Rider's Manual (US Model)

HP2 Megamoto



BMW Motorrad

The Ultimate Riding Machine

Motorcycle/Retailer Data

Motorcycle data

Model

Vehicle Identification Number

Color number

First registration

Registration number

Retailer Data

Contact in Service

Ms./Mr.

Phone number

Retailer's address/phone number (company stamp)

Welcome to BMW

We congratulate you on your choice of a motorcycle from BMW and welcome you to the community of BMW riders.

Familiarize yourself with your new motorcycle so that you can ride it safely and confidently in all traffic situations.

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

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

If you have any questions concerning 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

BMW Motorrad.

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General instructions

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Overview

Chapter 2 of this Rider's Manual will provide you with an initial overview of your motorcycle. All maintenance and repair work carried out on your motorcycle will be documented in Chapter 10. Proof of the maintenance work performed is a prerequisite for generous treatment of claims. When the time comes to sell your BMW, please remember to hand over this Rider's Manual; it is an important part of the motorcycle.

Abbreviations and symbols

Indicates warnings that you must comply with for reasons of your safety and the safety of others, and to protect your motorcycle 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 equipment
The motorcycles are assembled complete with all the BMW optional extras originally ordered.

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

EWS Electronic immobilizer.

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 BMW is equipped with options or accessories not described in this Rider's Manual, then this equipment is described in a separate operating manual.

Technical data

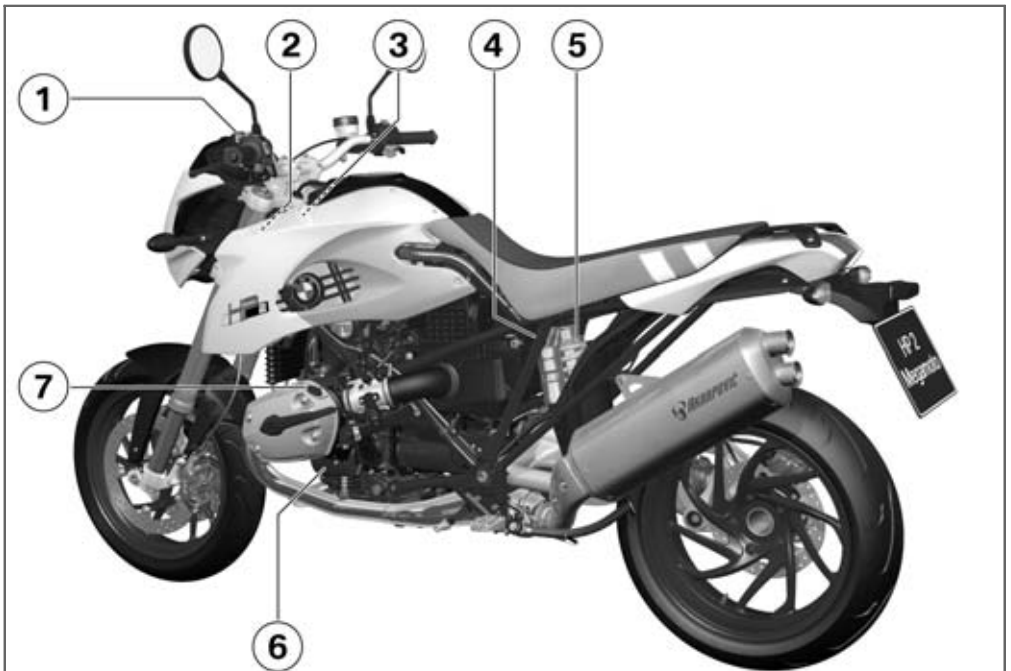
All dimensions, weights and performance specifications in the Rider's Manual refer to the standards of the Deutsche Institut für Normung e. V. (DIN) and comply with its tolerance specifications. Versions for individual countries may differ.

Currentness of this manual

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

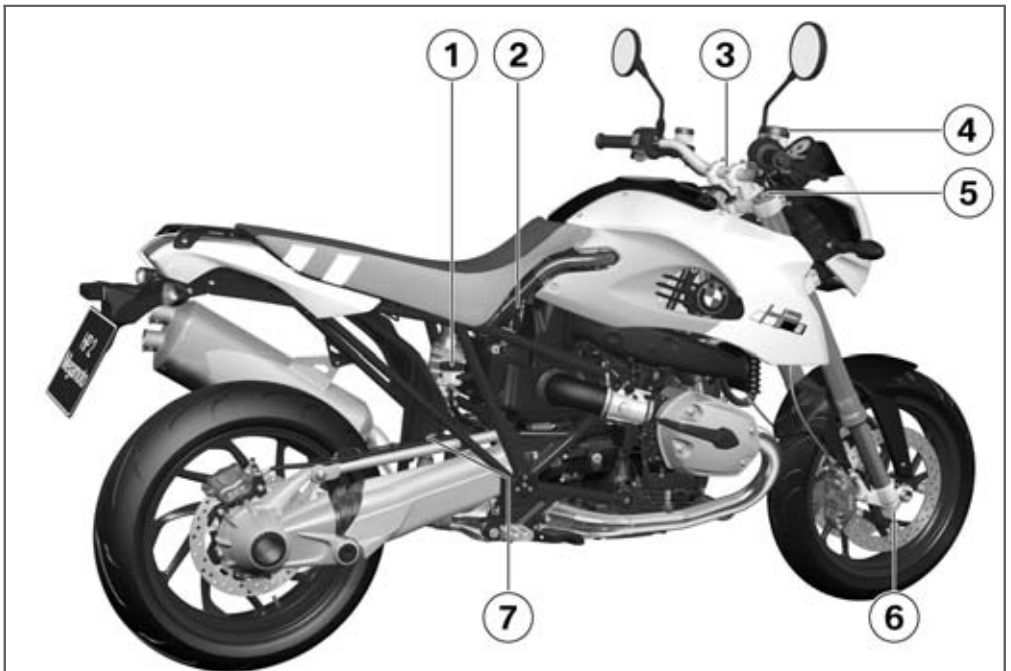
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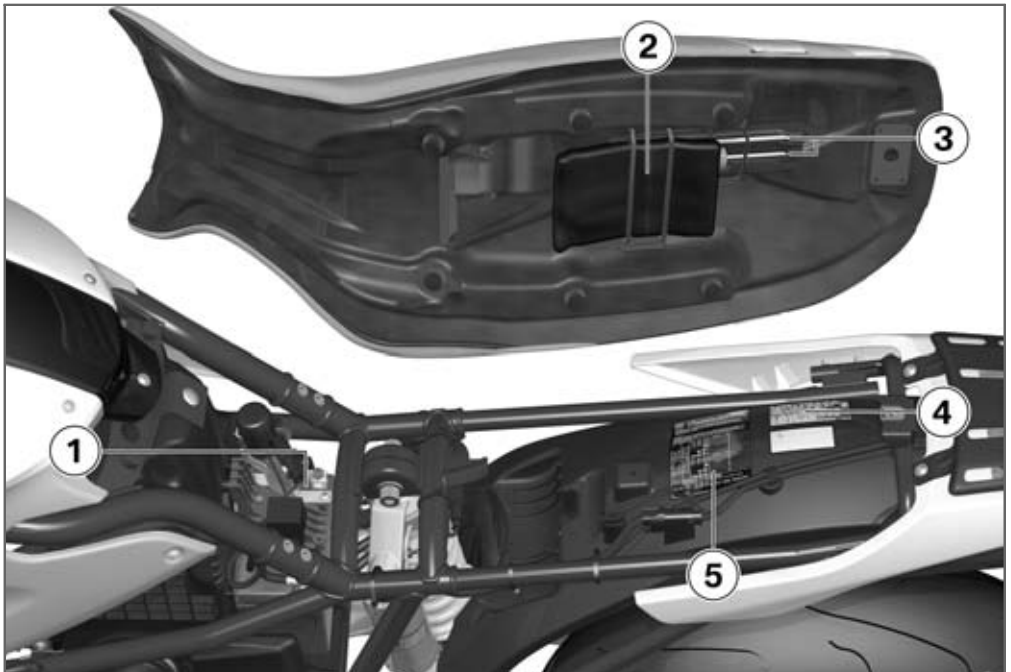
General view, left side

1 Clutch fluid reservoir (➡ 71)
2 Fill level indicator on fuel tank (➡ 55)
3 VIN, on steering head, right
4 Adjuster for damping characteristic, rear suspension (compression stage) (➡ 43)
5 Adjuster for spring preload, rear (➡ 41)
6 Oil sight glass (➡ 64)
7 Filler neck for engine oil (➡ 66)


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General view, right side

1 Brake-fluid reservoir, rear (➡ 70)
2 Onboard socket (➡ 60)
3 Adjustable handlebars (➡ 37)
4 Brake-fluid reservoir, front (➡ 69)
5 Adjuster for damping characteristic, front suspension (rebound stage) (➡ 43)
6 Adjuster for damping characteristic, front suspension (compression stage) (➡ 43)
7 Adjuster for damping characteristic, rear suspension (rebound stage) (➡ 43)


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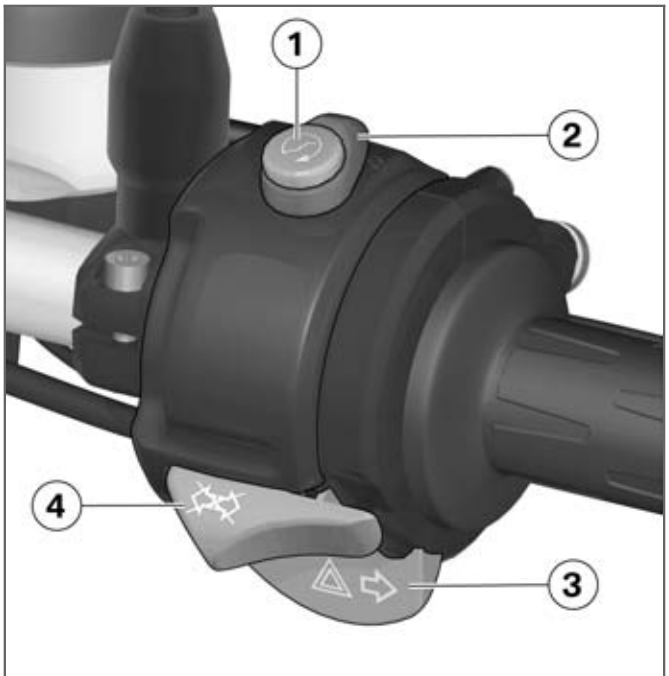
Underneath seat

1 Battery (➠ 89)
2 Rider's Manual (US Model)
3 Toolkit (➠ 64)
4 Weights table
5 Table of tire pressures

Left handlebar fitting

1 Operating the multifunction display (➡ 30), Setting clock (➡ 29)
2 Horn
3 Flashing turn indicators, left (➡ 33), Hazard warning flashers (➡ 34)
4 Headlight flasher, High-beam headlight switch (➡ 32)



