Rider's Manual

R 1200 GS

BMW Motorrad

Welcome to BMW

We congratulate you on your choice of a motorcycle from BMW and welcome you to the community of BMW riders.
Familiarise yourself with your new motorcycle, so that you can ride it safely and confidently in all traffic situations.
To make sure of this, please read this Rider's Manual carefully before starting to use your new 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 upkeep to help you maintain your motorcycle's reliability and safety, as well as its value. It also offers useful hints and information on the correct equipment for machine and rider, again geared toward maximising reliability and safety.
If you have any questions concerning your motorcycle, your authorised BMW motorcycle dealer will gladly provide advice and assistance.
We hope you enjoy reading this Rider's Manual and wish you many a pleasant, safe journey on your BMW motorcycle.

Best wishes,

BMW Motorrad

About this Rider's Manual

We have tried to make all the information in this Rider's Manual easy to find.
The quickest access to a particular topic or item is by consulting the detailed alphabetical index at the end. The first chapter of this Rider's Manual will provide you with an initial overview of your motorcycle.
When the time comes to sell your BMW, please remember to hand over this Rider's Manual; it is, by law, an important part of the vehicle.

Symbols and abbreviations

Warning:
This symbol indicates precautions and measures which are essential in protecting the rider and other persons from severe or fatal injury.

Attention:
Instructions and precautions specifically intended to prevent damage to the motorcycle. Disregarding them may render the warranty invalid.

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

Tightening torque:
This symbol introduces values for the various tightening torques

- This symbol introduces a passage containing instructions on how to perform a particular operation

– This symbol draws your attention to the outcome of the instructions on how to perform a particular operation

( ) Figure in brackets ➠ page number with explanations

OE Optional extra
Your motorcycle was assembled complete with all the optional extras you ordered

OA Optional accessory
You can obtain optional accessories through your authorised BMW motorcycle dealer or trade outlet; optional accessories have to be retrofitted to the motorcycle

EWS Electronic immobiliser

DWA Anti-theft alarm

Custom equipment

When you ordered your BMW motorcycle, you chose various items of custom equipment.
This Rider's Manual describes all the optional extras (OE) and selected optional accessories (OA) that BMW offers for this model series.
This explains why the manual may also contain descriptions of equipment which you have not ordered.

If your BMW was supplied with equipment not described in this Rider's Manual (such as a radio or anti-theft alarm, for example), you will find these features described in separate manuals.

Technical specifications

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

Currency

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

For your own safety

Warning:
Use only parts and accessories approved by BMW for your motorcycle.

Parts and products approved for your motorcycle by BMW have been checked 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 cannot assess every product of outside origin in order to decide whether it can be used on or with a BMW vehicle without constituting a safety hazard.
Even approval by an official inspection authority such as the TÜV in Germany, or an official permit (General Operating Permit) cannot always provide this guarantee.

Genuine BMW parts and accessories and other products which BMW has approved can be obtained from your authorised BMW motorcycle dealer, together with expert advice on their installation and use.

The right clothing
To reach your destination safely every time, there's only one choice:

- Helmet
- Suit
- Gloves
- Boots

It's foolhardy to ride without the right clothing. This applies even to short journeys, and to every season of the year.
Your authorised BMW motorcycle dealer will be happy to provide advice and tell you about the latest developments, and help you select the right clothing for your purpose.

Service

For safety reasons and to maintain the value of your motorcycle, regular maintenance intervals have been laid down. Always keep to the specified maintenance intervals. This is the only way to ensure that warranty claims are not invalidated. Your authorised BMW motorcycle dealer can provide information on the currently specified Service, Inspection and Annual Inspection needed, or you can fetch the information from the Internet whenever you want by visiting “www.bmw-motorrad.com/maintenance”.

Important:
BMW refuses to accept liability for damage or consequential damage due to repairs or service work carried out by other than BMW-authorised workshops.

Consequently, we advise you to have service and maintenance work carried out by your authorised BMW motorcycle dealer's specially trained, expert personnel, and confirmed by an entry in the “Service” section of this Rider's Manual.
Authorised BMW motorcycle dealers are supplied with the latest technical information and have the necessary technical know-how and specially trained staff.
Please do not hesitate to contact your authorised BMW motorcycle dealer on all matters concerning your motorcycle.
Authorised BMW motorcycle dealers are fully informed about all aspects of your motorcycle and will gladly advise and assist you.

Best wishes,

BMW Motorrad

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Contents

General view, left side

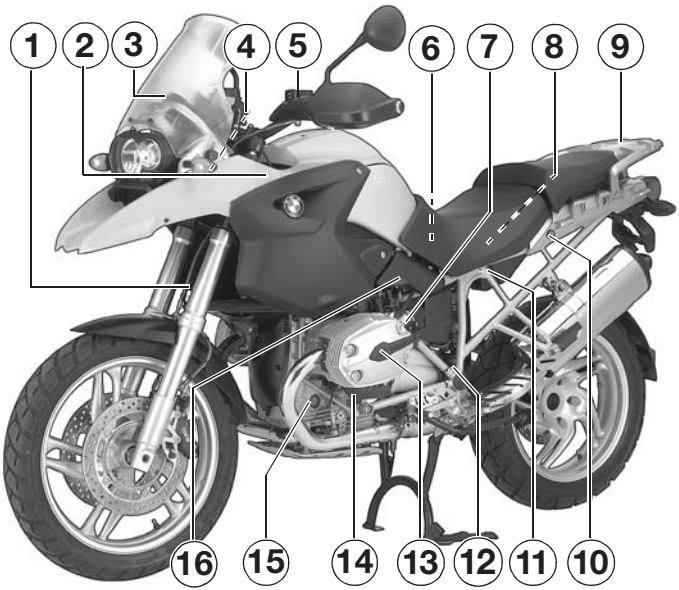
General view, right side

Left handlebar fitting

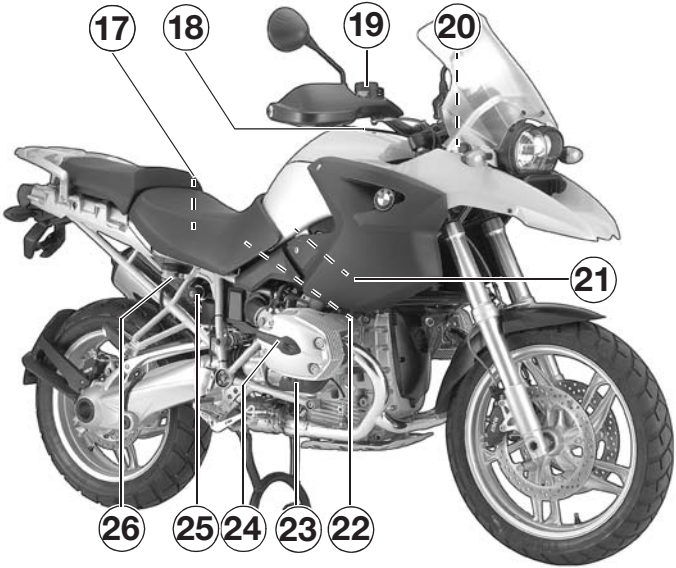
Right handlebar fitting

Cockpit

General view, left side

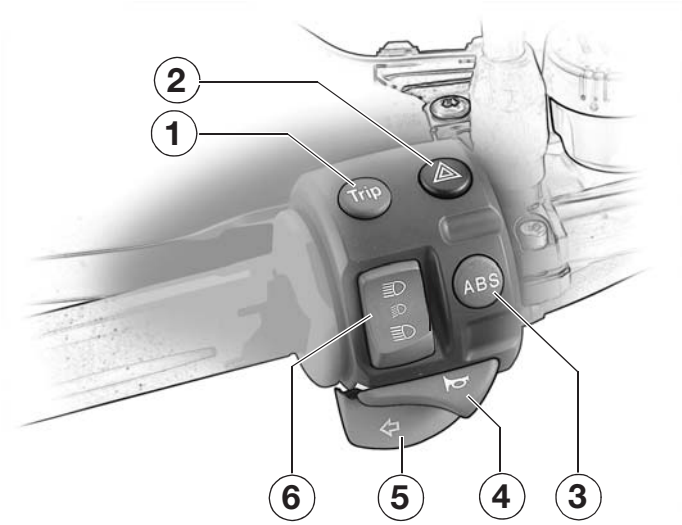


1 Spring-strut adjuster, front (➠ 50)
2 Power socket 12 V[OA] (➠ 93)
3 Windscreen (➠ 39)
4 Headlight adjuster (➠ 45)
5 Reservoir for clutch hydraulic fluid (➠ 117)
6 Helmet holder
7 Engine oil filler neck (➠ 111-112)
8 Seat adjuster (➠ 47)
9 Luggage rack (➠ 101)
10 Seat lock (➠ 46-48)
11 On-board socket, 12 V, for connecting electrical accessories (➠ 93)
12 Rear suspension strut, shock-absorber adjuster (➠ 51-52)
13 Primary spark plug
14 Secondary spark plug
15 Engine oil level sight glass (➠ 112)
16 Type plate



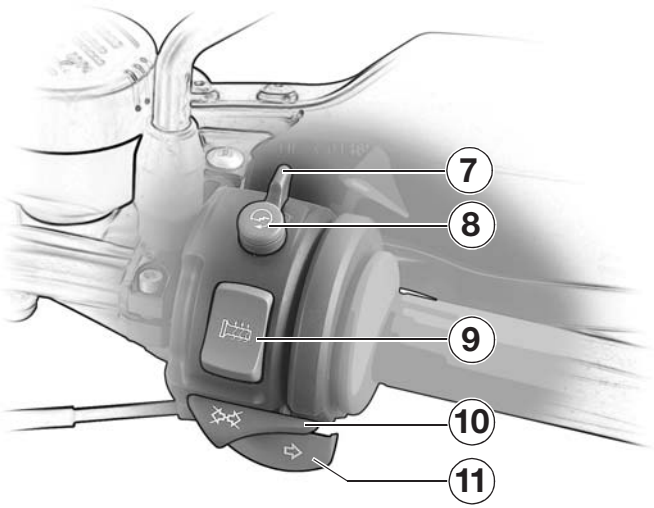
17 Compartment for toolkit
18 Fuel filler cap (➠ 78-79)
19 Brake-fluid reservoir for front brake (➠ 115)
20 Vehicle identification number
21 Air filter (➠ 140-142)
22 Helmet holder
23 Secondary spark plug
24 Primary spark plug
25 Spring-strut adjuster, rear (➠ 51)
26 Brake-fluid reservoir for rear brake (➠ 116)

Left handlebar fitting



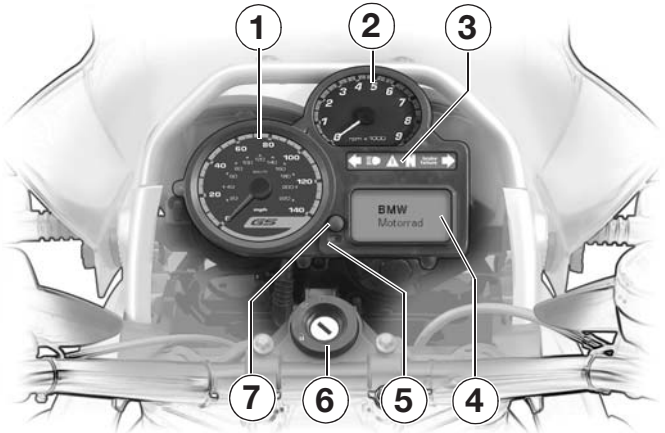
Warning:
To prevent air from entering the hydraulic circuit:
- **Do not turn the fitting on the handlebar.**
- **Do not turn the handlebars in the clamping blocks.**

1 Button for Tripmaster (➠ 34)
2 Hazard warning flasher switch (➠ 32)
3 ABS button[OE] (➠ 88)
4 Horn switch
5 Left flashing turn indicator switch
6 High-beam/low-beam switch (➠ 42-45)



Warning:
To prevent air from entering the brake circuit:
- **Do not turn the fitting on the handlebar.**
- **Do not turn the handlebars in the clamping blocks.**

7 Emergency off (kill) switch for ignition (➠ 65)
8 Starter button (➠ 67)
9 Switch for heated handlebar grips[OE] (➠ 37)
10 Turn indicator cancel switch
11 Right flashing turn indicator switch



Note:
The cockpit lights have automatic brightness control for daytime/night-time riding. The sensor that controls the brightness of the cockpit lights is beside the telltale light for the anti-theft alarm[OE].

1 Speedometer
2 Rev. counter (➠ 68)
3 Telltale and warning lights (➠ 18)
4 Multifunction display (➠ 19)
5 Telltale light for anti-theft alarm[OE] / bright/dark sensor for lights
6 Ignition switch and steering lock (➠ 28)
7 Button for setting clock (➠ 38)

Telltale and warning lights

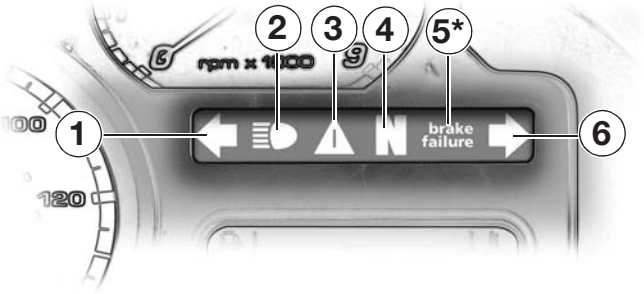
Multifunction display

Function indicators

Warning indicators

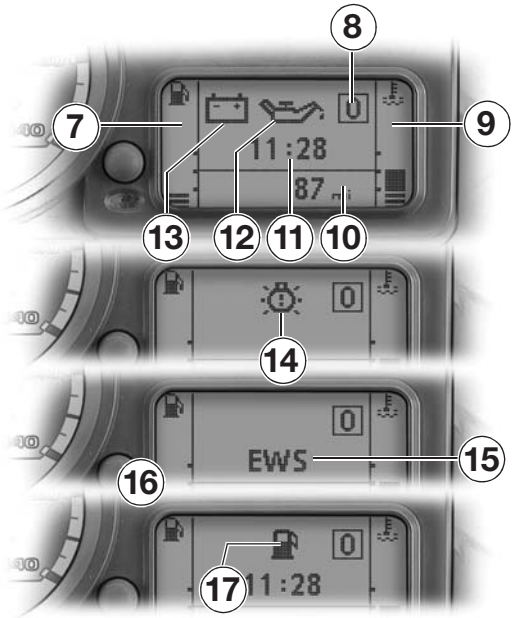
ABS^{OE} warning lights

Telltale and warning lights



1 Telltale light, left turn indicator
2 Telltale light, high-beam headlight
3 Warning light, general ⚠ (➠ 86)
4 Telltale light, neutral N (➠ 66)
5 Warning light, ABS ABS OE (➠ 86)
6 Telltale light, right turn indicator

* depending on national-market specification



7 Fuel level
(➠ 20, 79)
8 Gear indicator (➠ 66)
9 Oil temperature (➠ 20)
10 Display panel for Tripmaster (➠ 34, 35)
11 Display panel with clock (➠ 38)

Possible warnings
12 Oil pressure (➠ 21)
13 Battery charge light (➠ 22)
14 Bulb failure
15 Electronic immobiliser active (➠ 30)
16 Fault in electronic engine management system (➠ 21)
17 Fuel reserve indicator (➠ 20, 79)

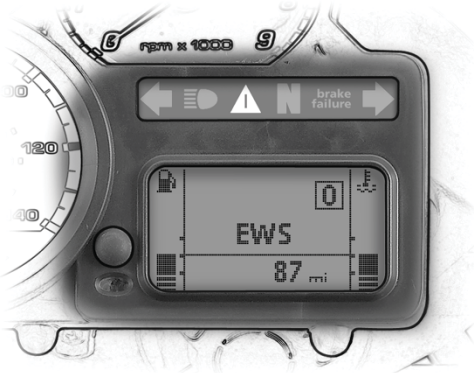
Function indicators

Telltale light	Multifunction display	Meaning
	11 : 28	**Clock** Shows the time in 12-hour mode
N		**Gear indicator** Telltale light N lights up when the gearbox is in neutral. The display shows a number corresponding to the gear you have engaged
⚠ yellow flashing		**Fuel level** When the fuel drops to the reserve level the ⛽ symbol appears in the display and flashes, and General warning light ⚠ flashes. The Tripmaster calculates the residual operating range and shows this estimated figure on the display.
⚠ red ON		**Engine temperature** The bar indicator flashes if the engine overheats and general warning light ⚠ lights up.

Warning light	Multifunction display	Meaning/measure
⚠ yellow ON		**Engine electronics** There is a fault in the electronic engine management system. Maintain a defensive riding style and proceed immediately to a specialist workshop, preferably an authorised BMW motorcycle dealer.
⚠ red ON		**Oil pressure** Insufficient engine oil pressure (➠ 111, 112) Taking the traffic situation into account: Disengage the clutch Operate the kill switch Bring the motorcycle safely to a halt Check the engine oil level ⚠ **Attention:** If the warning indicator lights up but the oil level is correct, always consult a specialist workshop without delay, preferably an authorised BMW motorcycle dealer.

Warning indicators

Warning light	Multifunction display	Meaning/measure
⚠ red ON		**Battery charge current** The battery is no longer charging, generator fault. Immediately consult a specialist workshop, preferably an authorised BMW motorcycle dealer.
⚠ yellow ON		**Bulb failure** Rear light or brake light defective replace bulbs (➠ 133)
		Bulb failure Front parking light, low-beam headlight, or high-beam headlight defective Repeater flashing at twice normal frequency, flashing turn indicator defective: replace bulbs (➠ 134-139)
⚠ yellow ON		Combination of the defects described above: replace bulbs (➠ 134-139)



Warning light	Multifunction display	Meaning/measure
⚠ yellow ON	**EWS**	**Electronic immobiliser** Key not recognised (➠ 30, 31). Communication with engine electronics disrupted

Note:
Various warnings may be issued simultaneously. Some warnings combine ⚠ yellow and ⚠ red, in which case the two are displayed alternately.

ABS^{OE} warning lights

Warning light, general ⚠	Warning light, ABS (ABS)	Malfunctions
OFF	ON	ABS function deactivated by the rider, integral braking system available (➠ 88)
OFF	Flashes at 1 Hz	ABS not available, because pull-away test not completed (➠ 86)
OFF	Flashes at 4 Hz	Only RESIDUAL BRAKING FUNCTION available in both circuits, (➠ 85) because self-diagnosis not completed (➠ 86)
Red ON	OFF	Brake-light switch defective or not correctly adjusted
Red ON	Flashes at 1 Hz	ABS function unavailable in at least one braking circuit
Red ON	Flashes at 4 Hz	Only RESIDUAL BRAKING FUNCTION available in at least one circuit (➠ 85)

Warning light, general ⚠	Warning light, ABS (ABS)	Malfunctions
Red, alternate flashing at 1 Hz	Alternate flashing at 1 Hz	Fluid level in BMW Integral ABS too low. If the functions listed below are active, maintain a defensive riding style and proceed immediately to the nearest specialist workshop, preferably an authorised BMW motorcycle dealer. – Ignition OFF, brake pressure OK at the brake levers – Brakes acting on both wheels – Brake system leaktight, no signs of brake fluid escaping Otherwise the brake system is defective: do not attempt to ride the motorcycle.
Red, alternate flashing at 4 Hz	Alternate flashing at 4 Hz	Fluid level in the BMW Integral ABS is too low, perform the checks listed above. Only RESIDUAL BRAKING FUNCTION available in at least one circuit (➠ 85)

Warning:
Do not ride the motorcycle if you have any doubts about the safety of the brake system.

Ignition switch and steering lock

Electronic immobiliser (EWS)

Hazard warning flashers

On-board computer

Kill switch

Heated handlebar grips[OE]

Setting the clock

Adjusting the windscreen

Handlebar levers

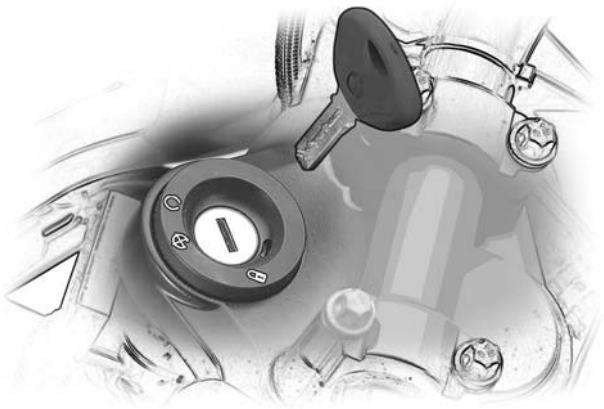
Lights

Seat

Mirrors

Spring preload

Ignition switch and steering lock

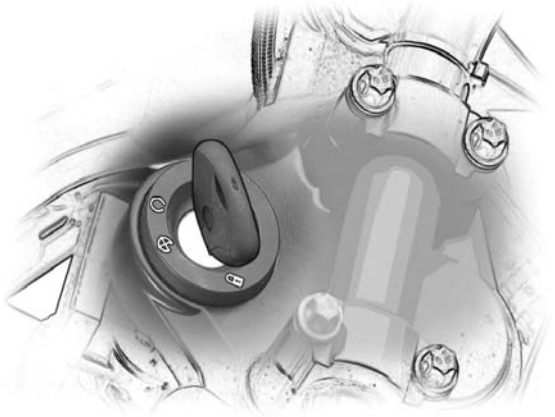


Warning:
If the motorcycle is fitted with BMW Integral ABS[OE], only the RESIDUAL BRAKING FUNCTION is available when the ignition is switched off (➠ 85)

Note:
Ignition switch and steering lock, tank filler cap lock and seat lock are all operated with the same key. On request, system cases[OA] can be arranged to lock with the same key.

