
- Remove rider's seat (➠ 77).
- Disconnect plug **1**.

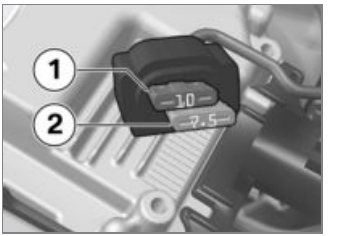
If defective fuses are bridged, this results in a danger of short-circuit and thus a danger of fire.
Replace defective fuses with new fuses.◀

- Consult the fuse assignment diagram and replace the defective fuse.

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

- Install connector **1**.
- Install rider's seat (➠ 77).

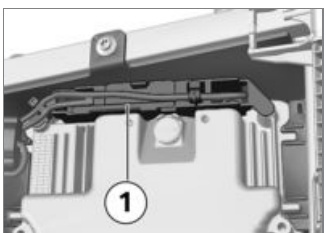
Fuse assignment



1 10 A
Instrument cluster
Anti-theft alarm system (DWA)
Ignition switch
Diagnostic socket

2 7.5 A
Multifunction switch, left
Tire Pressure Control
(TCP/RDC)

Fuse for alternator regulator



1 50 A
Alternator regulator

Accessories

General instructions

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

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

Onboard power sockets

Connection of electrical devices

– The ignition must be switched on before electrical devices connected to the power sockets can be operated.

Cable routing

– The cables from the onboard sockets to the auxiliary devices must be routed in such a way that they do not impede the rider.
– Cable routing must not restrict the steering angle and the handling characteristics.
– Cables must not be trapped.

Automatic deactivation

– The onboard sockets are 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 electron-

ics. In these cases, onboard sockets are already switched off shortly after the ignition is switched off.
– In case of insufficient battery voltage, the onboard sockets are switched off to maintain the ability to start the motorcycle.
– If the maximum loadability specified in the technical data is exceeded, the onboard sockets are switched off.

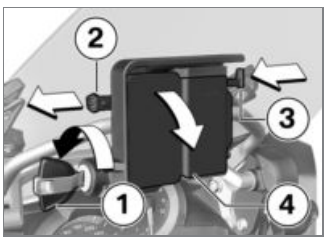
Navigation system

– with preparation for navigation system OE

Securely fastening navigation device

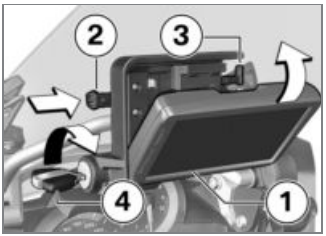
The navigation preparation is suitable for the BMW Motorrad Navigator IV and the BMW Motorrad Navigator V.◀

The locking system of the Mount Cradle offers no protection against theft.
Remove the navigation system and store in a safe place after every drive.◀



- Turn ignition key **1** counterclockwise.
- Pull shut-off lock **2** to **left**.
- Press in locking device **3**.

» Mount Cradle is unlocked and cover **4** can be removed with a rotating movement toward front.



- Mount navigation device **1** in lower area and swing toward rear with a rotating movement.

» Navigation device audibly engages.

- Slide shut-off lock **2** completely to **right**.

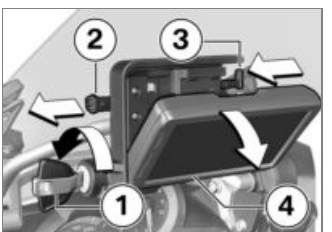
» Locking device **3** is locked.

- Turn ignition key **4** clockwise.

» Navigation device is locked and ignition key can be removed.

Removing navigation device and installing cover

Dust and dirt can damage the contacts of the Mount Cradle.
Reinstall the cover after end of each drive.◀



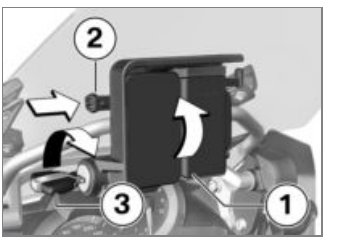
- Turn ignition key **1** counterclockwise.
- Pull shut-off lock **2** completely to **left**.