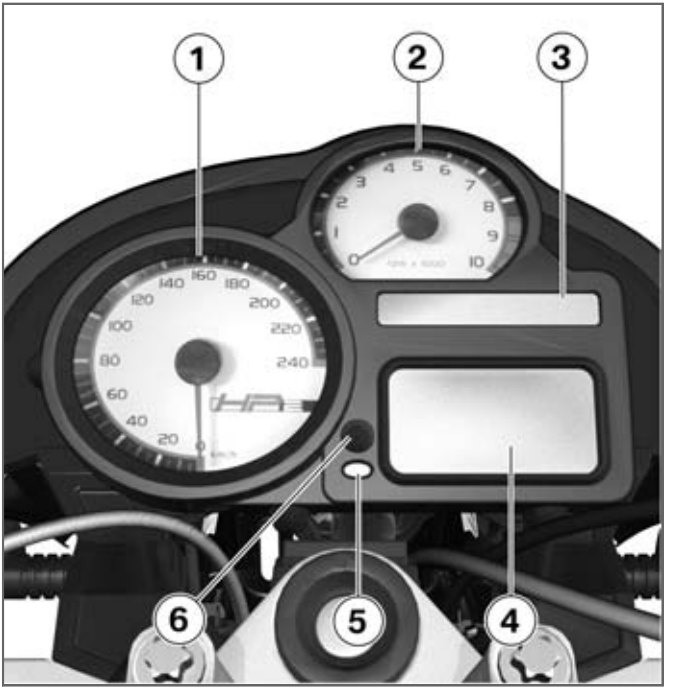


Handlebar fitting, right

1 Starter button (➡ 52)
2 Emergency ON/OFF switch (➡ 35)
3 Flashing turn indicators, right (➡ 33), Hazard warning flashers (➡ 34)
4 Turn-indicator cancel button (➡ 34) (➡ 35)

Instrument cluster

1 Speedometer
2 Tachometer
3 Indicator lights (➡ 20)
4 Multifunction display (➡ 20)
5 Sensor for instrument lighting
6 Operating the multifunction display (➡ 30)

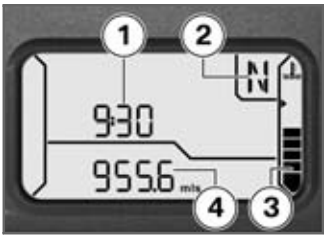


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Status indicators

Multifunction display



1 Clock (➡ 29)
2 Gear indicator (➡ 20)
3 Engine temperature (➡ 20)
4 Odometer and tripmeters (➡ 30)

Indicator lights



1 Flashing turn indicators, left
2 High-beam headlight
3 Idling
4 Flashing turn indicators, right

Gear indicator

N The gear engaged or **N** for neutral appears on the display.

N If no gear is engaged, the 'neutral' indicator light also lights up.

Engine temperature

The lateral bars under the temperature symbol show the engine temperature level.

Warning indicators

Display



Warnings are indicated by the 'General' warning light **1** showing in combination with a warning word, for example **2** or one of the warning symbols **3**. The 'General' warning light shows red or yellow, depending on the urgency of the warning. If two or more warnings occur at the same time,

all the appropriate warning symbols appear. Warnings are shown alternately.
The possible warnings are listed on the next page.

Overview of warning indicators

			Meaning
	Lights up yellow	EWS ! appears on the display.	Electronic immobilizer is active (➡ 23)
	Lights up yellow	FUEL ! appears on the display.	Fuel down to reserve (➡ 23)
	Lights up yellow	 Is indicated	Engine in emergency-operation mode (➡ 23)
	Flashes red	 Is indicated	Engine oil pressure insufficient (➡ 23)
	Lights up red	 Is indicated	Battery charge current insufficient (➡ 24)
	Lights up yellow	LAMPR ! appears on the display.	Rear bulb defective (➡ 24)
		LAMPF ! appears on the display.	Front bulb defective (➡ 25)
	Lights up yellow	LAMPS ! appears on the display.	Bulbs defective (➡ 25)

Electronic immobilizer is active

 General warning light shows yellow.

EWS ! appears on the display.
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.
- Use the reserve key.
- Have the defective key replaced, preferably by an authorized BMW Motorrad retailer.

Fuel down to reserve

 General warning light shows yellow.

FUEL ! appears on the display.

 A fuel shortage can lead to misfiring and to the engine dying unexpectedly. Misfiring can damage the catalytic converter, and the engine dying unexpected can lead to accidents.
Do not drive until the fuel tank is completely empty.◀

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

 Fuel reserve
– ≥1.1 gal (≥4 l)

- Refueling (➟ 56)

Engine in emergency-operation mode

 General warning light shows yellow.

 Engine symbol appears on the display.

 The engine is in the emergency operating mode. Only reduced engine performance may be available, which can lead to danger driving situations, especially during passing maneuvers.
Adapt your driving style to the possibly reduced engine performance.◀

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 by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Engine oil pressure insufficient

 General warning light flashes red.


Oil-can symbol appears on the display.

The oil pressure in the lubricating oil circuit is too low. Stop immediately and switch off the engine.

The warning on insufficient engine oil pressure is no substitute for the function of an oil-level indicator. The correct engine oil level can only be checked at the oil sight glass.◀

The cause of the warning on insufficient engine oil pressure can be an insufficient engine oil level.

- Checking engine oil level (➠ 64)

If oil level is too low:

- Top up engine oil.

If the engine oil level is correct:

Driving with insufficient engine oil pressure can result in engine damage.
Do not continue driving.◀

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

Battery charge current insufficient


General warning light shows red.


Battery symbol appears on the display.

A discharged battery can result in the engine cutting out unexpectedly, causing a hazardous situation.
Have faults eliminated as soon as possible.◀

If the battery is no longer charged, continued driving can lead to deep discharging, and therefore to the destruction of the battery.
If possible, do not continue driving.◀

The battery is not being charged.

- Continued driving is possible until the battery is discharged. However, the engine can die suddenly and the battery can be exhaustively discharged and therefore destroyed.
- Have the malfunction corrected as soon as possible by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Rear bulb defective


General warning light shows yellow.

LAMPR ! appears on the display.

A defective bulb places your safety at risk because it is easier for other users to oversee the motorcycle.
Replace defective bulbs as soon as possible; always carry a

complete set of spare bulbs if possible.◀

Tail light or brake light bulb defective.

- Replacing brake and tail light bulb (➡ 83)

Front bulb defective

LAMPF ! appears on the display.

⚠ A defective bulb places your safety at risk because it is easier for other users to oversee the motorcycle. Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible.◀

Low-beam, high-beam or turn signal bulb defective.

- Replacing low-beam and high-beam bulb (➡ 79)
- Replacing parking light bulb (➡ 80)
- Replacing turn indicator bulbs (➡ 85)

The license-plate carrier can be removed for sporty riding. The missing turn indicators and license-plate light will be indicated with this fault message.

- Installing license-plate carrier (➡ 92)

Bulbs defective

⚠ General warning light shows yellow.

LAMPS ! appears on the display.

⚠ A defective bulb places your safety at risk because it is easier for other users to oversee the motorcycle. Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible.◀

A combination of several bulb defects is present.

- See the fault descriptions above.

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Ignition switch and steering lock

Keys

You are provided with a main key and a reserve key, as well as a key for removing the seat. If a key is lost, please note the information on the electronic immobilizer (EWS) (➡ 29).
Ignition key and steering lock, as well as tank filler-cap lock are all operated with the same key.

Switching on ignition



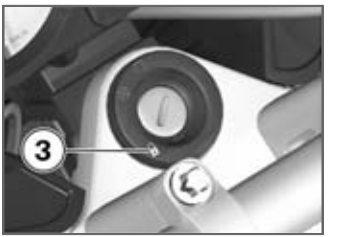
- Turn key to position **1**.
» Parking lights and all function circuits switched on.
» Engine can be started.
» Pre-ride check is performed. (➡ 53)

Switching off ignition



- Turn key to position **2**.
» Light switched off.
» Handlebars not locked.
» Key can be removed.
» Electrically powered accessories remain operational for a limited period of time.
» Battery can be recharged via onboard socket.

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 **3** while moving handlebars slightly.

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

Electronic immobilizer EWS

Theft protection

The electronic immobilizer helps protect your BMW motorcycle from theft, and this enhanced security is at your disposal without any need for you to set parameters or activate additional systems. The engine of a motorcycle fitted with this electronic immobilizer can be started only with the keys that belong to the motorcycle. You can also have your authorized BMW Motorrad retailer disable particular keys, for example in the event that you lose your keys. The engine cannot be started with a key that has been barred.

Electronics in key

The motorcycle's electronics exchange certain continuously changing signals with the electronics in the key; these signals are specific to your motorcycle and they are transmitted via the ring antenna in the ignition lock. The ignition is not enabled for starting until the key has been recognized as "authorized" for your motorcycle.

A spare 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 EWS is shown in the multifunction display.
Always store the spare key separately from the ignition key.◀

Replacement and extra keys

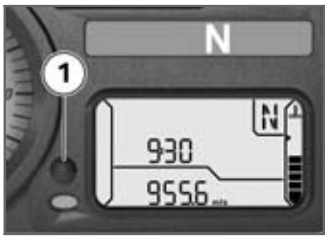
Replacement and spare keys are only available through an authorized BMW Motorrad retailer. The keys are part of an integrated security system, so the retailer is under an obligation to check the legitimacy of all applications for replacement/extra keys. If you want to have a lost key barred, you must bring along all other keys that belong to the motorcycle. A key that has been barred can subsequently be cleared and reactivated for use.

Clock

Setting clock

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

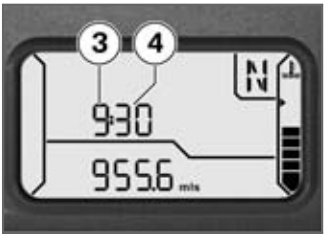
• Switch on ignition.



• Press button **1** repeatedly until total mileage is shown.



• If you prefer, you can use button **2** for this purpose.

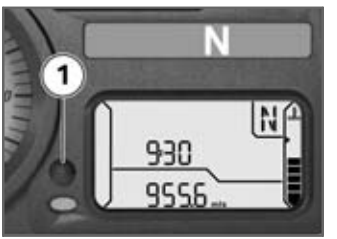


• Hold down button.
» Hours **3** flash.
• Press button.
» Hours increase by one each time button is pressed.
• Hold down button.
» Minutes **4** flash.
• Press button.
» Minutes increase by one each time button is pressed.
• Hold down button.
» End setting; set time is displayed.

Multifunction display

Selecting readings

• Switch on ignition.



• Press button **1**.



• If you prefer, you can use button **2** for this purpose.



The odometer display field indicates the values below in the following order beginning with the current value:

– Total distance covered
– Tripmeter 1 (Trip I)
– Tripmeter 2 (Trip II)
– Operating range (after reaching reserve level)

Resetting tripmeter

• Switch on ignition.
• Select desired tripmeter.

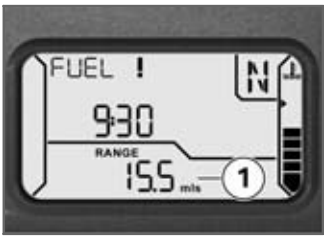


• Hold down button **1**.



• If you prefer, you can use button **2** for this purpose.
» Tripmeter is reset.

Residual range



The operating range **1** is displayed together with the lettering RANGE and indicates what distance can still be driven with the remaining fuel. It is only displayed after the fuel reserve is reached. This distance is calculated on the basis of fuel level and average consumption.
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. If the sensor cannot register the new level the residual-range readout cannot be updated.

The determined residual range is an approximate reading. BMW Motorrad therefore recommends that you do not try to use the full remaining range before refueling.◀

Lights

Parking lights

The parking lights switch 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.◀

Low-beam headlight

The low-beam headlight switches on automatically when you start the engine.

With the engine switched off, you can switch on the lights by switching on the high-beam headlight with the ignition switched on or by operating the headlight flasher.◀

Switching on high-beam headlight



- Press the top section of full-beam headlight switch **1**.
» High-beam headlight is switched on.
- Move full-beam headlight switch **1** to the center position.

» High-beam headlight is switched off.
• Press the bottom section of full-beam headlight switch **1**.
» High-beam headlight is switched on as long as switch is pressed (headlight flasher).

Switching on parking lights

• Switch off ignition.