Keys

You will receive two master keys and one spare key.



Key positions

Warning:
Never turn the key to position 🔒 while riding the motorcycle.

○ Operating position; ignition, parking light and all circuits switched on, predrive check is performed (➠ 64)

⊗ * Ignition and lights off, steering not locked (handlebars can be turned freely to left or right)

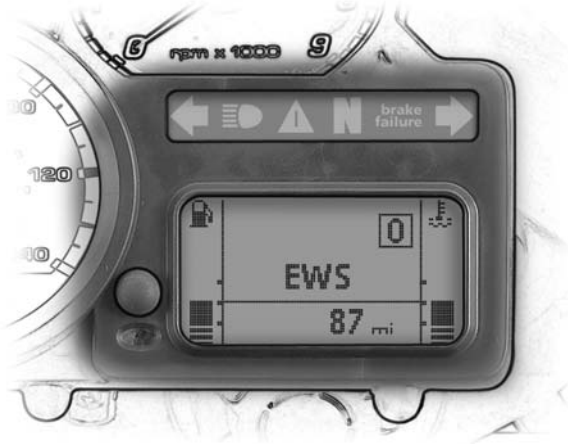
🔒 * Ignition and lights off, steering locked.

* The key can be removed in these positions

Attention:
Turn the handlebars all the way to the left before engaging the steering lock.

Note:
Switch the parking light on only for limited periods. Note state of battery charge.

Electronic immobiliser (EWS)



In-key security

The electronic immobiliser 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 immobiliser can be started only with the keys that belong to the vehicle. You can also have your authorised BMW motorcycle dealer bar individual keys, for example if a particular key goes missing. The engine cannot be started with a key that has been barred.

Function

An electronic component is integrated into each of your keys.

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 by the ignition lock. Ignition, fuel supply and starter are not enabled for starting until the key has been recognised as "authorised" for your motorcycle.

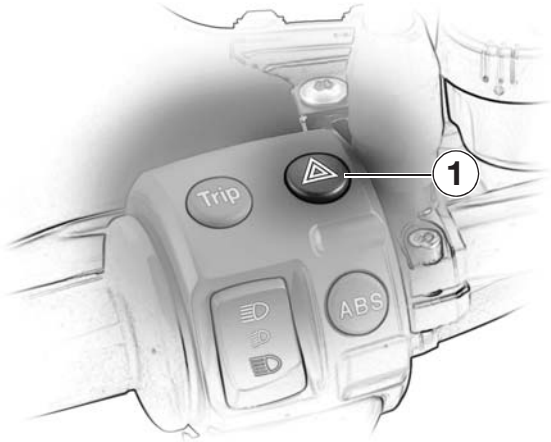
Note:
A spare key attached to the same ring as the ignition key used to start the engine could “irritate” the electronics, in which case the enabling signal for ignition, fuel supply and starter is not issued. Under these circumstances the motorcycle will refuse to start. Consequently, always keep the spare key or keys separate from the ignition key.
Similarly, physical force could damage the ignition key's integral electronics. If this happens, you will not be able to start the engine.

Spare/extra keys

You can obtain spare/extra keys only through an authorised BMW motorcycle dealer. The keys are part of an integrated security system, so the dealer is under an obligation to check the legitimacy of all applications for spare/extra keys.

Note:
If you want to have a key barred, you have to bring along all the keys that belong to the motorcycle.
A key that has been barred can subsequently be cleared and reactivated for use.

Hazard warning flashers



Hazard warning flashers

Note:

You cannot activate the hazard warning flashers if the ignition is switched off.

Do not use the hazard warning flashers for longer than absolutely necessary.

Note state of battery charge.

Switching on the hazard warning flashers

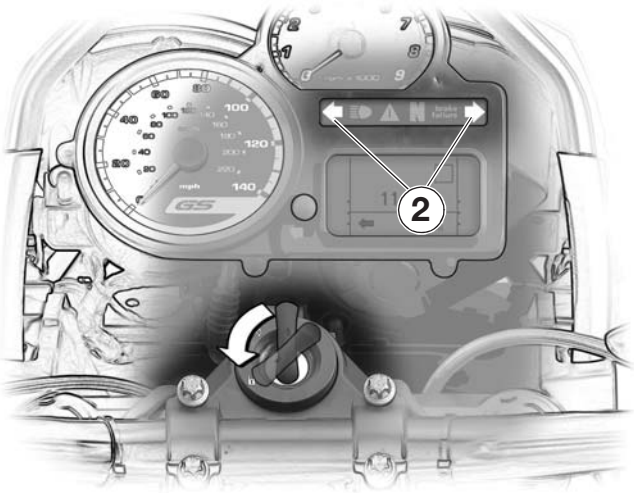
- Switch on the ignition, ignition key in the ○ position

– Hazard warning flasher switch **1** lights up

- Operate hazard warning flasher switch **1**

– Hazard warning flashers in operation

– Left/right flashing turn indicator repeaters **2** in the telltale light panel flash



- Switch off the ignition, and with the ignition key in the position, the hazard warning flashers continue to flash

– Repeaters **2** for the left and right flashing turn indicators in the telltale lights panel go out

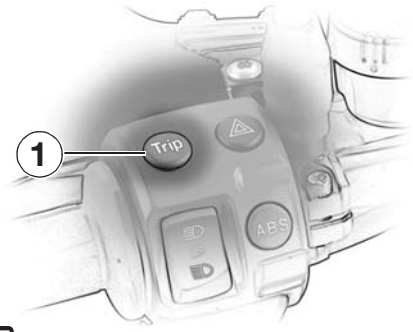
- Turn the handlebars to the position for locking the steering and lock the steering, turn the ignition key to

  – The hazard warning flashers continue to operate

Switching off the hazard warning flashers

- Operate hazard warning flashers switch **1** or switch on the ignition

  – Hazard warning flashers cease to operate



Note:

You can activate the Tripmaster only when the ignition is switched on, in other words when the ignition key is in the ○ position.

When you switch on the ignition, the information shown by the Tripmaster when the ignition was switched off always reappears on the multifunction display.

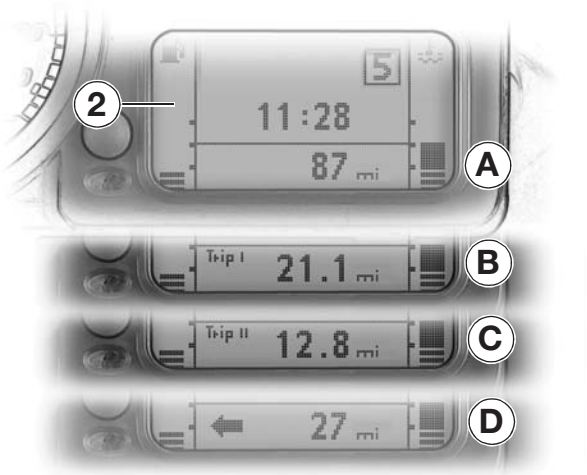
- Each time you briefly press button **1** on the left handlebar fitting, you step from one function to the next in the following sequence:
  - **A** Total distance covered
  - **B** Tripmeter 1
  - **C** Tripmeter 2
  - **D** Residual range

Residual range

This reading appears only when the fuel level drops to reserve. Residual range is estimated on the basis of style of riding and taking the remaining supply of fuel into account.

If the motorcycle is resting on its side stand the level in the tank cannot be measured correctly, so this estimate of residual operating range will be inaccurate. The display shows residual range in km or miles (depending on the national-market version). Also observe the reading of fuel-level gauge **2** (➠ 19, 79).

The Tripmaster registers that you have refuelled when approximately 3 litres (5 pints) have been added.



Resetting the tripmeter

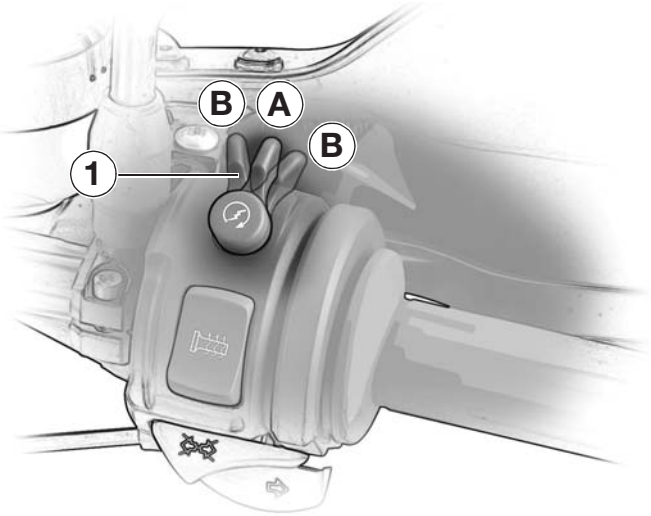
– Only when the motorcycle is at a standstill and the ignition switched on, in other words when the ignition key is in the ○ position

• Repeatedly press button **1** (Trip) for less than 2 seconds until
  – **B** tripmeter 1 **Trip I**
  or
  – **C** tripmeter 2 **Trip II**
  appears in the display

• Press button **1** (Trip) for longer than 2 seconds

– Reading is reset to zero

Kill switch



Operate the kill switch

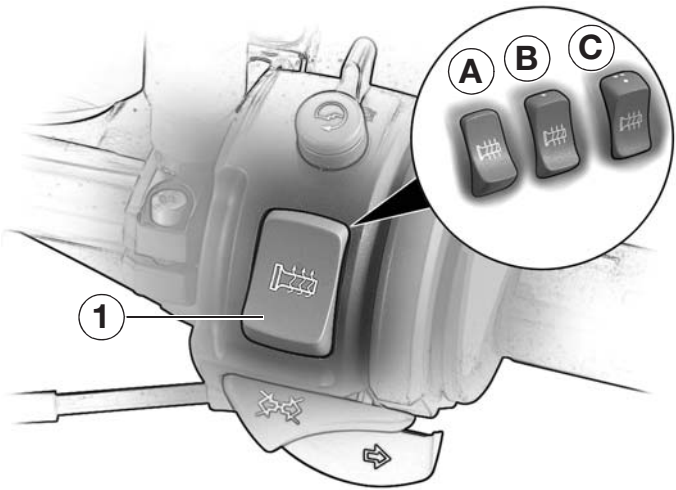
In an emergency only:

- Move switch **1** to the **B** position

– The electrical circuits for the electronic engine management system, instrument panel, fuel pump and starter motor are de-energised

Note:

If you move the kill switch to position **B** while the ignition is on (switch in the ○ position), the BMW Integral ABS[OE] remains operational (➠ 82-89).



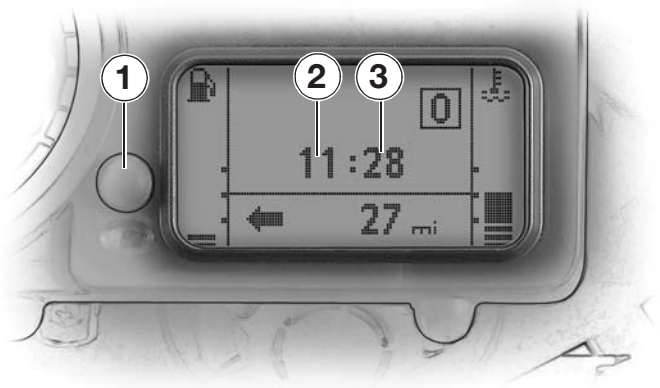
Actuating handlebar-grip heating

Note:

Grip heating can be activated only when the engine is running. The increase in power consumption can drain the battery if you are riding at low engine speeds.

- Operate switch for heated handlebar grips **1**

  A Heating function OFF
  B 50% (centre position)
  C 100%



Setting the clock

Warning:
Do not attempt to set the clock unless the motorcycle is at a standstill
– Risk of accident

- Ignition switch in the ○ position
- Press button **1** for longer than 2 seconds, until the clock enters set mode

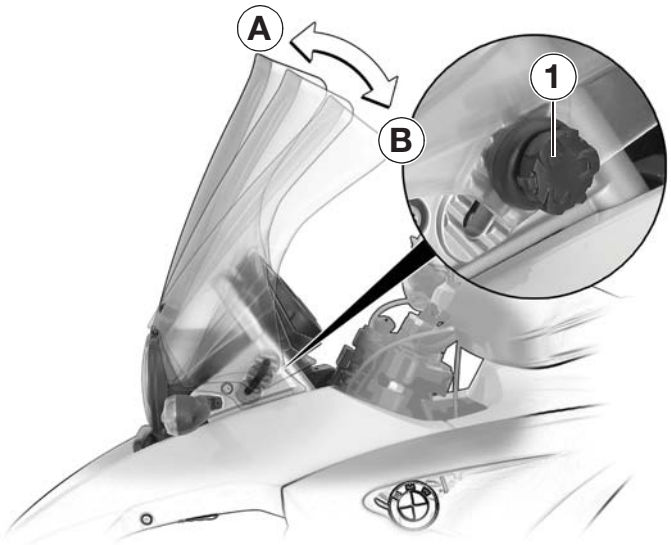
– Hours reading **2** starts flashing: briefly press button **1** to set

- Press button **1** again for longer than 2 seconds

– Minutes reading **3** starts flashing: briefly press button **1** to set

- Press button **1** again for longer than 2 seconds to exit set mode

Set mode is automatically exited if 20 seconds elapse without the button being pressed.



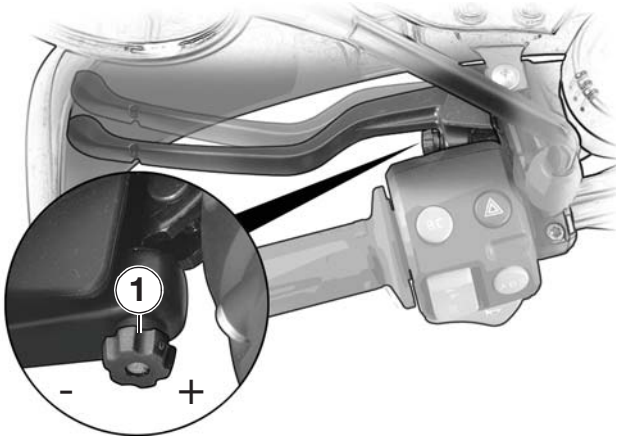
Adjusting the windscreen

Attention:
Always be sure to adjust clamping screws **1** on left and right symmetrically and hand-tighten the screws.

- Slacking clamping screws **1** on left and right until the windscreen can be adjusted

Note:
You can set the windscreen to any of six different positions.

- Move the windscreen in the **A** or **B** direction
- Carefully retighten clamping screws **1** on left and right

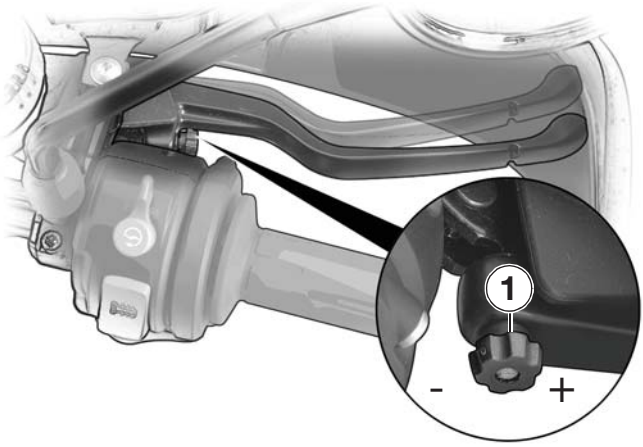


Clutch lever, adjusting

Attention:
Sudden changes in the amount of play at the lever or a spongy feeling when it is applied may indicate a fault in the hydraulic system.
If you are doubtful about the reliability of the hydraulic clutch operating system consult a specialist workshop, preferably an authorised BMW motorcycle dealer.

Warning:
Do not attempt to turn adjusting screw 1 while riding the motorcycle.

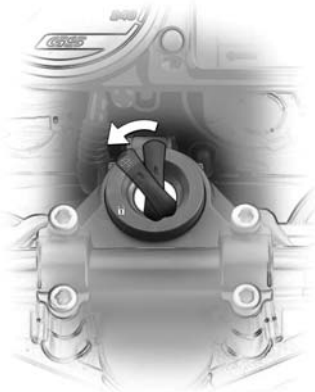
- Turn adjusting screw **1** to set the most comfortable span:
– Turn clockwise: to increase span
– Turn counter-clockwise: to reduce span



Adjusting the handbrake lever

Warning:
Do not attempt to turn adjusting screw 1 while riding the motorcycle.

- Turn adjusting screw **1** to set the most comfortable span:
  - Turn clockwise: to increase span
  - Turn counter-clockwise: to reduce span



Switching on the low-beam headlight

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

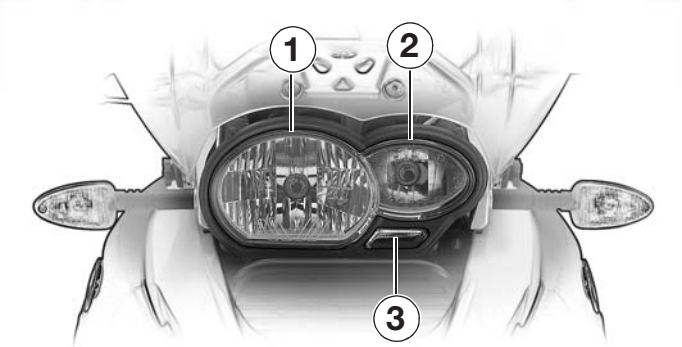
Switching on the parking light

Note:
You can switch on the parking light only immediately after switching off the ignition, when the ignition key is in the position.

- Switch off the ignition
- Press the left turn indicator switch
  – The parking light is on

Switching off the parking light

- Switch the ignition on and off again
  – The parking light is off



Checking lights

Attention:
Always check that all lights are in full working order before riding off.

Note:
If turn indicator repeater flashes at twice the usual speed: Defective flasher bulb. Similarly, general warning light ⚠ and warning indicator in the multifunction display (➠ 19) both light up notify you if a bulb fails.

1 Low-beam headlight
2 High-beam headlight
3 Parking light

For instructions on changing bulbs for parking light, high-beam/low-beam headlights, rear light, brake light and flashing turn indicators, (➠ 133-139).

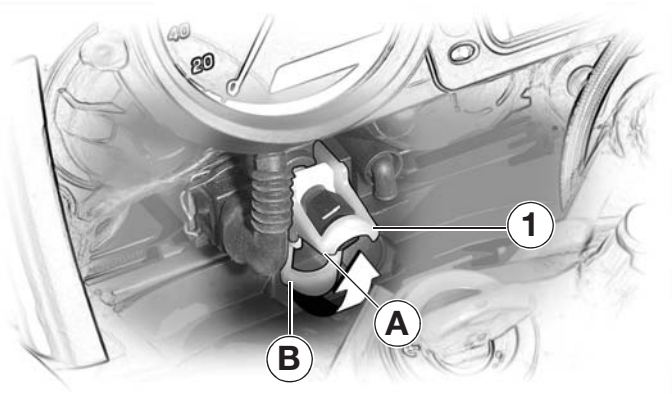
Headlight setting RHD/ LHD traffic

If the motorcycle is ridden in a country where the opposite rule of the road applies, its asymmetric dipped beam will tend to dazzle oncoming traffic.
Consult a specialist workshop, preferably an authorised BMW motorcycle dealer, to have the headlight adjusted to suit whichever rule of the road applies.

Attention:
Adhesive films with unsuitable adhesives can damage the headlight lens.

Headlight beam throw adjustment

Note:
Headlight beam throw is kept constant when spring preload is adjusted to suit load.
For instructions on adjusting spring-strut and shock-absorber settings to suit load, (➠ 50-52).
Consult a specialist workshop, preferably an authorised BMW motorcycle dealer, if you are unsure whether the headlight basic setting is correct.

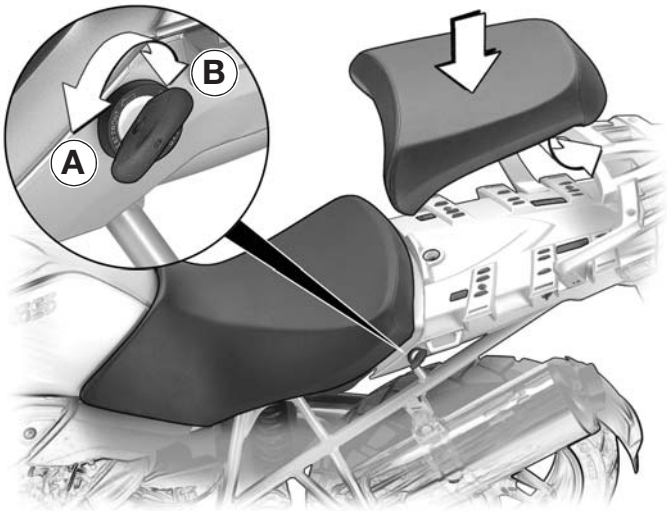


Headlight setting with motorcycle heavily loaded

Only if the load carried on the motorcycle is very high, the headlight beam can also be lowered by moving pivot lever **1**. This shortens the beam throw.