» Locking device **3** is unlocked.

- Slide locking device **3** completely to **left**.

» Navigation device **4** is unlocked.

- Remove navigation device **4** downward with a tilting movement.



- Mount cover **1** in lower area and swing upward with a rotating movement.

» Cover audibly engages.

- Slide shut-off lock **2** to **right**.
- Turn ignition key **3** clockwise.

» Cover **1** is secured.

Operating the navigation system

The following description refers to the Navigator V. The Navigator IV does not offer all options described.◀

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 BMW Motorrad Navigator is installed, some of its functions can be directly operated from the handlebars using the Multi-Controller.

The Multi-Controller is operated using six motions:
– Turning up and down.
– Short actuation to the left and right.
– Long actuation to the left and right.

Turning the Multi-Controller increases or decreases the volume of a BMW Motorrad communication system connected via Bluetooth on the Compass and Mediaplayer page.
Menu items on the BMW special menu are selected by turning the Multi-Controller.

Short actuation of the Multi-Controller to the left respectively to the right switches between the main pages of the Navigator:
– Map view
– Compass
– Mediaplayer
– BMW special menu
– My motorcycle page

Long actuation of the Multi-Controller corresponds to the activation of certain functions on the Navigator display. These functions are marked with an right arrow or a left arrow 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.

In detail, the following functions can be operated:

Map view
– Turning upward: Increase size of map section (Zoom in).
– Turn downward: zoom out 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 number of data displayed.
– Touching a data field on the display opens a menu for selecting the data.
– The values available for selection are dependent on the optional extras installed.

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.

Warning and status messages

Warning and status displays of the motorcycle are indicated with a corresponding icon **1** at the upper left on the map view.

If a BMW Motorrad communication system is connected, an acoustic signal is also sounds in case of a warning.◀

If several warning messages are active, the number of messages is indicated below the warning triangle.
A list of all warning messages is opened by pressing on the

warning triangle with more than one message.
Additional information is display when a message is selected.


Detailed information cannot be displayed for all warnings.◀

Special functions

Due to integration of the BMW Motorrad Navigator, there are a number of differences from the descriptions in the instruction manual for the Navigator.

Reserve fuel level warning

The settings for the fuel gauge are not available, as the reserve warning is being transferred from the vehicle to the Navigator. If the message is active, the nearest filling stations are displayed when the message is pressed.

Time and Date

The Navigator sends the time and date to the motorcycle. Transfer of this data into the instrument cluster must be activated in the SETUP menu of the instrument cluster.

Security settings

The BMW Motorrad Navigator V can be secured against unauthorized use with a four-digit PIN (Garmin Lock). When this function is activated, once the Navigator GPS receiver is cradled on the motorcycle and the ignition is switched on you will receive a prompt asking whether the motorcycle should be added to the list of secure vehicles. If you answer "Yes" to this question, the Navigator saves the vehicle identification number (VIN) of this motorcycle in its internal memory.

A maximum of five VINs can be saved in this way.
When the Navigator is subsequently switched on by switching on the ignition on one of those motorcycles, entry of the PIN is no longer necessary.
If the Navigator is removed from the motorcycle while switched on, a security prompt asking for the PIN to be entered is issued.

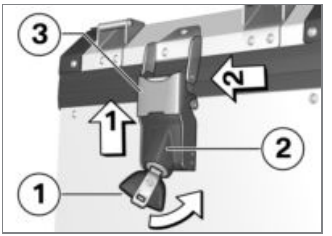
Screen brightness

Screen brightness is adjusted by the motorcycle while the unit is cradled. No manual input is necessary.
The automatic setting can be switch off in the display settings in the Navigator if desired.

Case

– with aluminum case OA

Open case

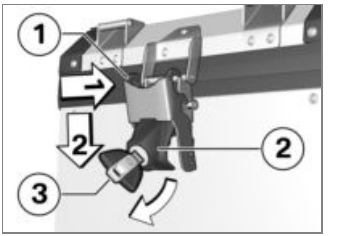


- Turn key **1** counterclockwise.