• Immediately after switching off the ignition, press and hold down button **1** for the left turn indicators.
» Parking light switches on.

Switching off parking lights

• Switch ignition on and then off again.
» Parking light switched off.

Turn indicators

Switching on left-hand turn indicator

• Switch on ignition.

After driving for approx. ten seconds or after covering a distance of approx. 650 ft (200 m), the turn indicators are automatically switched off.◀

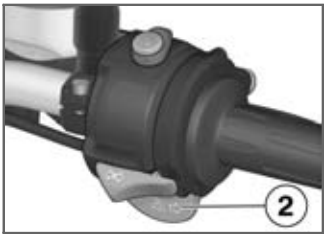


• Press button **1** for the left-hand turn indicators.
» Left-hand turn indicator is switched on.
» Indicator light for left-hand turn indicators flashes.

Switching on right-hand turn indicator

• Switch on ignition.

After driving for approx. ten seconds or after covering a distance of approx. 650 ft (200 m), the turn indicators are automatically switched off.◀



- Press button **2** for the right-hand turn indicators.

» Right-hand turn indicator is switched on.

» Indicator light for right-hand turn indicators flashes.

Switching off turn indicator



- Press turn-indicator cancel button **3**.

» Turn indicator is switched off.

» Turn indicator indicator lights off.

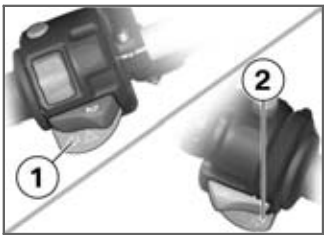
Hazard warning flashers

Switching on hazard warning flashers

- Switch on ignition.

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

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



- Simultaneously press button **1** for left turn indicators and button **2** for right turn indicators.

» The hazard warning flashers are switched on.

» Left and right turn indicator indicator lights flash.

- Switch off ignition.

» Hazard warning flashers continue to operate.

» Left and right turn indicator indicator lights are off.

Switching off hazard warning flashers



- Press turn-indicator cancel button **3**.

» Hazard warning flashers are switched off.

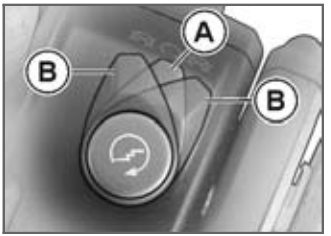
Emergency ON/OFF switch



1 Emergency ON/OFF 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 Operating position
B Engine switched off.

The engine can only be started in the operating position.◀

Clutch

Adjusting clutch lever

If the position of the clutch fluid reservoir is changed, air can enter the clutch system.
Do not reposition the handlebar controls on the handlebars or the handlebars in their mounts.◀

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



- Turn adjusting screw **1** clockwise.

The adjusting screw has a limit position and can be turned more easily when you press the clutch lever forward.◀

» Distance between handlebar grip and clutch lever increases.

- Turn adjusting screw **1** counterclockwise.

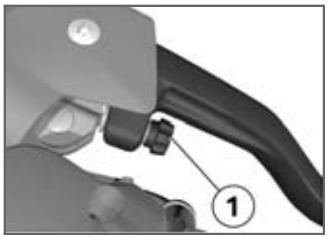
» Distance between handlebar grip and clutch lever decreases.

Brakes

Adjusting handbrake lever

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

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



- Turn adjusting screw **1** clockwise.

The adjusting screw has a limit position and can be turned more easily when you press the handbrake lever forward.◀

» Distance between handlebar grip and handbrake lever increases.

- Turn adjusting screw **1** counterclockwise.

» Distance between handlebar grip and handbrake lever decreases.

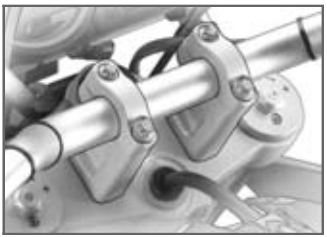
Handlebars

Adjustable handlebars

The distance of the handlebars from the rider can be adjusted by turning the handlebar clamping blocks by 180°.



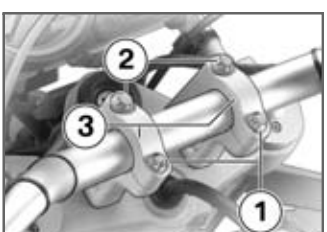
Short-reach position, handlebars toward rider.



Long-reach position, handlebars away from rider.

Adjusting handlebars

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

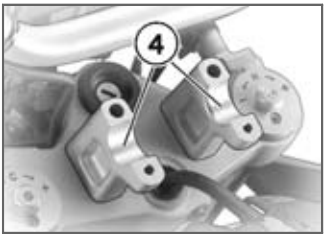


- Remove the small screws **1**.

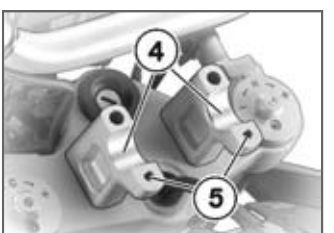
- Remove the large screws **2** while holding the handlebars in place.
- Take off the upper clamping blocks **3**.

Tilting the handlebars too far can allow air to enter the fluid reservoirs and make its way into the hydraulic systems. Hold the handlebars or lay them down in such a way that the reservoirs remain upright.◀

- Remove the handlebars from the lower clamping blocks.

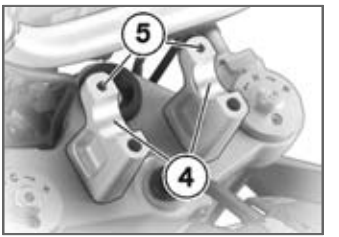


- Take off the lower handlebar clamping blocks **4**.



- Position the lower handlebar clamping blocks **4** with the threaded holes **5** facing toward the rear.

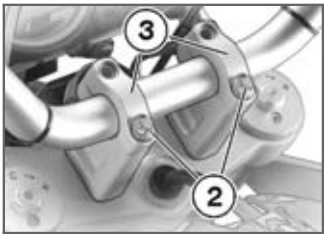
» Shorter distance to rider.



- Position the lower handlebar clamping blocks **4** with the threaded holes **5** facing toward the front.

» Longer distance to rider.

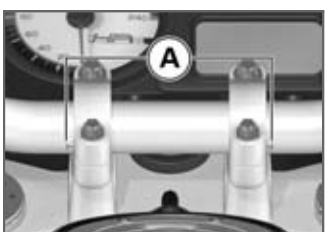
- Insert the lower handlebar clamping blocks in the desired position.



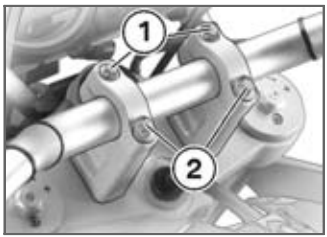
- Place the handlebars and the upper handlebar clamping blocks **3** on the lower handlebar clamping blocks while holding the handlebars in place.
- Install large screws **2**, but do not tighten.



- Install small screws **1**, but do not tighten.



- Align the handlebars in the clamping blocks such that the centers of the marks **A** are in line with the gaps between the top and bottom clamping blocks.



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.◀

- Tighten large screws **2** with torque.

Handlebar clamping block on fork bridge
– 28 lb/ft (38 Nm)

» No gap may remain between handlebar clamping blocks on side of large screws.

- If necessary, slacken screws **1** and retighten screws **2** to the specified tightening torque.
- Tighten the small screws **1** with torque.

Handlebars on handlebar clamping block
– 14 lb/ft (19 Nm)

» A gap remains between handlebar clamping blocks on side of small screws.

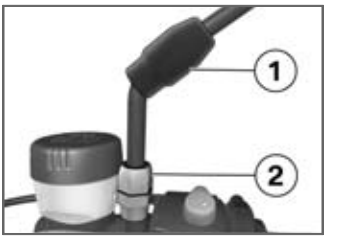
Mirrors

Adjusting mirrors



- Move mirror into desired position by twisting.

Adjusting 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 tightening torque, while holding the mirror arm to ensure that it does not move out of position.

Mirror on clamping piece
– 18 lb/ft (25 Nm)

• Slide protective cap over threaded fastener.

Spring preload

Setting

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

Adjusting spring preload for rear wheel

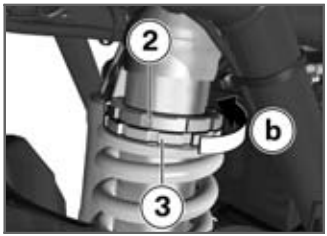
• Make sure ground is level and firm and park motorcycle.



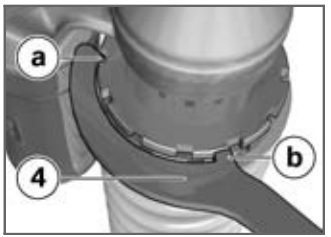
• Remove brake-fluid reservoir **1** from the holder, push the hose down slightly and lay the reservoir on the Paralever link.



• Use adjusting rings **2** and **3** to adjust spring preload.



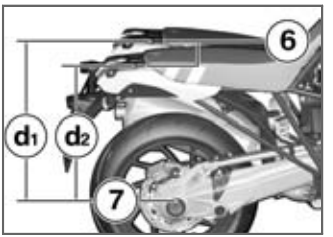
• Release the lock by turning adjusting ring **2** in direction **b** with the tool from the toolkit, while holding adjusting ring **3** with second tool from the toolkit.



- To turn the adjustment rings, mount the tools from the toolkit **4** so that hook **a** or hook **b** securely engages in a groove.

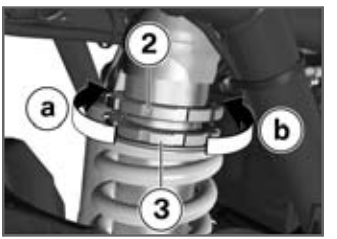
The adjustment rings can be turned in both directions with the tool from the toolkit in the same position by selecting the corresponding hook.◀

- Make sure there is no load on the motorcycle; remove all items of luggage, if carried.



- Measure distance **d1** between the bottom edge of luggage-plate recess **6** and the top edge of axle tube **7**.
- Apply the weight of the rider (and passenger, if applicable) to the motorcycle.
- With the assistance of a helper, measure distance **d2** between points **6** and **7** and calculate the difference between distances d1 and d2.

Load-dependent adjustment of spring preload
– 1.6 in (40 mm) (Negative spring displacement of rear wheel under load)



- If you want to reduce the difference (increase spring preload, in other words), turn adjusting ring **3** in direction **a**.
- If you want to increase the difference (reduce spring preload, in other words), turn adjusting ring **3** in direction **b**.

- Tighten the lock by tightening adjusting ring **2** in direction **a** with the tool from the toolkit, while holding adjusting ring **3** with second tool from the toolkit.

Lock nut of spring basic setting at top spring retainer
– 4 lb/ft (5 Nm)



- Seat brake-fluid reservoir **1** in the holder.
- Adjust the damping characteristic to suit spring preload.

Damping

Setting

The damping must be adjusted to the spring preload and the road conditions. An increase in spring preload requires firmer damping, a reduction in spring preload requires softer damping.

Adjusting front rebound stage

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



- Use adjusting screws **1** on left and right to adjust the rebound stage. Make sure that the settings are identical on left and right.



- If you want to increase damping, use a screwdriver to turn the adjusting screws on left and right in the + direction.
- If you want to reduce damping, use a screwdriver to turn the adjusting screws on left and right in the - direction.

Rebound stage, basic setting, front

– Turn top adjusting screw as far as it will go in the "+" direction, then back it off 10 clicks in the "-" direction.