Pivot lever **1**:

A = neutral position
B = high load

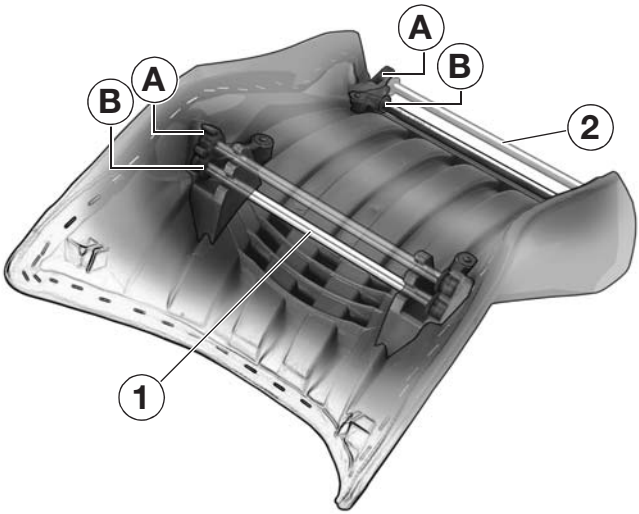


Removing the seat

Note:
You must remove the rear seat before the front seat can be removed.
If it is difficult to turn the key in direction **A**, pressing down firmly on the front seat will make the key easier to turn.

- Turn the key in the seat lock to position **B**
- Remove the rear seat
- Turn the key in the seat lock to position **A**
- Pull front seat to the rear and remove.

– Toolkit, Rider's Manual and battery are accessible



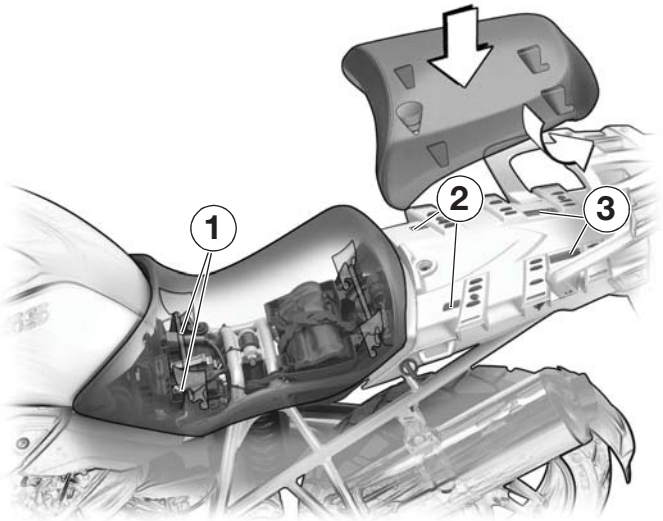
Adjusting seat

Attention:
Front and rear retainers **1** and **2** for height adjustment must always both be set to the same height. Never set retainer **1** to the high position and retainer **2** to the low position, or vice versa.

- Remove the rear seat
- Remove the front seat and turn it upside down

The front seat can be set to either of two positions by means of retainers **1** and **2**:

A = high
B = low



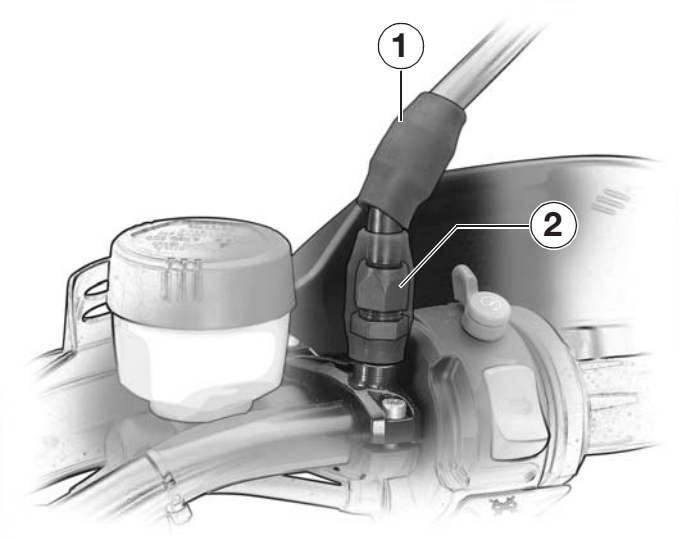
Installing seat

Warning:
When installing, make sure that front and rear seats are firmly located.

- Set the front seat to the desired height (➠ 47)
- Slide the front seat into front lock **1** and press it firmly to secure it in position in the latching mechanism

Note:
Make sure that the tools are packed in such a way that the toolkit is as flat as possible.

- Engage the rear seat in rear retainers **3** first, and then in front retainers **2**
- Press firmly to engage the seat in the latching mechanism



Adjusting mirrors

Simply turn the mirrors to adjust them:

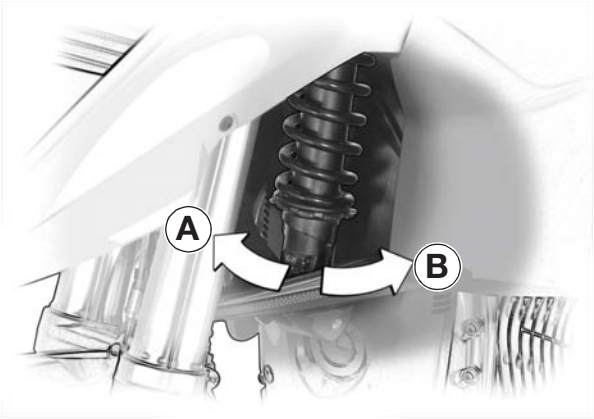
- Grip the mirror by the edge of the glass and
- turn it to the desired position

Adjusting mirror arms

In order to improve ergonomics or if a mirror arm has worked loose:

- Push back protective cap **1** on the threaded fastener of the left or right mirror arm, as applicable
- Remove union nut **2**
- Turn the left or right mirror arm to the desired position
- Retighten union nut **2**
- Pull protective cap **1** back into position concealing the threaded fastener

Spring preload



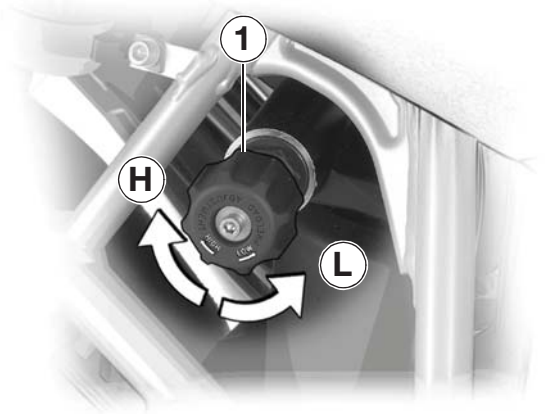
Warning:
Before starting off, adjust spring preload to suit the surface on which you intend riding.
Check and correct the tyre pressures (➠ 53).

Adjusting spring preload, front wheel

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Adjust preload of spring to a stage between 1 and 9:
  3rd stage – metalled road
  5th stage – loose gravel or similar
  9th stage – off-road

Fine-tune the setting in accordance with your personal preferences.

Note:
Stage 1:
Turn all the way in the direction indicated by **A**
Stage 9:
Turn all the way in the direction indicated by **B**



Warning:
Before starting off, adjust spring preload to suit the gross weight of the motorcycle and the surface on which you intend riding.
Check and correct the tyre pressures (➠ 53).
For safety reasons, never attempt to alter spring preload while the motorcycle is being ridden.
Always bring the motorcycle to a stop before adjusting.

Adjusting spring preload, rear wheel

LOW setting (one-up):

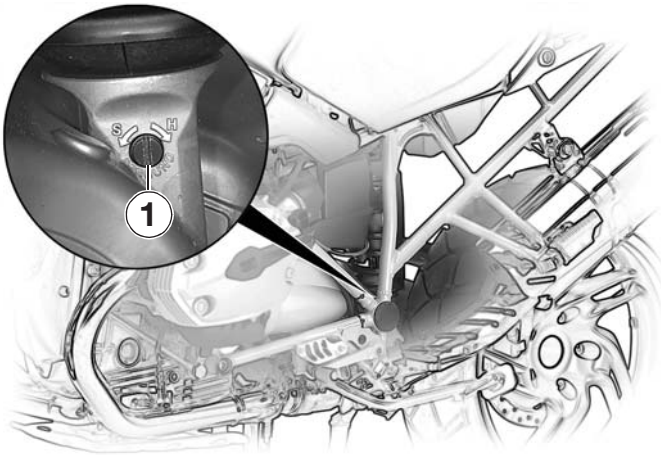
- Turn knob **1** as far as it will go counter-clockwise in **LOW** direction (**L**) as indicated by arrow.
- Then turn it ten clicks clockwise

HIGH setting (for off-road use, or two-up with luggage)

- Turn knob **1** as far as it will go clockwise in **HIGH** direction (**H**) as indicated by arrow.

Fine-tune the setting in accordance with your personal preferences.

Shock-absorber adjustment



Warning:
Before starting the journey, adjust the shock absorber to match total weight.
If spring preload is changed, it is essential to adjust the shock-absorber setting accordingly (and vice versa).

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Adjust the rear shock absorber

Basic setting (one-up)**:**
- Turn adjusting screw **1** as far as it will go clockwise in the direction indicated by the **H** arrow
- Turn adjusting screw **1** one and a half turns counter-clockwise in the direction indicated by the **S** arrow

Hard setting "H":
- Turn adjusting screw **1** as far as it will go clockwise in the direction indicated by the **H** arrow

Soft setting "S":
- Turn adjusting screw **1** as far as it will go counter-clockwise in the direction indicated by the **S** arrow

Checking tyre pressures

Warning:
Incorrect tyre pressures have a considerable influence on handling and on tyre life. Adjust tyre pressures to suit total weight. Never exceed either the motorcycle's gross weight or the individual wheel load limits (➠ 55).

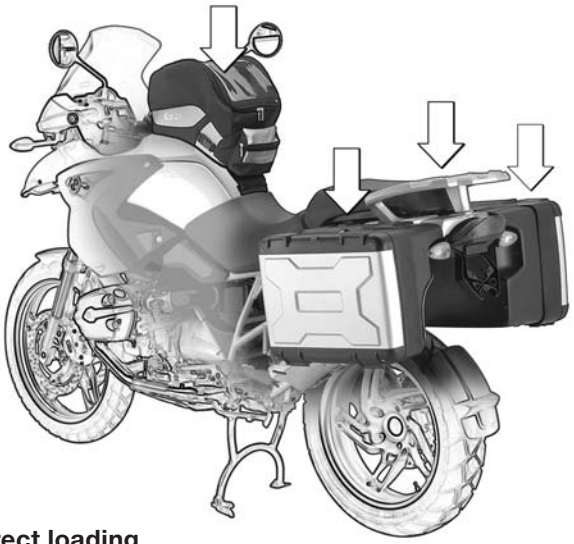
Tyres cold:
- Unscrew and remove valve cap
- Check/correct tyre pressure
- Screw the valve caps back on tightly

Tyre pressures for road tyres and massive-bar tyres:

	front	rear
One-up	2.2 bar	2.5 bar
Two-up or luggage	2.5 bar	2.9 bar
Two-up and luggage	2.5 bar	2.9 bar

Screw the valve caps back on tightly

Warning:
At high road speeds, tyre valves have a tendency to open as a result of centrifugal force.
Use only metal valve caps with rubber seals.
Valve caps that are screwed on well prevent air from escaping suddenly.



Correct loading

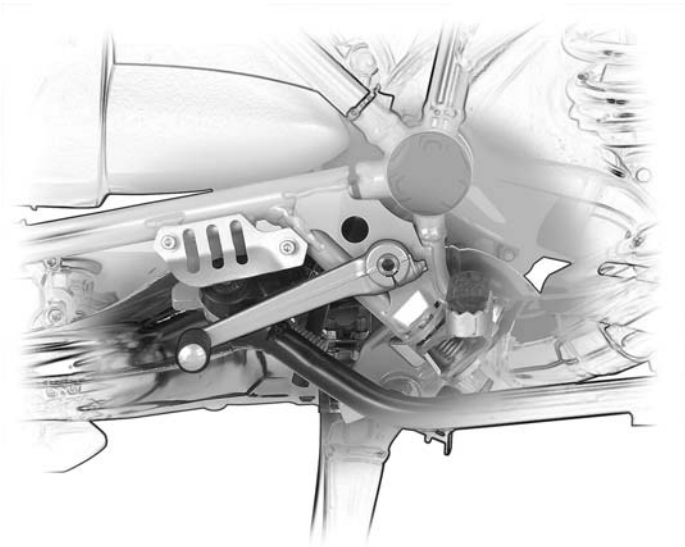
Warning:
Overloading can impair the handling of your motorcycle.

- Make sure that the weight is uniformly distributed between right and left
- Pack heavy items at the bottom and toward the inboard side
- Maximum load in each case[OA] left and right: 10 kg
- Maximum load in tank-top rucksack[OA] and topcase[OA]: 5 kg each
- Check that fastenings are correctly positioned and tight

Warning:
With cases installed, it is advisable not to exceed 130 km/h.

Attention:
Do not exceed the gross weight limit of 425 kg.
Do not exceed the wheel load limits of 170 kg at the front and 280 kg at the rear.
Adjust shock absorbers front and rear, rear-wheel spring and tyre pressures to suit total weight (➠ 50-53).
The total weight is the sum of:
– motorcycle with full tank
– rider
– passenger
– luggage

Shift lever



Warning:
For safety reasons, do not attempt to change the position of the shift lever.

If you would like settings changed to suit your personal preferences, please contact a specialist workshop, preferably your authorised BMW motorcycle dealer.

Safety instructions

Checklist

First time out

Before you start

Starting

Running in

Shifting gear

Off-road riding

Parking

Refuelling

Brake system - general

BMW Integral ABS[OE]

Motorcycle equipped with BMW Integral ABS (➠ 82-89)

Warning:
When the ignition is switched off or if the BMW Integral ABS fails, only a RESIDUAL BRAKING FUNCTION remains available for slowing the motorcycle (➠ 85).
Under these circumstances you must apply CONSIDERABLY higher pressure to the brake levers in order to apply the brakes, and lever travel is longer.

Risk of poisoning

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

Warning:
Inhaling exhaust fumes therefore represents a health hazard and can even cause loss of consciousness with fatal consequences.
Do not run the engine in an enclosed space.

Risk of fatal accident

Your motorcycle is equipped with a digital electronic engine management system and a high-power ignition system.

Warning:
When the engine is running or the ignition switched on, never touch electrically live parts of the ignition system or the digital engine electronics.

Catalytic converter

Attention:
To avoid damage to the catalytic converter:
- Do not run the fuel tank dry
- Do not run the engine with a spark plug lead disconnected
- Do not exceed the engine-speed limits marked on the revolution counter
- Comply with all specified maintenance intervals
- Stop the engine at once if it is misfiring
- In the event of misfiring or a severe drop in engine power, consult a specialist workshop, preferably an authorised BMW motorcycle dealer.

If misfiring or malfunction of the fuel-air mixture preparation system causes unburned fuel to reach the catalytic converter, there is a risk of it overheating and being damaged.

Risk of fire

High temperatures occur at the exhaust system, particularly if a catalytic converter is installed.

Warning:
Make sure that whether riding or standing still or when the motorcycle is parked, no easily flammable material (for example hay, grass, leaves, clothing or luggage etc.) can come into contact with the hot exhaust system. Do not allow the engine to idle unnecessarily or for prolonged periods of time – risk of overheating or fire. Ride away immediately after starting the engine.

Use the safety checklist – before every journey

Please perform the safety check accurately. If your motorcycle needs any routine maintenance, you may be able to attend to it before the journey starts, see the chapter entitled Maintenance in this manual, or you can have it carried out by a specialist workshop, preferably your authorised BMW motorcycle dealer.

This is to ensure that your motorcycle complies with road-vehicle use and safety laws. Your vehicle must be in perfect technical order: this is a basic prerequisite for your safety and the safety of other road users.

Checklist

- Fuel level
- Positions of the handlebar levers
- Brakes
- Brake fluid level
- Clutch fluid level
- Warning lights and telltale lights
- Lights
- Shock-absorber setting and spring preload
- Condition of wheels and tyres, tread depth and tyre pressures
- Load, gross weight
- Check that the luggage system is secure
- Check regularly (every time you stop for fuel):
  - Engine oil level
  (every second/third stop for fuel):
  - Brake pads

If you encounter any problems or difficulties, it is always best to contact your authorised BMW motorcycle dealer. He will provide the necessary advice and assistance.

Handling your motorcycle safely

Each motorcycle has a character all its own. It is time now for you to familiarise yourself with the way your own motorcycle behaves:
– acceleration
– roadholding
– cornering
– braking ...

These are all things you need to become familiar with.
Please remember too that if the motorcycle has not yet covered 1,000 kilometres (approx. 600 miles), the engine is not yet fully run in.

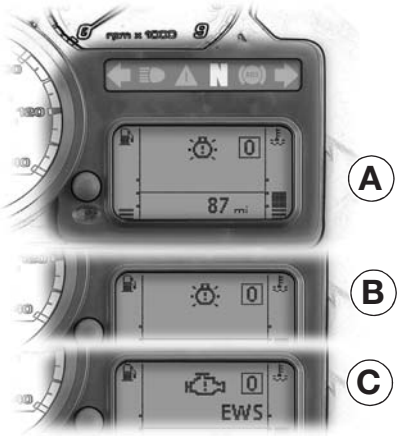
Attention:
BMW Integral ABS[OE] incorporates a brake booster, so braking efficiency is significantly higher than with conventional brake systems.

If you ride at high speed, always bear in mind that various boundary conditions such as the spring preload setting and the shock absorber setting, an unbalanced luggage load, loose clothing, low tyre pressure, poor tyre tread, and so on, can affect the handling of your motorcycle.

Safe motorcycling doesn't depend on the motorcycle alone.
Your own skill and common-sense are needed too.
The key to genuine safety on the road is a sensible balance between the motorcycle's technical features and the rider's skill, so that together they form a single efficient unit.
Riding safely in traffic and off-road calls for a sense of responsibility to your passenger and to other road users.

Warning:
Do not ride the motorcycle after drinking alcoholic beverages. Even small amounts of alcohol or drugs, particularly if taken in conjunction with medicines, will adversely affect your perception and your ability to assess situations and make decisions, and also slow down your reflexes.

Take to the road now by all means, but think carefully about everything you do.



Predrive check

A predrive check is performed when you switch on the ignition, in other words when the ignition lock is in the ○ position. All the warning lights come on briefly and then go out again. The multifunction display shows the following in the order in which they are described below:

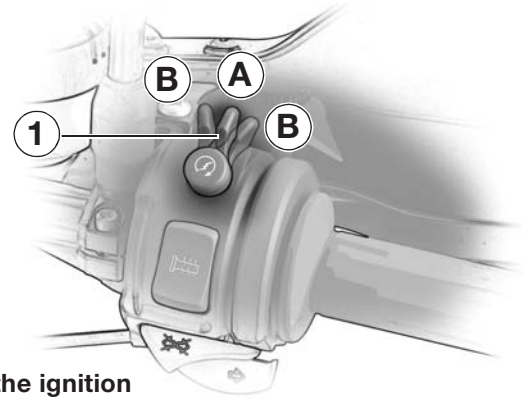
– Phase 1, **A**, with General warning light ⚠ red
– Phase 2, **B**, with General warning light ⚠ yellow and
– Phase 3, **C**, without General warning light ⚠

Once the predrive check completes, the various gauges and indicators in the instrument panel show their current values.

Note:
The predrive check is aborted if you start the engine before it completes.

ABS self-diagnosis

If the motorcycle is fitted with BMW Integral ABS^{OE}, the ABS performs self-diagnosis (➠ 86).



Switch on the ignition

- See the notes on the electronic immobiliser (EWS) (➠ 30)

– Move the kill switch **1** to the run position **A**

- Ignition switch in the ◯ position

– Predrive check is performed

– ABS self-diagnosis is performed

Warning:

ABS^{OE} self-diagnosis is not performed unless both brake levers are in their fully released positions.

Only the RESIDUAL BRAKING FUNCTION is available until self-diagnosis is completed (➠ 85).

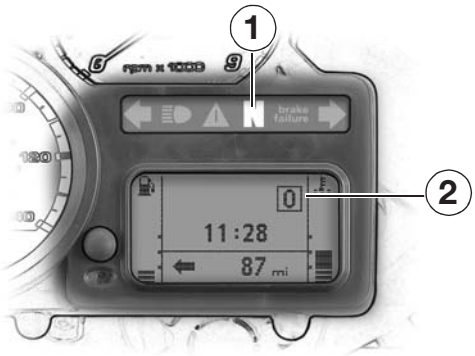
Note:

Starting on gradients:

Always switch on the ignition with gear engaged, clutch lever released and both brake levers released.

Self-diagnosis cannot be performed if you do not follow this procedure.

When self-diagnosis completes, apply the brakes, disengage the clutch, and start the engine.



Fully retract the side stand

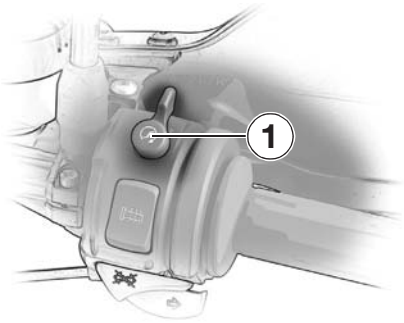
Note:
If the side stand is extended and a gear engaged, you cannot start the motorcycle.

