

Rider's Manual
US Models
K1100RS
K1100LT



Reporting Safety Defects!

If you believe your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying BMW of North America, Inc., P.O. Box 1227, Westwood, New Jersey 07675-1227, Telephone (201) 307-4000.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or BMW of North America, Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, DC area) or write to: NHTSA, US Department of Transportation, Washington, DC 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Rider's Manual

US Models

K 1100 LT

K 1100 RS



BMW AG Motorcycle Division

Important Notice

Your BMW motorcycle conforms to all applicable U.S. Federal Motor Vehicle Safety Standards and U.S. Environmental Protection Agency Regulations effective on the date of manufacture.

This motorcycle has been designed for use in a prudent and reasonable manner by a qualified operator. It is intended for on-road use as a vehicle only. Operation in forest, bush or grass covered areas may be illegal. Obey local laws and regulations.

Whether you are a novice or an experienced rider, **become familiar with this Rider's Manual before you ride the motorcycle.**

Pay special attention to passages which are preceded by the following expressions:

Warning

– marks the possibility of **danger** for the operator or another person, unless instructions are followed.

Caution

– marks the possibility of **damage** to the motorcycle or parts thereof, unless instructions are followed.

Note

– marks recommendations which are useful or vital for proper **use or maintenance** of your motorcycle.

It is recommended that maintenance be performed by an authorized BMW dealer using Original BMW parts.

Maintenance, replacement or repair of the emission control devices or systems may be performed, at your expense, by any motorcycle repair establishment or individual using any motorcycle part which is certified under those regulations without voiding the warranty.

In the interests of continuing technical development, we reserve the right to modify designs, equipment and accessories.

Dimensions, weights and performance data are listed at generally accepted tolerances. Errors and omissions excepted.

Please note that any discrepancies between your motorcycle and the details given in this book may be due to the equipment specification offered on a particular model or the version offered in another country. No claims based on data statements, descriptions or illustrations from this book will be entertained.

Errors and omissions excepted.

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BMW AG Motorcycle Division

Technical Service Department.

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**Dear motorcyclist and
BMW enthusiast,**

We congratulate you on choosing a BMW motorcycle and welcome you to the group of BMW riders.

Safety is a prime consideration in motorcycling. The better acquainted you are with the motorcycle, the more comfortable you will feel in road traffic.

That is why we ask you to please spare a little time now to read this Rider's Manual thoroughly before you start riding. It contains important information on operating your motorcycle to enable you to fully appreciate your BMW. You will also find helpful information regarding care and maintenance to ensure that your BMW motorcycle is always in proper operating condition to help ensure maximum road safety and retention of its value.

In conclusion, we wish you and those who ride with you many an enjoyable journey.

Yours sincerely,

BMW AG Motorcycle Division

Please Note: Important Safety Information!

For your personal safety, BMW of North America, Inc. (“BMW NA”) recommends that you use only parts and accessories approved by BMW NA.

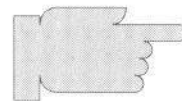
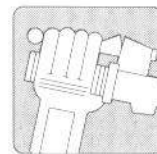
By using Original BMW Parts and Accessories tested and approved by BMW, you can enjoy the assurance of knowing that these products have been certified after appropriate testing as suitable for use on, or in conjunction with, your BMW motorcycle. BMW NA assumes full responsibility for these products when used as directed.

BMW NA assumes no liability whatsoever for parts and accessories which it has not approved.

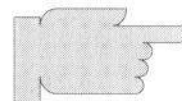
When you use such non-approved products on your BMW motorcycle, you do so at your own risk. BMW NA is unable to determine whether each after-market part and accessory can be used without representing a risk of injury or death to you and/or your passenger.

Original BMW Parts, BMW Accessories and other products approved by BMW NA, together with competent advice on all matters concerning them, can be obtained from any authorized BMW motorcycle dealer.

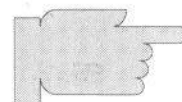
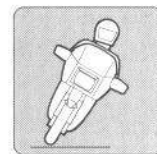
Operating instructions



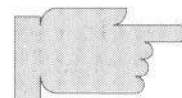
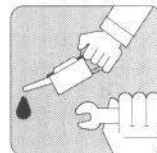
Safety check



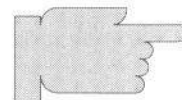
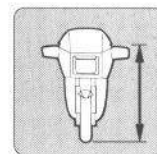
Starting - Riding - Parking



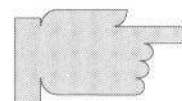
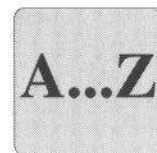
Care and maintenance



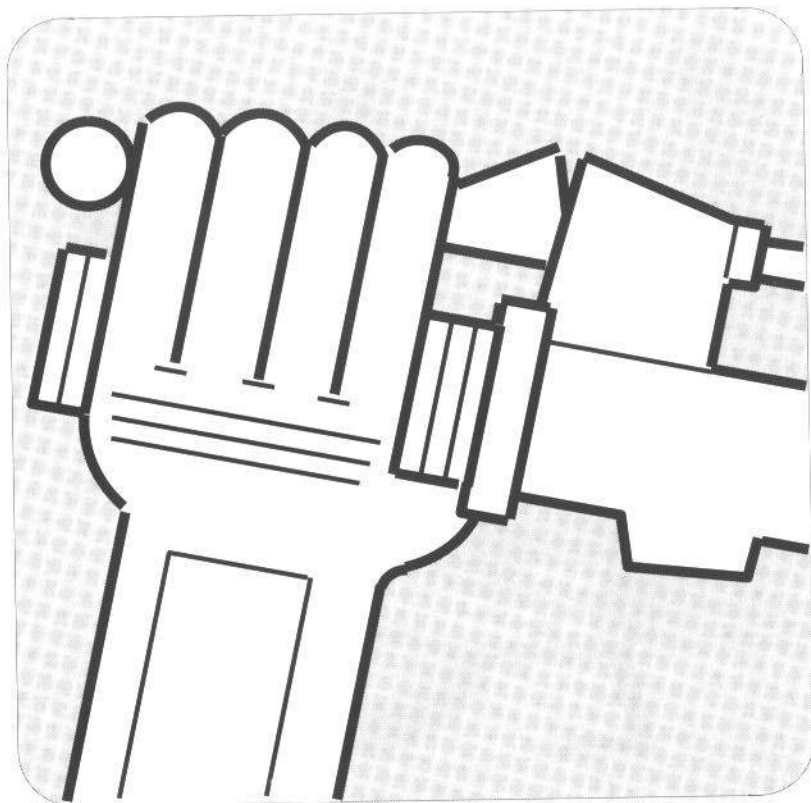
Specifications



Alphabetical index



Operating instructions



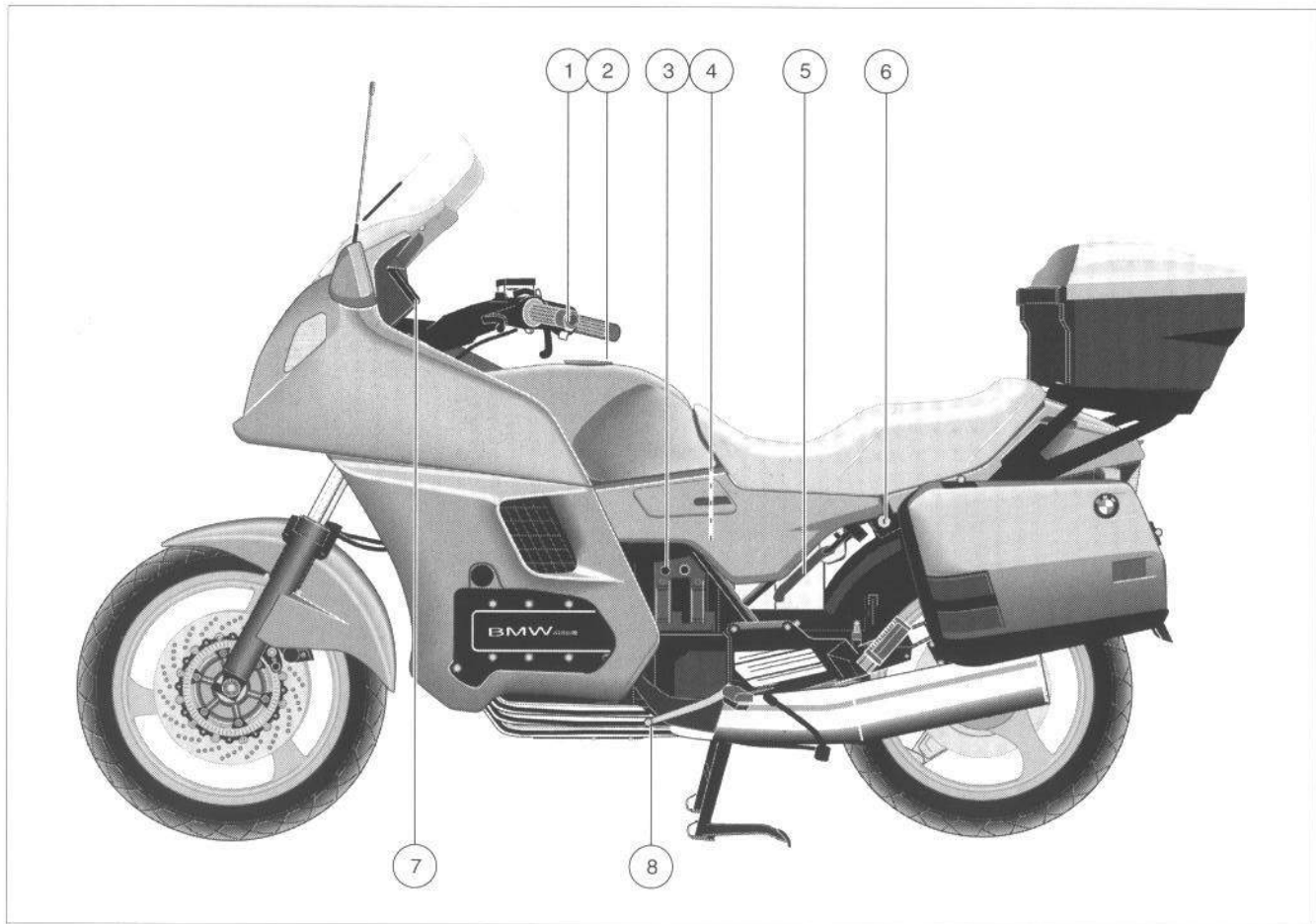
Where is everything?

- General views of motorcycle (8-11)

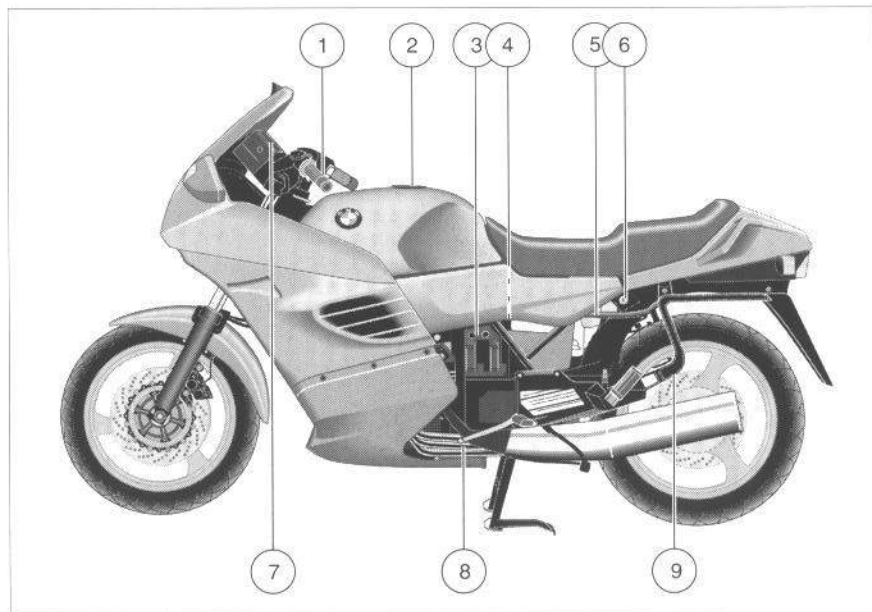
How does it work?

- Ignition and steering lock (12)
- LCD-Digital clock (12)
- Left instrument unit (13)
- Central instrument unit (13)
- Right instrument unit (13)
- Fuel gauge (14)
- Temperature gauge (14)
- Left handlebar controls (15)
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- Self-cancelling turn-signals (15)
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- Heated handlebar grips (16)
- Adjusting windshield (17)
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- Storage space (18)
- Opening/Detaching the Topcase (19)
- Releasing dualseat lock (19)
- Anti-lock braking system (ABS) (20-23)

() Figures in brackets ⇒ Page on which item is described.



Where is everything?