▷ The case cover can be opened with both the left and the right latch.◀

- Press lock housing **2** upward to release locking claw **3**.
- Pull locking claw **3** to side and open cover lid.

Closing case



- Close case lid.
- Position locking claw **1** on lid.
- Press lock housing **2** downward while making sure that claw grips into lid.
- To lock, turn key **3** clockwise and remove.

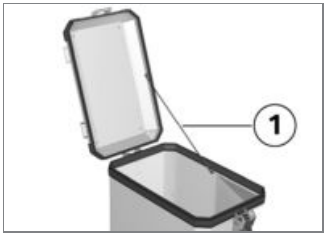
Remove case lid

- Open case (➠ 142).

- Detach lid retaining cable **1**.
- Close case lid.
- Open second latch of case lid.
- Remove case lid.

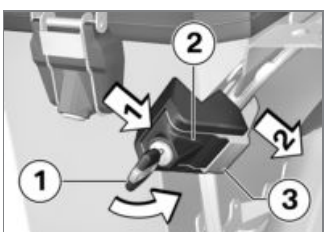
Install case lid

- Lay case lid on case.
- Close one lock of case lid.
- Open case lid toward closed side.



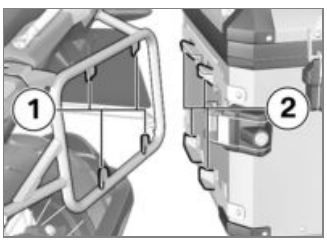
- Hook in lid retaining cable **1**.
- Close case lid.
- Close second lock of case lid.

Remove case

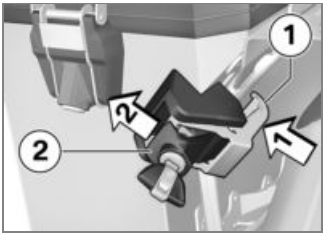


- Turn key **1** counterclockwise.
- Press lock housing **2** to side to release locking claw **3**.
- Pull locking claw **3** to side while holding case in place.
- Pull case forward as far as possible and remove to side.

Mount case



- Position pannier on pannier rack and slide rearwards so that the tabs on the pannier rack **1** engage with the lugs on the pannier **2**.

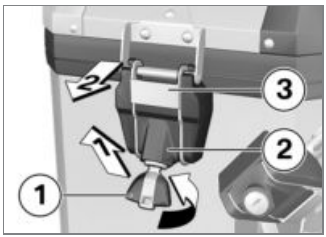


- Position locking claw **1** on case carrier while holding case in place.
- Press lock housing **2** to side while ensuring that claw grips around bracket.
- Turn key clockwise and remove.

Topcase

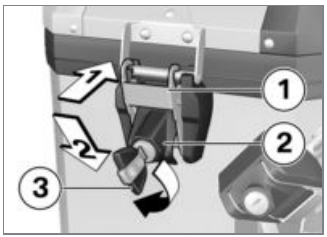
– with aluminum topcase[OA]

Opening topcase



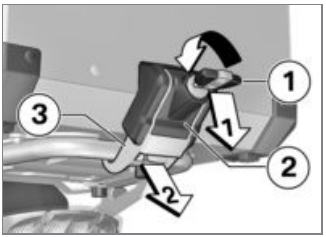
- Turn key **1** counterclockwise.
- Press lock housing **2** upward to release locking claw **3**.
- Pull locking claw **3** toward rear and open lid.

Close topcase



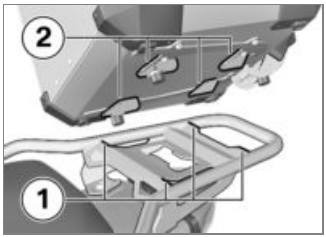
- Close topcase lid.
- Position locking claw **1** on lid.
- Press lock housing **2** downward while making sure that claw grips into lid.
- To lock lock, turn key **3** clockwise and remove.