Select neutral

– Neutral telltale light **1** **green** [N] lights up and gear indicator **2** in the multifunction display shows **0**.

Note:
Engine does not start:
– Move the gear lever to the [N] position or
– Do not pull the clutch lever until after you switch on the ignition

Engine stops when first gear is engaged:
– Fully retract the side stand; if necessary consult the troubleshooting chart (➠ 109)



Starting

Attention:
Do not allow the engine to idle unnecessarily or for prolonged periods of time
– risk of overheating or fire.
Ride away immediately after starting the engine.
To avoid overheating the air-cooled engine and possible damage as a result, avoid even short warming-up periods at a standstill.
Avoid high engine speeds after a cold start.

Note:
The start attempt is automatically interrupted if battery voltage is too low.
Before trying again: recharge the battery.

Note:
Do not turn the throttle twistgrip when starting the engine.
At ambient temperatures below 0 °C switch on the ignition and pull the lever to disengage the clutch when starting the engine.

- Press starter pushbutton **1**
  – The engine will then start
- Observe instruments and display for warnings and information (➠ 20-25)

Attention:
Exceeding the specified engine speeds while running in will lead to increased engine wear.

Note:
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 rather than high-speed main roads and highways.

Running-in engine speeds

From 0 to 1,000 km

- Engine speed max. 4,000 rpm and no full-load acceleration
- The first inspection should always be performed after 500 to 1,200 km. Make an appointment with your authorised BMW motorcycle dealer in good time, so that the work can be performed punctually.

From 1,000 to 2,000 km

- Engine speeds can be gradually increased after 1,000 km
- Avoid lengthy periods at full load until 2,000 km have been covered

Brake pads: running in

Warning:
New brake pads must "bed down" and therefore do not achieve their optimum friction levels during the first 500 km . This slight initial reduction in braking efficiency can be compensated for by exerting greater pressure on the lever. Try to avoid all unnecessary hard braking during this initial period.

Attention:
Comply with the notes on BMW Integral ABS[OE] (➠ 82-89).

Tyres: running in

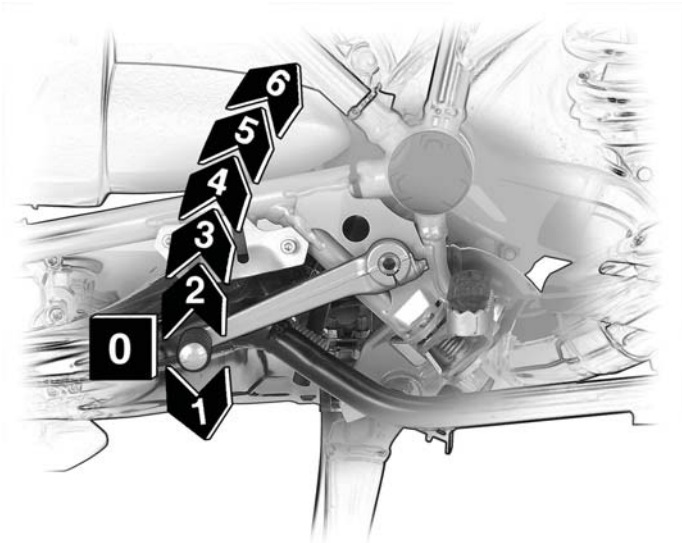
Warning:
New tyres have a smooth surface. This must be roughened by riding in a restrained manner at various heel angles until the tyres are run in. This running in procedure is essential if the tyres are to achieve maximum grip.

Engine speed

Do not use the high end of the engine-revolutions range in any gear unless the engine is at operating temperature
When the revolution counter needle enters the red zone on the dial, the fuel supply is interrupted in order to protect the engine against overspeeding. The governor cuts in at 7,900 rpm.

Load changes

Warning:
Try not to open or close the throttle abruptly, particularly on wet or slippery roads.



Gear shifts

Attention:
Always disengage the clutch in order to shift gear.

Note:
Digital gear indicator **1** in the multifunction display tells you which gear is engaged.

Wheels and tyres

Warning:
If you lowered the pressure in the tyres for more traction when riding off-road, remember that you must immediately reinflate the tyres to the correct pressures when you return to metalled roads (➠ 53).

Attention:
This motorcycle is a touring Enduro machine, which means it can also be used for light off-roading on unsurfaced tracks. If you are contemplating heavy off-road usage or long trips that will involve a lot of off-road riding, it is advisable to fit cross-spoked wheels[OE] in order to avoid damage to the cast-aluminium rims of the standard wheels.

Dirt or mud on brakes

Warning:
Dirt on the brake discs or brake pads will increase the braking distance.
The brakes have to clean themselves before they start to bite.
Dirt on the brakes increases the rate of pad wear.

BMW Integral ABS[OE]

If you are riding off-road or on a loose surface, you might prefer to deactivate the ABS function. (➠ 88-89).

Spring preload

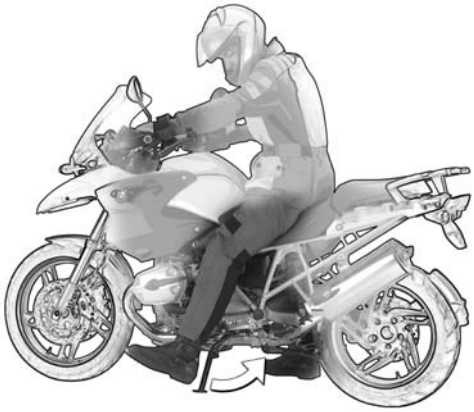
Attention:
Adjust spring preload and the shock-absorber settings before you start off-roading.
Remember to reset spring preload and the shock absorbers to the correct setting when you return to metalled roads (➠ 50-52).

Placing motorcycle on side stand

Warning:
For safety reasons, never sit on the motorcycle with the side stand extended.

Attention:
Stop the engine before using the side stand.
Make sure the surface under the stand is firm.
On a gradient, the motorcycle should always face uphill; select 1st gear.

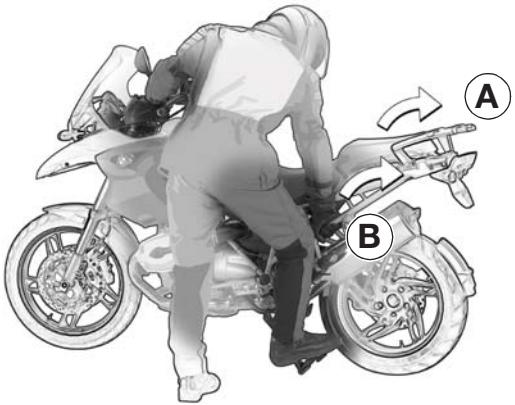
- Switch off the ignition
- Pull the handbrake lever
- Hold the motorcycle upright and balanced
- Use your left foot to extend the side stand fully (arrow)
- Slowly lean the motorcycle to the side until its weight is taken by the stand and dismount from the motorcycle
- Turn the handlebars to full left lock (➠ 29)
- Check that the motorcycle is firmly supported



Removing motorcycle from side stand

Warning:
If the motorcycle is equipped with BMW Integral ABS[OE] only a RESIDUAL BRAKING FUNCTION is available when the ignition is switched off (➠ 85).
Make sure the side stand is fully retracted before you ride off.
– Allowing the motorcycle to roll with the side stand extended represents a safety risk.

- Ignition key in the ⊗ or ○ position
  – Handlebars unlocked
- Both feet on the ground, no weight on the motorcycle
- Pull the handbrake lever
- Slowly raise the motorcycle to the upright position and keep it balanced
- Sit on the motorcycle and use your left foot to retract the side stand

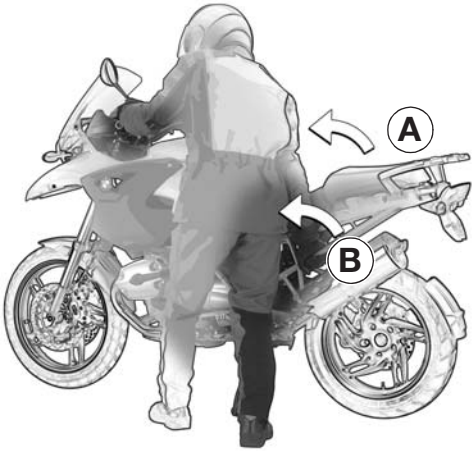


Place the motorcycle on its main stand.

Warning:
For safety reasons, never sit on the motorcycle with the main stand extended.

Attention:
Stop the engine before using the main stand.
Make sure the surface under the stand is firm.

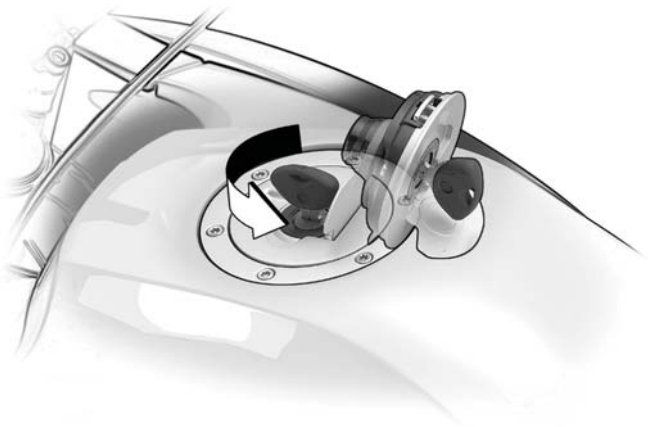
- Switch off the ignition
- Hold the left handlebar grip with your left hand
- Grip luggage rack **A** or rear frame **B** with your right hand.
- Place your right foot on the pin of the main stand, and press the stand down until its curved feet touch the ground
- Apply all your body weight to the stand
- Pull the motorcycle to the rear and upwards (arrow) until it rests on the main stand
- Check that the motorcycle is firmly supported



Removing motorcycle from main stand

Attention:
Make sure the main stand is fully retracted before you ride off.

- Ignition key in the ⚿ or ○ position
  – Handlebars unlocked
- Hold the left handlebar grip with your left hand
- Grip luggage rack **A** or rear frame **B** with your right hand.
- Push the motorcycle forward off the main stand
- Check that the main stand has fully retracted

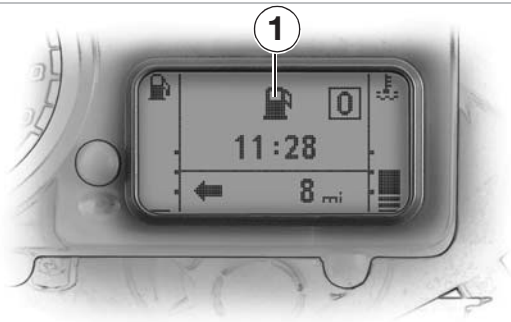


Refuelling

Warning:
Fuel is flammable and explosive. Do not smoke. Never bring a naked flame near the fuel tank.
Fuel expands when hot (for instance if the fuel tank is in the sun). For this reason, only fill as far as the lower edge of the filler neck.

Attention:
Leaded fuel will destroy the catalytic converter.
Do not run the fuel tank dry or you may damage the engine or catalytic converter.
Fuel can damage plastic parts, so make sure they are not brought into contact with fuel.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Open the fuel filler cap
- Refuel with fuel of the approved grade
- Close the fuel filler cap



Fuel grade

The engine is designed to run on:

– unleaded premium fuel (95 RON)

Use fuel of this grade by preference, in order to achieve rated performance and fuel consumption.

You can also run the engine on fuel of the following grade:

– unleaded premium-plus fuel (98 RON)

The minimum grade is:

– unleaded regular fuel (91 RON)

It is advisable not to run the engine on fuel of a lower grade than 91 RON

Capacity

Note:

The fuel gauge in the multifunction display works only when the ignition is switched on, in other words when the ignition key is in the ◯ position.

– Usable tank capacity is 20 litres, including a reserve of approximately 4 litres

Note:

Symbol **1** flashes and ⚠ lights up yellow when the fuel in the tank drops to reserve. At this point there are about 4 litres of fuel left in the tank. The estimated residual operating range appears on the Tripmaster's display.

Descending mountain passes

Attention:
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.

Wet brakes

After the motorcycle has been washed, ridden through water or ridden in the rain, the brake discs and pads may be wet (or iced-over in winter), and may not take effect immediately.

Warning:
The brakes have to dry before they start to bite.

Salt on brakes

The brakes may fail to take effect immediately if the motorcycle was ridden on salt-covered roads and the brakes were not applied for some time.

Warning:
The layer of salt on the brake discs and pads has to be worn off before the brakes start to bite.

Oil and grease on brakes

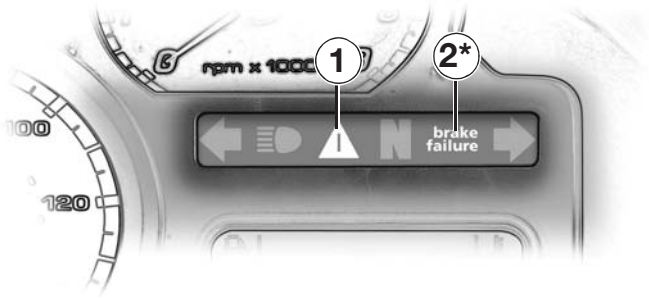
Warning:
Brake discs and pads must be free from oil and grease.

Dirt or mud on brakes

When riding on loose surfaces or muddy roads, the brakes may fail to take effect immediately because of dirt or moisture on the discs or brake pads.

Warning:
The brakes have to clean themselves before they start to bite.
Dirt on the brakes increases the rate of pad wear.

Warning:
If the brake lever can be moved right to the limit of its travel, this indicates a mechanical or hydraulic fault. The brake system is defective.
Immediately consult a specialist workshop, preferably an authorised BMW motorcycle dealer.



Warning:
If ABS telltale light 1 or 2 lights up, consult the ABS troubleshooting table (➠ 24-25).

Sensitive electronic control

It takes skill and sensitive control of the brakes to pull up safely on a motorcycle. If the front wheel brake locks and the wheel skids, the necessary longitudinal and lateral stabilising forces are lost, and a fall can result.
For this reason, the rider seldom makes full use of available braking performance in an emergency.

BMW Integral ABS is the latest-generation BMW Motorrad ABS development: by preventing both wheels from locking and optimising braking-force distribution by means of the integral function, it offers much improved braking performance (➠ 84). Full use is made of technical braking capacity to minimise braking distances, even when road conditions are poor. When the motorcycle is ridden in a straight line, the BMW Integral ABS is able to handle emergency braking safely.

* Ⓞ depending on national-market specification

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

– You have to familiarise yourself with the new, electronically assisted braking. Try the brakes several times when you take your motorcycle out for the first time. Find out for yourself how the brakes feel.
– Take care when cornering. When you apply the brakes on a corner, the motorcycle's weight and momentum take over and even BMW Integral ABS is unable to counteract their effects.

Partially integral brakes

The integral brake function interlinks the front and rear brakes, so both wheels are braked when you operate the brake lever.

The electronic controller in the BMW Integral ABS computes the braking-force distribution between front and rear wheels, and applies the brakes accordingly.

Braking-force distribution depends on load and is recalculated every time the ABS controller comes into action.

In this partially integral brake configuration, the integral braking function is activated only when you pull the handbrake lever. The footbrake lever acts only on the rear brake.

Brake booster

The hydraulic pump in the BMW Integral ABS actively boosts the braking force acting on the wheel when the brakes are applied.

By boosting the braking force in this way, BMW Integral ABS achieves higher braking efficiency than standard brake systems.

ABS anti-lock brake system

ABS prevents the wheels locking under heavy braking, thus contributing significantly to road safety.

RESIDUAL BRAKING FUNCTION

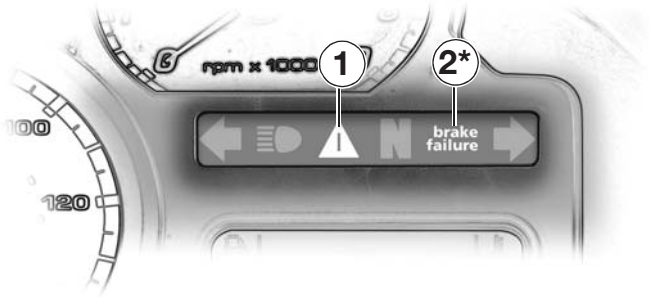
If the BMW Integral ABS develops a fault, a RESIDUAL BRAKING FUNCTION only is available in the brake circuits in question.
The RESIDUAL BRAKING FUNCTION is the braking efficiency without the hydraulic servo assistance of the BMW Integral ABS. Under these circumstances, therefore, you must apply CONSIDERABLY higher pressure to the brake levers in question in order to apply the brakes, and lever travel is longer.
When the RESIDUAL BRAKING FUNCTION is active, the ABS function is unavailable in the brake system in question.
When the RESIDUAL BRAKING FUNCTION is active, the integral braking function is partially or entirely unavailable.

Warning:
When the RESIDUAL BRAKING FUNCTION is active, maintain a defensive riding style and proceed immediately to the nearest specialist workshop, preferably an authorised BMW motorcycle dealer.

Note:
When the RESIDUAL BRAKING FUNCTION is active at the front wheel, it is advisable to set the adjuster in such a way as to permit maximum movement of the handbrake lever (➠ 41).

The RESIDUAL BRAKING FUNCTION is active under the following circumstances:
– Ignition off
– Before and during self-diagnosis (➠ 86)
– Fault in the BMW Integral ABS (➠ 24-25)

Note:
When the RESIDUAL BRAKING FUNCTION is active for both brake circuits, the noise of the pump is no longer audible when you operate the brake levers.



Self-diagnosis with pull-away test

The BMW Integral ABS performs self-diagnosis and a pull-away test to ensure its operability.

Self-diagnosis is performed automatically when you switch on the ignition.

Warning:

Self-diagnosis is not performed unless both brake levers are in their fully released positions.

Only the RESIDUAL BRAKING FUNCTION is available until self-diagnosis is completed (➠ 85).

- Release the brake levers, if necessary
- Switch on the ignition

Initially:

– ABS warning light **2**: flashes at 4 Hz

– General warning light **1**: ON

➠ Self-diagnosis is in progress

Then:

– ABS warning light **2**: flashes at 1 Hz

– General warning light **1**: OFF

➠ Self-diagnosis successfully completed

* Ⓘ depending on national-market specification

- Start the engine.
- Move off

– ABS warning light **1**:
OFF (as of approx. 5 km/h (3 mph) road speed)

➠ Pull-away test successfully completed

➠ BMW Integral ABS is available

Note:
Flashing at 1 Hz = 1 flash per second (slow flashing)
Flashing at 4 Hz = 4 flashes per second (fast flashing)

Note:
Starting on gradients:
Always switch on the ignition with gear engaged, clutch lever released and both brake levers released.
Self-diagnosis cannot be performed if you do not follow this procedure.
When self-diagnosis completes, apply the brakes, disengage the clutch, and start the engine.

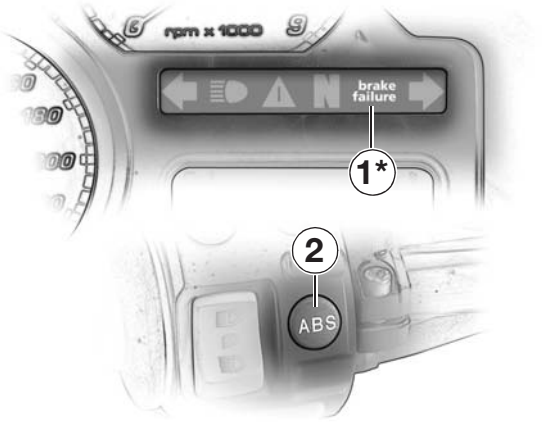
Off-road deactivation

In contrast to road riding, when BMW Integral ABS should always be active in order to prevent wheel lock and a resulting accident, it may be desirable to dispense with ABS when riding off-road or on a loose surface. This is the reason why the ABS function of BMW Integral ABS can be deactivated.

Deactivating ABS

Warning:
Never switch the ignition off and on unless the motorcycle is at a standstill.
Brake boost and the integral function remain operational, even if the ABS function is deactivated.

Note:
The ABS function is reactivated once the self-diagnosis routine has completed successfully after you switch off the ignition and switch it on again with the motorcycle at a standstill.



Warning:
When the ABS function is deactivated – as indicated by the ABS warning light 1 – the safety reserves normally offered by the anti-lock braking system are not available until the ABS function is reactivated.
There is a risk of dropping the motorcycle if the brakes are applied too hard and the front wheel locks or the rear wheel lifts clear of the ground as a result of a high level of front tyre adhesion.

– With the motorcycle at a standstill, switch off the ignition
• Press and hold down ABS button **2**
• Switch on the ignition
• Release ABS button **2**
– ABS warning light **1** remains ON
– The ABS function is deactivated
– Warning light **1** remains permanently on to remind you that ABS has been deactivated

* depending on national-market specification

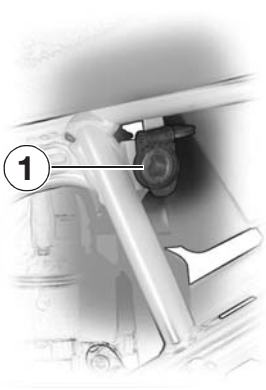
General instructions

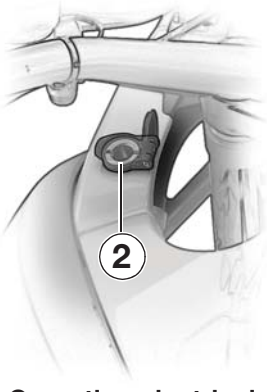
Power sockets, 12 V

Luggage system

Warning:
BMW cannot examine or test each product of outside origin on the accessories and tyres market to ensure that it can be used on or in connection with BMW motorcycles without constituting a safety hazard. Even approval by an official inspection authority or an official permit (General Operating Permit) cannot always provide this guarantee. 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.