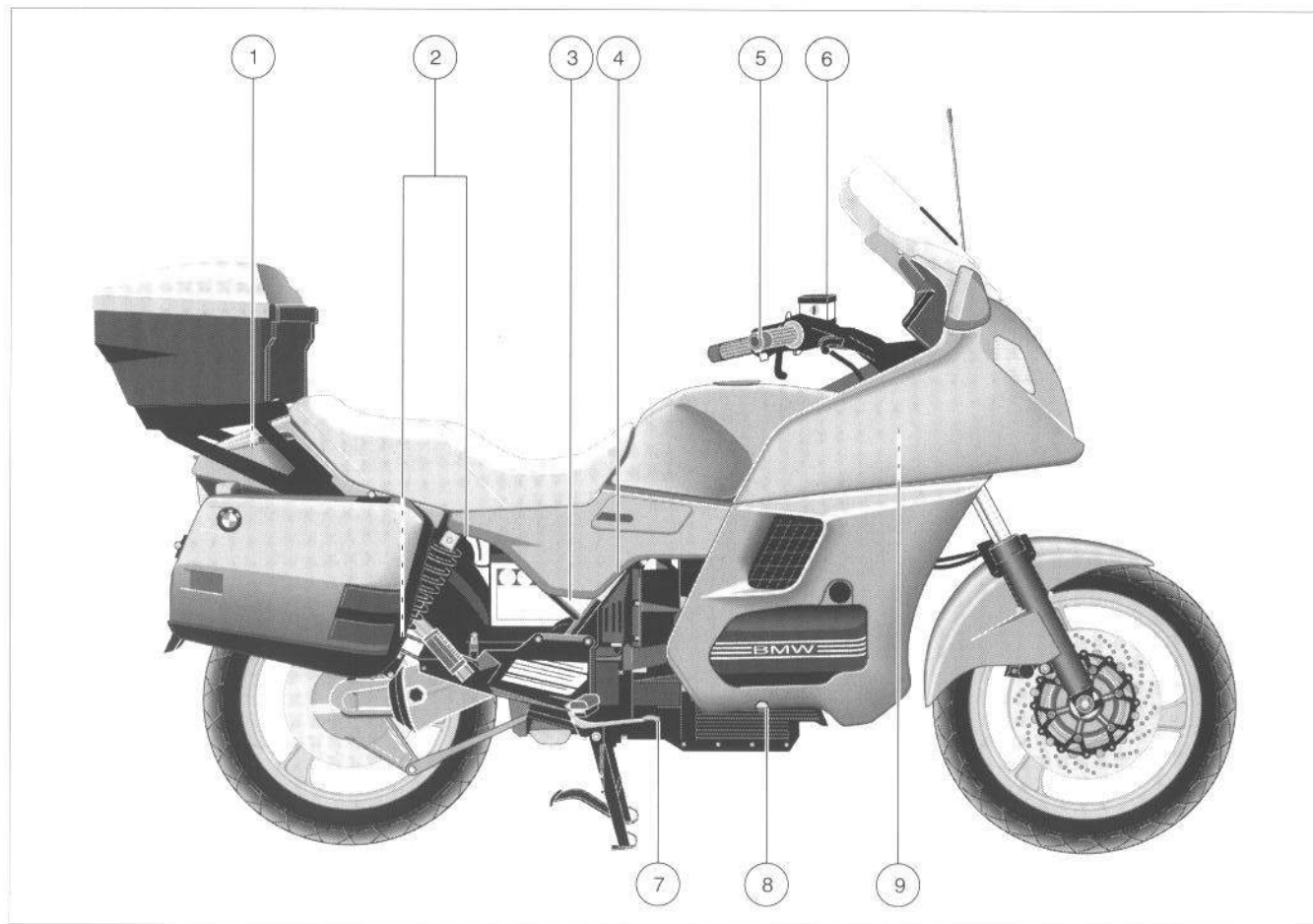


- 1 Lefthand handlebar controls (15)
- 2 Fuel filler cap (28)
- 3 Electrical socket (17)

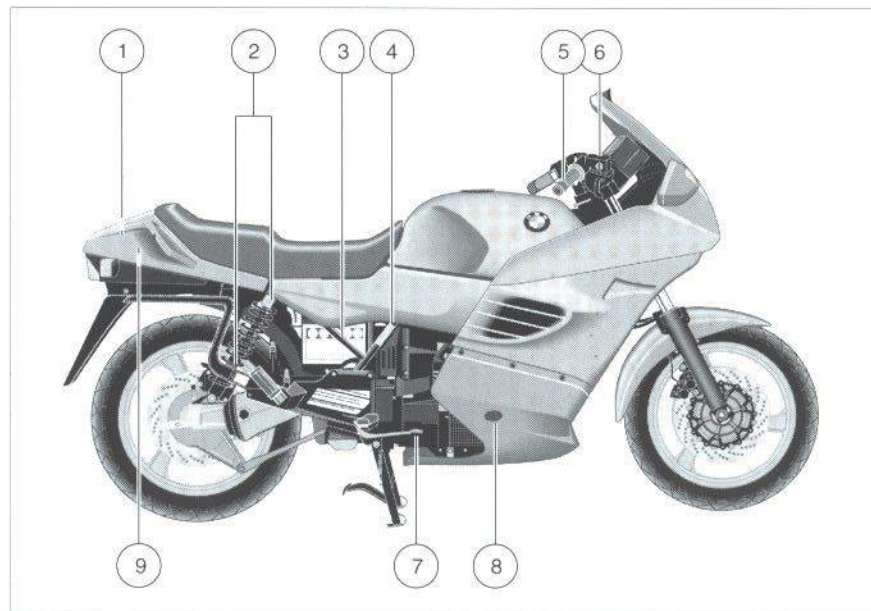
- 4 Fuses (60)
- 5 Grab handle (44)
- (For placing motorcycle on stand)
- 6 Dualseat lock release/ helmet holder (19)

- 7 Instrument unit (13)
- 8 Gear change pedal (43)
- 9 Case holder

() Figures in brackets
 ⇒ Page on which item is described



Where is everything?



1 Storage compartment (19)

2 Spring strut adjuster (34)

3 Vehicle Identification Number (VIN)

4 Brake fluid reservoir, rear wheel brake (30)

5 Righthand handlebar controls (15)

6 Brake fluid reservoir, front wheel brake (30)

7 Brake pedal (32)

8 Oil level check window (27)

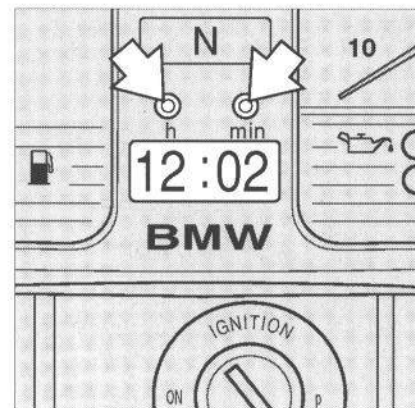
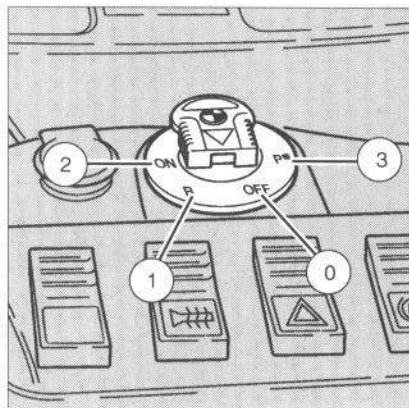
9 Storage compartment, tool kit (48)

() Figures in brackets

⇒ Page on which item is described

How does it work?

Operating instructions



Keys to motorcycle

The ignition, fuel filler and storage compartments have identical locks.

1 folding head master key and 2 rigid head spare keys are supplied.

A self adhesive label bearing the key number is also supplied. Keep it in a safe place.

Ignition and steering lock

- 0 Ignition off.
Steering locked.
Key can be withdrawn.
- 1 Ignition off.
Steering unlocked
Key can be withdrawn
- 2 On position.
Ignition and all other equipment can be operated, automatic switch-on of head-light and taillight.
Key can not be removed.
- 3 Parking lights on.
Key can be withdrawn.
Steering locked.

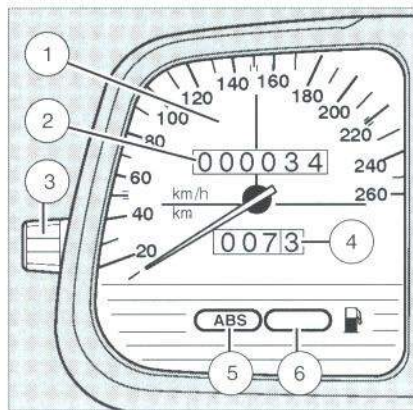
Note

Do not leave the parking lights on for more than a short period. Ensure that the battery is always properly charged.

LCD Digital clock

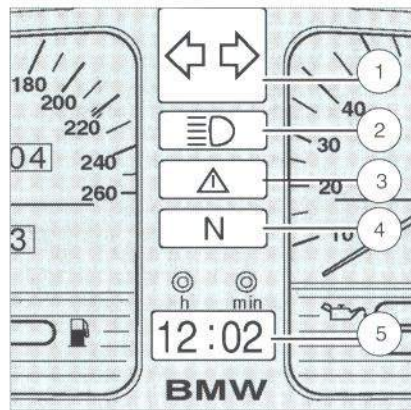
Setting to correct time

- Use a ballpoint pen tip or similar item to press in the appropriate button (h/min).
- | | |
|------------|----------------------|
| h | For setting hours. |
| min | For setting minutes. |



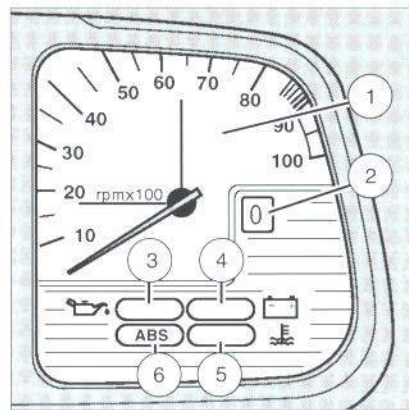
Left instrument unit

- 1 Speedometer
- 2 Odometer
- 3 Knob for resetting trip odometer
- 4 Trip odometer
- 5 ABS warning light
Red (see page 22)
- 6 Fuel level warning light
Red if approximately 1.3 U.S. gal.
(5 liters) of fuel in tank



Central instrument unit

- 1 Turn-signal telltale
Green
- 2 High beam telltale
Blue
- 3 Rear light monitor and ABS telltale
Red (see page 40)
- 4 Neutral/gearbox telltale
Green
- 5 LCD Digital clock
Setting (see page 12)

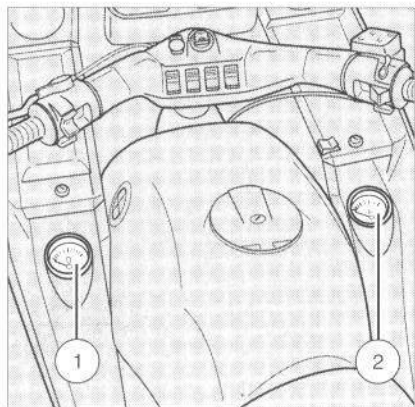


Right instrument unit

- 1 Tachometer
- 2 Digital gear display
- 3 Engine oil pressure warning light
Red (see page 27)
- 4 Alternator warning light
Red (see page 40)
- 5 Coolant temperature warning light
Red (see page 40)
- 6 ABS warning light
Red (see page 22)

Note

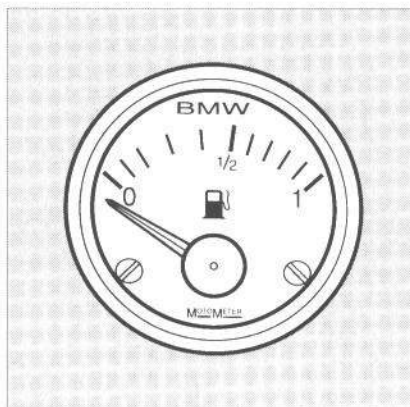
Telltale and warning lights should come on in ignition switch position 2 prior to starting engine.



K 1100 LT

Auxiliary instruments,

- 1 Fuel gauge
- 2 Temperature gauge



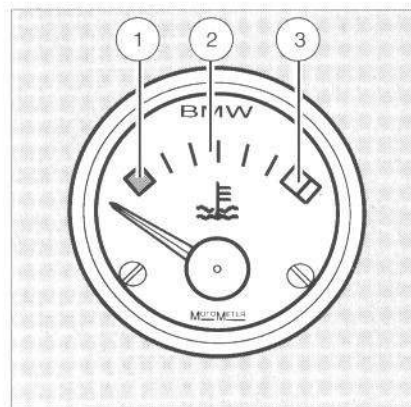
K 1100 LT

Fuel gauge

Fuel tank capacity:
19,5 liters (5,2 gal) fuel.

Note

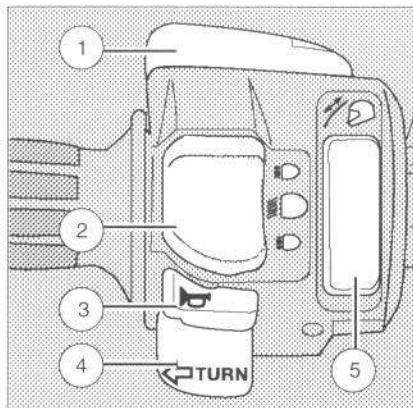
The fuel gauge only functions when the ignition is switched on. (see page 28)






K 1100 LT

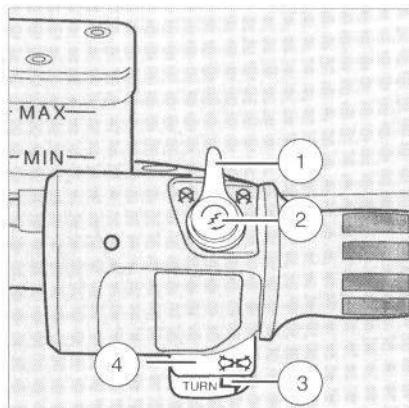
Temperature gauge

- 1 Engine cold (blue area)
- 2 Engine at operating temperature
- 3 Engine overheating (red area)
(see page 40)



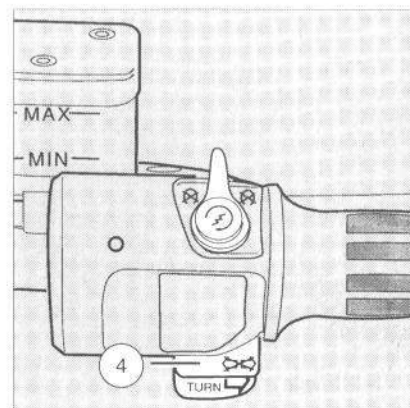
Left handlebar controls

- 1 Choke control for cold start (see page 42)
- 2 Headlight dipswitch:
 -  Up position:
main (high) beam
 -  Center position:
low (dipped) beam
 -  Down position:
headlight flashing
(switch returns to center position automatically)
- 3 Horn control
- 4 Left turn-signal switch
Pressed:
Left turn-signal flashes
- 5 Rocker switch for electric windshield adjuster (1996 model year)



Right handlebar controls

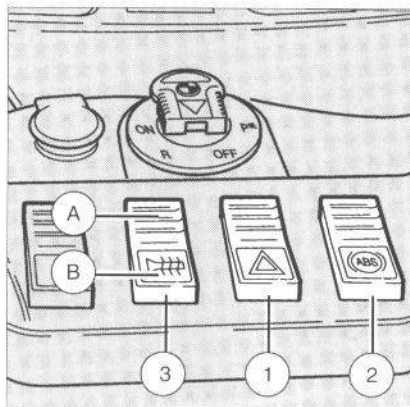
- 1 Ignition kill switch
Center position:
All electrical circuits energized when ignition on
- 2 Starter pushbutton
- 3 Right turn-signal switch
Pressed:
Right turn-signal flashes
- 4 Turn-signal cancel switch
Pressed:
Left/right turn-signal off



Self cancelling turn-signals

The left or right turn indicator are cancelled automatically after a certain time or distance if this not done by pressing switch "4":

- After approximately 10 seconds at road speeds – above approximately 30 miles per hour (50 km/h)
- After approximately 690 ft (210 m) in local or slow-moving traffic.