Adjusting front compression stage

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



- Use adjusting screws **1** on left and right to adjust the compression stage. Make sure that the settings are identical.
- If you want to increase damping, use a screwdriver to turn the adjusting screws on left and right in the clockwise direction.
- If you want to reduce damping, use a screwdriver to turn the adjusting screws on left and right in the counterclockwise direction.

Compression stage, basic setting, front

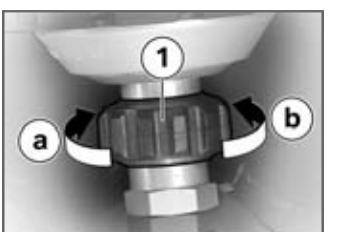
– Turn bottom adjusting screw as far as it will go in the clockwise direction, then back it off 10 clicks in the counterclockwise direction.

Adjusting rear rebound stage

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



- Adjust the rebound stage by turning adjusting ring **1**.



- If you want to reduce the rebound stage, turn adjusting ring **1** in direction **a**.

- If you want to increase the rebound stage, turn adjusting ring **1** in direction **b**.

Rebound stage, basic setting, rear
– Turn adjusting screw as far as it will go in the counterclockwise direction, as viewed from above, then turn it 19 clicks in the clockwise direction.

Adjusting rear compression stage

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



- Adjust the compression stage by turning adjusting ring **1**.



- If you want to increase the compression stage, turn adjusting ring **1** in the H direction.
- If you want to reduce the compression stage, turn adjusting ring **1** in the S direction.

Compression stage, basic setting, rear
– Turn the adjusting screw as far as possible clockwise, then 14 clicks counterclockwise.

Tires

Checking tire pressure

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

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 have a tendency to open as a result of centrifugal force.
Fit metal valve caps with rubber seals and screw them on firmly to prevent sudden deflation.◀

- Check tire pressures against the data below.

Tire pressure, front
– 31.9 psi (2.2 bar) (Single rider, with cold tire)
With OA Passenger footrest:
– 31.9 psi (2.2 bar) (Driver with passenger and/or load, with cold tire)◁

Tire pressure, rear
– 36.3 psi (2.5 bar) (Single rider, with cold tire)
With OA Passenger footrest:
– 36.3 psi (2.5 bar) (Driver with passenger and/or load, with cold tire)◁

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

Headlight

Adjusting headlight for RHD/LHD traffic

If the motorcycle is ridden in a country where the opposite rule of the road applies, its asymmetric low-beam headlight will tend to dazzle oncoming traffic.
Have the headlight adjusted to the relevant conditions by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Headlight range and spring preload

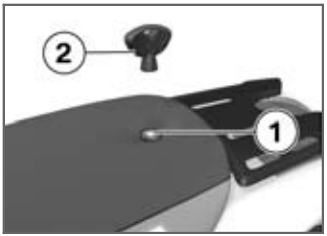
The headlight range generally remains constant due to the adjustment of the spring preload to the loading state.
Spring preload adjustment may only be insufficient when the motorcycle is very heavily loaded.
In this case, the headlight range must be adjusted to the weight.

If you are unsure whether the basic headlight setting is correct, consult a specialized workshop, preferably an authorized BMW Motorrad retailer.◀

Seat

Removing seat

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

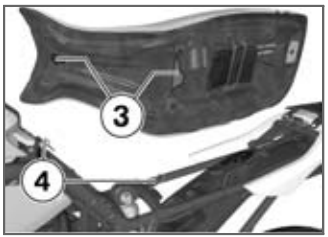


• Unscrew the screw **1** with the seat key **2**.



• Pull the seat toward the rear to release it from its holders.

Installing seat

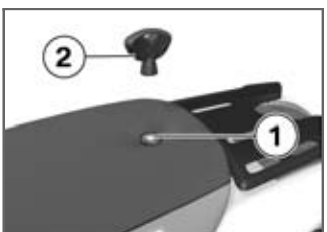


• Insert the seat with the mounts **3** in the holders **4**.



⚠ If too much pressure is applied in the forward direction, there is a danger that the motorcycle will be pushed off its stand.
Make sure that the motorcycle is steady on its stand.◀

• Push the seat as far as possible toward the front.



• Tighten the screw **1** hand-tight with the seat key **2**.

Riding

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Safety instructions

Rider's equipment

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

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

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
– Imbalanced load
– Loose clothing
– Insufficient tire inflation pressure
– Poor tire tread
– Etc.

Correct loading

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

Top speed for 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.◀

Alcohol and drugs

Even small amounts of alcohol or drugs will adversely affect your perception and your ability to assess situations and make decisions, and slow down your reflexes. Medication can exacerbate these effects.
Do not ride your motorcycle after consuming alcohol, drugs and/or medication.◀

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.◀

High voltage

Touching live parts of the ignition system with the engine running can cause electric shock.
Do not touch parts of the ignition system when the engine is running.◀

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.◀

Risk of fire

Temperatures at the exhaust are high.

Flammable materials (e.g. hay, leaves, grass, clothing and luggage, etc.) could ignite if allowed to come into contact with the hot exhaust pipe.
Make sure that no highly flammable materials can come in contact with the hot exhaust system.◀

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.◀

Tampering with the engine control unit

Tampering with the engine control unit can damage the motorcycle and cause accidents.
Do not tamper with the engine control unit.◀

Tampering with the engine control unit can result in mechanical loads that the motorcycle's components are not designed to withstand. Damage caused in this way is not covered by the warranty.
Do not tamper with the engine control unit.◀

Checklist

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

- Brakes
- Front and rear brake fluid levels
- Clutch
- Clutch fluid level
- Shock absorber setting and spring preload
- Tread depth and tire pressure
- Secure luggage attachment

At regular intervals:

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

Starting

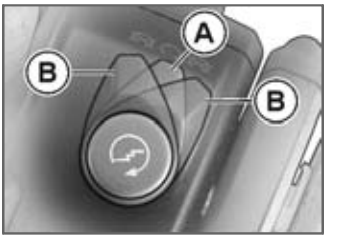
Side stand

You cannot start the motorcycle with the side stand extended and a gear engaged. The engine will switch itself off if you start it with the transmission in neutral and then engage a gear before retracting the side stand.

Transmission

You can start the engine when the transmission is in neutral or if you pull the clutch with a gear engaged. Do not engage the clutch until after switching on the ignition, as otherwise the engine cannot be started.

Starting engine



- Emergency ON/OFF switch in run position **A**.
- Switch on ignition.

» Pre-ride check is performed. (➡ 53)



• Press starter button **1**.

At extremely low temperatures it may be necessary to operate the throttle twist grip during starting. At ambient temperatures below 32 °F (0 °C), actuate the clutch after switching on the ignition.◀

The start attempt is automatically interrupted if battery voltage is too low. Recharge the battery before you start the engine, or use jump leads and a donor battery to start.◀

» Engine starts.

» Consult the troubleshooting chart if the engine refuses to start. (➟ 100)

Pre-ride check

The instrument cluster runs a test of the 'General' warning light when the ignition is switched on: this is the "Pre-Ride-Check" The 'General' warning light shows first red and then yellow, so that you can check that it is in working order. The test is aborted if you start the engine before it completes.

Phase 1

General warning light shows red.

– CHECK! appears on the display.

Phase 2

General warning light shows yellow.

– CHECK! appears on the display.

If the 'General' warning light does not show:

Some malfunctions cannot be indicated if the 'General' warning light cannot be displayed.

Check that the 'General' warning light comes on, and that it shows red and yellow.◀

• Have the malfunction corrected as soon as possible by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Running in

The first 600 miles (1,000 km)

• While running in the motorcycle, vary the throttle opening and engine-speed range frequently.

- Try to do most of your riding during this initial period on twisting, fairly hilly roads, avoiding high-speed main roads and highways if possible.

Exceeding the specified engine speeds while running in will lead to increased engine wear.
Adhere to the specified engine run-in speeds.◀

- Do not exceed the engine run-in speeds.

 Engine break-in speed
– <4000 min^{-1}

- Do not accelerate at full throttle.
- Avoid low engine speeds at full load.
- After 300 - 750 miles (500 - 1,200 km), have the first inspection performed.

Brake pads

New brake pads must "bed down" and therefore do not achieve their optimum friction levels during the first 300 miles (500 km). This initial reduction in braking efficiency can be compensated for by exerting greater pressure on the 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 have not achieved their full adhesion yet. There is a danger of accidents when driving at extreme angles.
Avoid extreme angles.◀

Parking your motorcycle

Placing on side stand

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.◀

- Switch off the engine.
- Pull handbrake lever.
- Hold motorcycle upright and balanced.
- Use your left foot to extend side stand fully.

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.◀

- Slowly lean the motorcycle to the side until its weight is taken by the stand and dismount to the left.

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.
- Check that the motorcycle is standing firmly.

On a grade, the motorcycle should always face uphill; select 1st gear.◀

Remove from side stand

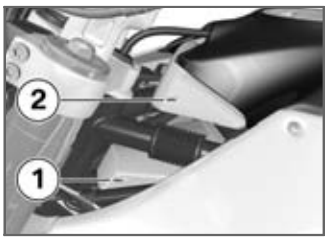
- Unlock steering lock.
- Switch on ignition.
- From left, grip handlebars with both hands.
- Pull handbrake lever.
- Swing your right leg over the seat and lift motorcycle to upright position.
- Hold motorcycle upright and balanced.

An extended side stand can catch on the ground when the motorcycle is moving and lead to a fall.
Retract the side stand before moving the vehicle.◀

- Sit on motorcycle and use your left foot to retract side stand.

Refueling

Fuel level



The fuel tank is made of semi-transparent material, so the level of fuel in the tank is visible. When viewed from the direction of the telescopic forks, this makes it possible to check the fuel level. The 1.3-gallon (5-liter) level **1** and the 3-gallon (11-liter) level **2** are marked on the fuel tank.

Refueling

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

Fuel expands when exposed to heat. When the tank is overfilled, fuel can escape and get onto the rear wheel. This results in a danger of falling.
Do not fill the tank past the bottom edge of the filler neck.◀

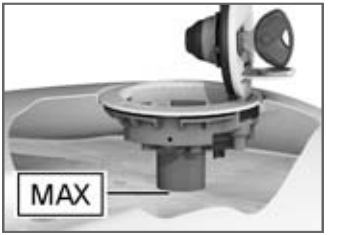
Fuel attacks plastic surfaces, making them cloudy or unattractive.
Wipe off any fuel that gets onto plastic parts immediately.◀

Leaded fuel will destroy the catalytic converter.
Use only unleaded fuel.◀

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



- Open protective cap.
- Open the fuel tank cap with the ignition key by turning it counterclockwise.



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

Recommended fuel quality
– 98 ROZ/RON (Super plus)
– 95 ROZ/RON (Super unleaded (fuel type can be used with reduced performance and consumption))

Usable fuel capacity
– 3.4 gal (13 l)

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

Brake system

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 brakes

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

Salt on brakes

The full braking effect can be delayed if the motorcycle is ridden on salt-covered roads and the brakes are not applied for some time.
Brake early until the salt layer of the brake disks and brake pads has been braked off.◀

Oil or grease on brakes

Oil and grease on the brake disks and pads considerably diminish braking efficiency.
Especially after repair and maintenance tasks, make sure that the brake disks and brake pads are free of oil and grease.◀

Dirt or mud on 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.◀

Accessories

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General instructions

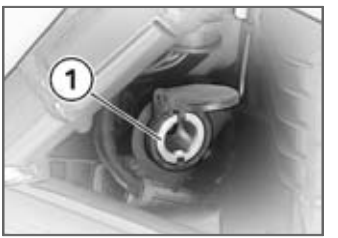
BMW Motorrad recommends the use of parts and accessories for your motorcycle that are approved by BMW for this purpose.
Your authorized BMW Motorrad retailer is the right place to go for genuine BMW parts and accessories,other BMW-approved products, and expert advice on their installation and use.
These parts and products have been tested by BMW for safety, function and suitability. BMW accepts product liability for these products.
Conversely, BMW is unable to accept any liability whatsoever for parts and accessories which it has not approved.