Note:
BMW accessories and BMW-approved products can be obtained from your authorised BMW motorcycle dealer.





Operating electrical accessories

Sockets

On-board sockets **1** and **2**[OA] and the plug for electrical accessories have a combined maximum rating of 5 A.
Socket **2**[OA] is intended solely for accessories mounted in the cockpit or secured to the handlebars, for example GPS, Roadbook, Tripmaster, etc.

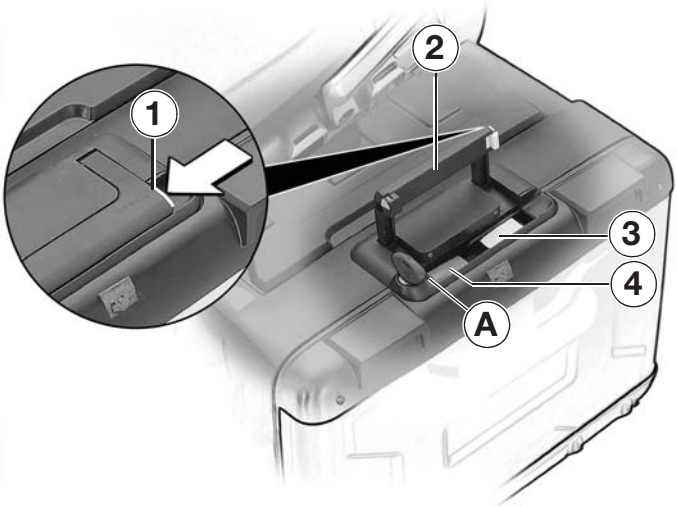
Note:
The supply to the sockets is switched off automatically if battery voltage is low or the load exceeds the maximum rating.

Note:
You can start using electrical accessories only when the ignition is switched on, in other words when the ignition key is in the ◯ position. The accessory remains operational if the ignition is subsequently switched off.
In order to ensure that the drain on the on-board power supply system is minimised, the supply to the power sockets is cut off approximately 15 minutes after the ignition is switched off, and it is also temporarily interrupted during the start procedure.

Wiring

Note:
Have the wiring installed by a specialist workshop, preferably an authorised BMW motorcycle dealer.

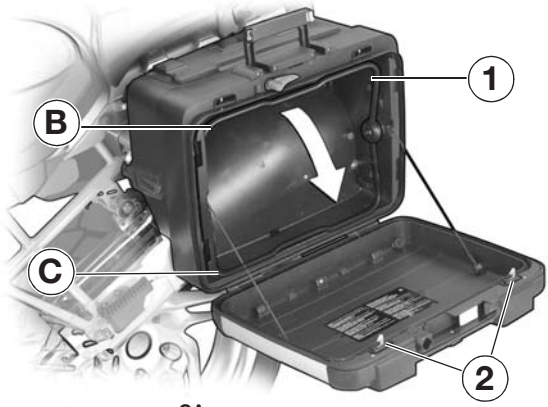
Warning:
The wiring must be installed in such a way that the cable(s)
– do not impede the rider
– do not restrict or impede movement of the handlebars and/or handling
– cannot be trapped



Warning:
After an accident or if the motorcycle has fallen over, check that the system cases are secure.
Max. load per system case: 10 kg.
With system cases installed, it is advisable not to exceed 130 km/h.

Opening system case[OA]

- Turn the key in the case lock to position **A**
- Release latch **1** by pressing in the direction indicated by the arrow
- Hold down latch **1** and pull up carrying handle **2**
  – Yellow rocker switch **3** and red lever **4** are accessible
- Press ribbed part of yellow rocker switch **3**
- Hold the rocker switch down and open the lid of the case



Closing system case[OA]

Attention:
Before closing the carrying handle, make sure that the case lock is in position **A**.
Risk of breaking the locking tongue.

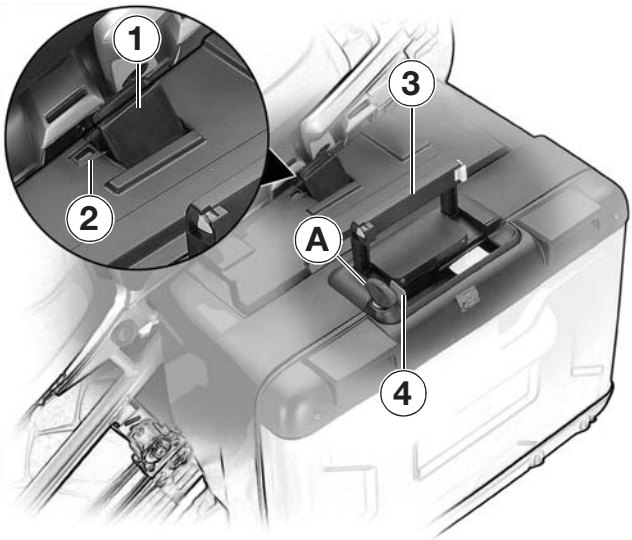
- Turn the key in the case lock to position **A** (➠ 97)
- Lift the lid and push it closed until the two hooks **2** at the sides engage with an audible click.
- Fold down the carrying handle
- Lock the case and remove the key

Changing case volume

Note:
Pivot lever **1** enables you to change the volume of the case.

- Open the system case
- Take everything out of the system case
- Turn pivot lever **1** to change the volume of the case

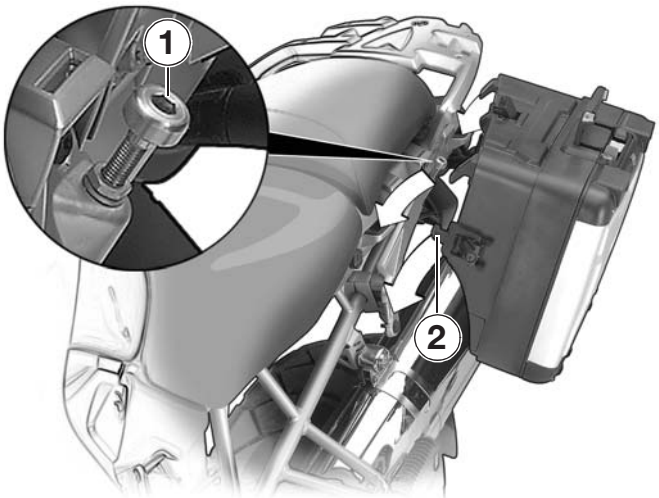
Pivot lever **1** moved all the way to position **B**:
– Case set to low volume
Pivot lever **1** moved all the way to position **C**:
– Case set to high volume



Installing system case[OA]

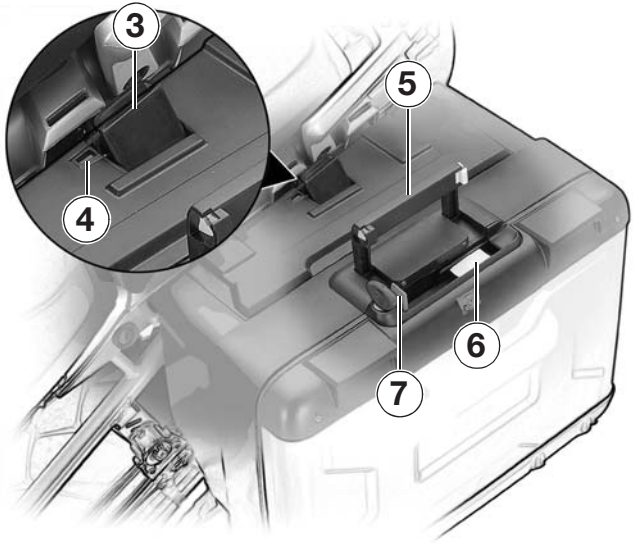
Warning:
When attaching, make sure that the case is retained securely.
An incorrectly secured case could be lost and endanger other road users.

- Open carrying handle **3**
- Pull up red lever **4**, latching flap **1** releases
- Pull latching flap **1** fully open
- Hold the case straight and lower it into the two top holders
- Push down latching flap **1** until window **2** turns black



Note:
Mushroom head **1** has to be adjusted accordingly if the case sits loose or refuses to latch.

- Push red lever **7** (➠ 99) down, while pressing on latching flap **3**
  – Latching flap **3** (➠ 99) engages
- Engage locking lever **2** in the holder and close it
- Check the security of the case
- Fold carrying handle (➠ 99) down
- Lock the case and remove the key



Removing system case[OA]

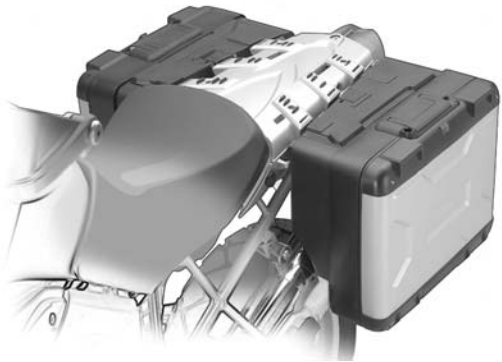
- Unlatch carrying handle **5** and pull it up (➠ 95)

– Yellow rocker switch **6** and red lever **7** are accessible underneath the handle

- Open locking lever **2**
- Pull up lever **7**, latching flap **3** releases
- Pull latching flap **3** fully open

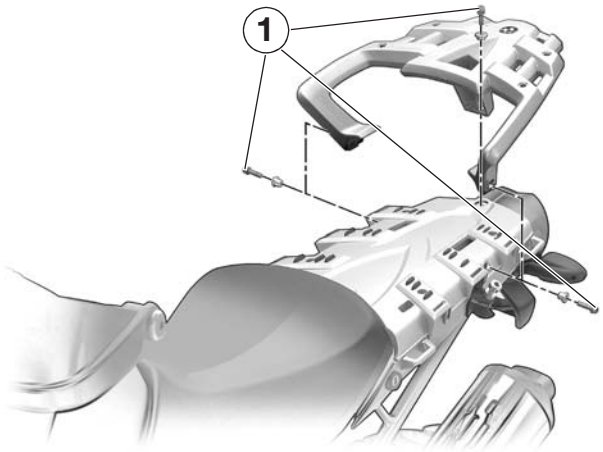
– Window **4** turns red

- Take a firm grip of the handle and lift the case off the holder



Warning:
Do not exceed the total weight limit of the cases.

Note:
By removing the luggage rack with the rear seat removed and system cases[OA] installed, you have a large flat luggage carrier to which you can secure bulky items of luggage in various ways.



Removing luggage rack

- Remove the rear seat (➠ 46)
- Remove the system cases[OA]
- Remove three securing screws **1**
  – and remove complete with sleeves and washers
- Remove the luggage rack
- The procedure for installing the luggage rack is the reverse of the removal procedure
- Tighten three securing screws **1** to the specified tightening torque (➠ 172)
- Install the system cases[OA]

Note:
When installing, make sure that the spacer sleeves and washers are installed right way round.

Attention:
Always have the tightening torques checked by a specialist workshop, preferably an authorised BMW motorcycle dealer.

Reliable operation

Service worldwide

Training means extra safety

Know-how…
Regular visits to the workshop for routine servicing are strongly recommended even after the warranty has expired. They are the only way to be genuinely certain that your BMW is being kept in perfect working order. For generous treatment of claims submitted after the warranty has expired, evidence of regular maintenance by an authorised BMW motorcycle dealer is essential.

Certain signs of wear, moreover, may otherwise not be noticed until it is too late to put them right at moderate cost. The staff in the authorised BMW motorcycle dealer's workshop know every detail of your motorcycle and can take remedial action if necessary before minor faults develop into serious problems. By having the necessary repairs done properly and in good time, you save time and money in the long run.

…service
You can obtain accurate advice in all cases, and make appointments with a firm completion deadline which we will comply with punctually. But the most gratifying feeling of all is that your BMW is in genuinely good shape when it leaves the authorised BMW motorcycle dealer's workshop – and above all, safe.

BMW Motorrad Service Card

A Service Card is available for all new BMW motorcycles.
A wide range of emergency-assistance services are in place to help you in the unlikely event of a problem occurring somewhere far from home.
If you have a breakdown anywhere in Europe, just call our Mobile Service Centre number from any telephone. Our experts are on duty there day and night to arrange assistance for you. They can provide practical advice on what to do next and can make arrangements on your behalf, for example notifying local emergency services anywhere in Europe, recovery and transportation of the motorcycle to the nearest authorised BMW motorcycle dealer, a taxi for you, and even a replacement vehicle and hotel accommodation, if necessary.

BMW Service worldwide

And if your travels take you even further afield, you have no need to worry: we are represented in more than 100 countries of the world.

Note:

Call us if you have any questions about the BMW dealership network. The phone number is in the “Service Kontakt / Service Contact” booklet.

Cornering and braking need to be practised

Develop a “sixth sense” for potentially dangerous situations. What this means: look ahead, plan how to avoid possibly dangerous situations and study other road users' behaviour with a degree of healthy scepticism.

– Take bends smoothly and rhythmically, avoiding harsh braking and acceleration
– Approach bends slower than you feel they can be taken; a neat riding style will get you to your destination more safely than sheer speed
– Ride at the inner edge of the ideal line, look ahead and plan to leave the bend as smoothly as you entered it

Allow for reaction time when judging braking distances.

– At a speed of 50 km/h, for instance, one second's hesitation means that about 14 metres are covered before the brakes are applied
– At 90 km/h, this distance grows to 25 metres.

Practice applying the brakes with and without an extra load on the motorcycle, and study its reactions on various kinds of road surface.

Work up to the wheel lock limit gradually.

BMW has a worthwhile safety contribution to make in this area too – BMW Safety Training. These programs are a wonderful opportunity: systematic basic and follow-up training enables you to master situations close to the limit and keep your motorcycle under supreme control whatever happens.

Safety information

Troubleshooting chart

Engine oil

Brake system - general

Brake system - without BMW Integral ABS

Brake system - with BMW Integral ABS[OE]

Clutch

Wheels

Removing the front wheel

Installing the front wheel

Removing rear wheel

Installing the rear wheel

Checking brake pads

Notes on changing bulbs

Bulbs

Air filter

Jump starting

Battery maintenance instructions

Removing and installing battery

Technical modifications

Warning:
The data stored in the control unit of the electronic engine management system is the result of extensive experimental and testing work. Tampering with the control unit of the engine management system represents an increased safety risk for the rider.

Note:
Manipulation of the control unit of the electronic engine management system voids the warranty in all instances of damage consequential to such manipulation.

Whenever you are planning such modifications, comply with all the legal requirements. The motorcycle must not infringe your national road-vehicle construction and use regulations.
Your authorised BMW motorcycle dealer will gladly advise you on technical requirements, the manufacturer's recommendations and the overall benefit likely to be obtained.

Fault: Engine does not start or is very difficult to start

Possible cause	Remedy	See ➠ Page
Kill switch operated	Move the kill switch to the run position	(➠ 64-66)
Side stand extended and gear engaged	Fully retract the side stand	(➠ 66)
Gear engaged (clutch lever not pulled in)	Select neutral (or disengage clutch)	(➠ 67)
Clutch pulled when ignition was OFF	Switch on the ignition, then pull the clutch lever	
No fuel in tank	Refuel	(➠ 78-79)
Blocked air filter element	Replace	(➠ 140-142)
Spark plugs/leads or caps wet	Dry	
Battery not adequately charged	Recharge battery	(➠ 147)

Troubleshooting chart

Note:
It is advisable to have other faults – and work not described on pages 111...150 – attended to by a specialist workshop, preferably your authorised BMW motorcycle dealer.

Note:
You can obtain further technical information from the following publications:
– BMW Repair Manual

Checking oil level

Check the oil level at regular intervals.

Always check the oil level when the engine is at operating temperature, because the difference between the oil level indicated when the engine is at operating temperature and the oil level indicated when the engine is very cold can be as much as 10 mm.

After switching off the engine at operating temperature, wait at least 5 minutes for the oil to drain back into the sump.

Checking the oil level after the engine has been run only briefly or when it is not properly warm will falsify the reading and could lead to the engine being operated with the wrong quantity of oil, because cold oil is viscous and takes longer to drain back into the sump. At extremely low outdoor temperatures (-10 °C), this can take as long as 12 hours.

.

Attention:

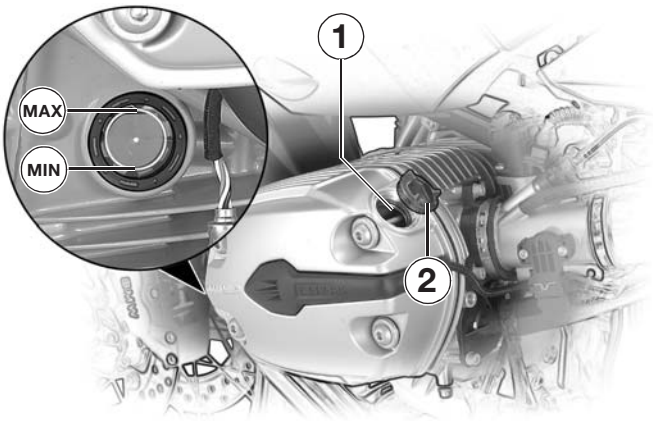
To avoid damage to the engine:

– Never exceed the maximum oil level.
– Always keep the level above the minimum mark.

Always check the oil level with the motorcycle upright.

- Check the oil level with the engine at its regular operating temperature
- Check the oil level after the engine has been stopped for at least 5 minutes
- Make sure that the motorcycle is upright
  – Make sure the ground is level and firm.

Engine oil



- Check the oil level at the sight glass:
  MAX top edge of marking ring
  MIN bottom edge of marking ring
  – The space between the marks represents approx. 0.5 litre
- If necessary, remove oil filler plug **2**
- Pour in the correct quantity of engine oil thorough filler neck **1**
- Reinstall oil filler plug **2**

Attention:
Red General warning light ⚠ in conjunction with engine oil pressure warning light indicate no (or very little) oil pressure in the lube-oil system; this must not be regarded as an oil level check.
Oil pressure builds up in 1-2 seconds after the engine starts, and the engine oil pressure warning light (➠ 19) must disappear and the red General warning light ⚠ (➠ 21) must go out.

Work on the brake system

Warning:
To ensure reliability have all work on the brake systems carried out by a specialist workshop, preferably an authorised BMW motorcycle dealer.

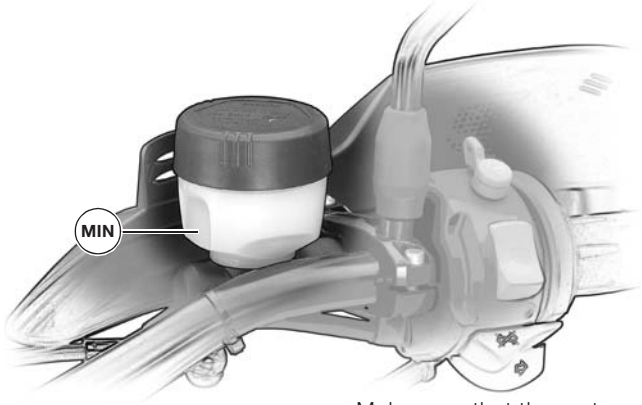
Brake system, checking

Warning:
Sudden changes in play or spongy action of the brake lever indicate a fault in the brake system.
Before riding off, therefore, always check the resistance of the front and rear brake levers and test operation of the brakes.
Do not ride the motorcycle if you have any doubts about the safety of the brake system.
Immediately seek the advice of a specialist workshop, preferably an authorised BMW motorcycle dealer.

Checking brake pads

Warning:
Have the brake pads replaced as soon as they wear to the minimum permissible thickness: have the work performed by a specialist workshop, preferably an authorised BMW motorcycle dealer.

Brake pad wear depends on your personal style of riding. Frequent off-roading in particular tends to accelerate the rate of brake-pad wear.
To ensure reliable operation of the brakes: have brake pads replaced before the minimum permitted thickness is reached.
Checking brake pads
(➠ 130-131)



- Make sure that the motorcycle is upright
  – Make sure the ground is level and firm
- Handlebars centred
- Check the brake fluid level in the reservoir

MIN Minimum level

Checking front brake fluid level

Warning:
If the fluid level drops below the MIN mark, assume there is a defect in the brake system.
Have the brake system checked immediately by a specialist workshop, preferably an authorised BMW motorcycle dealer.

Note:
If the motorcycle is not fitted with BMW Integral ABS, the brake fluid level in the brake fluid reservoir drops as the brake pads wear. If the motorcycle is fitted with BMW Integral ABS^{OE}, the brake fluid level remains constant.