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Operating the hazard warning flashers

- Switch on ignition.
- Operate switch (1);
 - Hazard warning flashers come on.
- Switch off ignition.
 - Hazard warning flashers remain on.

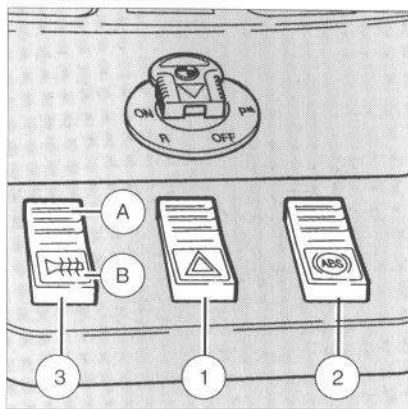
Switching off hazard warning flashers

- Operate switch (1) for hazard warning flashers.

Note

When the ignition is switched off, the hazard warning flashers cannot be switched on.

Only leave the hazard warning flashers on for a limited period of time. Note battery charge.



K 1100 RS

ABS switch

ABS cancel button (2).

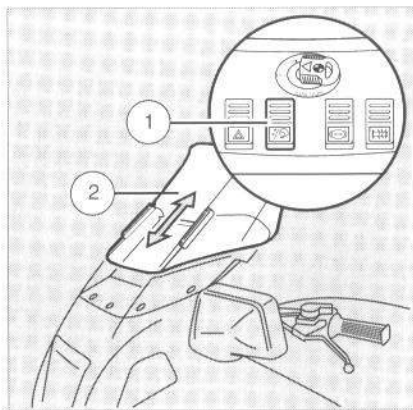
See ABS operating instructions for function, (see page 22).

Switching on heated handlebar grips

(optional extra)

- Switch on ignition.
- Operate rocker switch (3);

1st stage	(B)	50 % heat output.
2nd stage	(A)	100 % heat output.



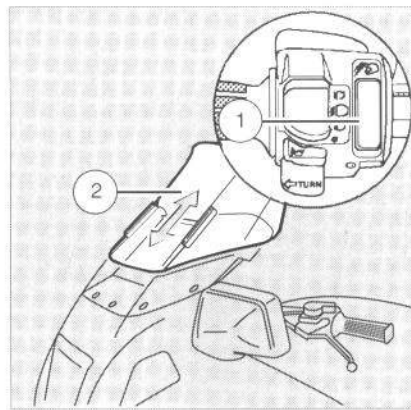
K 1100 LT

Adjusting windshield (modelljahr 94)

- Switch on ignition.
- Press switch (1).
- Windshield (2) is raised or lowered.

Caution

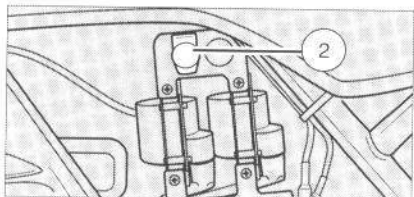
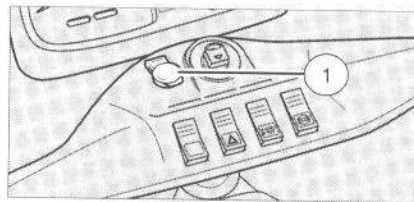
Do not adjust the windshield while riding. The windshield may only be adjusted when the motorcycle is stationary.



K 1100 LT

Adjusting windshield (1996 model year)

- Switch on ignition.
- Press switch (1).
- Windshield (2) is raised or lowered.

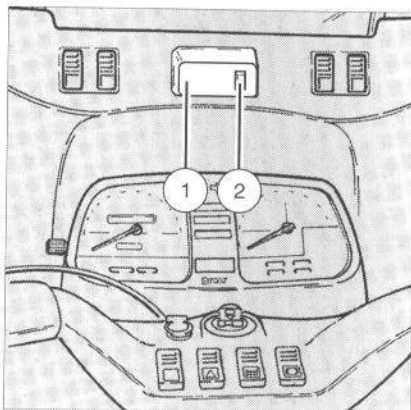


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Power sockets

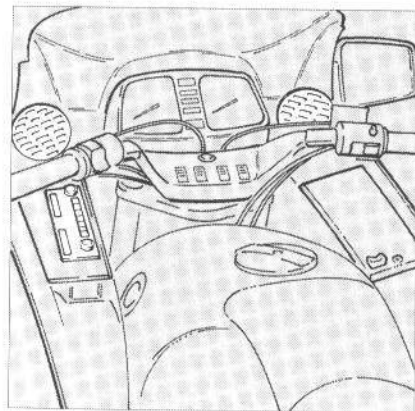
Plug sockets for auxiliary equipment

- 1 **K 1100 LT:** Power socket next to ignition/steering lock.
 - 2 Power socket in ignition coil holder on the left, beneath the battery cover.
- Protected by 15 A fuse, location 4.



Reading lamp

- 1 Reading lamp
- 2 Reading lamp switch



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Radio

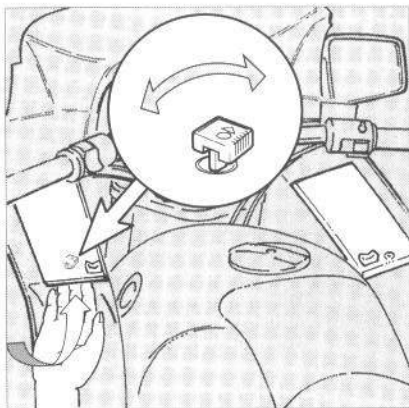
- Turn ignition key to "ON" or "R".
 - Switch on Radio
- See separate radio operating instructions, located in document pouch.

Caution

Operation of the radio must not be allowed to distract or disturb either the rider or other road users in any way which could create a traffic hazard or cause obstruction.

Note

Radio anti-theft code must be reset if battery is disconnected.



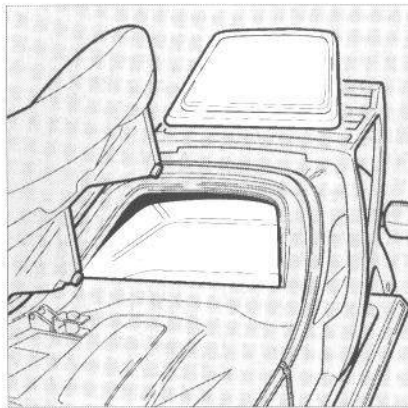
Storage compartments

Side fairings on right

- Open storage compartment lid with the ignition key.
- Actuate the release hoop (arrow) with the fingertips.
 - Lid will jump open.
- Remove the lid to the rear
 - Storage compartment is now open.

Note

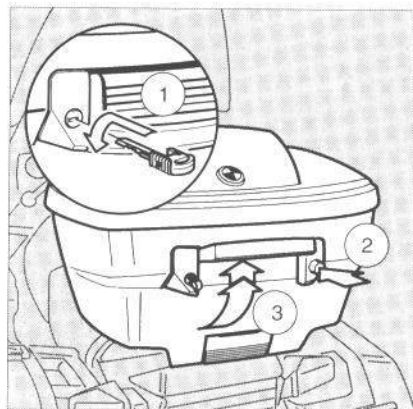
When closing the storage compartment lid, ensure that the guide pins engage in the grooves,



K 1100 LT

Rear storage compartment

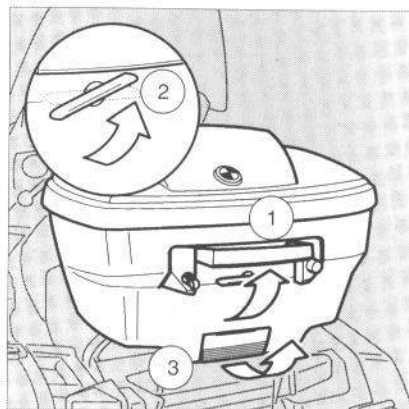
- Open the dualseat (see page 19).
- Take the cover off the rear storage compartment.
 - The storage compartment (capacity approximately 9 liters).



K 1100 LT

Opening the Topcase

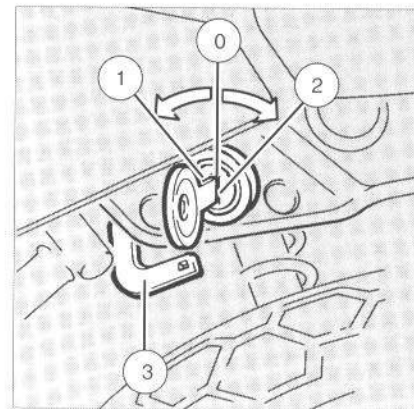
- Use the ignition key (1) to open the Topcase lock.
- Press the button (2) and at the same time raise handle (3) as far as possible.
- The lid can then be opened.



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Detaching the Topcase

- Use the ignition key to open the Topcase lock.
- Raise the handle (3).
- Turn lever (2) fully to the left and release catch (3) by hand.
- The Topcase can then be lifted off forwards and upwards and removed. (Its lid remains locked.)



Releasing dualseat lock /Helmet holder

In key positions:

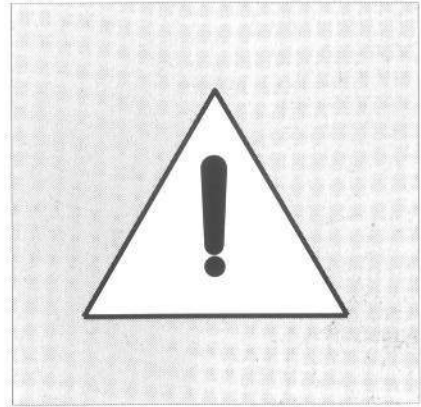
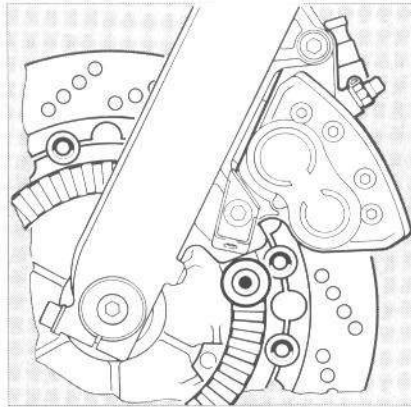
- 0 The dualseat is locked.
- 1 Press in the lock.
The dualseat is unlocked and can be opened.
The key can be withdrawn.
- 2 Press in the lock.
The helmet holder (3) opens.

The dualseat and helmet holder can be locked again when the key is withdrawn.

Warning:

Do not operate motorcycle with helmet attached to helmet holder, as interference with the rear wheel could occur.

What ABS Means on the Road



Man and Technology: Both Have Their Limits

Every BMW has a brake system designed for the motorcycle's performance capabilities. However, the efficiency of any brake system depends not only on its technical capabilities, but also on the rider.

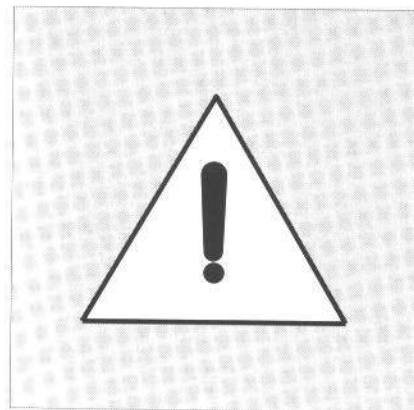
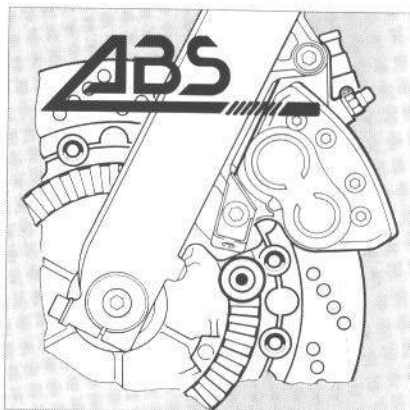
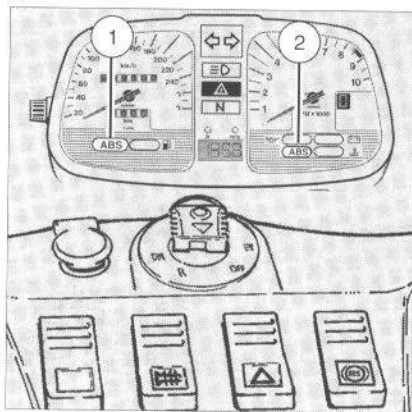
While an experienced rider might be able to apply the brakes with the same efficiency on dry asphalt, ABS can effectively cope with road surfaces which vary rapidly in their frictional coefficient, controlling the brakes at a speed superior to human reflexes. Even if puddles, gravel, sand or oil unexpectedly appear on a hard and dry surface and the rider must brake suddenly, ABS will respond quickly and do it faster and with more precision. As long as one is riding in a straight line, the rider can apply the brakes in full without fear of wheel locking.

Through its very concept, the motorcycle

also limits the potential of an anti-lock braking system. Applying the brakes forcefully while cornering will make the motorcycle straighten from its inclined position, thereby reducing lateral stability. Not even ABS can change this. For physical reasons, even a motorcycle with ABS loses its steering and directional potential when applying the brakes in a corner.

Conclusion:

BMW motorcycle ABS adds a dimension to riding never before available. However, every rider, no matter what the level of experience, should know and understand how ABS works. Even a motorcycle equipped with anti-lock brakes requires a proper style of riding and skillful application of the brakes. Please remember that, as remarkable as ABS is, there is no substitute for safe riding practices.



ABS functions

The ABS is energized automatically when the motorcycle ignition is turned "on", observing the following sequence:

- When the ignition has been switched on, ABS warning lights (1) and (2) flash synchronously.
- After starting the engine and setting off, the system completes a clearly audible internal test.
- The ABS system will run through an automatic check, once the motorcycle is driven away. When all functions are confirmed, both warning lights go out when the motorcycle reaches a speed of 2.5 mph (this will seem almost immediate).

ABS control is operational:

- when you can sense a hard resistance at the hand- or foot-operated brake lever during braking

Note

After the point of hard resistance, the brake levers may possibly "give-in" slightly, due to the equalization of fluid volume in the system. When ABS II is activated, due to operator overbraking, it "disconnects" the operator portion of the brake system from the rest of the system and takes control of brake system pressure regulation. Fluid volume equalization may occur when the system shifts back to operation control.