⚠ 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.◀

Whenever you are planning modifications, comply with all the legal requirements. The motorcycle must not infringe on national road-vehicle construction and use regulations.

Onboard socket

Ratings



The supply to the socket **1** is cut off automatically if battery voltage is low or the load exceeds the maximum rating.

Operating electrical accessories

You can start using electrical accessories only when the ignition is switched on. The accessory remains operational if the ignition is subsequently switched off. Approx. 15 minutes after switching off the ignition and/or during

starting, the onboard socket is switched off to take the load off the motorcycle electrical system.

Cable routing

The cables from the onboard socket to the auxiliary device must be routed in such a way that they:

– do not impede the rider
– do not restrict or obstruct the steering angle and handling characteristics
– cannot be trapped

 Improperly routed cables can impede the rider. Route the cables as described above.◀

Luggage

Correct loading

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

– Set spring preload, damping characteristic and tire pressures to suit total weight.
– Max. load in tank rucksack 11 lbs (5 kg).
– Maximum load on guard for rear light 2.2 lbs (1 kg).

Maintenance

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General instructions

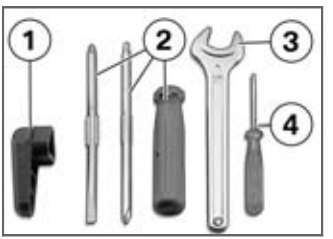
The 'Maintenance' chapter describes work involving the checking and replacement of wear parts that can be performed with a minimum of effort.

If special tightening torques are to be taken into account for assembly, these are listed. An overview of all required torques is contained in the chapter "Technical Data".

You will find information on more extensive maintenance and repair work in the Repair Manual on the CD or DVD that accompanies your motorcycle.

Onboard toolkit

Onboard toolkit



1 Lever for cap of oil filler neck

– Opening and closing the cap of the oil filler neck

2 Reversible screwdriver with two blades

– Changing bulbs

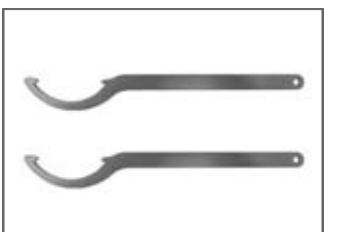
3 Open-ended wrench, 17 mm

– Adjusting mirror arm

4 Small plain screwdriver

– Adjusting damping characteristic of front suspension

Onboard toolkit for spring strut



Two hook wrenches

– Adjusting rear spring preload

Engine oil

Checking engine oil level

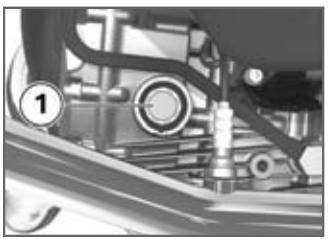
⚠ The engine can seize if the oil level is low, and this can lead to accidents.

Always make sure that the oil level is correct.◀

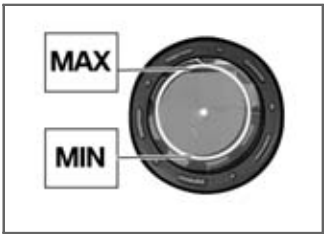
The oil level varies with the temperature of the oil. The higher the temperature, the higher the level of oil in the sump. Checking the oil level with the engine cold or after a short trip leads to misinterpretations and therefore to incorrect oil fill quantities.
To ensure that the display of the engine oil level is correct, only check the oil level after a longer trip.◀

The warning on insufficient engine oil pressure is no substitute for the function of an oil-level indicator. The correct engine oil level can only be checked at the oil sight glass.◀

- Make sure ground is level and firm and park motorcycle at operating temperature.
- Make sure ground is level and firm and park motorcycle at operating temperature.
- Wait five minutes after switching off the engine at operating temperature.
- Hold the motorcycle is vertical.



- Read off the oil level from the display **1**.



Engine oil level
– between MIN and MAX marking
– Max 0.5 quarts (Max 0.5 l) (Difference between MIN and MAX)

If oil level is below MIN mark:
- Top up engine oil.

If oil level is above MAX mark:
- Have oil level corrected by a specialized workshop, prefer-

ably an authorized BMW Motorrad retailer.

Topping up engine oil

- Checking engine oil level (➡ 64)



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

- Wipe area around fill location clean.
- Use the tool from the toolkit to remove cap **1** from the engine oil filler neck.
- Add engine oil up to specified level.

Oil consumption
– <2 quart/1000 miles (<1 l/1000 km)

- Use the tool from the toolkit to install the cap of the engine-oil filler neck.

General brake system

Brake safety

A fully functional brake system is a basic requirement for the road safety of your motorcycle.
Do not ride the motorcycle if you have any doubts about the dependability of the brake system. In this case, have the brake system checked by a specialized workshop, preferably by an authorized BMW Motorrad retailer.

Incorrect working practices endanger the reliability of the brakes.
Have all work on the brake system performed by a specialized workshop, preferably by an authorized BMW Motorrad retailer.◀

Checking brake operation

- Pull handbrake lever.
» Pressure point must be clearly perceptible.
- Press footbrake lever.
» Pressure point must be clearly perceptible.

If no clear pressure points are perceptible:

- Have the brakes checked by a certified workshop, preferably an authorized BMW Motorrad retailer.

Brake pads

Checking front brake pad thickness

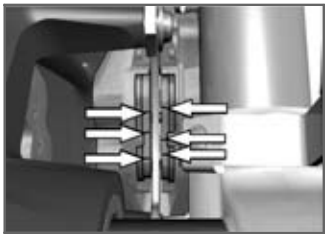
Dropping below the minimum pad thickness leads to reduced braking performance and may result in damage to the brakes.

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

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



- Visually inspect the left and right brake pads to ascertain their thickness. Direction of view: between wheel and slider tube through to brake caliper.



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

If the wear indicating marks are no longer clearly visible:

- Have the brake pads replaced by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Checking rear brake pad thickness

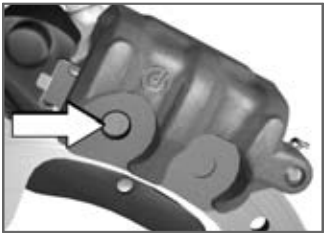
Dropping below the minimum pad thickness leads to reduced braking performance and may result in damage to the brakes.

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

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



- Check the brake pad thickness on the rear brake caliper **1** with visual inspection from the left.



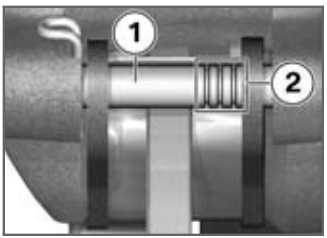
Rear brake-pad wear limit
– 0.04 in (1 mm) (Only friction material without carrier plate)
– Brake disk must not be visible through bore hole of inner brake pad.

If brake disk is visible:

- Have the brake pads replaced by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Brake pad wear

The rear brake has a mechanical brake-pad wear indicator.



Shaft **1** with three marker rings **2** is between the brake pads.

How to interpret the marks:

- Three rings visible: brake-pad thickness is at least 75 %
- Two rings visible: brake-pad thickness is at least 50 %
- One ring visible: brake-pad thickness is at least 25 %
- No rings visible: brake pads worn to wear limit; check as described above

Brake fluid

Checking front 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 park the motorcycle.
- Move handlebars into straight-ahead position.



- Read off the brake fluid level at the 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)

If brake fluid level drops below permissible level:

- Have the defect corrected as soon as possible by a specialized 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 the ground is level and firm and hold the motorcycle vertically.



- Read off the brake fluid level at the 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)

If brake fluid level drops below permissible level:

- Have the defect corrected as soon as possible by a special-

ized workshop, preferably an authorized BMW Motorrad retailer.

Clutch

Checking clutch operation

- Pull the clutch lever.

» Pressure point must be clearly perceptible.

If no clear pressure point can be felt:

- Have the clutch checked by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Checking clutch fluid level

- Make sure ground is level and firm and park motorcycle.
- Move handlebars into straight-ahead position.



- Read off clutch fluid level at reservoir **1**.

The fluid level in the clutch fluid reservoir rises due to clutch wear.◀

The clutch system is filled with a special hydraulic fluid that does not require changing.◀



Clutch fluid level

– The clutch fluid level must not drop. (Motorcycle standing upright with handlebars straight ahead)

A drop in clutch-fluid level is indicative of a leak in the clutch system. If fluid level drops:

Unsuitable hydraulic fluids could cause damage to the clutch system.
No fluids may be poured in.◀

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

Tires

Measuring tire tread depth

- Measure tire tread depth in main tread grooves with wear indicating marks.

Tires have wear indicators integrated into the main tread grooves. 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.◀

If the tire tread depth no longer complies with the legally required minimum tread depth:

- Replace tire.

Rims

Visual inspection

- Make sure ground is level and firm and park the motorcycle.
- Visually inspect rims for defects.
- Have damaged rims checked and, if necessary, replaced by a specialized workshop, preferably an authorized BMW Motorrad retailer.

Wheels

Recommended tires

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.

Removing front wheel

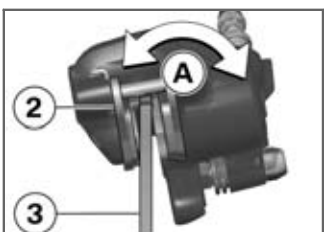
- Place motorcycle on an auxiliary stand; BMW Motorrad recommends BMW Motorrad rear wheel stand.
- Installing rear-wheel stand (➡ 78)



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

- Remove mounting bolts **1** of brake calipers on left and right.



- Press brake pads in brake caliper **2** apart slightly by rocking back and forth **A** in relation to brake disks **3**.
- Mask off area of wheel rim that could be scratched in process of removing brake calipers.
- Carefully pull brake calipers back and out until clear of brake disks.
- Raise front of motorcycle until the front wheel can turn freely. BMW Motorrad recommends the BMW Motorrad front-wheel stand for lifting the motorcycle.
- Mounting front wheel stand (➡ 76)



- Unscrew left-hand axle clamping screws **1**.
- Remove axle screw **2**.



- Unscrew right-hand axle clamping screws **3**.
- Pull out axle **4** using a screwdriver.
- Do not remove grease on axle.
- Roll front wheel out of the forks.



• Remove spacing sleeve **5**.

Installing front wheel

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

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



• Install spacing sleeve **5**.
• Roll front wheel into forks.



• Insert axis **4**.



• Tighten axle screw **2** to the specified torque; if necessary use a screwdriver to counter-hold at the other side.

	Axle screw of front wheel in axle holder
–	Thread-locking compound: Optimoly TA
–	30 lb/ft (40 Nm)

• Without actuating brake: firmly compress spring forks several times.
• Tighten the left-hand axle clamping screws **1** with torque.

Pinch bolt of axle holder
– Tightening sequence: 2x each side, alternately
– 6 lb/ft (8 Nm)



- Tighten right axle clamping screws **3** to the specified tightening torque.

Pinch bolt of axle holder
– Tightening sequence: 2x each side, alternately

Pinch bolt of axle holder
– 6 lb/ft (8 Nm)

- Remove front wheel stand.
- Ease brake calipers onto brake disks.



- Install mounting screws **1** with appropriate torque.