Remove topcase

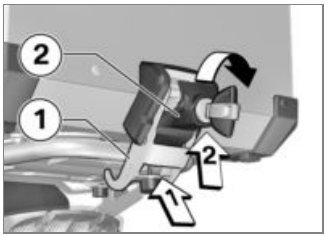


- Turn key **1** counterclockwise.
- Press lock housing **2** downward to release locking claw **3**.
- Pull locking claw **3** back.
- First pull topcase toward rear and then remove upward.

Mounting topcase



- Position topcase on topcase rack and slide forward so that tabs on topcase rack **1** engage with lugs on topcase **2**.



- Position locking claw **1** on topcase carrier.
- Press lock housing **2** upward while making sure that claw grips around carrier.
- To lock lock, turn key clockwise and remove.

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 vehicle.

The use of unsuitable products for cleaning and care can damage motorcycle components.
For cleaning, do not use any solvents such as nitro-thinners, cold cleaning agents, fuel or similar, and do not use cleaning agents that contain alcohol.◀

Washing your motorcycle

BMW Motorrad recommends that you use BMW Insect Remover to soften and wash off insects and stubborn dirt from painted parts before washing the motorcycle.
To prevent stains, do not wash the motorcycle immediately after it has been exposed to bright sunlight and do not wash it in the sun.
Make sure that the motorcycle is washed frequently, especially during the winter months.
To remove road salt, clean the motorcycle with cold water immediately after completion of every trip.

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

Warm water intensifies the effect of salt.
Only use cold water to remove road salt.◀

The high water pressure from high-pressure cleaners (steam blasters) can result in damage to seals, the hydraulic brake system, the electrics and the seat.
Do not use high-pressure or steam-jet devices!◀

Cases and topcases made of aluminum have no surface coating. The best possible appearance is preserved with the following care:
Remove road salt and corrosive deposits immediately with cold water after completing the trip.◀

Cleaning sensitive motorcycle parts

Plastics

If plastic parts are cleaned using unsuitable cleaning agents, the surfaces can be damaged.
Do not use cleaning agents that contain alcohol, solvents or abrasives to clean plastic parts.
'Insect sponges' or sponges with hard surfaces can also lead to scratches.◀

Fairings and panels

Clean fairings and panels with water and BMW plastic cleaner.

Windshields and lenses are manufactured in plastic

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

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

Clean with water and sponge only.

Do not use chemical cleansers.

Chrome

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

Radiator

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

Cooling fins can be bent easily.
When cleaning the radiator, ensure that the fins are not bent.◀

Rubber parts

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

Using silicone sprays for the care of rubber seals can cause damage.
Do not use silicone sprays or care products that contain silicone.◀

Paint care

Washing the vehicle on a regular basis will help prevent long-term damage from harmful substances, and is especially important when your vehicle is used in areas with high levels of air pollution or where natural con-

taminants such as tree resin and pollen are present.
However, remove particularly aggressive substances (spilled fuel, oil grease, brake fluid as well as bird droppings) immediately; otherwise changes in the paint or discolorations may occur.
BMW Motorrad recommends BMW car polish or BMW paint cleaner for the purpose.
Contamination on the paint finish is particularly easy to see after the vehicle 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.

Storing the motorcycle

- Completely fill the motorcycle's fuel tank.
- Clean motorcycle.
- Remove battery (➠ 130).
- Spray the brake and clutch lever, and the center and side stand pivots with a suitable lubricant.
- Coat bare metal and chrome-plated parts with an acid-free grease (Vaseline).
- Store the motorcycle in a dry room, raising it to remove the weight from both front wheels (preferably using the front and rear-wheel stands offered by BMW Motorrad).

Protective wax coating

Paint must be protected, if water no longer pearls up on it.
To preserve the finish of your vehicle, BMW Motorrad recommends BMW Car Wax or agents that contain carnauba or synthetic waxes.

Returning motorcycle to use

- Remove the protective wax coating.
- Clean the motorcycle.
- Install a charged battery.
- Observe checklist before starting.