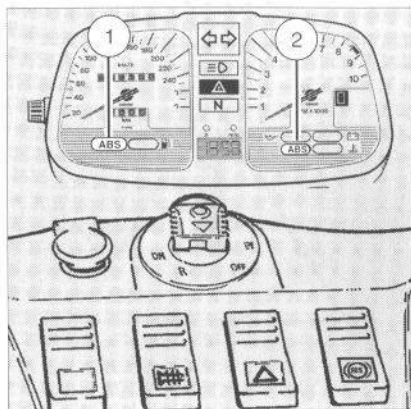
ABS control is not operational:

- at speeds below 5 km/h (unless you have already reached 5 km/h)
- when the ignition is off
- if the battery is flat or defective (indicated by ABS warning lamps)

The braking system operates as normal accepted without the benefit of ABS.!

Warning:

If you experience constant, strong pulsations from one of the brake levers during ABS control, this points to a mechanical/hydraulic defect. See your nearest authorized BMW motorcycle dealer!



Fault in ABS

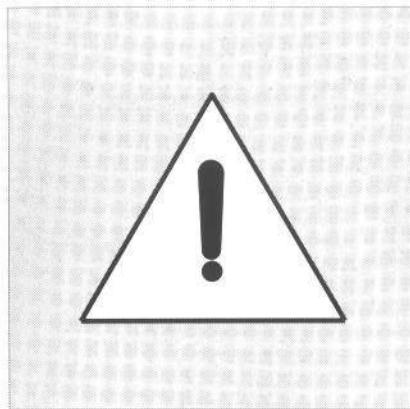
- ABS warning lamps 1 and 2 flash alternately or are lit continuously: ABS braking is not available
- Switch off ignition and switch back on
- ABS warning lamps flash in simultaneously: the ABS just had a temporary fault due to external influences (e.g. low voltage from the battery); the system is now in working order again.

Note

It is not necessary in such a case to visit your authorized BMW motorcycle dealer. Once the system has successfully passed the start-off test, this means that it is in correct working order and will be available for use should the need arise.

Note

However, please remember the difference in braking effectiveness when you are without the benefits of ABS. If the ABS fails, the conventional brake system will remain operational.



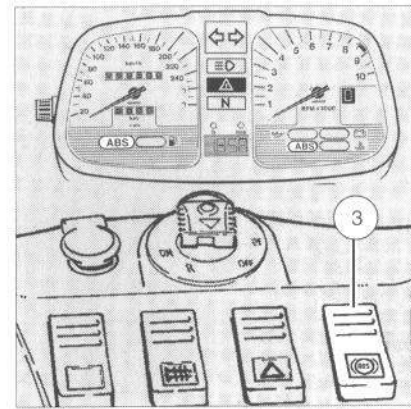
Fault in the ABS

- Warning lamps 1 and 2 flash alternately:
The system is not available

If the alternate flashing of the ABS warning lamps cannot be remedied by switching the ignition off and on again, visit your authorized BMW motorcycle dealer.

Warning:

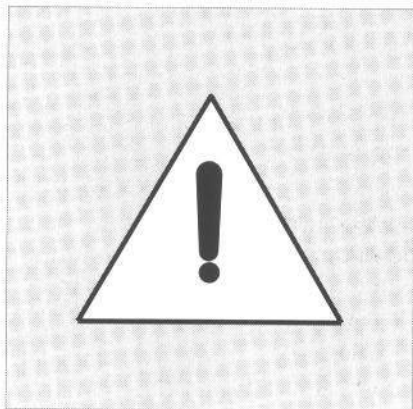
Have faults rectified immediately by your authorized BMW motorcycle dealer.



ABS cancel switch

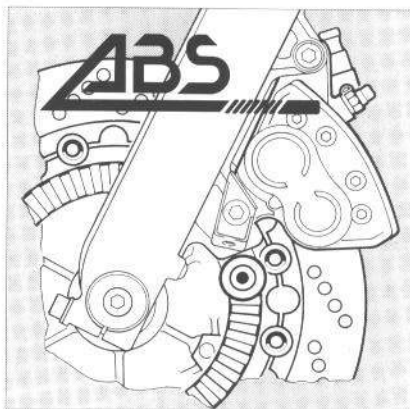
- The flashing warning lights can be changed to constant illumination of one warning light by depressing the cancel switch (3).
- The ABS cancel switch (3) is not used during normal operation and only serves to cancel the flashing of indicators when a fault emerges.

This will make the indicator lights less annoying, especially at night. The warning lights will resume flashing after approximately 5 minutes to emphasize that you are no longer operating with the benefit of ABS. As before, you can change them from flashing to constant illumination for (approximately) 5 minute intervals by depressing the cancel switch (3). This can be repeated as many times as necessary.



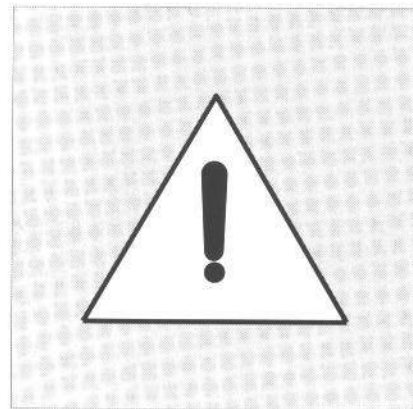
What happens if I spin the rear wheel during acceleration?

Spinning the rear wheel may cause the ABS system to lose programmed coordination, as the front wheel is no longer synchronized with the rear wheel. This loss of coordination will cause the ABS unit to register a fault. Faults registered from wheel spins will usually cancel themselves when the ignition is turned "off". If not, you must visit your authorized BMW Dealer to have the control unit "reset". Until the "reset" is performed, you will not be operating with the benefits of ABS.



Important:

In the event of faults to the ABS or brake system, allow an authorized BMW Dealer to repair the motorcycle as soon as possible.



Caution:

While it is well protected, the electronic control unit can only withstand a certain electromagnetic load.

You are therefore advised against using high-performance radio equipment on the motorcycle, as the ABS may otherwise suffer from interference.

When working on the electrical system, always switch off the ignition and disconnect the battery negative lead.

Safety check



Safety checks before you start

- General note (26)
- High performance ignition system (26)
- Engine oil level (27)
- Add engine oil (27)
- Engine oil pressure (27)
- Fuel level (28)
- Adding fuel (28)
- Coolant level (29)
- Correcting coolant level (29)
- Brake fluid level (30)
- Topping up brake fluid (31)
- Brake pedal travel (32)
- Handbrake lever travel (32)
- Clutch level travel (32)
- Tire pressures (33)
- Tire tread depth (33)
- Rims/valve caps (33)
- Spring strut setting/Damping (34)
- Side stand (34)
- Loads (35)
- Lighting (35, 36)

() Figures in brackets ⇒ Page on which item is described.

Safety checks before you start

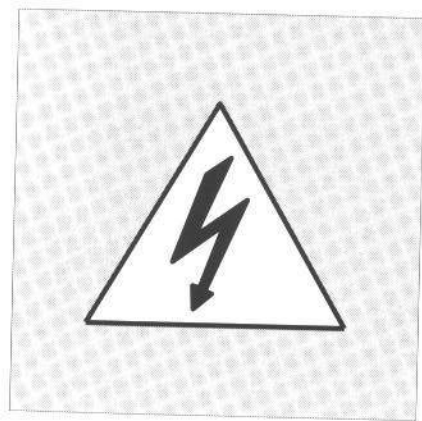


General note

Perform the safety checks conscientiously. This allows you to rectify any faults on your motorcycle before you set off (refer to care and maintenance from page 45 on), or to have them rectified at your BMW motorcycle dealer.

Only a motorcycle which is in proper working order assures your own safety and the safety of other road users.

If you have any problems or difficulties, contact your BMW motorcycle dealer which will be able to provide you with professional advice.



High performance ignition system

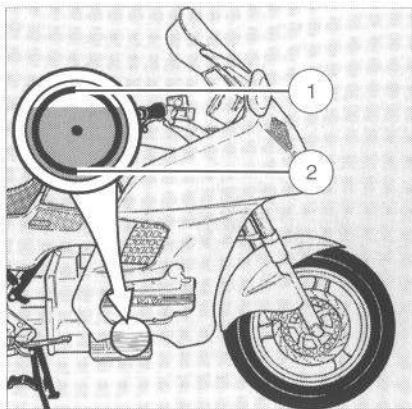
Even on conventional ignition systems with breaker points, an electrical shock could be quite unpleasant.

On this motorcycle's ignition system, however, much greater care has to be taken.

The motorcycle is equipped with a micro-processor-controlled high-performance digital ignition system.

Warning:

A dangerous or even fatal accident could be caused by touching any live component while the engine is running



Engine oil level

Checking

- Position motorcycle on its center stand on a flat, level surface.
- Run the engine for a short time and then switch it off.
- Check the oil level reading after a few minutes at the ring marking.

maximum level (1)

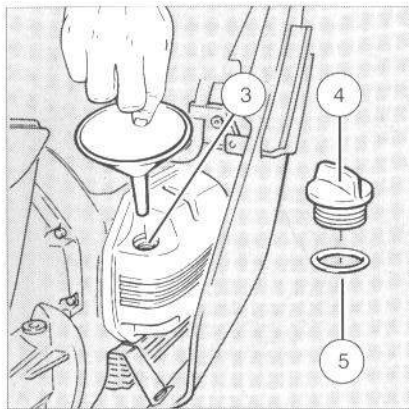
minimum level (2)

Capacities between Minimum/Maximum marks:

approximately 0.6 liters (1.05 pints)

Caution

Always ensure oil level is not above Maximum and not below Minimum mark! Damage to engine may occur!

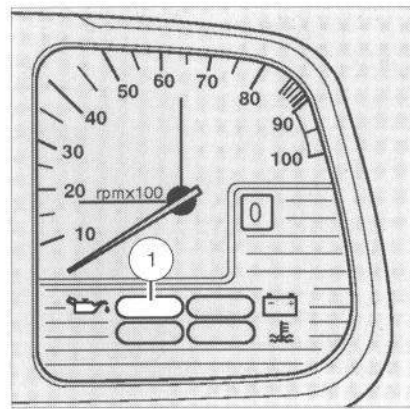


Add engine oil

- Pour in engine oil through funnel into filler opening (3), (Refer to page 74 for oil grades).
- Screw in oil filler plug (4) with seal (5).
- Run engine briefly/switch off.
- Check oil level after a few minutes at oil sight glass.

Note

A full range of BMW Special Performance lubricants is available from your authorized BMW dealer.



Engine oil pressure

Telltale light (1) out

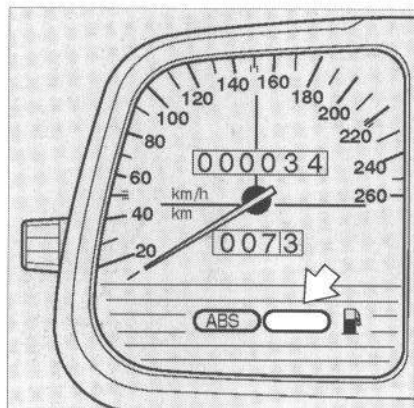
- After engine starts.
- At idling speed.

Caution

If telltale light lights up when riding, immediately:

- disengage clutch
- switch off ignition
- bring motorcycle safely to a stop
- check engine oil level

If there is enough oil in the engine, contact your BMW motorcycle dealer or qualified service technician.



Fuel level

The low fuel warning light (arrow) comes on when approximately 5 liters (1.3 gal.) of fuel remain in the tank.

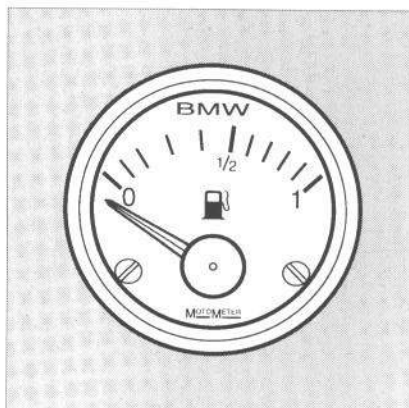
The fuel tank holds a total of 19.5 liters (5.2 gal.). After the motorcycle has been broken in, determine how far it can normally be ridden with the low-level light on (this will depend on your riding style).

Warning:

Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the motorcycle is refueled or stored. Never use an exposed flame to check fuel level! Do not overfill the tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed securely. Fuels containing ethanol or other oxygenates (e.g. ethers and ketones) or methanol may cause drivability, starting and stalling problems. Fuel additives are not recommended.

Caution:

Remember that fuel expands if it becomes warm such as from the effect of heat or the sun's rays. Never fill the tank to the brim.



K 1100 LT

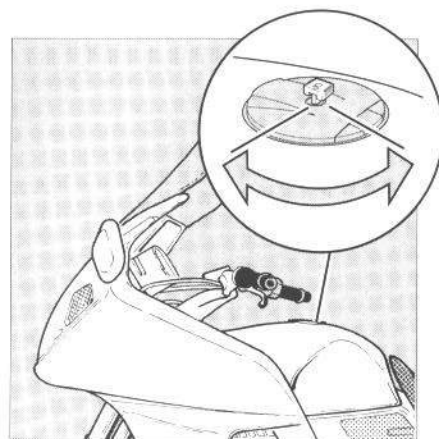
Fuel gauge

Note

The fuel gauge only functions when the ignition is switched on.

Fuel tank capacity:

19,5 liters (5.2 gal) fuel.



Adding fuel

Warning:

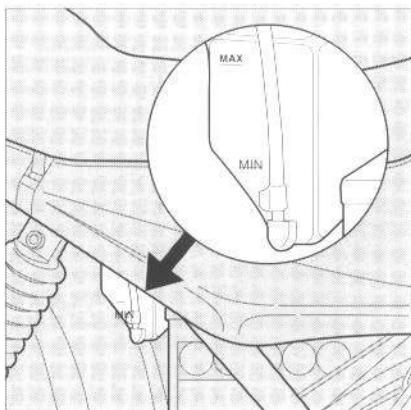
Turn your head from fuel cap when opening. Fuel tank operates under a low pressure.

Unlock the filler cap (all locks on motorcycle can be opened with the same key).

- Insert key.
- Turn counterclockwise $\frac{1}{4}$ revolution.
- Cap springs up automatically, the key can be removed.
- After adding fuel, ensure that the cap is closed securely by pushing the cap down until a "click" is heard to lock it.