Brake caliper on slider tube
– 22 lb/ft (30 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.◀

- Operate brakes several times until brake pads contact brake disk.
- Remove rear wheel stand.

Removing rear wheel

- Place motorcycle on an auxiliary stand; BMW Motorrad recommends BMW Motorrad rear wheel stand.
- Installing rear-wheel stand (➡ 78)



- Remove 5 screws **1**.
- Take off rear wheel.

Installing rear wheel

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.◀



- Make sure that wheel centering device and contact surfaces of wheel hub are grease-free.
- Seat the rear wheel on the wheel centering spigot.
- Hand-tighten 5 wheel studs **1** and then tighten to specified torque.

Rear wheel on wheel carrier
– Tightening sequence: Tighten diagonally
– 44 lb/ft (60 Nm)

- Remove rear wheel stand.

Front wheel stand

Use

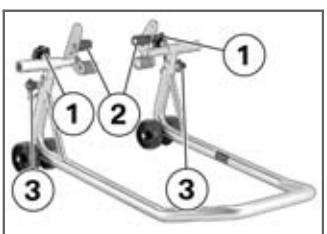
A front-wheel stand for simple, safe changing of the front wheel is available from BMW Motorrad. This front wheel stand is available at your authorized BMW Motorrad retailer.

The BMW Motorrad front wheel stand is not designed to support the motorcycle without the assistance of an auxiliary stand. A motorcycle standing on the front wheel stand and the rear wheel alone can fall over. Place the motorcycle on an auxiliary stand before lifting the front wheel with the BMW Motorrad front-wheel stand.◀

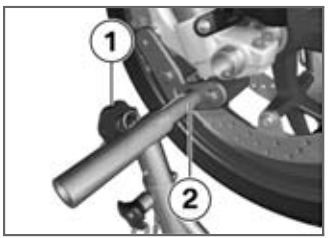
Mounting front wheel stand

- Place motorcycle on an auxiliary stand; BMW Motorrad rec-

ommends BMW Motorrad rear wheel stand.
- Installing rear-wheel stand (➡ 78)
- Use basic stand with tool number (363971) in combination with front-wheel adapter (363972).



- Loosen adjusting screws **1**.
- Push two mounts **2** far enough apart that front forks fit 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 forks rest securely on them.
- Tighten adjusting screws **1**.



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

Rear-wheel stand

Use

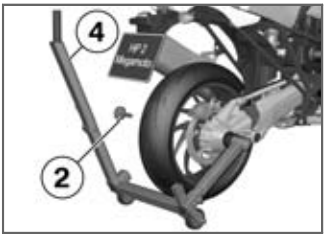
In order to be able to work safely on motorcycles without center stands, BMW Motorrad offers a rear wheel stand. You can obtain the rear-wheel stand from your authorized BMW Motorrad retailer.

Installing rear-wheel stand

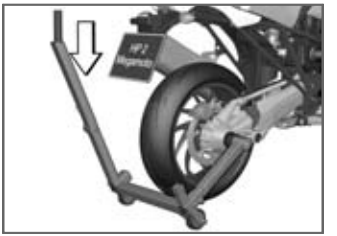
- Make sure ground is level and firm and park the motorcycle.
- Use rear-wheel stand with tool number (363980) with adapter shaft (363986) appropriate to the motorcycle.



- Set the desired height of the rear wheel stand using the bolts **1**.
- Remove the lock washer **2**; to do so, press the unlock button **3**.



- Push the rear-wheel stand from the right onto the rear axle.
- Mount lock washer **2** from left by pressing release button.
- Place your left hand on the motorcycle and your right hand on the lever **4** of the rear wheel stand.



- Raise motorcycle while simultaneously pressing lever downward until motorcycle stands vertically.
- Press lever onto ground.

Lamps

General instructions

A warning appears in the multifunction display if a bulb is defective. If the brake or rear light fails, the symbol is accompanied by the 'General' warning light, which lights up yellow. If the rear light fails the second filament of the brake light shines at reduced

brightness to double as a rear light. Even though you have this substitute rear light, the indicators in the display tell you that a bulb defect has occurred.

A defective bulb places your safety at risk because it is easier for other users to oversee the motorcycle.
Replace defective bulbs as soon as possible; always carry a complete set of spare bulbs if possible.◀

The bulb is pressurized and can cause injury if damaged.
Wear eye and hand protection when replacing bulbs.◀

An overview of the bulb types installed in your motorcycle is provided in the chapter "Technical Data".◀

Do not touch the glass of new bulbs with your fingers. For installation, use a clean, dry cloth. Dirt deposits, in particular oil and grease, interfere with heat radiation from the bulb. Overheating and therefore short service life of the bulbs are the consequence.◀

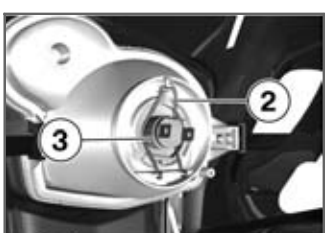
Replacing low-beam and high-beam bulb

The headlight bulbs are accessible from below, through the headlight surround. There is very little space inside the housing, so to facilitate identification of the bulbs and to avoid handling problems, the procedure for changing bulbs described below includes removal of the headlight surround.◀

- Removing headlight surround (➨ 81)



- Remove rubber cap **1**.



- Disengage spring clip **2** from the fastening and swing it up.

- Pull low-beam and high-beam bulb **3** out of headlight housing.
- Replace defective bulb.

Bulb for low-beam and high-beam headlight
– H4 / 12 V / 55 W / 60 W



- Insert bulb **3** into headlight housing.
- Close and lock spring strap **2**.



- Position rubber cap **1** on headlight housing and press on.

- Installing headlight surround (➡ 82)

Replacing parking light bulb

▷ The headlight bulbs are accessible from below, through the headlight surround. There is very little space inside the housing, so to facilitate identification of the bulbs and to avoid handling problems, the procedure for changing bulbs described below includes removal of the headlight surround.◀

- Removing headlight surround (➡ 81)



- Pull bulb **1** out of socket **2**.
- Replace defective bulb.

Bulb for parking light
– W5W / 12 V / 5 W



- Push bulb **1** into socket **2**.
- Installing headlight surround (➡ 82)

Removing headlight surround

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



- Remove screws **1** on left and right.
- Remove the left and right headlight side panels.

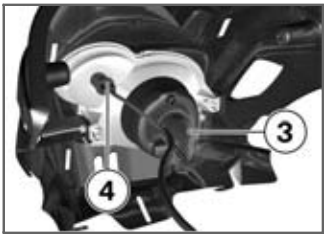


- Mark the position of screw **1** on the headlight surround.
- Remove screw **1** and screws **2** on left and right.
- Tilt the headlight surround forward, but do not remove it at this point.



- If applicable, switch off the ignition.
- Disconnect connector **3**.
- Pull bulb socket **4** out of the headlight housing.

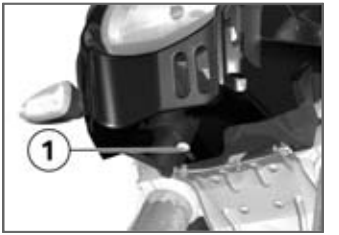
Installing headlight surround



- Press bulb socket **4** into the headlight housing.
- Connect plug **3**.



- Place the headlight surround in position.
- Install screw **1** and screws **2** on left and right, but do not tighten the screws at this point.



- Align the headlight surround with the mark on screw **1**.
- Tighten screw **1**.



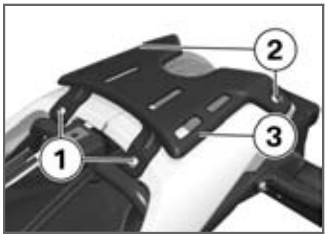
- Tighten screws **2** on left and right.



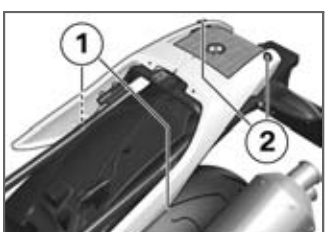
- Hold the left and right headlight side panels in position.
- Install screws **1** on left and right.

Replacing brake and tail light bulb

- Removing seat (➡ 46)

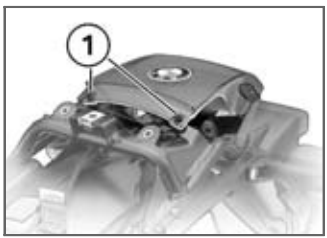


- Remove screws **1** and **2**.
- Take off taillight protection plate **3**.

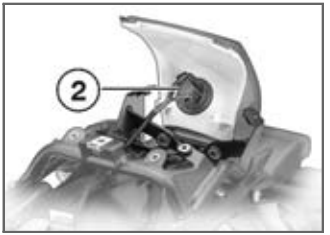


- Remove screws **1**.

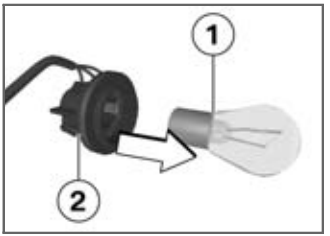
- Remove the rear trim panels, taking care not to mislay aluminum bushes **2**.



- Remove the screws **1**.
- Pull the rear light toward the rear to release it from its holders.



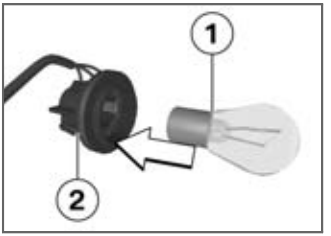
- Remove the bulb socket **2** from the rear light by turning it counterclockwise.



- Press the bulb **1** into the fitting **2** and remove it by turning it counterclockwise.

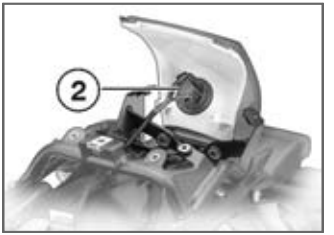
- Replace defective bulb.

Bulb for taillight/brake light
– P21/5W / 12 V / 5 W / 21 W

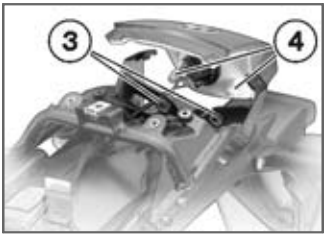


- Press the bulb **1** into the fitting **2** and install it by turning it clockwise.

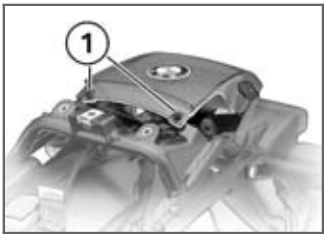
The bulb cannot only be inserted in the socket in one direction.◀



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



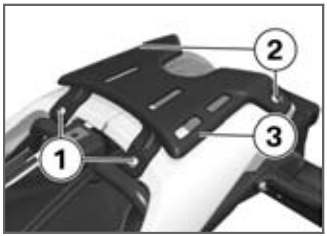
- Press taillight with mounts **4** in brackets **3**.



- Install screws **1**.



- Install the rear trim with the screws **1**.



- Lay on taillight protection plate **3**.
- Install screws **1**.
- Install screws **2**.
- Installing seat (➡ 47)

Replacing turn indicator bulbs

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

⚠ If it is not standing firmly, the motorcycle could topple in the course of the operations described below.
Make sure that the motorcycle is steady on its stand.◀

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



- Remove screw **1**.



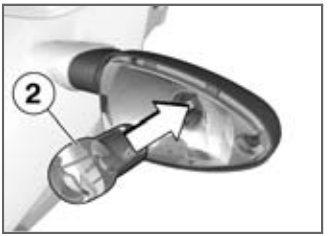
- Pull glass on screw connection side out of mirror housing.