Technical data

Troubleshooting chart

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

Possible cause	Remedy
Emergency on/off switch (kill switch)	Adjust emergency on/off switch (kill switch) to normal operating position.
Side stand extended and gear engaged	Retract side stand.
Gear engaged and clutch not disengaged	Place transmission in neutral or disengage clutch.
No fuel in tank	Refueling procedure (➠ 89).
Battery drained	Charge connected battery (➠ 129).

Threaded fasteners

Front wheel	Value	Valid
Brake caliper on telescopic forks		
M10 x 65	28 lb/ft (38 Nm)	
Clamping screw for quick-release axle in telescopic fork		
M8 x 35	14 lb/ft (19 Nm)	
Wheel speed sensor on fork		
M6 x 16 Micro-encapsulated or medium-strength screw lock	6 lb/ft (8 Nm)	

Rear wheel	Value	Valid
Tighten rear wheel on wheel flange		
M10 x 1.25 x 40	**Tighten diagonally**	
	44 lb/ft (60 Nm)	

Mirror arm	Value	Valid
Mirror (locknut) on adapter		
Left-hand thread, M10 x 1.25	16 lb/ft (22 Nm)	
Adapter on clamping block		
M10 x 14 - 4.8	18 lb/ft (25 Nm)	

Handlebars	Value	Valid
Clamping block (handlebar clamp) on fork bridge		
M8 x 35	**Tighten on block in front (in the direction of travel)**	
	14 lb/ft (19 Nm)	

Engine

Engine number location	Lower right of engine block beneath the starter
Engine type	122EN
Engine design	Air/liquid-cooled two-cylinder, four-stroke opposed-twin engine with two spur gear-driven overhead camshafts and one counterbalance shaft
Displacement	1170 cc (1170 cm^3)
Cylinder bore	4 in (101 mm)
Piston stroke	2.9 in (73 mm)
Compression ratio	12.5:1
Rated output	125 hp (92 kW), at engine speed: 7750 min^{-1}
Torque	92 lb/ft (125 Nm), at engine speed: 6500 min^{-1}
Maximum engine speed	max 9000 min^{-1}
Idle speed	1150 min^{-1}, engine at operating temperature

Fuel

Recommended fuel quality	Super unleaded (max. 10 % ethanol, E10) 89 AKI (95 ROZ/RON) 89 AKI
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption. If the engine should for example be operated with 91 RON in countries with lower fuel quality, the motorcycle must be respectively programmed first by your authorized BMW Motorrad retailer.) (max. 10 % ethanol, E10) 87 AKI (91 ROZ/RON) 87 AKI
Usable fuel quantity	Approx. 7.9 gal (Approx. 30 l)
Reserve fuel quantity	Approx. 1.1 gal (Approx. 4 l)
Emission standard	EU 3

Engine oil

Engine oil, capacity	max 1.1 gal (max 4 l), with filter replacement
Specification	SAE 5W-40, API SL / JASO MA2, additives (for instance, molybdenum-based substances) are prohibited because they would attack the coatings on engine components. BMW Motorrad recommends that you use the BMW Motorrad oils available from your BMW Motorrad Dealer.
Engine oil, quantity for topping up	max 1 quarts (max 0.95 l), difference between MIN and MAX

BMW recommends ADVANTEC ORIGINAL BMW ENGINE OIL

Clutch

Clutch design	Multi-disk oil-bath clutch, slipper clutch

Transmission

Transmission design	Dog-engagement 6-speed transmission with helical gears
Transmission gear ratios	1.000 (60:60 teeth), Primary gear ratio 1.650 (33:20 teeth), Transmission input ratio 2.438 (39:16 teeth), 1st gear 1.714 (36:21 teeth), 2nd gear 1.296 (35:27 teeth), 3rd gear 1.059 (36:34 teeth), 4th gear 0.943 (33:35 teeth), 5th gear 0.848 (28:33 teeth), 6th gear 1.061 (35:33 teeth), Transmission output ratio