Note:

Use only middle or premium grade unleaded fuel, minimum octane number 89 (Anti-knock Index $R+M/2$) or minimum octane number 95 (Research Method, RM).



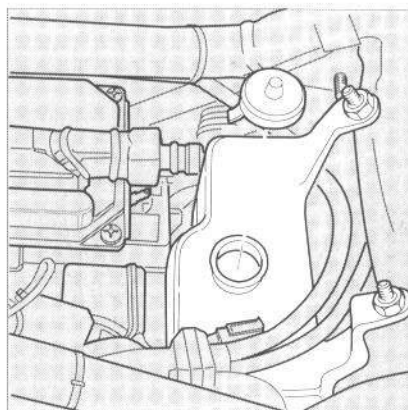
Coolant level

Checking

- Engine cold.
- Place motorcycle on center stand.
- On the right side of the engine, read off the coolant level at the min/max marks on the level equalizing tank.
- Add coolant, if necessary, up to bottom of filler neck.

Caution

If the coolant temperature warning lamp (red) comes on, check coolant level in expansion tank immediately (see above).



Correcting coolant level

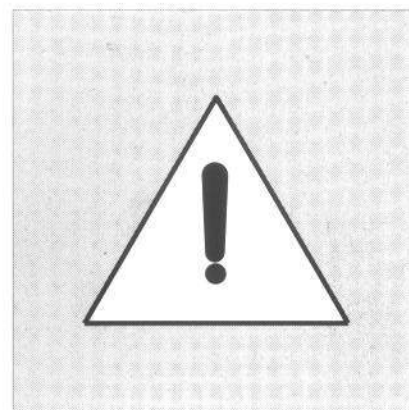
No tools required

Procedure

- Place motorcycle on center stand.
- Open the dualseat.
- Remove the filler cap.
- Top up with coolant mixture as far as the "MAX" mark.
- Put the filler cap back on.

Caution

If expansion tank is full and warning lamp is still on or you have excessive coolant consumption, contact your BMW motorcycle dealer or qualified service technician. Operation with an overheated engine may cause damage to the engine.



Note

Correct coolant level only when engine is cold.

Refill at expansion tank when there is a slight loss of coolant.

Mixing ratio:

40% antifreeze,

60% water.

Provides antifreeze protection down to:

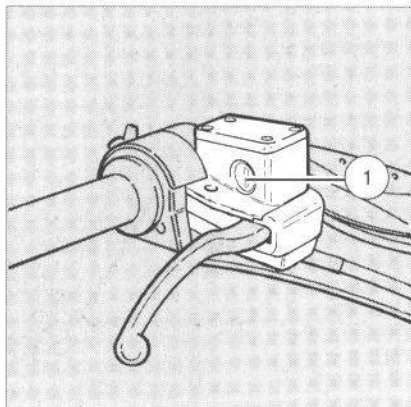
- 26 °C (-8 °F)

Have coolant replaced every two years regardless of mileage.

Nitrite - free BMW Coolant is available from your authorized BMW motorcycle dealer.

Caution

Use only antifreeze and anti-corrosion agents free of nitrite!



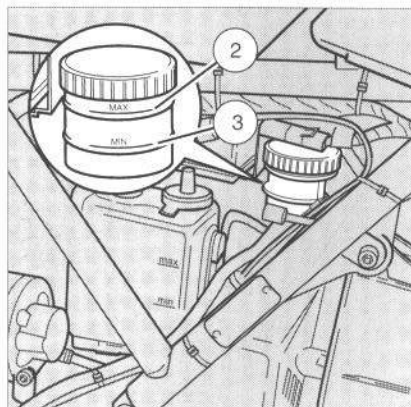
Brake fluid level

Checking: Front wheel brake

- Turn handlebars to the left.
- Sight glass (1) must be fully covered with brake fluid.
- If an air bubble can be seen in the sight glass, top up the brake fluid, Refer to page 31 for topping up.

Caution

Do not allow fluid to drop below Minimum level! Fluid must be visible in sight glass!



Checking: Rear wheel brake

- Remove the right battery cover.
- Take reading of brake fluid level at MAX/ MIN markings.

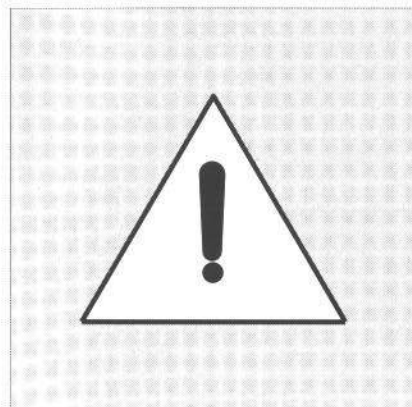
Maximum level (2)

Minimum level (3)

- Top up brake fluid up to MAX marking, if necessary. Refer to page 31 for topping up.

Caution

Do not allow fluid to drop below Minimum level!



Brakes

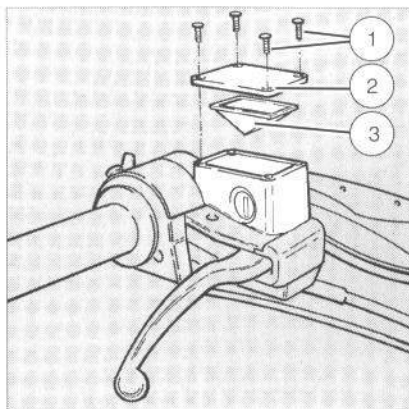
Before starting any trip, always test the brakes:

- the hydraulic brake circuit is intact if the brake lever can be operated without a 'spongy' feeling.
- there must be sufficient brake fluid in the front reservoir.
- brake discs and calipers must be free from oil, grease and traces of solvents or cleansers.

Warning:

Never ride your motorcycle if you are in any doubt as to the condition of the brakes.

Check with your BMW motorcycle dealer or qualified service technician immediately.



Topping up brake fluid

Front wheel brake

Tools required

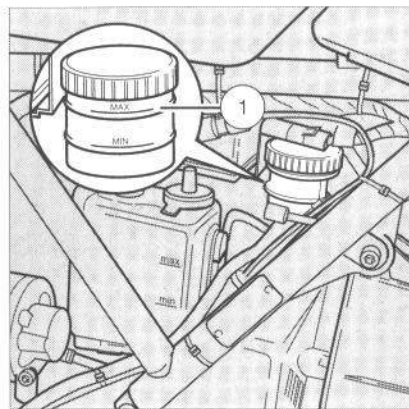
Screwdriver with reversible blade.

Procedure

- Unscrew 4 phillips screws (1) (press cover down when doing this).
- Turn handlebars fully to the left. Take off cover (2) and rubber membrane (3).
- Top up brake fluid to upper edge of sight glass.
- Fit on rubber membrane and cover.
- Press on cover, turn handlebars fully to the right. Tighten phillips screws gently.

Warning:

Steam cleaning of the hydraulic brake system can affect brake fluid viscosity and is not recommended.

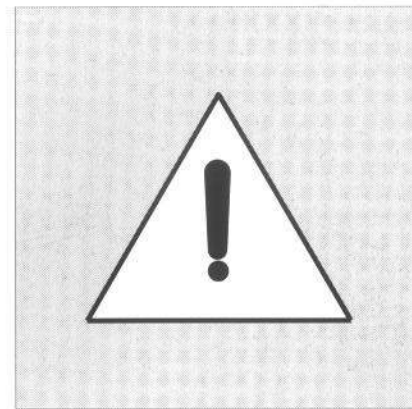


Rear wheel brake

No tools required

Procedure

- Take off the right battery cover. (see page 70)
- Pull reservoir out of fixing clamp.
- Take off cover with rubber membrane.
- Top up brake fluid to MAX mark (1).
- Install in the reverse order.



Caution

Use only fresh brake fluid conforming to specification DOT 4.

Brake fluid may cause damage to paintwork!

Brake fluid is subject to high thermal stresses and absorbs moisture from the surrounding air.

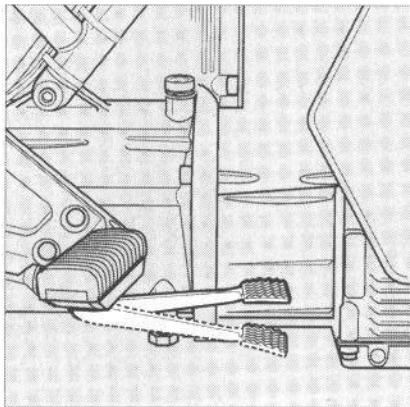
For this reason:

Regardless of the distance you have covered, brake fluid should be replaced at least once a year.

In areas with mainly high temperatures and/or high air humidity, the brake fluid has to be replaced at least every 6 months.

Note

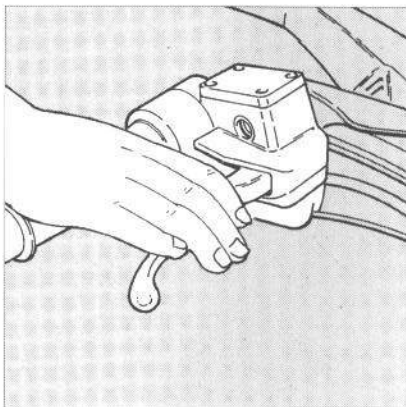
BMW (DOT 4) Brake Fluid is available from your authorized BMW motorcycle dealer.



Brake pedal travel

Checking

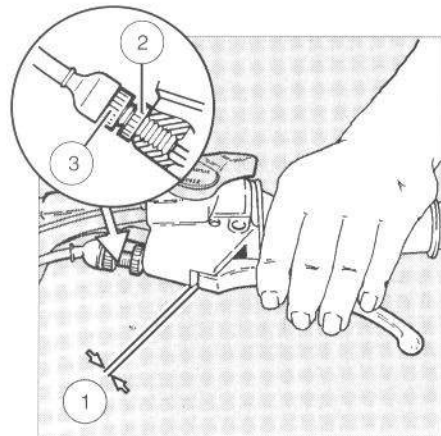
The brake pedal travel is factory set and must not be altered.



Handbrake lever travel

Checking

The handbrake lever travel is a design feature and cannot be altered.



Clutch lever travel

Checking

- Pull lever until resistance is felt.
- Measure free travel.
Should be (arrow):
4 +/- 0.5 mm.
- Slacken lock nut (2).
- Turn adjusting screw (3) to the left: reduces free travel.
- Turn adjusting screw (3) to the right: increases free travel.
- Tighten lock nut (2).

Note

Basic clutch adjustment takes place during the BMW Inspection.

Warning

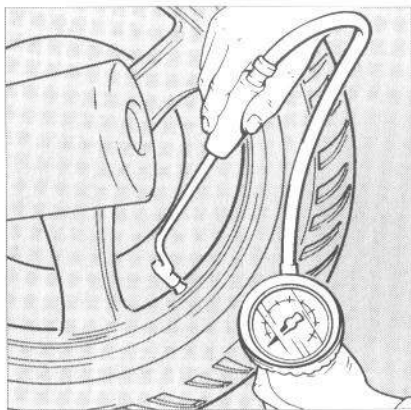
Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.

When possible, reduce speed or brake before entering a turn; closing the throttle or braking in midturn may cause wheel slip. Wheel slip will reduce control of the motorcycle.

When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.

Sudden changes in the amount of free travel or a spongy feeling at the brake lever are signs of possible malfunctions in the hydraulic system.

Contact your BMW motorcycle dealer or qualified service technician immediately.



Tire pressures

For your safety, periodically and certainly always before a trip, check your tire pressure, making sure it conforms to specifications provided below.

Checking

- Tires cold
- Unscrew valve caps.
- Check/correct tire pressure.
- Screw on valve caps

One-up

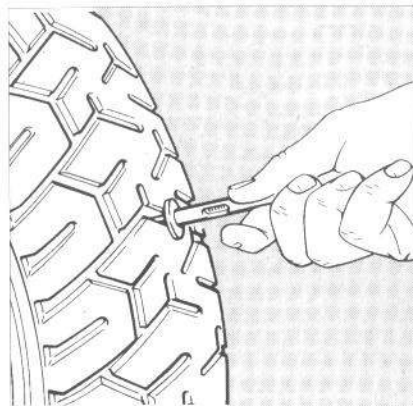
front / rear 32/36 psi (2.2/2.5 bar)

Two-up

front / rear 36/42 psi (2.5/2.9 bar)

Warning:

Incorrect tire pressure can considerably affect the driving characteristics of the motorcycle as well as reduce tire life!



Tread depth

Checking

- Measure tread depth in the middle of the tire with a tread depth gauge.

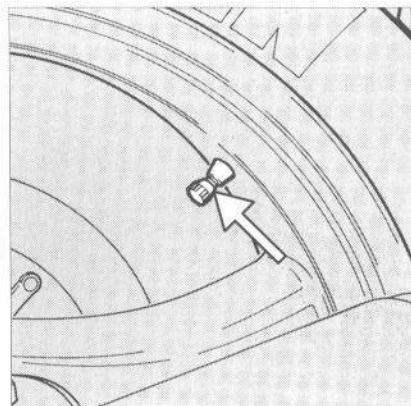
BMW recommendation (minimum):

Front wheel	2 mm
Rear wheel	
up to 130 km/h (80 mph)	2 mm
over 130 km/h (80 mph)	3 mm

Warning:

Ensure tires always have minimum legal tread depth!

Do not mix brands of tires. When replacing tires, only use brand, model and size combinations recommend by BMW.



Rims / valve caps

Wheels

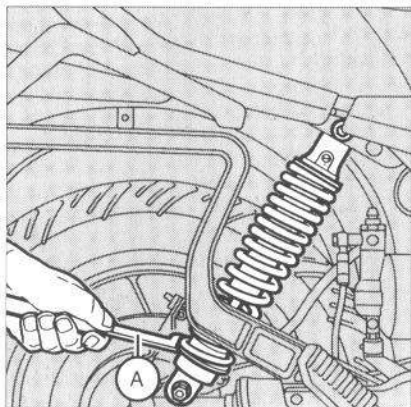
The wheels (rims) are an important safety item. Although the wheels are very strong, they could be damaged or distorted in an accident or by riding over an obstacle.

- Check that metal valve caps with seal are tightly seated on valves.

Warning:

Damaged wheels must always be replaced. Do not straighten or repair. Check your wheels regularly for damages.