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



- Install bulb **2** by turning clockwise in light housing.



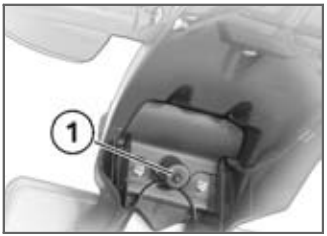
- Insert glass on motorcycle in lamp housing and close.



- Install screw **1**.

Replacing license-plate light

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



- Remove screw **1**.
- Take off cable guard.



- Pull bulb socket **1** out of bulb holder.



- Pull the bulb **2** out of the socket **3**.
- Replace defective bulb.

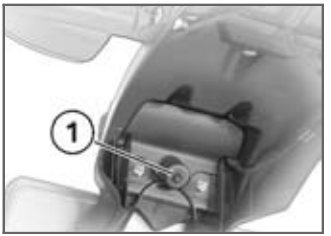
	Bulb for license-plate light
–	W5W / 12 V / 5 W



- Press the bulb **2** into the socket **3**.



- Press bulb socket **1** into lamp carrier.



- Install cable guard with screw **1**.

Jump-starting

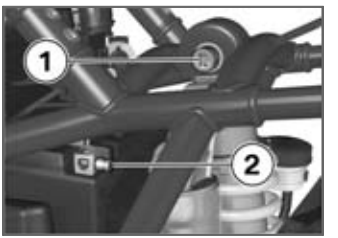
The wires leading to the power socket do not have a load-capacity rating adequate for jump-starting the engine. Excessively high current can lead to a cable fire or damage to the motorcycle electronics.
Do not use the onboard socket to jump-start the engine of the motorcycle.◀

Touching live parts of the ignition system with the engine running can cause electric shock.
Do not touch parts of the ignition system when the engine is running.◀

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.◀

- Removing seat (➡ 46)
- When jump-starting the engine, do not disconnect the battery from the onboard electrical system.
- Run engine of donor vehicle during jump-starting.



- Begin by connecting one end of the red jump lead to the positive terminal of the discharged battery and the other end to positive terminal **2** of the donor battery.
- Then connect one end of the black jump lead to the negative terminal of the donor battery, and the other end to the ground of the vehicle with the flat battery. If the battery of

your motorcycle is flat, use spring-strut screw **1** as the connection to ground.

- Start the engine of the vehicle with the discharged battery in the usual way; if the engine does not start, wait a few minutes before repeating the attempt in order to protect the starter motor and the donor battery.
- Allow both engines to idle for a few minutes before disconnecting jump leads.
- First disconnect the jumper cable from the ground connection, then from the positive battery terminal.

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

- Installing seat (➨ 47)

Battery

Maintenance instructions

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

Compliance with the points below is important in order to 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 periods when the motorcycle is not being used, of more than four weeks, disconnect the battery from the motorcycle or connect a trickle charger 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.◀

Charging connected battery

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

Charging the battery via the onboard socket is only possible with suitable chargers. Unsuitable chargers can result in damage to the motorcycle electronics.
Use BMW chargers with the part numbers 71 60 7 688 864 (220 V) or, as applicable, 71 60 7 688 865 (110 V). If in doubt, charge the disconnected battery directly at the terminals.◀

If you switch on the ignition and the multifunction display and indicator lights fail to light up, the battery is completely flat. Attempting to charge a completely flat battery via the onboard socket can cause damage to the motorcycle's electronics. Always charge a completely drained battery directly at the terminals of the disconnected battery.◀

- Charge disconnected battery via onboard socket.
- Comply with the operating instructions of the charger.

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

Charging disconnected battery

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

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

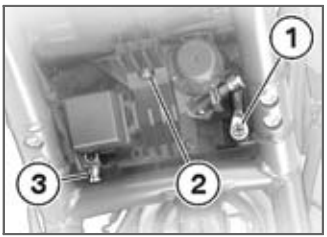
Removing battery

Disconnecting the battery causes the tripmeter and the operating hours meter to be reset.◀

- Removing seat (➨ 46)

If it is not standing firmly, the motorcycle could topple in the course of the operations described below.
Make sure that the motorcycle is steady on its stand.◀

• Switch off ignition.



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

- Remove battery ground wire **1** first.
- Then remove positive battery cable **2**.
- Remove screw **3** of battery holder.
- Lay battery holder with cables connected over frame to left.



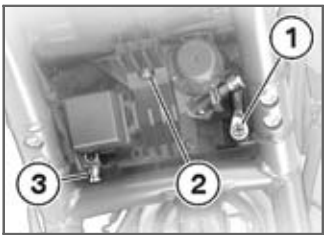
- Tilt the battery 90° and lift it clear of the motorcycle.

Installing battery

- Switch off ignition.
- Place battery edgewise in battery holder and turn it into correct position.

» The positive terminal is on the left in the driving direction.

- Place battery in center between bars on air cleaner box.



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

- First install positive battery cable **2**.
- Then install negative battery cable **1**.
- Install screw **3** of battery holder.
- Installing seat (➡ 47)
- Setting clock (➡ 29)

License-plate carrier

Removing license-plate carrier

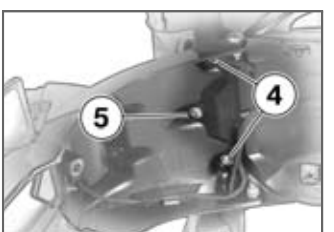
- Make sure ground is level and firm and park motorcycle.



- Remove license-plate plug **1** from its holder and disconnect the plug.
- Take protection connector **2** out of holder.
- Connect connector **1** to protection connector **2**.
- Insert end of wiring harness from connector **1** in mount of protection connector **2**.

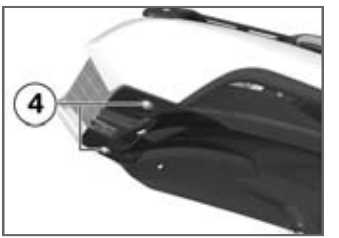


- Remove screws **3** on left and right.



- Remove screws **4** and screw **5**.

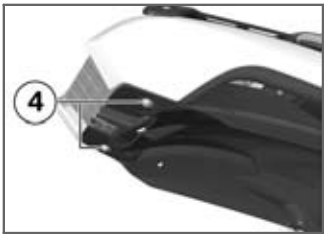
- Take off the license-plate carrier and thread out the connected cables.



- Reinstall screws **4**.

Installing license-plate carrier

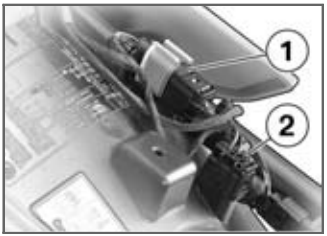
- Make sure ground is level and firm and park motorcycle.



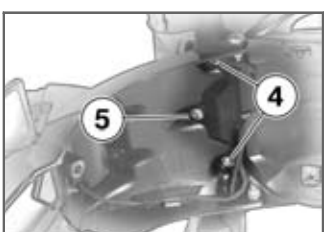
- Remove screws **4**.
- Thread in connected cables and position license-plate carrier.



- Install screws **3** on left and right.
- Disconnect license-plate connector and protection connector.



- Take end of wiring harness from connector **1** out of holder.
- Connect connector **1** and insert in holder.
- Insert protection connector **2** in holder.



- Install screws **4** and screw **5**.

Care

Care products 96
Washing your motorcycle 96
Cleaning sensitive motorcycle parts 96
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Protective wax coating 98
Storing motorcycle 98
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Care products

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

The use of unsuitable cleaning and care products 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 on painted parts prior to washing the motorcycle.
To prevent stains, do not wash the motorcycle immediately after it has been exposed to bright sunlight and do not wash it in the sun.
Make sure that the motorcycle is washed frequently, especially during the winter months.
To remove road salt, clean the motorcycle with cold water immediately after every trip.

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

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

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

Cleaning sensitive motorcycle parts

Plastics

Clean plastic parts with water and BMW plastic care emulsion.
This includes in particular:
– Windshields
– Headlight lens made of plastic
– Covering glass of the instrument cluster
– Black, unpainted parts

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.
'Fly sponges' or sponges with hard surfaces can also lead to scratches.◀

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

Chrome

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

Radiator

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

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

Rubber

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

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

Paint care

Washing the motorcycle regularly will help counteract the long-term effects of substances that damage the paint, especially if your motorcycle is ridden in areas with high air pollution or natural sources of dirt, e.g. tree resin or pollen.
However, remove particularly aggressive materials immediately; otherwise changes in the paint or discoloration can occur. These include spilled fuel, oil, grease, brake fluid as well as bird droppings. BMW Car Polish or BMW Paint Cleaner are recommended for this.
Contamination of the paint finish is particularly easy to see after the motorcycle has been washed. Remove this type of soiling with cleaning naphtha or spirit on a clean cloth or cotton ball. BMW Motorrad recommends removing tar spots with BMW tar re-

mover. Then add a protective wax coating to the paint at these locations.

Protective wax coating

BMW Motorrad recommends applying only BMW car wax or products containing carnauba wax or synthetic wax.
A sure sign that the paint must be protected, is the fact that water no longer pearls up on it.

Storing motorcycle

- Clean the motorcycle.
- Remove the battery.
- Spray the brake and clutch lever pivots and the side stand pivots with a suitable lubricant.
- Coat bare metal and chrome-plated parts with an acid-free grease (e.g. Vaseline).
- Park motorcycle in a dry room so that both wheels are unloaded. Appropriate auxiliary stands are available at your authorized BMW Motorrad retailer.

▷ Before putting the motorcycle into storage, have the engine oil and the oil filter element changed by a specialist workshop, preferably an authorized BMW Motorrad retailer. Combine work for storing/returning to use with maintenance service or an inspection.◀

Returning motorcycle to use

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

Technical data

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Troubleshooting chart

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

Possible cause	Remedy
Emergency ON/OFF switch activated	Emergency ON/OFF switch in operating position
Side stand extended and gear engaged	Retract the side stand. (➡ 52)
Gear engaged and clutch not operated	Select neutral or pull clutch lever (➡ 52)
Clutch pulled when ignition was OFF	Switch on the ignition, then pull the clutch lever
No fuel in tank	Refueling (➡ 56)
Battery not adequately charged	Charging connected battery (➡ 90)

Threaded fasteners

Handlebars	Value	Valid
Handlebar clamping block on fork bridge		
M10 x 100	28 lb/ft (38 Nm)	
Handlebars on handlebar clamping block		
M8 x 30	14 lb/ft (19 Nm)	

Mirrors	Value	Valid
Mirror on clamping piece		
M10	18 lb/ft (25 Nm)	
Clamping piece on clamping block		
M10	22 lb/ft (30 Nm)	

Front wheel	Value	Valid
Pinch bolt of axle holder		
M6 x 30	**2x each side, alternately**	
	6 lb/ft (8 Nm)	

Front wheel	Value	Valid
Axle screw of front wheel in axle holder		
Lubricate thread, M22 x 1.5 Optimoly TA	30 lb/ft (40 Nm)	
Brake caliper on slider tube		
M8 x 32 - 10.9	22 lb/ft (30 Nm)	

Rear wheel	Value	Valid
Rear wheel on wheel carrier		
M10 x 53 x 1.25	**Tighten diagonally**	
	44 lb/ft (60 Nm)	

Engine

Engine design	four-stroke opposed twin, air-cooled with oil-cooled exhaust ports, installed longitudinally, two overhead camshafts, electronic engine management
Displacement	1170 cc (1170 cm^3)
Cylinder bore	4 in (101 mm)
Piston stroke	2.9 in (73 mm)
Compression ratio	12:1
Rated output	113 hp (83 kW), At: 7500 min^{-1}
With OE Power reduction:	107 hp (79 kW), At: 7500 min^{-1}
Torque	85 lb/ft (115 Nm), At: 6000 min^{-1}
Maximum engine speed	Max 8000 min^{-1}
Idle speed	$1150^{\pm 50}$ min^{-1}
Fuel	
Recommended fuel quality	98 ROZ/RON, Super plus 95 ROZ/RON, Super unleaded (fuel type can be used with reduced performance and consumption)
Usable fuel capacity	3.4 gal (13 l)
Fuel reserve	≥1.1 gal (≥4 l)

Engine oil	
Engine oil, capacity	Max 1.1 gal (Max 4 l), with filter change
Lubricant	Engine oil 20W-50
Engine oil, quantity for topping up	Max 0.5 quarts (Max 0.5 l), Difference between MIN and MAX
Oil consumption	<2 quart/1000 miles (<1 l/1000 km)
Oil grades	Engine oils of the API classification SF or better. Engine oils of the ACEA classification A2 or better. BMW Motorrad recommends not using synthetic oils for the first 6,000 miles (10,000 km). Ask your BMW Motorrad retailer for engine oils suitable for your motorcycle.