Rear-wheel drive

Type of final drive	Shaft drive with bevel gears
Type of rear suspension	Cast-aluminum single swing arm with BMW Motorrad paralever
Gear ratio of final drive	2.91 (32:11 teeth)

Suspension

Front wheel	
Type of front suspension	BMW Telelever, upper fork bridge tilt decoupled, leading link mounted in engine and on telescopic fork, centrally positioned spring strut supported on leading link and frame
Design of the front-wheel suspension	Central spring strut with coil spring
– with dynamic ESA OE	Central spring strut with coil spring and expansion tank, electrically adjustable rebound-stage and compression damping
Spring travel, front	8.3 in (210 mm), on wheel

Rear wheel	
Type of rear suspension	Cast-aluminum single swing arm with BMW Motorrad paralever
Type of rear suspension	Central spring strut with coil spring, adjustable rebound-stage damping and spring preload
– with dynamic ESA[OE]	Central spring strut with coil spring and expansion tank, electrically adjustable rebound-stage and compression damping, electrically adjustable spring preload
Spring travel at rear wheel	8.7 in (220 mm)

Brakes

Type of front brake	Hydraulically operated double disc brakes with 4-piston radial monobloc calipers and floating brake discs
Brake-pad material, front	Sintered metal
Front brake-disk thickness	min 0.16 in (min 4 mm), wear limit
Free travel of brake actuation (Front wheel brake)	Approx. 0.07 in (Approx. 1.85 mm), at piston
Type of rear brake	Hydraulically operated disc brake with 2-piston floating caliper and fixed brake disc
Brake-pad material, rear	Organic

Rear brake-disk thickness	min 0.18 in (min 4.5 mm), wear limit
Free travel of brake actuation (Rear wheel brake)	Approx. 0.04 in (Approx. 1 mm), at piston

Wheels and tires

Recommended tire combinations	You can obtain an overview of the current tire approvals from your authorized BMW Motorrad retailer or on the Internet at www.bmw-motorrad.com.
Front wheel	
Front wheel design	Cross spoke wheel
Front-wheel rim size	3.0"x19"
Front tire designation	120/70 - 19
Front wheel load at unladen weight	295 lbs (134 kg)
Permissible front wheel load	max 381 lbs (max 173 kg)
Permissible front-wheel imbalance	max 0.2 oz (max 5 g)
Rear wheel	
Rear wheel design	Cross spoke wheel
Rear-wheel rim size	4.50"x17"
Rear tire designation	170/60 - 17
Rear wheel load at unladen weight	278 lbs (126 kg)

Permissible rear wheel load	max 677 lbs (max 307 kg)
Tire inflation pressures	
Tire pressure, front	36.3 psi (2.5 bar), with tire cold
Tire pressure, rear	42.1 psi (2.9 bar), with tire cold

Electrical system

Electrical rating of onboard sockets	max 5 A, all onboard sockets together
Fuse carrier 1	10 A, Slot 1: instrument cluster, anti-theft alarm system (DWA), ignition lock, diagnostic socket 7.5 A, Slot 2: left multifunction switch, Tire Pressure Control (TCP/RDC)
Fuse carrier	50 A, Fuse 1: alternator regulator
Battery	
Battery design	AGM (Absorptive Glass Mat) battery.
Battery voltage	12 V
Battery capacity	12 Ah
Spark plugs	
Spark plugs, manufacturer and designation	NGK LMAR8D-J
Electrode gap of spark plug	$0.03^{\pm 0.01}$ in ($0.8^{\pm 0.1}$ mm), new max 0.04 in (max 1.0 mm), wear limit

Bulbs	
Bulb for high-beam headlight	H7 / 12 V / 55 W
– with LED headlights[OE]	LED
Bulbs for low-beam headlight	H7 / 12 V / 55 W
– with LED headlights[OE]	LED
Bulb for parking light	W5W / 12 V / 5 W
– with LED headlights[OE]	LED
Bulb for taillight/brake light	LED
Bulbs for flashing turn indicators, front	RY10W / 12 V / 10 W
Bulbs for flashing turn indicators, rear	RY10W / 12 V / 10 W