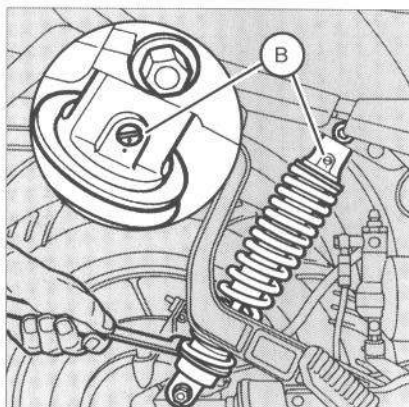
Tire valves tend to open suddenly because of centrifugal forces at high speeds! Valve caps prevent a sudden loss of tire pressure!



Spring strut preload

Adjusting spring preload:

- Adjust the spring preload of support springs (A) to the load conditions with the aid of a spanner and extension (in motorcycle toolkit).
- 1 "Normal" spring setting for solo operation.
 - 3 "Moderate" spring setting when riding two-up or with heavy luggage.
 - 5 "Firm" spring setting for extreme loads.



Damping

Adjusting damping stroke/rebound stroke:

- Adjust damping stroke/rebound stroke (B) to the load conditions with the aid of a coin/screwdriver.

Max. damping

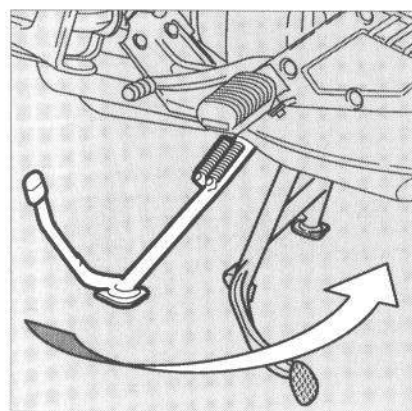
Screw in adjusting screw completely.

Basic setting

Rotate adjusting screw through half a turn.

Min. damping

Rotate adjusting screw through one and a half turns.



Side stand

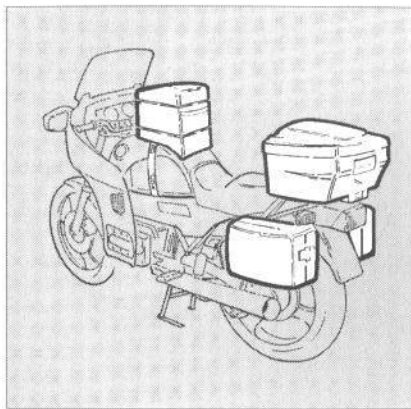
Checking

- Place motorcycle on center stand.
- Move side stands down as far as stop.
- Start the engine.
- If engine does not start: **safety device is functioning properly.**
- Push side stands back until spring action takes effect/release.
- Return springs must automatically retract stand (arrow) fully.

Note

Side stand is linked to ignition.

Engine cannot be started if side stand is extended, but starter motor will still operate.



Warning

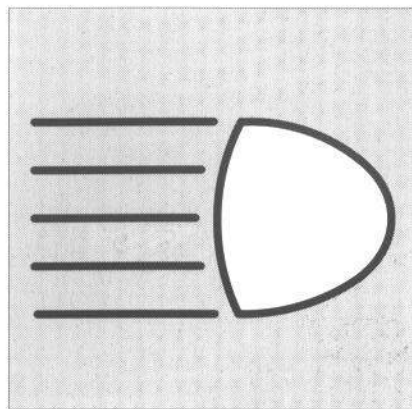
Handling and stability of your motorcycle can be adversely affected by a number of factors.

In particular, excessive or unbalanced loading and the use of accessories not approved by BMW can lead to dangerous deterioration of the handling and stability characteristics of your motorcycle and thereby cause an accident.

Maximum speed with luggage system attached:

=> 130 km/h (80 mph)!

Ride behavior affected at high speeds.



Loads

Your motorcycle can be equipped with a specially developed luggage system.

The BMW luggage system consists of:

- Integral BMW cases
- BMW top case
- BMW tank-top rucksack

Checking

- Do not exceed the maximum load for each case.
Maximum loads:
Per integral case (10 kg) 22 lbs
35 litre top case (5 kg) 11 lbs
- Refer to system description for fitting and removing cases.
- Check that the fastenings are correctly located and tight.

Warning

Do not exceed these specified load limits.

Stow heavy items of luggage in the bottom area of the tank top bag (alters center of gravity!).

Always make use of both side cases.

Ensure that the weight is evenly distributed on both sides.

Do not exceed the permissible gross weight! [K 1100 LT: 500 kg, (1102 lbs); K 1100 RS: 485 kg, (1069 lbs)].

Permissible gross weight comprises:

- Motorcycle with full tank
- Rider
- Passenger
- Luggage
- Accessories

Lights

Before starting the engine, it is a good practice to **check the operation** of the

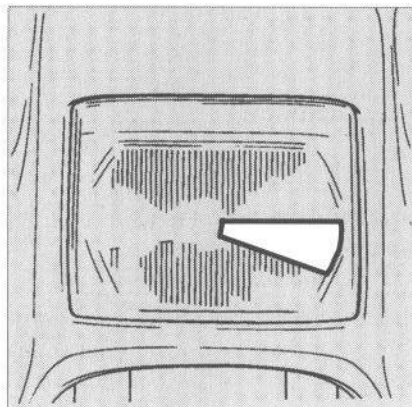
- parking light
- low headlight beam
- high headlight beam

by holding a hand in front of the headlight lens.

As you have read on page 35, the **tail and brake lights can be checked** at monitor "△".

Pay special attention to condition of the turn indicators:

Turn indicator bulbs have to withstand severe loadings. **A blown or damaged bulb can normally be detected by the increased flashing frequency of the turn signal telltale**, and should be repaired or replaced immediately.



For countries with leftside rule of the road.

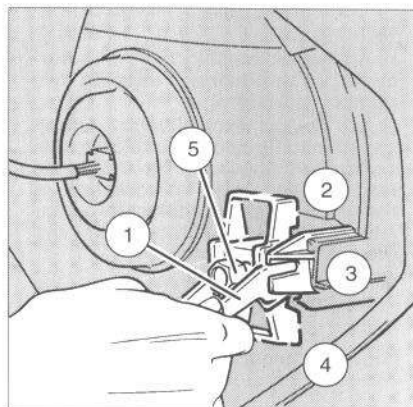
Motorcycles for countries with leftside rule of the road are equipped with leftside asymmetrical low beam headlight.

The headlight beam is correctly aimed by analogy to the description on the left.

Note

Left cutoff point is determined by leftside asymmetrical low beam headlight.

If a motorcycle with right-hand asymmetrical low beam headlight is ridden temporarily in countries with leftside rule of the road, the wedge visible in the center of the lens must be blanked off with adhesive tape cut to shape.



Adjusting headlight beam angle

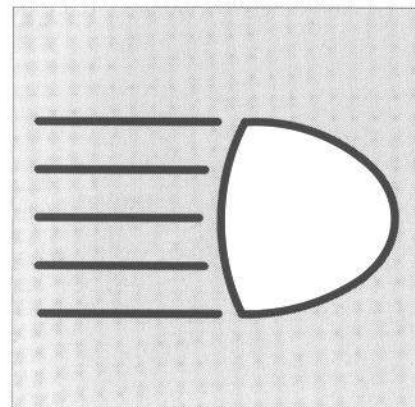
High/low setting

No tools required.

Set vertical beam angle of headlight by adjusting lever (1) to the right of headlight bulb, ahead of right fork tube

- Lever moved up (2):
⇒ **long beam angle.**
- Lever in middle position (3):
⇒ **neutral beam angle.**
- Lever in bottom position (4):
⇒ **short beam angle.**

Perform fine setting with hexagon plastic adjustment knob (5).

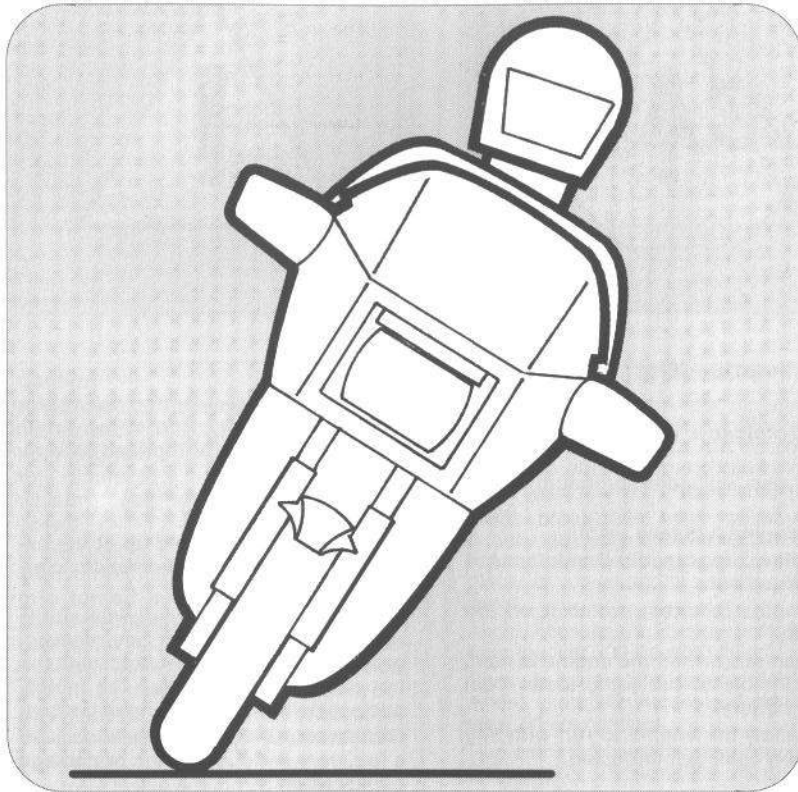


Note

Adjust high/low setting of beam so as not to blind oncoming traffic.

Ensure that light beam illuminates road surface sufficiently far ahead.

Starting - Riding - Parking

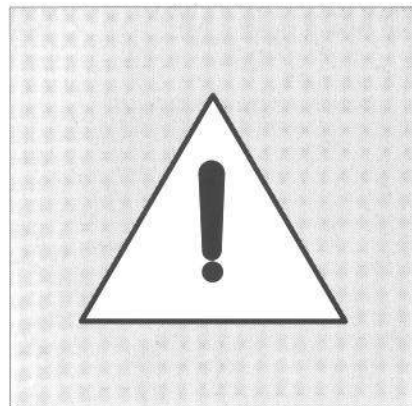
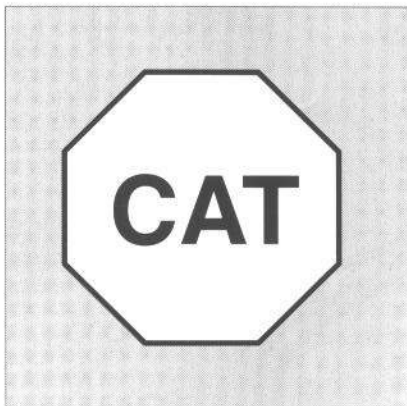


And now we're off!

- Note on catalytic converter (38)
- Important ABS information (39)
- Some breaking-in rules (39)
- Engine speed limits (39)
- Rear light telltale (40)
- Coolant temperature (40)
- Battery charge current/alternator (40)
- Before starting the engine (41)
- Switching on ignition (41)
- Selecting neutral (41)
- Operating the choke (42)
- Pressing the starter switch (42)
- Resetting choke (42)
- Changing gears (43)
 - Moving off/shifting up (43)
 - Shifting down (43)
- Placing motorcycle on center stand (44)
- Moving motorcycle off center stand (44)
- Placing motorcycle on side stand (44)

() Figures in brackets ⇒ Page on which item is described.

And now we're off! Starting - Riding - Parking



Catalytic converter

Note

If the motorcycle has a catalytic converter:

Always use unleaded premium grade fuel.

Do not run the fuel tank empty.

Always have the prescribed maintenance work carried out.

If the engine misfires, switch it off immediately.

Only push-start when the engine is cold. It is preferable to use jump leads from another battery.

Do not allow the engine to run with any spark plug caps disconnected.

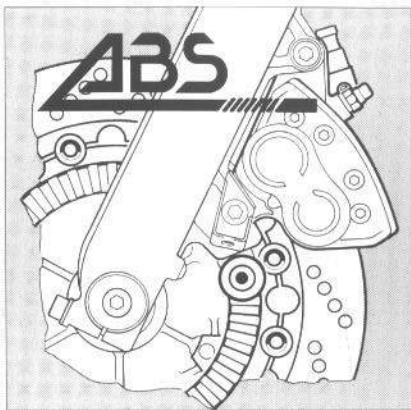
If the engine misfires or its power output deteriorates acutely, ride at low engine speed to the nearest authorized BMW Motorcycle dealer.

Caution

High temperatures build up at the exhaust (with or without catalytic converter).

Make sure that no easily combustible material (for example hay, leaves, grass etc.) comes into contact with the hot exhaust system when the motorcycle is being ridden, idling or parked.

If this material were to ignite and cause a fire, very serious injuries or damage could result.

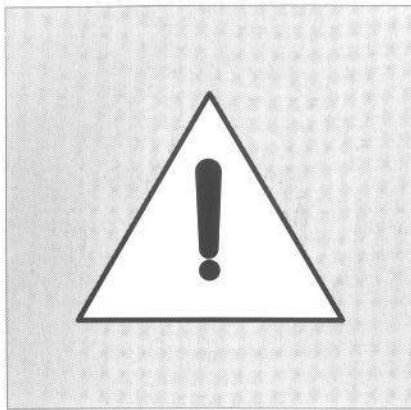


Caution

A motorcycle fitted with ABS should not be accelerated if the rear wheel is spinning to a considerable degree, as this results in a disparity between the wheel speed and the actual road speed.

If the brakes are applied immediately afterwards in this situation or the twist-grip turned back suddenly, the rear wheel decelerates rapidly. In extreme cases, the ABS system could interpret this as an emergency brake application and the system could be activated, delaying the build-up of brake pressure at the rear wheel for a brief period of max. 1 second.

The front brake remains under full ABS control regardless of this.



Some breaking-in rules

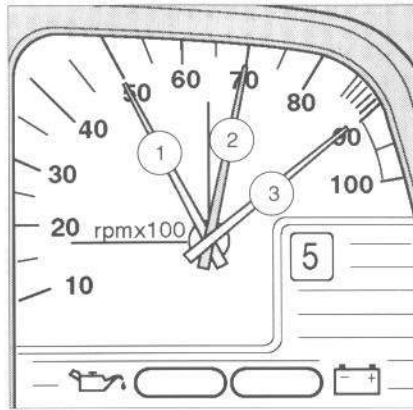
Carefully breaking-in your motorcycle can make a positive contribution to performance and operating life. For this reason, please pay close attention to the breaking-in rules and engine speed limits given below.