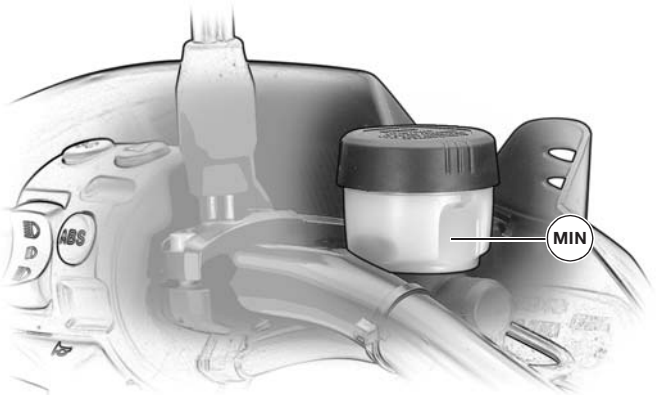
Checking rear brake fluid level

Warning:
If the fluid level drops below the MIN mark, assume there is a defect in the brake system.
Have the brake system checked immediately by a specialist workshop, preferably an authorised BMW motorcycle dealer.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Check the brake fluid level in the reservoir

MIN Minimum level

Note:
If the motorcycle is not fitted with BMW Integral ABS, the brake fluid level in the brake fluid reservoir drops as the brake pads wear. If the motorcycle is fitted with BMW Integral ABS^{OE}, the brake fluid level remains constant.

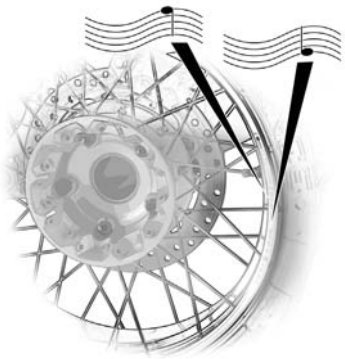


Fluid level in clutch lever fitting

The clutch system is filled with a special hydraulic fluid that does not have to be changed.

Note:
The fluid level in the reservoir rises as the clutch wears.

Attention:
Unsuitable hydraulic fluids could cause damage to the clutch system.
Do not top up the level in the system.



Checking wheel rims

Warning:
Have damaged wheel rims checked and, if necessary, replaced by a specialist workshop, preferably an authorised BMW motorcycle dealer.

Checking spokes[OE]

Warning:
Before every journey, check for damage to the spokes. Always have damaged spokes and irregular spoke tension rectified immediately by a specialist workshop, preferably an authorised BMW motorcycle dealer.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Tap spokes with adequate device (e.g. screwdriver) and listen for the correct ringing sound

Note:
If the note varies, spoke tension is uneven (individual spokes too loose or too tight).

Warning:
Use only wheels and tyres that BMW Motorrad has approved for your motorcycle. For each size of tyre BMW tests certain makes, and approves those that it certifies as roadworthy.
If BMW Motorrad has not approved the wheels and tyres it cannot assess their suitability or provide any guarantee of road safety.
You can obtain detailed information from your authorised BMW motorcycle dealer or by visiting "www.bmw-motorrad.com/maintenance" on the Internet.

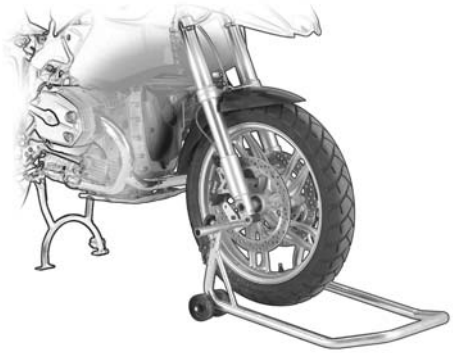
Checking tyre tread depth

Road tyres and massive-bar tyres

Warning:
Comply with local legal requirements concerning minimum tread depth.
Remember:
Handling and grip can be impaired even before the tyres wear to the minimum tyre tread depth permitted by law.

- Measure tread depth at the centre of the tyre tread

Warning:
The maximum permissible speed for a motorcycle fitted with massive-bar tyres[OE] is 160 km/h: do not exceed this limit.
A label stating the maximum permissible speed must be affixed in the rider's field of vision.

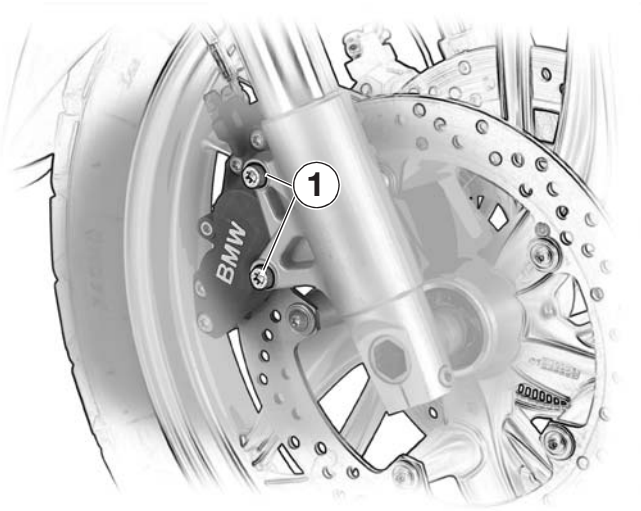


Removing the front wheel

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Raise the front wheel with front wheel stand, BMW special tool No. 36 3 970, or a suitable auxiliary stand

Note:
Make sure that the auxiliary stand is set to the correct width and height.

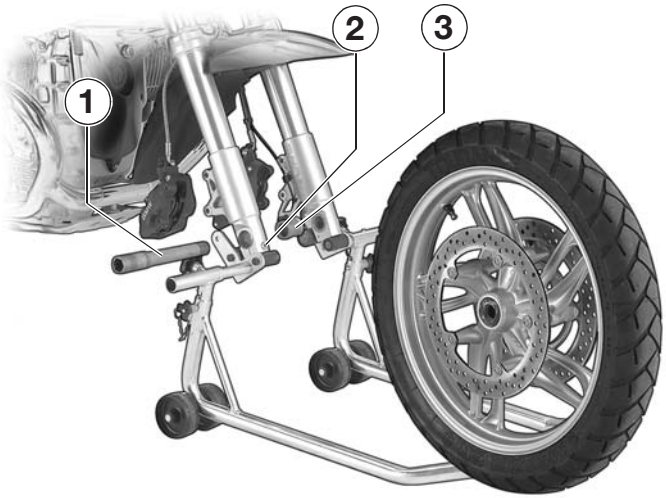
Attention:
When removing, do not damage brake pipes, brake discs, brake pads and the wheel rim (mask off with tape if necessary).
Do not scratch the rim when forcing back the brake pads or removing the calipers (apply masking tape if necessary).
To prevent damage to the brake caliper and possible difficulty when assembling: never pull the brake lever when the brake calipers have been removed.
Motorcycle with
BMW Integral ABS[OE]:
Do not damage the ABS sensor cable, the ABS sensor ring and the ABS sensor.



Warning:
Make sure that the motorcycle is standing firmly and cannot topple forwards or to either side.

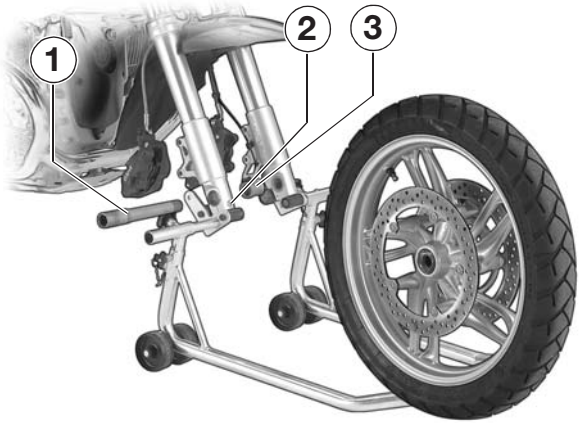
- Remove securing screws **1** for the left and right brake calipers
- Push the brake pads back a little by lightly rocking the brake calipers
- Carefully take off the left and right brake calipers

Note:
Check the brake pads (➠ 130) and have them replaced if necessary.



- Slacken axle clamping screw **2**
- Remove quick-release axle **1**
- Roll the front wheel forwards and out
- Remove spacing bushing **3** from the wheel hub

Attention:
When setting down the front wheel, do not damage the brake discs and ABS sensor ring[OE]. Keep dirt and moisture away from the wheel bearings.



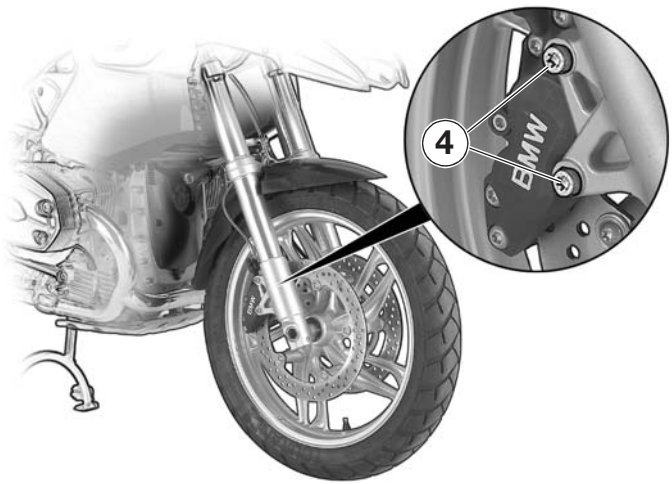
Installing the front wheel

Attention:
Do not damage brake lines, discs and pads when installing. Keep dirt and moisture away from the wheel bearings.
Motorcycle with BMW Integral ABS[OE]:
Do not damage the ABS sensor cable, the ABS sensor ring and the ABS sensor.

Note:
Note arrow on tyre indicating correct direction of rotation.

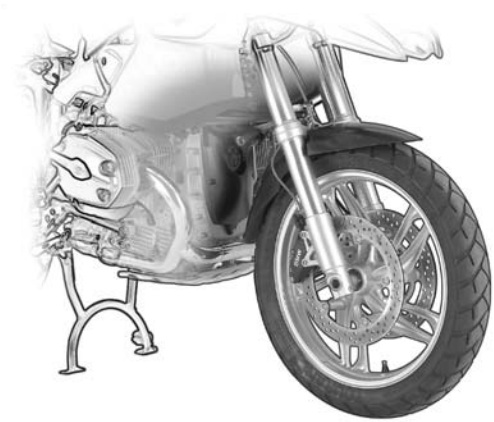
Warning:
Make sure that the motorcycle is standing firmly and cannot topple forwards or to either side.

– On left as viewed in forward direction of travel:
  • Insert spacing bushing **3** into the wheel hub
• Roll the front wheel in between the fork stanchions
• Clean quick-release axle **1**, grease it, and insert it from the right until it is hand-tight, holding up the wheel at the same time
• Hand-tighten axle clamping screw **2**



Warning:
Motorcycle not equipped with BMW Integral ABS: once assembly work on the brake calipers has been completed, pull the handbrake lever firmly several times.
Motorcycle equipped with BMW Integral ABS^{OE}: once assembly work on the brake calipers has been completed, pull the handbrake lever after the ignition has been switched on and self-diagnosis has completed.

- Remove front-wheel stand
- Compress the front forks firmly several times
- Tighten axle **1** to the specified tightening torque (➠ 172)
- Tighten axle clamping screws **2** (➠ 172) to the specified tightening torque
- Carefully slip the brake calipers over the left and right brake discs
- Install the brake calipers and tighten screws **4** to the specified tightening torque (➠ 172)



Installing the front wheel

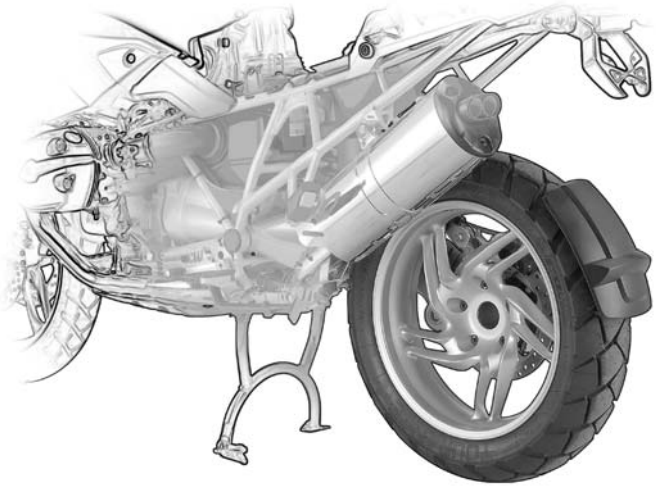
Without BMW Integral ABS

- Firmly pull the handbrake lever several times

With BMW Integral ABS[OE]

- Switch on the ignition
- Wait for self-diagnosis to complete
- Pull the handbrake lever

Attention:
Always have the tightening torques checked by a specialist workshop, preferably an authorised BMW motorcycle dealer.



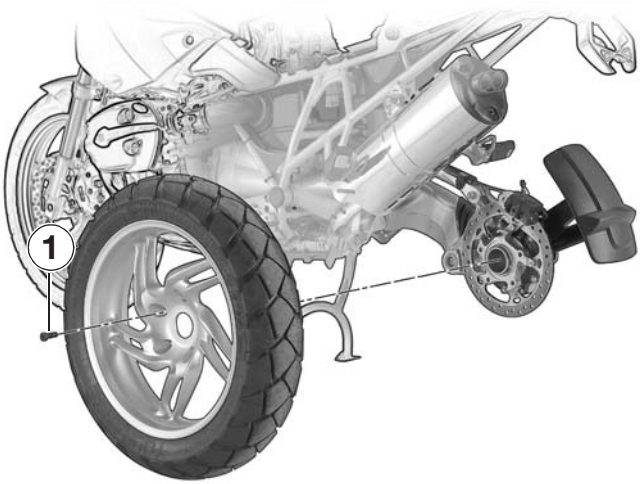
Warning:
Make sure that the motorcycle is standing firmly and cannot topple to the rear or to either side.

Removing rear wheel

Note:
Check the brake pads (➠ 131) and have them replaced if necessary.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand

Attention:
Do not damage brake lines, brake disc, brake pads, rims and spokes when removing.
Motorcycle with
BMW Integral ABS[OE]:
Do not damage the ABS sensor cable, the ABS sensor ring and the ABS sensor.



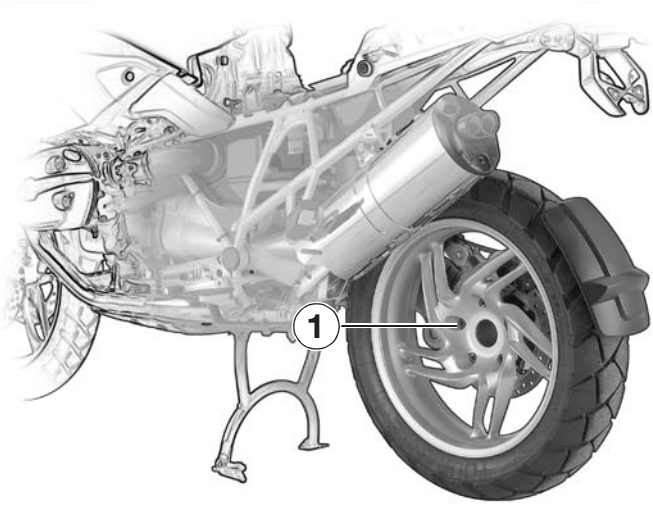
- Apply a weight to the front wheel
- Select 1st gear
- Remove five wheel studs **1**
- Lift the rear wheel clear of its centring spigot, tilt it, lower it to the ground and remove it

Attention:
Protect the wheel hub contact face against dust and dirt.

Installing the rear wheel

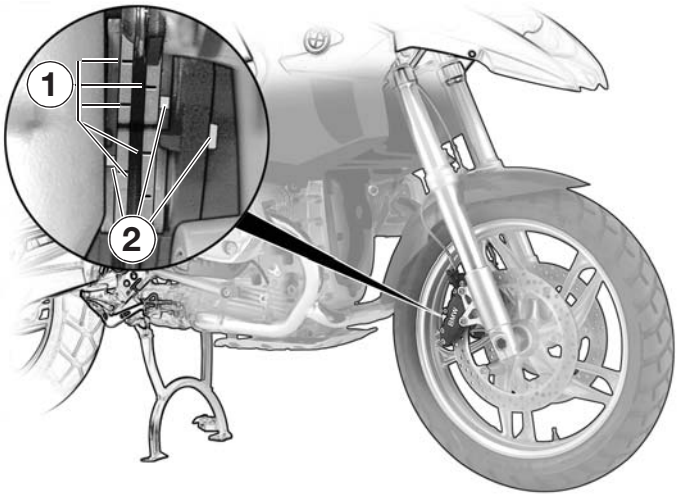
Warning:
Note that the length codes of the wheel studs of the cross-spoked wheels[OE] and the cast aluminium wheels differ. Be sure not to mix up the wheel studs or use a mixture of the two lengths.

Attention:
Use only wheel studs with the same length code number. Do not oil or grease the wheel studs.
Do not damage brake lines, brake disc, brake pads, rim and spokes when installing.
Motorcycle with BMW Integral ABS[OE]:
Do not damage the ABS sensor cable, the ABS sensor ring and the ABS sensor.



- Check that the wheel centring spigot and the contact faces on the wheel hub are free of grease
- Insert rear wheel into centring hole
- Hand-tighten wheel studs **1** and then tighten in diagonally opposite sequence to the specified tightening torque (➠ 172)

Attention:
Always have the tightening torques checked by a specialist workshop, preferably an authorised BMW motorcycle dealer.



Checking front brake

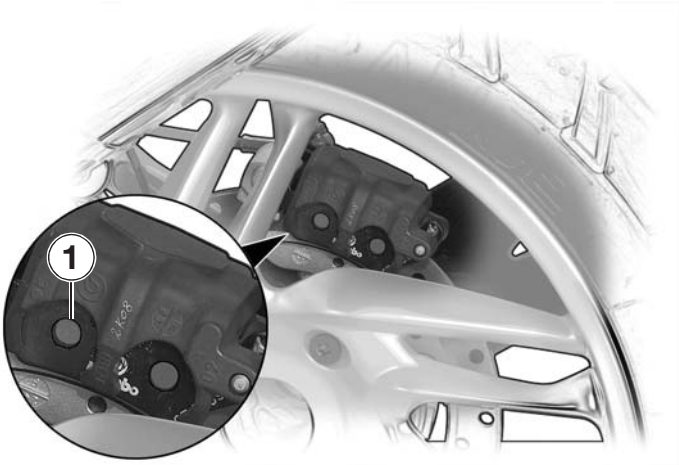
Attention:
Have brake pads replaced before the minimum permitted thickness is reached.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Visually inspect both sets of brake pads and brake calipers and make sure that they all bear the same colour mark **2**
- Visually check brake pad thickness

Minimum pad thickness: Wear indicator 1 must be clearly visible on the pads.

– If the wear indicator is no longer clearly visible:

have the brake pads replaced by a specialist workshop, preferably an authorised BMW motorcycle dealer.



Checking rear brake

Attention:
Have brake pads replaced before the minimum permitted thickness is reached.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Visually check brake pad thickness

Minimum pad thickness:
Make sure that the brake disc is not visible through bore 1 in the inboard brake pad.

– If the brake disc is visible through bore **1** in the inboard brake pad:

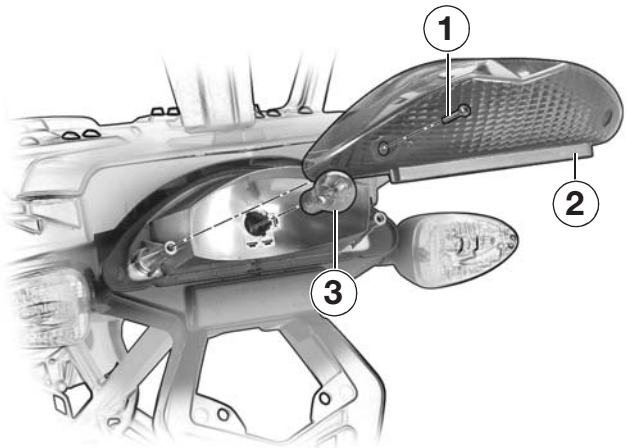
have the brake pads replaced by a specialist workshop, preferably an authorised BMW motorcycle dealer.

Warning:
When the engine is running or the ignition is switched on, do not touch electrically live components, terminals or wiring.
Risk of fatal accident.
Work on the electrical system only when the circuit has been interrupted (ignition switched off). For greater safety, disconnect and insulate the negative battery lead.

Your motorcycle has one bulb for the low-beam headlight and one for the high-beam headlight, one for the parking light, one for the brake light/rear light, plus four bulbs for the turn indicators.
A bulb failure is indicated by in the multifunction display, in some instances in combination with the General warning light ⚠ (➠ 19-22).

Warning:
A bulb failure can mean that you will have problems in seeing and being seen.
You should therefore always carry spare bulbs on the motorcycle.

Note:
Do not touch the glass of new bulbs with your fingers.
Use a clean, dry cloth to hold the bulbs when inserting them. Dirt deposits, in particular oil and grease, interfere with heat radiation from the bulb. This leads to overheating and shortens the bulb's operating life.