Permissible viscosity classes	
SAE 5 W- ≥30	-4...68 °F (-20...20 °C), Operation at low temperatures
SAE 10 W-40	14...86 °F (-10...30 °C), Operation at moderate temperatures
SAE 15 W- ≥40	≥32 °F (≥0 °C)
SAE 20 W- ≥40	≥32 °F (≥0 °C)
SAE 5 W- ≥50	≥-4 °F (≥-20 °C), High-quality and synthetic oil for operation at all temperatures
SAE 10 W- ≥50	≥-4 °F (≥-20 °C), High-quality and synthetic oil for operation at all temperatures

Riding specifications

Top speed	>124 mph (>200 km/h)

Clutch

Clutch design	Single-plate dry clutch

Transmission

Transmission design	Helical 6-speed transmission with integrated torsional vibration damper, claw shifting via sliding sleeves
Gear ratios	
Transmission gear ratios	1.824 (31:17 teeth), Primary gear ratio 2.277 (41:18 teeth), 1st gear 1.583 (38:24 teeth), 2nd gear 1.259 (34:27 teeth), 3rd gear 1.033 (31:30 teeth), 4th gear 0.903 (28:31 teeth), 5th gear 0.805 (29:36 teeth), 6th gear

Rear-wheel drive

Type of final drive	Shaft drive with bevel gears
Gear ratio of final drive	2.82:1

Running gear

Type of front suspension	Upside-down telescopic forks
Spring travel, front	6.3 in (160 mm), On wheel
Type of rear suspension	Directly linked central spring strut with coil pressure spring and single-tube gas-filled shock absorber
Basic setting of spring preload, rear	187 lbs (85 kg), Full tank of gas, with rider 6.9 in (175 mm), Spring length (rear wheel not loaded)
Spring travel, rear	6.3 in (160 mm), On wheel

Brakes

Type of front brake	Hydraulically operated twin disk brake with 4-piston fixed calipers and floating brake disks
Brake-pad material, front	Sintered metal
Type of rear brake	Hydraulic disk brake with 2-piston floating caliper and fixed brake disk
Brake-pad material, rear	Sintered metal

Wheels and tires

Front wheel design	Cast aluminum wheel with 5 double spokes, MT H2
Front-wheel rim size	3.50" x 17"
Front tire designation	120/70 X 17
Rear wheel design	Cast aluminum wheel with 5 double spokes, MT H2
Rear-wheel rim size	5.50" x 17"
Rear tire designation	180/55 - ZR17

Tire combinations recommended at time of going to press (As at: 24.05.2007)	front: Bridgestone BT 014 F, 120/70 ZR17 M/C (58W) rear: Bridgestone BT 014 R E, 180/55 ZR17 M/C (73W)
	front: Bridgestone BT002F Street, 120/70 ZR17 M/C (58W) rear: Bridgestone BT002F Street, 180/55 ZR17 M/C (73W)
	front: Continental Sport Attack, 120/70 ZR17 M/C (58W) rear: Continental Sport Attack, 180/55 ZR17 M/C (73W)
	front: Dunlop Sportmax D209F, 120/70 ZR17 M/C (58W) rear: Dunlop Sportmax D209F, 180/55 ZR17 M/C (73W)
	front: Dunlop Sportmax D209F Qualifier, 120/70 ZR17 M/C (58W) rear: Dunlop Sportmax D209F Qualifier, 180/55 ZR17 M/C (73W)
	front: Metzeler Sporttec M3, 120/70 ZR17 M/C (58W) rear: Metzeler Sporttec M3, 180/55 ZR17 M/C (73W)

	front: Michelin Pilot Power B, 120/70 ZR17 M/C (58W) rear: Michelin Pilot Power, 180/55 ZR17 M/C (73W)
	front: Pirelli Diabolo Supercorsa SC4, 120/70 ZR17 M/C (58W) rear: Pirelli Diabolo Supercorsa SC3, 180/55 ZR17 M/C (73W)
Tire pressures	
Tire pressure, front	31.9 psi (2.2 bar), Single rider, with cold tire
With OA Passenger footrest:	31.9 psi (2.2 bar), Driver with passenger and/or load, with cold tire
Tire pressure, rear	36.3 psi (2.5 bar), Single rider, with cold tire
With OA Passenger footrest:	36.3 psi (2.5 bar), Driver with passenger and/or load, with cold tire
Tire pressure for sport riding (One-up, tire cold and depending on ambient temperature)	30.5 psi (2.1 bar), front
	30.5 psi (2.1 bar), rear

Electrical system

Electrical rating of onboard socket	5 A
Fuses	The circuits are electronically protected, so plug-in fuses are no longer necessary. If an electronic fuse trips and de-energizes a circuit, the circuit is active as soon as the ignition is switched on after the fault has been rectified.
Battery	
Battery manufacturer and designation	YTZ 12 S
Battery design	AGM (Absorptive Glass Matt) battery
Battery voltage	12 V
Battery capacity	11 Ah
Spark plugs	
Spark plugs, manufacturer and designation	Bosch YR5LDE
	NGK DCPR 8 EKC
Electrode gap of spark plug	$0.03^{\pm 0.01}$ in ($0.8^{\pm 0.1}$ mm), New Max 0.04 in (Max 1 mm), Wear limit

Bulbs	
Bulb for low-beam and high-beam headlight	H4 / 12 V / 55 W / 60 W
Bulb for parking light	W5W / 12 V / 5 W
Bulb for taillight/brake light	P21/5W / 12 V / 5 W / 21 W
Bulbs for flashing turn indicators, front	RY10W / 12 V / 10 W
Bulbs for flashing turn indicators, rear	RY10W / 12 V / 10 W
Bulb for license-plate light	W5W / 12 V / 5 W

Frame

Frame design	Steel lattice-tube composite frame, non-carrying drive unit
Location of type plate	On left steering head
Location of vehicle identification number	On right steering head

Dimensions

Motorcycle length	92.5 in (2350 mm)
Motorcycle height	55.9 in (1420 mm), in DIN normal-load position; with mirrors
Motorcycle width	36.3 in (922 mm), Across mirrors
Driver's seat height	35 in (890 mm)
Rider's inside-leg arc, heel to heel	76.4 in (1940 mm)

Weights

Unladen weight	439 lbs (199 kg), DIN unladen weight, ready for road, 90 % load of fuel
Permissible gross weight	838 lbs (380 kg)
Maximum payload	399 lbs (181 kg)

Service

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Confirmation of service 124

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 dealer, or BMW of North America, LCC.

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

Advanced technology requires specially adapted methods of maintenance and repair.

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.◀

You can obtain information on the contents of the BMW Services from your BMW Motorrad retailer.
Have all maintenance and repair work carried out confirmed in the "Service" chapter in this manual.
Your authorized BMW Motorrad retailer is supplied with all the latest technical information and therefore possesses the necessary technical know-how. BMW Motorrad recommends that you refer any questions about your motorcycle to your authorized BMW Motorrad retailer.

BMW Motorrad Service Quality

BMW Motorrad means not only quality workmanship and high reliability, but also an outstanding quality of service.
To ensure that your BMW is always in optimum condition, BMW Motorrad recommends that you adhere to the regular maintenance schedule for your motorcycle, preferably having the work done by your authorized BMW Motorrad retailer. For generous treatment of claims submitted after the warranty period has expired, evidence of regular maintenance is essential.
Certain signs of wear, moreover, may otherwise not be noticed until it is too late to correct them at moderate cost. The workshop personnel at BMW Motorrad retailers have thorough knowledge of your motorcycle and can take action before minor problems can turn into major trouble. By having the necessary repairs done properly and in good time, you save time and money in the long run.

BMW Motorrad Service Card - On-the-spot breakdown assistance

With all new BMW motorcycles, the BMW Motorrad Service Card protects you in the event of a breakdown with an extensive range of services such as breakdown assistance, motorcycle transportation etc. (differing regulations are possible in individual countries). In the case of a breakdown, you contact the Mobile Service of BMW Motorrad. Here you will find our specialists

ready to help with both advice and action.
Important country-specific contact addresses and the relevant after-sales service organization phone numbers as well as information on Mobile Service and the retail network can be found in the "Service Kontakt/Service Contact" brochures.

BMW Motorrad Service Network

With its worldwide service network, BMW Motorrad can attend to you and your motorcycle in over 100 countries around the globe. In Germany alone, there are approximately 200 authorized BMW Motorrad retailers ready to assist you.
All information concerning the international dealership network can be found in the brochure "Service Contact Europe" or "Service Contact Africa, America, Asia, Australia, Oceania".

Maintenance work

BMW Pre-Delivery Check

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

BMW Running-in Check

The BMW running-in check has to be performed when the motorcycle has covered between 300 miles (500 km) and 750 miles (1,200 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 drivers who drive long distances annually, it may be necessary to come in for service before the entered date. In this case a corresponding maximum odometer reading will also be entered in the confirmation of service. If this odometer reading is reached before the next service date, service must be performed sooner.

Confirmation of maintenance work

BMW Pre-Delivery Check

Conducted

on_____

_____

Stamp, Signature

BMW Running-in Check

Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

on_____

Odometer reading_____

Next service
at the latest

on_____
or, if reached sooner,

Odometer reading_____

Stamp, Signature

BMW Service
Conducted

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Odometer reading_____

Next service
at the latest

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Odometer reading_____

Stamp, Signature

BMW Service
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Next service
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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

BMW Service
Conducted

on

Odometer reading

Next service
at the latest

on
or, if reached sooner,

Odometer reading

Stamp, Signature

BMW Service
Conducted

on

Odometer reading

Next service
at the latest

on
or, if reached sooner,

Odometer reading

Stamp, Signature

Confirmation of service

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

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Work carried out	Odometer reading	Date

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

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Fuel	
Recommended fuel quality	98 ROZ/RON, Super plus 95 ROZ/RON, Super unleaded (fuel type can be used with reduced performance and consumption)
Usable fuel capacity	3.4 gal (13 l)
Fuel reserve	≥1.1 gal (≥4 l)
Tire pressures	
Tire pressure, front	31.9 psi (2.2 bar), Single rider, with cold tire
With OA Passenger footrest:	31.9 psi (2.2 bar), Driver with passenger and/or load, with cold tire
Tire pressure, rear	36.3 psi (2.5 bar), Single rider, with cold tire
With OA Passenger footrest:	36.3 psi (2.5 bar), Driver with passenger and/or load, with cold tire

BMW recommends Castrol

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