While breaking-in your motorcycle, frequently vary engine load and speed. Breaking-in is ideally carried out on roads with plenty of curves and hills, rather than highways.

Avoid, if possible, full brake applications until after the first 500 km (300 miles).

Break-in the tires for at least 500 km (300 miles), gradually increasing lean angles to wear off tire coatings.

Remember to have the first inspection performed after 1000 km (600 miles).



Engine speed limits

0 to 1000 km (600 miles)

max. 5000 rpm (1)

1000 to 2000 km (600 - 1200 miles)

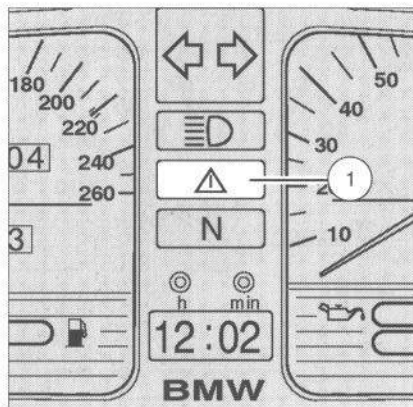
max. 7000 rpm (2)

After 2000 km (1200 miles)

max. 8900 rpm (3)

Caution

Exceeding maximum engine speeds increases engine wear!

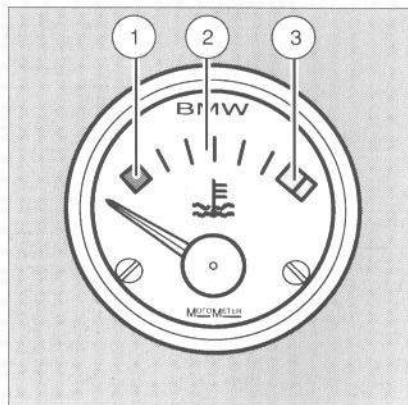


Rear light telltale

Checking

- Switch on ignition, parking lights / headlight. Light monitor will illuminate.
- Operate handbrake and brake pedal.
 - Telltale light (1) changes to flashing: Tail and brake light operating.
 - Telltale light does not flash: Bulb, wiring or switch faulty.
 - Telltale lights up when riding: Fault in tail light.

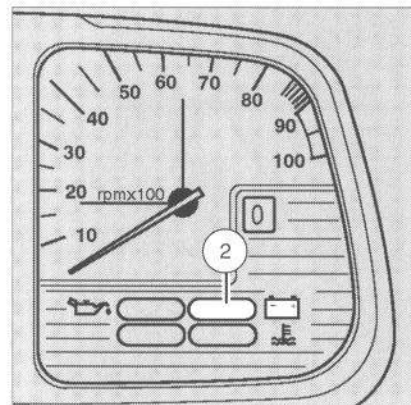
A tail light fault can only be detected when the parking lights or headlight are on.



K 1100 LT

Coolant temperature gauge

- 1 Engine cold (blue area): ride at low engine speeds.
- 2 Engine at operating temperature.
- 3 Engine overheating (red area): switch off immediately and allow to cool down, then contact your authorized BMW dealer or qualified service technician..



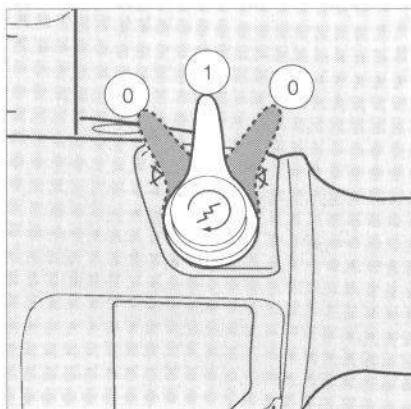
Charge current / Alternator

Telltale light (2) goes out:

- after engine starts.
- at idling speed.

Note

**If telltale light comes on while riding:
Contact your BMW dealer or qualified service technician.
Battery will discharge quickly without input from the alternator.**



Before starting the engine

- Place motorcycle on center stand.
- Check that the ignition kill switch is in position (1).

Note

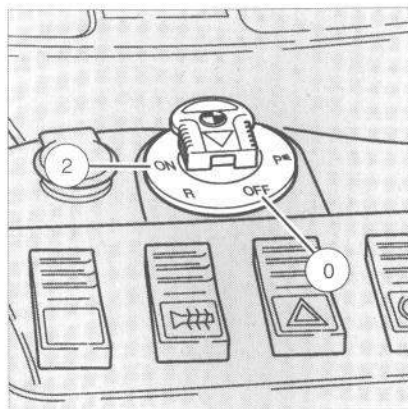
Engine can only be started when kill switch is in position (1).

Ignition kill switch in positions (0):

Electrical circuits for ignition, injection system, fuelpump and starter are de-energized.

Emergency stop:

Move switch into position (0).



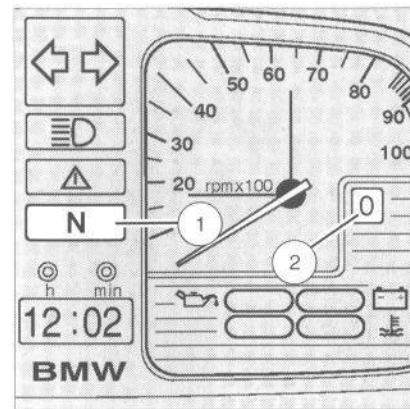
Switching on ignition

- Use ignition key to turn ignition switch into On position (2).

Caution

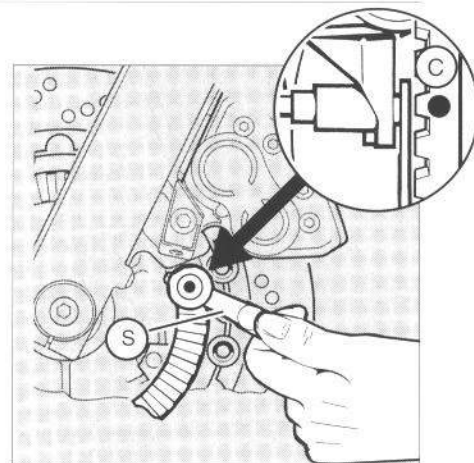
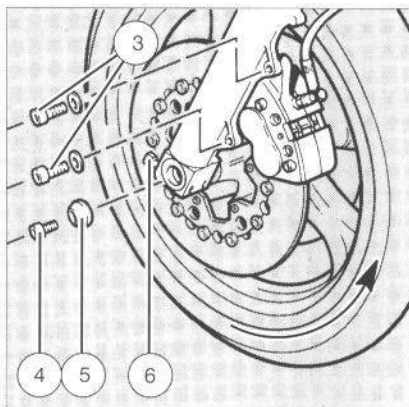
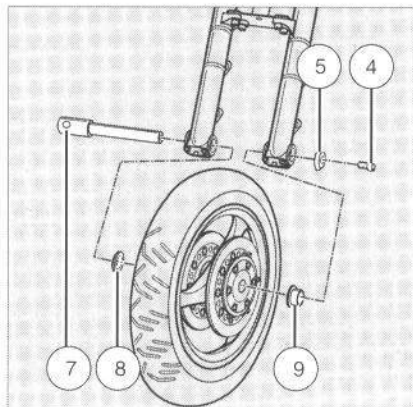
Place motorcycle on center stand. Side stand has start lockout.

When side stand is deployed, starter motor will operate, but engine will not start. Retract sidestand to start engine.



Selecting neutral

- Neutral telltale light (1) comes on.
- Digital gear display (2) in position ("0").



Procedure for installing wheel

- Roll front wheel in between forks. Pay attention to direction of rotation arrow or marking on tire.
- Fit left/right brake caliper onto brake discs.
- Insert spacing bushings.
On left in direction of travel:
wide bushing (8);
On right in direction of travel:
narrow bushing (8).
- Grease stub axle (7).
- Install stub axle from the right (raising wheel at same time).

- Fit on profile disc (5).
- Tighten axle bolt (4).
- Install brake calipers with mounting brackets and tighten bolts (3).
- Tighten left-hand axle clamp bolts (6).
- Remove support from below engine.
- Vigorously compress telescopic forks several times with handbrake applied.
- Tighten right-hand axle clamp bolts.

Check ABS sensor gap

Note

Extreme care must be taken when carrying out this work in order not to interfere with the correct functioning of the system.

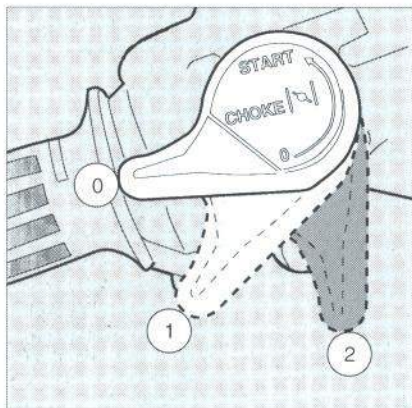
Caution

After fitting wheel, it is essential to check the gap (S) at the point of the maximum distance (chisel punch point "C"), and have it set by your BMW motorcycle dealer or a qualified service technician if necessary.

Gap (S)

Front wheel

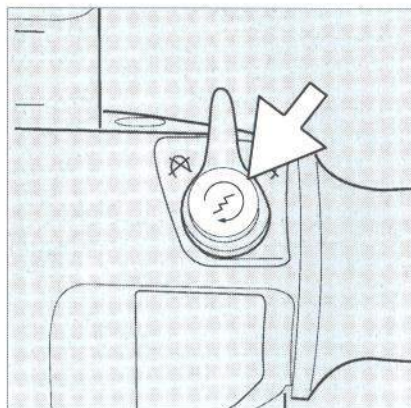
0,50...0,55 mm



Operating choke (increased cold starting speed)

Operate choke lever depending on engine or ambient temperature.

- Position **2**:
below 32 °F (0 °C).
- Position **1**:
above 32 °F (0 °C).
- Position **0**:
engine at normal operating temperature.



Pressing starter switch

- Engine starts.

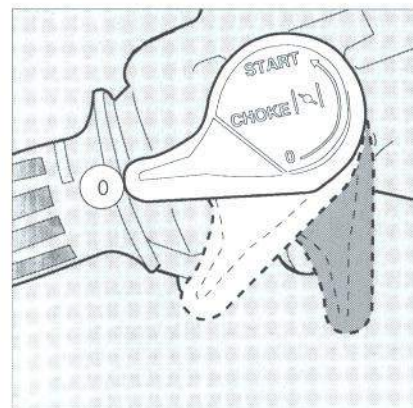
- If necessary, rotate throttle-twist grip gently.

Note

Pull-in clutch lever when starting engine at ambient temperatures below 32 °F (0 °C).

Caution

**Attempting to start engine with a low battery will cause starter relay to chatter audibly. Further attempts at starting will damage starter relay.
Charge battery!**



Resetting choke (increased cold starting speed)

As engine runs more smoothly

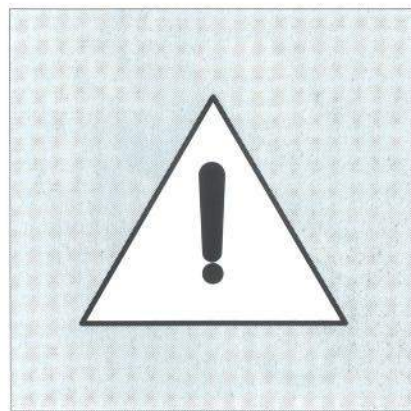
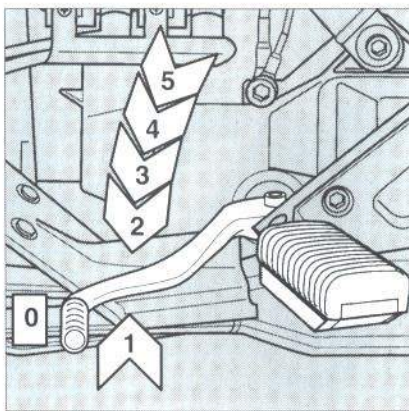
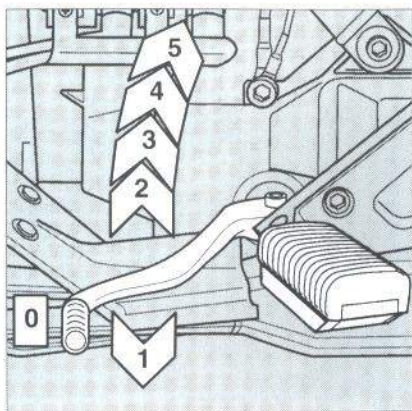
- Move gradually back to position (0).

Note

Do not run engine at fast speeds for too long.

Move back choke lever as soon as possible.

**Do not warm up engine at idling speed.
Move off immediately after starting.**



Changing gears

Moving off/shifting up

- Pull clutch lever.
- Press gear change pedal down fully.
- Engage clutch smoothly.
- Increase engine speed slightly when engaging clutch.
- After clutch engaged, accelerate.
- Similar procedure for shifting up into 2nd, 3rd, 4th and 5th gear.

Caution

Do not allow clutch to slip when changing gears. Vary speed only with the throttle. Otherwise clutch may wear prematurely.

Shifting down

- Close throttle twist grip.
- Pull clutch lever.
- Shift down into next lower gear.
- Engage clutch again slowly.
- After clutch engaged, accelerate.

Note

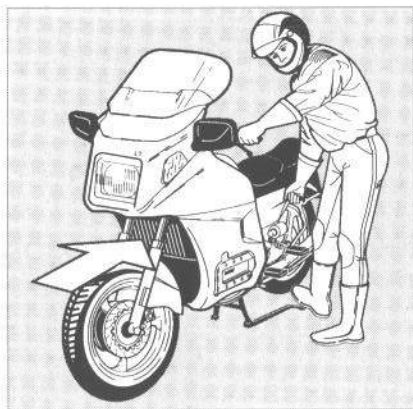
Alter throttle opening to reduce the jerk caused by selecting lower gear.

Digital gear display in revolution counter indicates gear selected.

Select a lower gear if engine speed drops below 1500 rpm during normal riding.

Warning:

When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Intentional sudden acceleration, braking, or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.