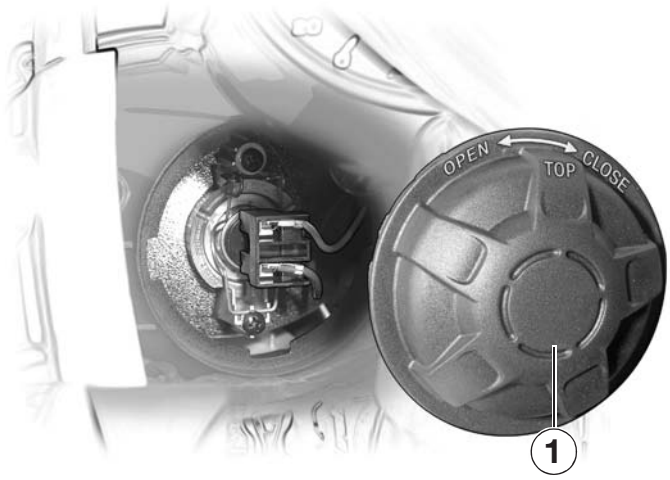


Changing brake-light/ rear-light bulb

Attention:
Switch off the ignition before changing a bulb.
Risk of short-circuit

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Remove securing screws **1**
- Remove rear light glass **2**
- Press bulb **3** into its socket and disengage it by turning it counter-clockwise
- Remove bulb **3**
- Installation is the reverse of the removal procedure

– Brake/rear light bulb **3**: **12 V 21/5 W**

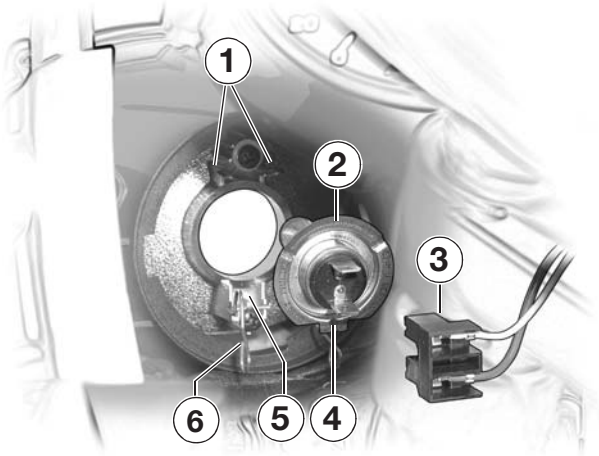


Attention:
Switch off the ignition before changing a bulb.
Risk of short-circuit

Changing high-beam headlight bulb

Warning:
H7 bulbs are pressurised. Wear goggles and protective gloves, risk of injury.

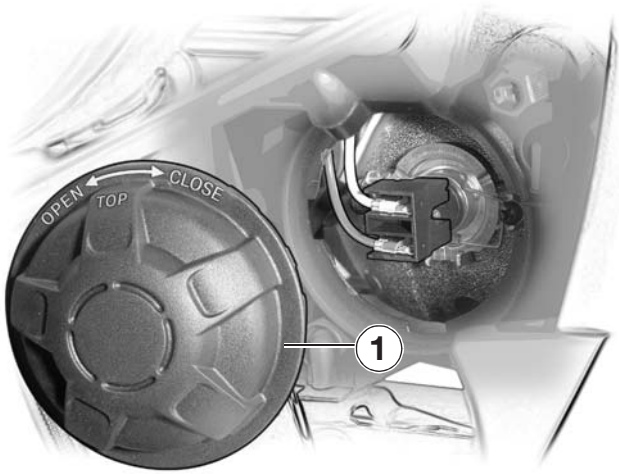
- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Turn the handlebars all the way to the right
- Turn left cover **1** counterclockwise (arrow) to disengage it and remove



- Disconnect plug **3** from H7 bulb **2**
- Release spring clip **6** from retainers **1** on left and right and swing the clip open
- Pull H7 bulb **2** out of its bulb socket
- Installation is the reverse of the removal procedure

Note:
Insert H7 bulb **2** with lug **4** in guide **5**.
Make sure that wording **TOP** on the cover (➠ 134) is toward the top.

– High-beam headlight **2**:
H7 12 V 55 W

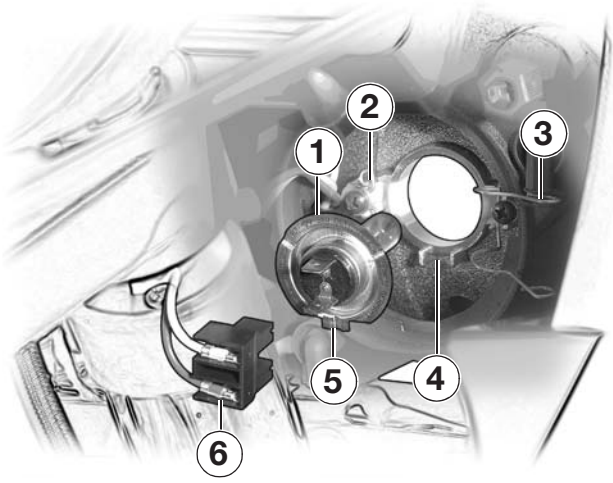


Attention:
Switch off the ignition before changing a bulb.
Risk of short-circuit

Changing low-beam headlight bulb

Warning:
H7 bulbs are pressurised. Wear goggles and protective gloves, risk of injury.

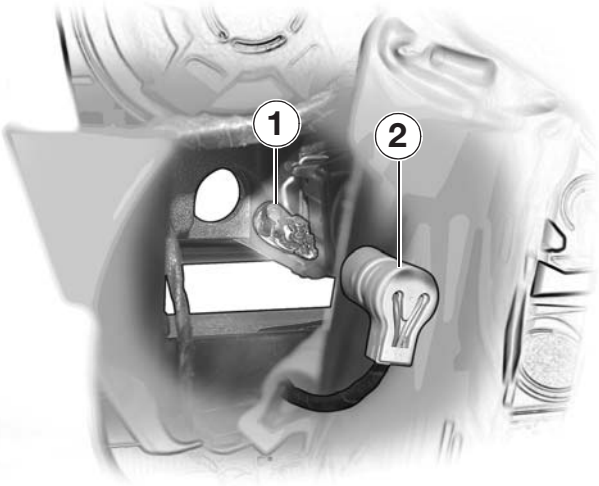
- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Turn the handlebars all the way to the left.
- Turn right cover **1** counterclockwise (arrow) to disengage it and remove



- Disconnect plug **6** from H7 bulb **1**
- Release spring clip **3** from retainers **2** at top and bottom and swing the clip open
- Pull H7 bulb **1** out of its bulb socket
- Installation is the reverse of the removal procedure

Note:
Insert H7 bulb **1** with lug **5** in guide **4**.
Make sure that wording **TOP** on the cover (➠ 136) is toward the top.

– Low-beam headlight **1**:
H7 12 V 55 W

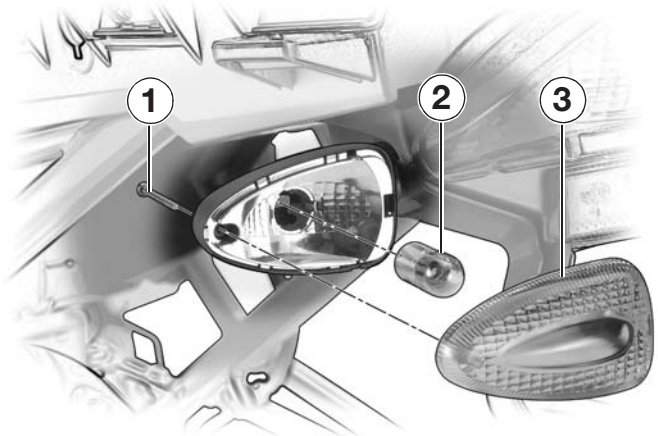


Changing parking light bulb

Attention:
Switch off the ignition before changing a bulb.
Risk of short-circuit

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Turn the handlebars all the way to the right
- Pull bulb holder **2** out of the headlight housing
- Pull bulb **1** out of its bulb socket
- Installation is the reverse of the removal procedure

– Parking-light bulb **1**: **12 V 5 W**

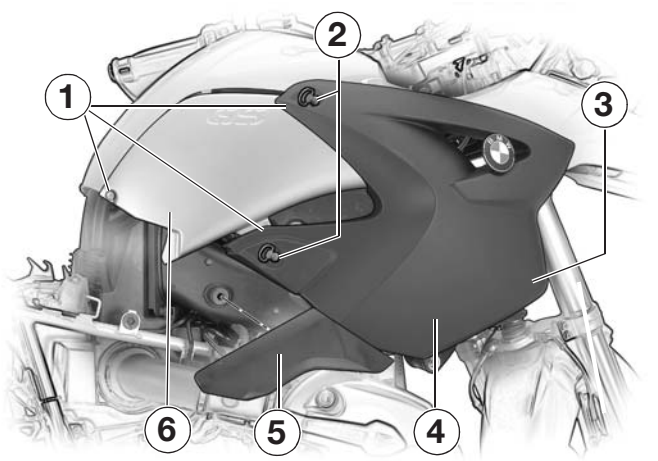


Changing bulbs for flashing turn indicators front/rear

Attention:
Switch off the ignition before changing a bulb.
Risk of short-circuit

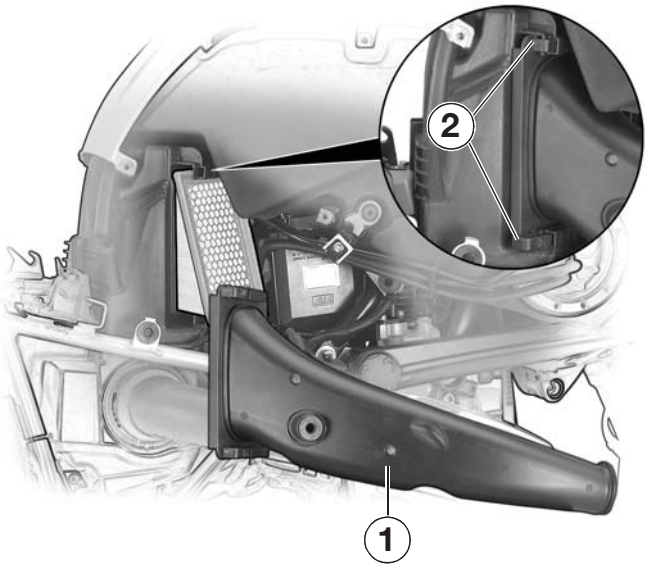
- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Remove securing screw **1**
- Remove flashing turn indicator glass **3**
- Press bulb **2** into its socket and disengage it by turning it counter-clockwise
- Remove the bulb
- Installation is the reverse of the removal procedure

– Flashing turn indicator bulbs, front/rear **2**:
12 V 10 W



Replacing air filter element

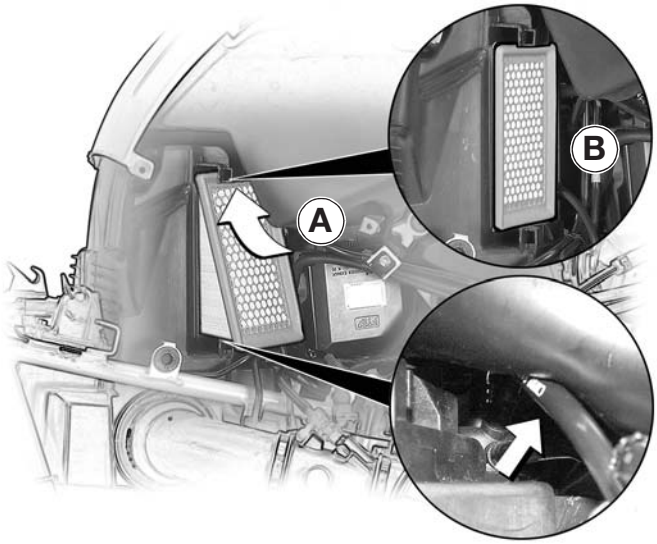
- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Remove the front and rear seats (➠ 46)
- Remove the right side panel as follows:
- Pull cover **5** out of its holders
- Turn two quick-action adapters **2** counter-clockwise to unlatch
- Working from inside, turn quick-release adapter **3** counter-clockwise to unlatch
- Pull front panel **4** out of its holders at the top front (see marks) and remove
- Remove three securing screws **1** and rear panel **6**



- Press two retainers **2** at the rear to release and remove
- Remove intake **1**

Attention:
Make sure that the throttle-valve cable is not disengaged when you remove the air filter element.

- Pull the old air-filter insert forward and down, as illustrated, to remove



- As shown in the illustration, insert the new air filter element from above into the air filter housing **A**
- and then push it down into the air filter housing **B**

Note:
This procedure for removing and installing the air filter element prevents dirt from entering the air filter housing.

- From this point on, installation is the reverse of the removal procedure

Attention:
After installing, check that both throttle valves move to their limit stops.
Make sure that the throttle-valve cable (arrow) is correctly routed.

Jump starting

Attention:
Do not attempt to jump-start the motorcycle using the on-board socket.
Risk of fire
The wires leading to the power socket do not have a load-capacity rating adequate for jump-starting the engine.

Attention:
If you switch on the ignition and the telltale lights fail to light up, the battery is completely flat. In this case, do not attempt to jump-start the motorcycle: recharge the battery instead.
Risk of damaging the control units.

Note:
Do not use proprietary start-assist sprays or other products to start the engine. If the motorcycle's battery charge level is low, you can start the engine of your motorcycle with the aid of another vehicle's 12 V battery and two jump leads. By the same token, you can jump start another motorcycle. Use only jump leads fitted with fully insulated crocodile clips at both ends.

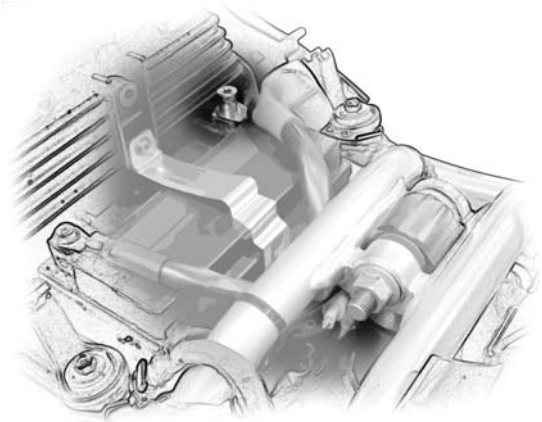
Note:
On your motorcycle, use the battery adapter point on the positive terminal and the spring-strut screw as the ground connection when connecting the jump leads.

- When jump-starting the engine, do not disconnect the battery from the on-board electrical system

Attention:
Make sure that the battery of the other vehicle has a voltage rating of 12 V

Warning:
Do not touch live components of the ignition system while the engine is running – Risk of fatal accident

Attention:
Make sure that there is no contact between the body parts of the two vehicles. Risk of short-circuit



- Remove the protective cap from the battery adapter point
- Begin by connecting one end of the red jump lead to the positive terminal of the discharged battery and the other end to the positive terminal 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 negative terminal of the discharged battery
- Start the engine of the donor vehicle and allow it to run for the duration of the jump-start procedure
- Start the engine of the vehicle with the discharged battery in the usual way; if the engine refuses to start wait a few minutes before repeating the attempt
- Allow both engines to idle for a few minutes before disconnecting the jump leads
- Disconnect the jump lead from the negative terminals first, then disconnect the second cable from the positive terminals.
- Remember to reinstall the protective cap on the adapter point

Your motorcycle is supplied with a maintenance-free battery.

Attention:
Compliance with the points below is important in order to maximise battery life:
- Keep the surface of the battery clean and dry
- Do not attempt to open the battery
- Do not attempt to top up the battery with water
- Be sure to read and comply with the instructions for charging the battery on the next pages
- Do not turn the battery upside down.

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

Charging the battery when installed and connected

The battery has to be charged at regular four-weekly intervals if the motorcycle is laid up for a lengthy period.

Attention:
If the battery is not disconnected, the on-board electronics (clock, etc.) will drain the battery. This can cause the battery to run flat. If this happens, warranty claims will not be accepted.
It is advisable to disconnect the battery if the motorcycle is going to be off the road for a lengthy period.
If the battery is completely flat it must always be recharged directly at the terminals. In order to recharge the battery in this way, it is essential to disconnect it from the on-board electrical systems.

Note:
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 of disuse, without having to disconnect the battery from the motorcycle's on-board systems. Your authorised BMW Motorrad dealer will be happy to provide you with more information.

You can use the on-board socket to recharge the battery if it is not completely flat. To do so:
- Disconnect electrical accessories, if any, connected to the second on-board socket
- Switch on the ignition
- Plug in the charger
- Switch off the ignition

Note:
The motorcycle's on-board electronics know when the battery is fully charged. In this case, the on-board socket is de-energised. If you are unable to charge the battery through the power socket, you may be using a charger that is not compatible with your motorcycle's electronics. If this happens, disconnect the battery from the on-board systems and connect the charger directly to the battery.

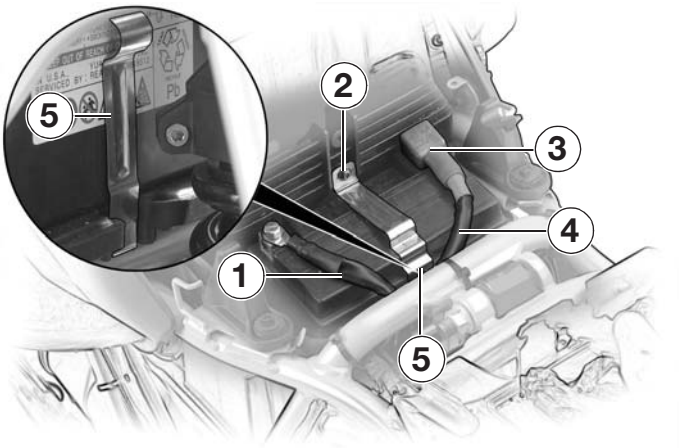
Attention:
Remember that you must disconnect the battery from the on-board systems if you want to connect your charger directly to the battery terminals.

Charging the battery when disconnected

- Charge the battery, using a suitable charger
- Once the battery is fully charged, disconnect the charger's crocodile clips from the battery terminals

– If the battery is in storage for an extended period of time, recharge it at regular intervals of approx. 4 months.
– Always fully recharge the battery before restoring it to use

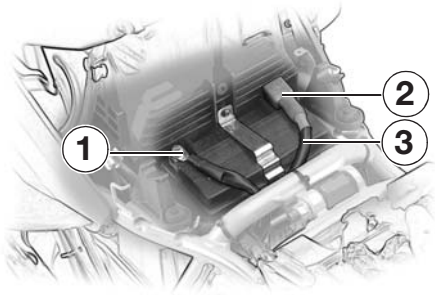
In case of doubt ask a specialist workshop, preferably an authorised BMW motorcycle dealer, to prepare the vehicle for laying up and to undertake the necessary battery maintenance and storage



Removing the battery

Warning:
Before disconnecting the battery, switch off the ignition. Turn the ignition switch to position , and check that the steering lock is engaged. To avoid short-circuits:
- First disconnect the **negative** battery lead (–),
- then disconnect the **positive** lead (+).

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Remove the front and rear seats (➠ 46)
- Disconnect **negative** battery lead **1**
- Open protective cap for the battery's positive terminal **3**
- Disconnect **positive** battery lead **4**
- Remove securing screw **2** from retaining strap **5**
- Disengage retaining strap **5** at bottom and remove, see detail
- Lift out the battery



Installing the battery
Installation of the battery is the reverse of the removal procedure.

Warning:
Before connecting the battery, make sure the ignition is switched off.
Turn the ignition switch to position , and check that the steering lock is engaged.
To avoid short-circuits:
- **Connect the positive battery lead (+) 3 first**
- **Close protective cap 2 for the positive battery post**

– **Never install the battery without the protective cap**

- **Connect negative battery lead (–) 1**
- Tighten the battery-terminal clamps
- Switch on the ignition
- Fully open the throttle once or twice

– The engine's control unit registers the throttle-valve positions

Note:
Remember to reset the clock after reconnecting the battery.

Washing the motorcycle

Removing road salt

Cleaning the windscreen

Cleaning/care

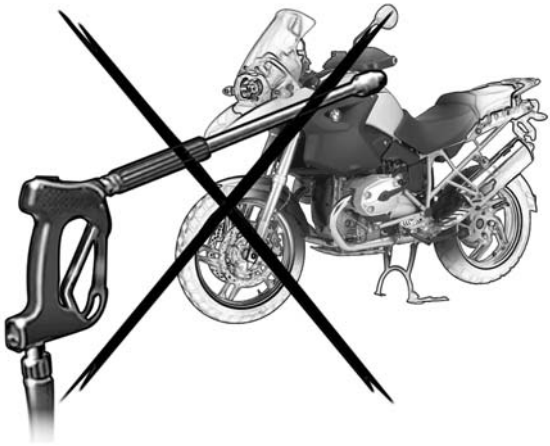
Touching up minor damage

Care of exhaust silencer

Cleaning/care

Laying up

Restoring to use



Attention:
Do not use aggressive or penetrating cleaning agents or solvents, as they would cause damage to rubber and plastic parts.
Use only solvent-free cleaning agents to clean the seat.
Do not use a steam jet or high-pressure cleaning equipment. High water pressure can damage seals, the hydraulic brake system or the complete electrical system.

Note:
Regular cleaning, using the correct methods, is an important factor in maintaining the value of your motorcycle.
It also ensures that safety-relevant parts remain in full working order.

Washing the motorcycle

Warning:
After cleaning and before starting a journey, always test the brakes.