Frame

Frame design	Steel-tube frame with partially self-supporting drive unit, steel-tube rear frame
Location of type plate	Frame at front right (next to spring strut)
Location of the vehicle identification number	Frame at front right on steering head

Alarm system

– with anti-theft alarm [OE]

Activation time	Approx. 30 s
Alarm duration	Approx. 26 s
Battery type	CR 123 A

Dimensions

Motorcycle length	88.8 in (2255 mm), above luggage rack
Motorcycle height	57.1 in (1450 mm), windshield in highest position
– with lowering OE	55.5 in (1410 mm), windshield in highest position
Motorcycle width	37.5 in (952 mm), across mirrors 38.6 in (980 mm), across hand protectors
Rider's seat height	35...35.8 in (890...910 mm), without rider at unladen weight
– with low seat OA	33.1...33.9 in (840...860 mm), without rider at unladen weight
– with Rallye seat OA	35.2 in (895 mm), without rider at unladen weight
– with lowering OE	33.1...33.9 in (840...860 mm), without rider at unladen weight
– with lowering OE – with black seat OE	32.3...33.1 in (820...840 mm), without rider at unladen weight
Rider's inside-leg arc, heel to heel	76.8...78.3 in (1950...1990 mm), without rider at unladen weight
– with low seat OA	72.8...74.4 in (1850...1890 mm), without rider at unladen weight
– with Rallye seat OA	77.6 in (1970 mm), without rider at unladen weight

– with lowering[OE]	72.8...74.4 in (1850...1890 mm), without rider at unladen weight
– with lowering[OE] – with black seat[OE]	71.7...73.2 in (1820...1860 mm), without rider at unladen weight

Weights

Unladen weight	573 lbs (260 kg), DIN unladen weight, ready for road, fuel tank 90 % full, without OE
Permissible gross weight	1058 lbs (480 kg)
Maximum payload	485 lbs (220 kg)

Performance data

Start-off capacity on uphill grades (with permissible total weight)	20 %
Top speed	>124 mph (>200 km/h)

Service

Reporting safety defects

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

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

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

BMW Motorrad Service

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

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

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

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

BMW Motorrad Mobility Services

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

Maintenance procedures

BMW Pre-Delivery Check

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

BMW Running-in Check

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

BMW Service

BMW Service is carried out once a year. The scope of the services performed may be dependent on the vehicle owner and the mileage driven. Your BMW Motorrad retailer confirms that the service has been 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 service display in the multifunction display reminds you of the next service date approx. one month or 1000 km before the entered values.

Confirmation of maintenance work

BMW Pre-Delivery Check

Conducted

on_____

Stamp, Signature

BMW Running-in Check

Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

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Odometer reading_____

Stamp, Signature

BMW Service
Conducted

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Stamp, Signature

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BMW Service
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at the latest

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or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

Confirmation of service

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

Work carried out	Odometer reading	Date

Work carried out	Odometer reading	Date

Appendix

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

Certification Tire Pressure Control (TPC)

FCC ID: MRXBC54MA4 IC: 2546A-BC54MA4	FCC ID: MRXBC5A4 IC: 2546A-BC5A4

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions:

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

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

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

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

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
Alternative fuel quality	Regular unleaded (restrictions with regard to power and fuel consumption. If the engine should for example be operated with 91 RON in countries with lower fuel quality, the motorcycle must be respectively programmed first by your authorized BMW Motorrad retailer.) (max. 10 % ethanol, E10) 87 AKI (91 ROZ/RON) 87 AKI
Usable fuel quantity	Approx. 7.9 gal (Approx. 30 l)
Reserve fuel quantity	Approx. 1.1 gal (Approx. 4 l)
Tire inflation pressures	
Tire pressure, front	36.3 psi (2.5 bar), with tire cold
Tire pressure, rear	42.1 psi (2.9 bar), with tire cold

BMW recommends ADVANTEC
ORIGINAL BMW ENGINE OIL

Order No.: 01 41 8 558 987
09.2014, 4th edition, 07