- Make sure the ground is level and firm and lift the motorcycle onto its main stand
- Apply a mild cleaning agent to the wheels, engine block, gearbox and swinging arm, in accordance with the manufacturer's instructions
- Thoroughly dry all wet surfaces
- Do not use solvents or cleaning agents to clean the instrument panel, switches and windscreen – take care not to scratch the windscreen
- Remove tar splashes only with an approved product – rinse thoroughly with water afterwards.
- Clean flies and other insects off the fork stanchions
- Treat painted and chrome-plated surfaces regularly with the approved care products

Removing road salt

- Wash the motorcycle down immediately with cold water at the end of the journey.

Note:
Do not use warm water – this aggravates the effect of the salt.

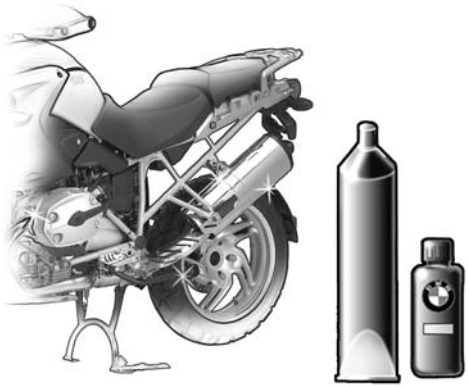
- Thoroughly dry the motorcycle
- Apply a wax-based corrosion-proofing product to chrome-plated parts
- Coat/polish fairing elements after cleaning and drying with a recommended wax

Cleaning the windscreen

Attention:
Do not use cleaning agents. Fuel or chemical solvents attack the windscreen material.

- Remove dirt and dead insects with a soft sponge and plenty of water

Note:
Soften stubborn dirt or insects by soaking with a wet kitchen tissue.



Touching up minor damage

Attention:
Comply with the manufacturer's working instructions and safety precautions.

- Minor damage caused by stones striking the painted surface can be touched up with a BMW touch-up pencil of the correct colour

Note:
Have severe damage repaired by a specialist workshop, preferably your authorised BMW motorcycle dealer.

Care of exhaust silencer

- Changes in the appearance of the silencers during operation or as a result of environmental influences can be treated with a polish available from your authorised BMW motorcycle dealer.

Laying up

- Clean the motorcycle (➠ 153)
- Remove the battery (➠ 149-150)
- Spray the brake and clutch lever pivots and the main and side stand pivots with a suitable lubricant
- Coat bright metal/chrome-plated parts with an acid-free grease (e.g. Vaseline)
- Place the motorcycle on its main stand in a dry room
- Support the motorcycle under the engine so that the wheels are not taking any weight

Note:

Before laying the vehicle up out of use have the engine oil and the oil filter element changed by a specialist workshop, preferably your authorised BMW motorcycle dealer.

It is always a good idea to combine the preparations for a lay-up and the post lay-up work with a Service check or Inspection and have the work done by a specialist workshop, preferably your authorised BMW motorcycle dealer.

Restoring to use

- If necessary, remove protective wax coating
- Clean the motorcycle (➠ 153)
- Install a charged battery (➠ 149-150)
- Perform all safety checks (➠ 60)
- Check the brakes (➠ 80-88), (➠ 113-116) and (➠ 130-131)
- Check/correct tyre pressures (➠ 53)

Engine

Power train

Frame and suspension

Fuel and lubricants

Electrical system

Dimensions and weights

Performance data

Tightening torques

	R 1200 GS
Type	Two-cylinder, four-stroke EVO opposed-twin engine
Displacement	1,170 cc
Max. output to DIN 70 020	
	74 kW
- at engine speed	7,000 rpm
Max. torque	115 Nm
- at engine speed	5,500 rpm
Permissible engine speeds	
Engine speed, maximum	7,800 rpm
Idle speed	$1{,}150^{\pm 50}$ rpm
Bore/stroke	101/73 mm
Compression ratio	11.0 : 1
Fuel consumption to ISO 7118	
constant 90 km/h	4.3 l/100 km
constant 120 km/h	5.5 l/100 km
Maximum oil consumption	1 l/1,000 km

	R 1200 GS
Clutch	Single-plate dry clutch
Clutch plate dia.	180 mm
Gearbox	6-speed with claw shift and integral torsional vibration damper
Gear ratios	1st gear = 4.15 2nd gear = 2.89 3rd gear = 2.30 4th gear = 1.88 5th gear = 1.65 6th gear = 1.47
Transmission from gearbox to rear wheel drive	Universal shaft with integrated torsional damper
Rear wheel drive	Bevel gears
Final drive ratio	1 : 2.82

	R 1200 GS
Frame	Three-part frame concept with load-bearing engine. Tubular steel front and rear frames.
Location of type plate	Behind left side cover
Location of vehicle identification number (VIN)	On front frame at right
Front brake	Two floating brake discs with 4-piston fixed calipers
	Sintered metal brake-pad linings
Rear brake	One fixed brake disc with 2-piston floating caliper
	Organic brake-pad linings

	R 1200 GS
Wheel location	
Front	BMW Telelever
Rear	BMW EVO Paralever swinging arm
Steering lock angle	2 x 42°

	R 1200 GS
Front suspension system	Central spring strut with twin-tube shock absorber, spring preload adjustable in nine stages
Spring travel (bump)	122 mm
Spring travel (rebound)	68 mm
Total suspension travel	190 mm
Fixed tube diameter	41 mm
Front wheel castor in normal-load position	110 mm
Rear suspension system	Central spring strut with single-tube shock absorber with progressive damping. Spring preload and rebound damping steplessly variable
Spring travel (bump)	135 mm
Spring travel (rebound)	65 mm
Total suspension travel (at wheel)	200 mm
Swinging arm length	535 mm

	R 1200 GS
Wheels and tyres	**Note:** You can obtain detailed information on approved tyre sizes and makes from your authorised BMW motorcycle dealer or by visiting “www.bmw-motorrad.com/maintenance” on the Internet
Front wheel	Angled rim shoulder and double tyre retaining hump
Rim size	2.50 x 19"
Tyre size	110/80-19
Rear wheel	Angled rim shoulder and double tyre retaining hump
Rim size	4.00 x 17"
Tyre size	150/70-17

		R 1200 GS
Tyre pressures (with tyres cold)		
One-up	Front	2.20 bar
	Rear	2.50 bar
Two-up	Front	2.50 bar
	Rear	2.90 bar
Two-up and luggage		
	Front	2.50 bar
	Rear	2.90 bar

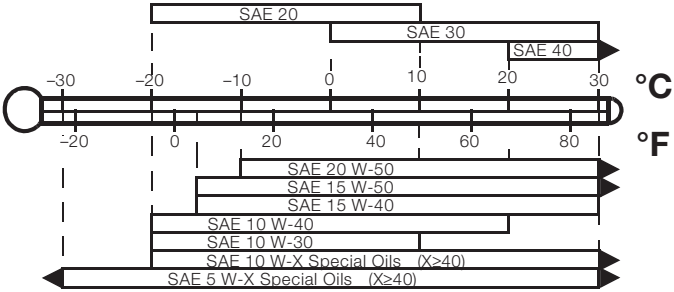
Recommended minimum tyre tread depth

Comply with local legal requirements concerning minimum tread depth.

Warning:
Handling and grip can be impaired even before the tyres wear to the minimum tyre tread depth permitted by law.

Engine oil

Brand-name HD oil of API classification SF, SG or SH; CD or CE amendments are permissible; or brand-name HD oil of CCMC classification G4 or G5; amendment PD2 is permissible.



The viscosity class depends on outside temperatures. Temperatures above or below the limits quoted for the individual SAE classifications are permitted for brief periods only.
All engine oils supplied by BMW are subject to regular BMW quality assurance checks.
BMW does not approve the use of any upper-cylinder lubricants or similar oil additives.

Engine oil capacity

With filter change	3.95 l

	R 1200 GS
Gear oils	
Gearbox	Castrol SAF XO
Capacity	approx. 0.8 l (to bottom edge of filler neck)
Fuel grade	**Super (premium) unleaded fuel to DIN 51 607 standard, minimum octane number 95 (RON)**
Fuel tank capacity (usable)	20 l including approx. 4 l reserve
Brake fluid	DOT 4 We recommend BMW brake fluids
	Attention: Use only new brake fluid to DOT 4 specification.
	Note: Oil in the fork legs and the rear wheel drive: Lifetime filling

	R 1200 GS
Battery	12 V 14 Ah, maintenance-free
Low temperature test current	100 A
Spark plugs	
Approved types	
Primary spark plug	BOSCH YR5LDE
Secondary spark plug	BOSCH YR5LDE
Electrode gap	0.8 mm
Wear limit	1.0 mm
Fuses	All circuits are electronically protected, so plug-in fuses are no longer necessary. If an electronic fuse trips and de-energises a circuit, the circuit is active as soon as the ignition is switched on after the fault has been rectified.
Headlights	Twin halogen headlights
Bulbs	
High-beam headlight	H7 halogen bulb 12 V 55 W
Low-beam headlight	H7 halogen bulb 12 V 55 W
Parking light	DIN 72 601 12 V 5 W Standard designation T 8/4
Brake light/tail light	DIN 72 601 12 V 21/5 W Standard designation P 25-2
Flashing turn indicators	DIN 72 601 12 V 10 W Standard designation P 25-1
Power socket	12 V 5 A for connecting GPS, Roadbook, Tripmaster etc.

Dimensions and weights

	R 1200 GS
Maximum length	2,210 mm
Maximum width (without mirrors)	915 mm
Maximum height (without rider)	1,430 mm
Seat height	840/860 mm
Wheelbase	
- in normal-load position	1,520 mm
Ground clearance	
- in normal-load position	187 mm
DIN unladen weight	225 kg
Dry weight (to EU specification)	211 kg
Permitted gross weight	425 kg
Maximum payload	200 kg
Permissible wheel loads	
Front	170 kg
Rear	280 kg

	R 1200 GS
Top speed	more than 200 km/h
Ride-past noise level	
to EU specification	79 dB (A)
Stationary noise level	
to EU specification	87 dB (A) at 3,500 rpm
Acceleration	
0-100 km/h	3.4 s

Tightening torques

	R 1200 GS	
Front wheel		
	Brake caliper screws	30 Nm
	Quick-release axle	50 Nm
	Axle clamping screw	19 Nm
Rear wheel		
	Wheel studs	60 Nm
Spark plugs		
Primary spark plug	Engine cold	22.5 Nm
Secondary spark plug	Engine cold	22.5 Nm
Battery		
	Battery-terminal clamps	3.5 Nm
Luggage rack		
	Luggage rack to rear frame	10 Nm

Some maintenance tasks have to be performed after a certain time, others depend on the distance covered by the motorcycle.

BMW running-in check
The BMW running-in check has to be performed when the motorcycle has covered between 500 km and 1,200 km

BMW Annual Inspection
Some maintenance tasks have to be carried out at least once a year.
Other tasks depend on the distance the motorcycle has covered.

BMW Service
After the first 10,000 km (and every further 20,000 km (30,000 km, 50,000 km, 70,000 km...) if covered within a year

BMW Inspection
After the first 20,000 km and every further 20,000 km (40,000 km, 60,000 km, 80,000 km...) if covered within a year

Maintenance schedules

If you like, you can view the current maintenance schedule for your motorcycle on the Internet and download the file from "www.bmw-motorrad.com/maintenance".

Note:
Every BMW motorcycle dealer has a fixed scale of charges based on work times and carefully calculated hourly rates. Fuel, lubricants and similar substances, filters, gaskets, etc. are charged separately.

Confirmation of maintenance work

BMW Pre-delivery Check

Carried out in accordance with manufacturer's instructions

Odometer reading _____

Date, stamp, signature

BMW Running-In Check

Carried out in accordance with manufacturer's instructions

Odometer reading _____

Brake fluid changed:

Without BMW Integral ABS

☐

With BMW Integral ABS

☐ Wheel circuit

☐ Control circuit

Date, stamp, signature

BMW Service

☐ BMW Annual Inspection

☐ BMW Service

☐ BMW Inspection

Carried out in accordance with manufacturer's instructions

Odometer reading _____

Brake fluid changed:

Without BMW Integral ABS

☐

With BMW Integral ABS

☐ Wheel circuit

☐ Control circuit

_____

Date, stamp, signature

BMW Service

☐ BMW Annual Inspection

☐ BMW Service

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Carried out in accordance with manufacturer's instructions

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Without BMW Integral ABS

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Date, stamp, signature

Confirmation of maintenance work

BMW Service

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Carried out in accordance with manufacturer's instructions

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Date, stamp, signature

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☐ BMW Service

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Odometer reading _____

Brake fluid changed:

Without BMW Integral ABS

☐

With BMW Integral ABS

☐ Wheel circuit

☐ Control circuit

_____

Date, stamp, signature

Confirmation of maintenance work

BMW Service

- ☐ BMW Annual Inspection
- ☐ BMW Service
- ☐ BMW Inspection

Carried out in accordance with manufacturer's instructions

Odometer reading _____

Brake fluid changed:

Without BMW Integral ABS

☐

With BMW Integral ABS

- ☐ Wheel circuit
- ☐ Control circuit

_____

Date, stamp, signature

BMW Service

- ☐ BMW Annual Inspection
- ☐ BMW Service
- ☐ BMW Inspection

Carried out in accordance with manufacturer's instructions

Odometer reading _____

Brake fluid changed:

Without BMW Integral ABS

☐

With BMW Integral ABS

- ☐ Wheel circuit
- ☐ Control circuit

_____

Date, stamp, signature

Record of all work carried out in workshop		
Work performed	**km/miles**	**Date**

This list is intended as a record of maintenance, warranty and repair work, of the installation of optional accessories, and also to confirm that special campaign work has been carried out.

Confirmation of service

Record of all work carried out in workshop		
Work performed	**km/miles**	**Date**

Now it's your turn

- Regular care is important, with all functions checked before the journey starts.
- Use only genuine BMW accessories. These satisfy all safety requirements and are precisely matched to your BMW motorcycle.
- Have your motorcycle serviced only by the trained, expert personnel at your local authorised BMW motorcycle dealer.
- Do not under any circumstances install unapproved accessories. This can represent a safety hazard, invalidate the motorcycle's general operating permit or cause you to lose your insurance cover.
- Technical modifications should always be entrusted to your authorised BMW motorcycle dealer.

Note:

Your local authorised BMW motorcycle dealer can supply you with useful items to add to your motorcycle's toolkit and accompany the maintenance instructions.

– BMW Repair Manual

It's good to know you've thought of everything, isn't it?

Our aim is to make your journey safer

We want you to reach all your destinations safely – and we want you to enjoy riding your BMW as a constant source of relaxed pleasure and satisfaction.

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Vehicle/dealership data

Vehicle data

Model

Vehicle identification number

Colour code

First registration

Registration number

Dealership data

Person to contact in Service

Ms./Mr.

Phone number

Dealership address/phone (company stamp)

You might need certain items of information when you stop to refuel, so it is a good idea to write down the important data in this chart.

Fuel		
Designation	Premium fuel	
RON: Minimum	95	
Engine oil		
Grade		
The difference between the min. and max. marks is equal to approximately 0.5 litre.		
Tyre pressures	Front	Rear
One-up	2.20 bar	2.50 bar
Two-up	2.50 bar	2.90 bar
Two-up with luggage	2.50 bar	2.90 bar

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The Ultimate Driving Machine

How does ABS work?
The maximum braking force it is possible to transfer to the carriageway depends, among other things, on the road surface's coefficient of friction. Gravel, ice and snow, and water on the road, have significantly poorer coefficients of friction than a dry, clean asphalt road surface. The poorer the road's coefficient of friction, the longer the braking distance.
If the maximum braking force it is possible to apply to the road is exceeded when the rider increases brake pressure, the wheels will begin to lock and directional stability is lost; a fall threatens. Before this situation can arise, ABS intervenes and adapts the braking pressure to the maximum braking force it is possible to transfer so that the wheels continue to turn and driving stability is maintained whatever the prevailing road conditions.

What happens with bumps in the road?
Corrugated road surfaces or bumps in the road can cause the tyres to temporarily lose contact with the road surface and hence the braking force it is possible to apply to drop to zero. If the brakes are applied in this situation, the ABS must reduce the braking pressure to ensure driving stability when contact with the road surface is restored. At this moment, BMW Motorrad Integral ABS must assume extremely low coefficients of friction (gravel, ice, snow) so that the wheels turn in any conceivable situation and thus the stability of the motorcycle is ensured. Once the actual circumstances are detected, the system will set the brake pressure to the optimum value.

What do we observe during rider safety training?
Braking in which ABS has to intervene has, by comparison with normal braking, a significantly higher demand for electricity which puts a heavy load on the battery. The battery is constantly being charged in normal riding so that it always has sufficient capacity available.

If the motorcycle is not to be ridden for several weeks, a trickle charger, which can be obtained from your BMW Motorrad dealer, should be connected or the battery disconnected and then recharged before starting riding again.

During rider safety training, an unusual number of ABS-controlled braking operations take place in rapid succession interspersed with periods of waiting and assessment in which the motorcycle is not being ridden. The battery is put under heavy load by the ABS control actions, but at the same time it is not being recharged as practically no riding is being done.

In isolated cases, in this artificially created situation, braking operations in which the brake lever is operated with maximum force and extreme speed, in combination with declining on-board supply voltage, can bring the ABS up to its technical limits in which its control function is no longer fulfilled.

Field observations carried out by BMW Motorrad indicate that a comparable situation has not arisen in traffic or even during training rides.

The following notes must be observed during safety training:

- check the warning and indicator lamps before any braking exercise
- ride the motorcycle over sufficient distance to charge the battery after a maximum of five braking exercises
- switch off consumers such as seat and grip heating, radio, navigation system and accessories connected to the power sockets
- in pauses and discussions, switch off the ignition; if the engine is switched off with the emergency off switch, the lights and all electronic systems remain switched on and drain the battery

How can I achieve the shortest braking distance?

Dynamic load distribution between the front and rear wheels changes under braking. The heavier the brakes are applied, the more load is transferred to the front brake. The greater the load on the wheel, the more braking force can be transferred.

To achieve the shortest braking distance, it is necessary to apply the front brake gradually and with increasing force. This makes best use of the dynamic increase in load on the front wheel. At the same time, the clutch should be disengaged.
In emergency braking as it is often taught, in which the brake pressure is generated as quickly as possible and with all possible force, the dynamic load distribution cannot follow the increasing deceleration and the braking force cannot be completely transferred to the road. The ABS has to intervene to ensure that the front wheel does not lock up; this reduces the brake pressure and the braking distance is extended.

What happens if ABS control fails?
A fault in BMW Motorrad Integral ABS is indicated by a corresponding warning display in the instrument cluster. If only ABS control fails, the Integral system and the brake servo action remain operational. If these systems also fail, the residual brake function is applied. In this case, the forces to be applied to the brake levers will be significantly higher and the lever travel required will be longer. The residual brake function is a mechanical function and is always available in the event of the failure of the BMW Motorrad Integral ABS, whatever the battery condition. It meets all requirements of legislation around the world on the design of brakes for motor vehicles and allows the rider to brake the motorcycle. The following notes must be observed for riding with the residual braking function:

- set the brake lever to maximum travel
- always brake with both front and rear brakes
- where it is safe to do so, try out the brakes so that you can learn the brakes' response characteristics
- be aware of the prevailing road conditions and adapt your braking force accordingly
- since this is an emergency-run function, you should visit a specialist workshop, or better still a BMW Motorrad dealer, as quickly as possible

What is the role of regular maintenance?

Any technical system is only ever as good as its maintenance.

The service intervals specified must be kept to without fail to ensure that the BMW Motorrad Integral ABS is in an optimum maintenance condition.◀

What is the design specification for BMW Motorrad Integral ABS?

BMW Motorrad Integral ABS ensures stability of the motorcycle on any surface within the bounds of physics.

The system is not designed for special requirements such as those that arise under extreme conditions of competition off-road or on the racetrack.

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The Ultimate Riding Machine

Applies to: Motorcycles with hand protectors[OA]

Possibility of malfunction due to incorrectly positioned hand protector

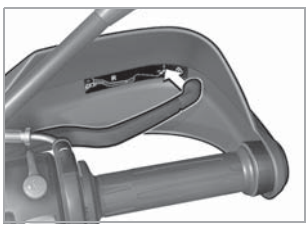
If the hand protector is twisted out of position relative to the handlebar lever to the extent that the two come into contact, there is a possibility of the handlebar lever remaining continuously in the partly operated position. This is turn can cause problems with the clutch or brake function, depending on which lever is affected.

Possible causes can be:

– Crash or fall
– Lack of due care when transporting the motorcycle
– Threaded fasteners working loose
– Impermissible ergonomic settings (see Rider's Manual, "Adjusting clutch lever/ handlebar lever" or, as applicable, "Adjusting brake lever/handlebar lever").

• Before riding off, always check that there is nothing to impede the movement of the clutch lever and the handbrake lever.

Checking freedom of movement of handlebar levers



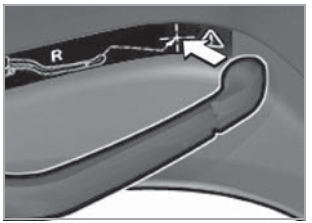
The movement of the handlebar levers is not impeded if

– you can insert a finger into the gap between the handlebar lever and the hand protector,

or

– the handlebar lever is easily pushed forward from its normal released position.

Aligning hand protector



- Push the handlebar lever fully forward. Turn the hand protector until the tip of the handlebar lever touches the cross on the label.
- Have the settings and the threaded-fastener tightening torques checked by a specialist workshop, preferably an authorised BMW Motorrad dealer.