Placing motorcycle on center stand

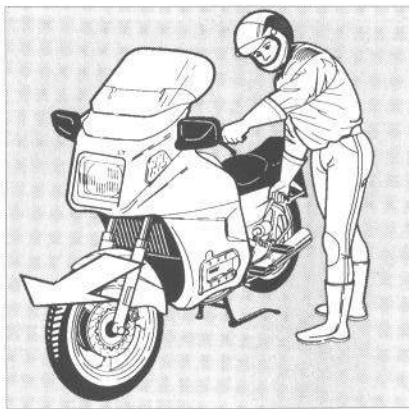
- Left hand on left handlebar twist grip.
- Right hand on retracting handle below seat edge.
- Right foot on arm of center stand.
- Transfer full body weight onto center stand arm.
- Pull motorcycle up and back onto center stand (arrow).
- Check that motorcycle is firmly supported.

Caution

Always ensure that the stand is resting on a firm level surface, to avoid the risk of the motorcycle falling over.

Caution

For safety reasons, never sit on the motorcycle when the prop or center stand is extended.

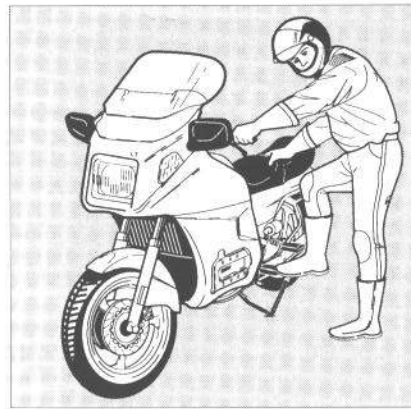


Lowering motorcycle down off center stand

- Left hand on left handlebar twist grip.
- Right hand on retracting handle below seat edge.
- Push motorcycle forward off center stand (arrow).
- Check that center stand is fully retracted.

Warning:

Center stand must be fully retracted before setting off, or an accident may result.



Placing motorcycle on side stand

- Left hand on left handle bar twist grip.
- Right hand on dual seat.
- Extend side stand fully forward by means of it's extension arm.
- Tilt motorcycle slowly onto stand.

Caution

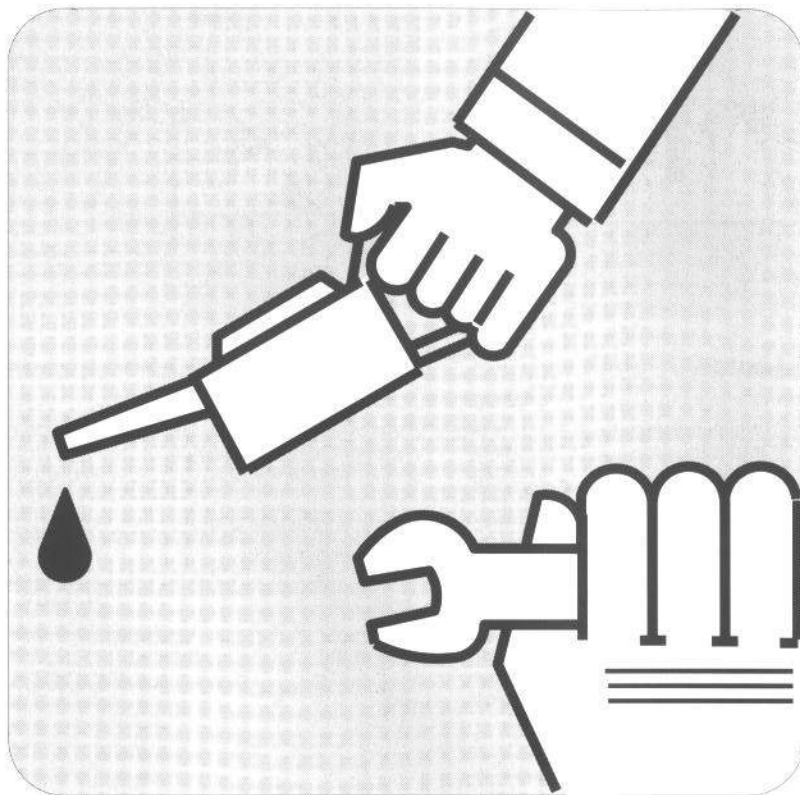
Make sure the stand is always resting on a firm surface with front fork extended, to avoid the risk of the motorcycle falling over.

On an incline, always position front of motorcycle pointing uphill with sufficient lean angle toward stand and engage 1st gear to prevent motorcycle from moving.

Warning:

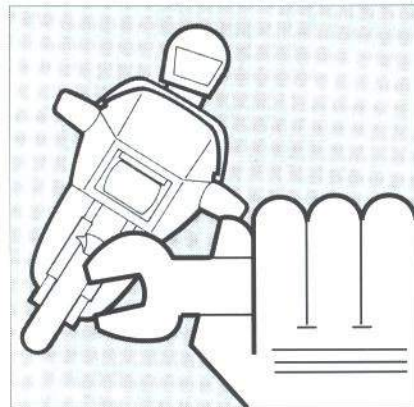
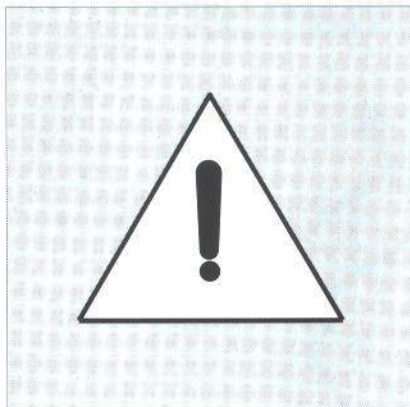
Side stand must be fully retracted before setting off, or an accident may result.

Care and maintenance



- General notes (46, 47)
 - Tool kit, repair kit for tubeless tires (48)
 - Removing/installing front wheel (49-51)
 - Removing/installing rear wheel (51-54)
 - Checking brake pads
 - Front wheel (55)
 - Rear wheel (56)
 - Electrical system: replacing bulbs, replacing fuses (57-60)
 - Servicing battery (61, 62)
 - Troubleshooting table (63)
 - Cleaning/care (64, 65)
 - Check, care and cleaning windshield (66)
 - Storing motorcycle/restoring to service (67)
- () Figures in brackets ⇒ Page on which item is described.

Care and maintenance



General notes

The section which follows provides you with information regarding care and maintenance of your motorcycle. You will need certain technical knowledge and skill in using tools to perform the necessary care and maintenance jobs.

Only in this way can you be sure that the work which you perform will also bring you the desired success.

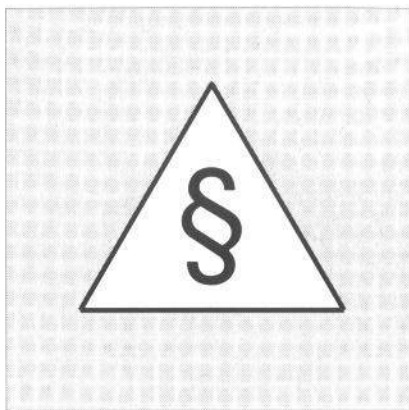
Your motorcycle reflects a high-technical standard. Special tools, special diagnostic and test systems as well as expert knowledge are required to keep your motorcycle in top shape.

Your BMW motorcycle dealer has the necessary technical expertise and properly trained staff. Take advantage of the help they can offer you. It will help ensure that your motorcycle is always in proper working order. Think of your own safety and trouble free operation of your motorcycle.

Do not attempt to perform more extensive work.

Have your motorcycle inspected and serviced at the specified intervals.

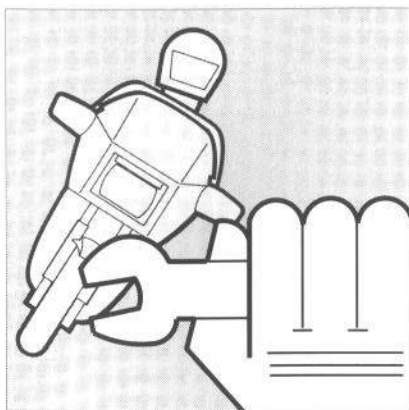
Use only Original BMW Parts and Accessories.



Technical Modifications

Technical modifications are only permitted to a limited extent. Remember to comply with any legal requirements when modifying your motorcycle.

Your BMW motorcycle dealer will be glad to advise you on the merits of any modifications you have in mind, the legal situation and factory recommendations concerning specific technical modifications to your motorcycle.



Original BMW Parts and Accessories

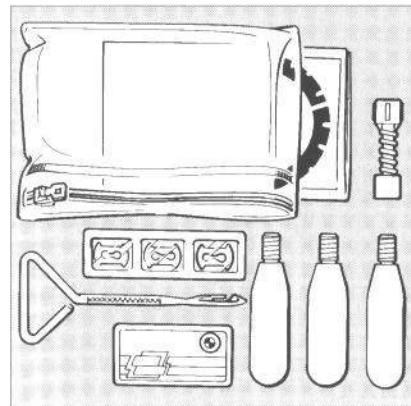
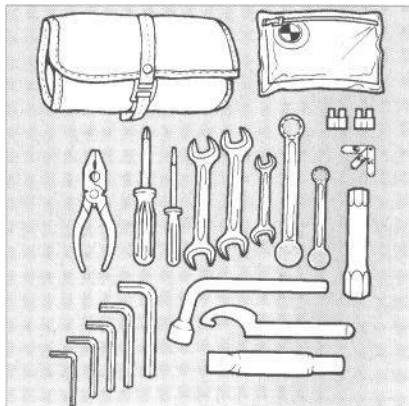
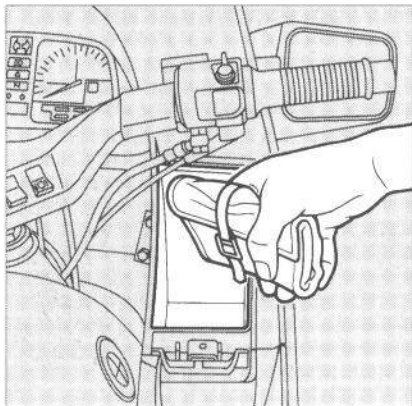
For safety reasons use only Original BMW Parts and Accessories.

BMW is unable to inspect and test every after-market part and accessory and therefore cannot assume any responsibility for such non-BMW parts.

Original BMW Parts are identical to the parts originally used in your new BMW motorcycle.

Original BMW Parts, (components and accessory items supplied by BMW AG Motorcycle Division and BMW of North America, Inc.) are covered by limited warranties* against defects in material and workmanship.

* See your Warranty Information/Service History booklet for details on BMW Limited Warranties.



Tool kit

- **K 1100 LT:** Toolkit in front right storage compartment in fairing.
- **K 1100 RS:** Toolkit in rear-section compartment.

Contents

- 1 leatherette case
- 1 multi-purpose pliers
- 1 large screwdriver (reversible blade)
- 1 small screwdriver
- 1 ABS feeler gauge
- 3 open-ended wrenches
 - 10 x 13 mm
 - 17 x 19 mm
 - 16 x 18 mm
- 2 ring wrenches
 - 10 x 12 mm
 - 17 x 19 mm
- 1 spark plug wrench
- 5 Allen keys
 - 3 mm,
 - 4 mm,
 - 5 mm,
 - 6 mm,
 - 8 mm.
- 1 box wrench for wheel studs
- 1 hook wrench for spring strut
- 1 tubular extension
- 1 flat fuses 15 A
- 1 flat fuses 7,5 A

Repair kit for tubeless tires

Only suitable for punctures up to 4 mm (0.61 in) in diameter.

Please refer to instructions with kit for repair procedure.

Warning

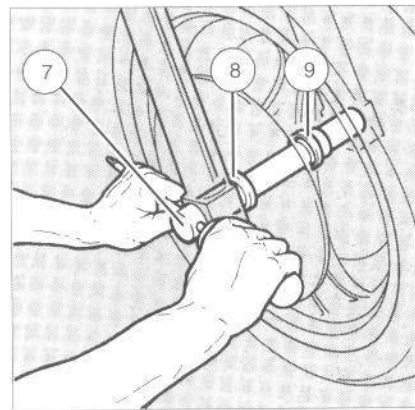
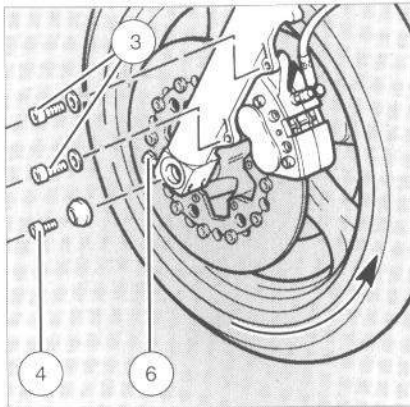
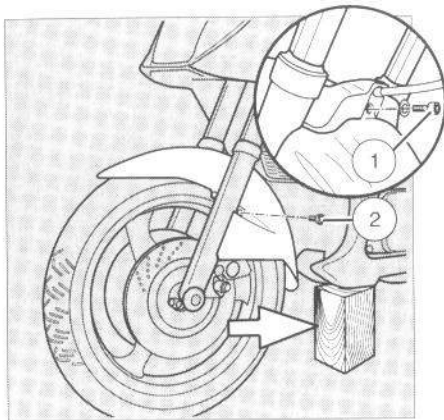
Maximum speed:

⇒ 60 km/h (37 mph) !

Maximum distance:

⇒ 400 km (250 miles)!

Always have tire renewed as soon as possible.



Removing/installing front wheel

Tools required

Allen keys

- 4 mm,
- 6 mm,
- 8 mm,

Open-ended wrench

- 13 mm.

Tubular extension

Procedure for removing wheel

- Place motorcycle on center stand.
- Position support below engine (arrow).
- front wheel exposed.

- **K 1100 LT:** Unscrew fastening bolts (1,2).
- **K 1100 LT:** Take off rear fender section.
- Mark installed position on tire or note direction of rotation arrow on tire.
- Unscrew fastening bolts (3) for left/right brake caliper.
- Unscrew axle bolt (4).
- Slacken axle clamp bolts (6).

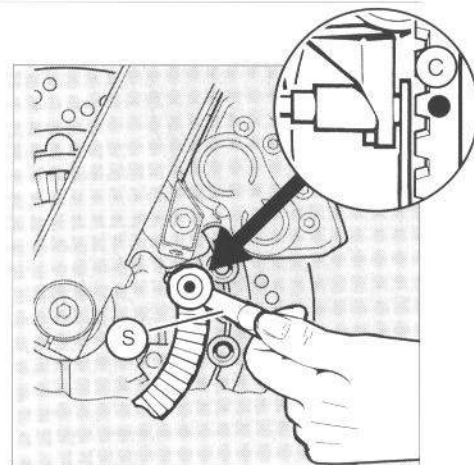
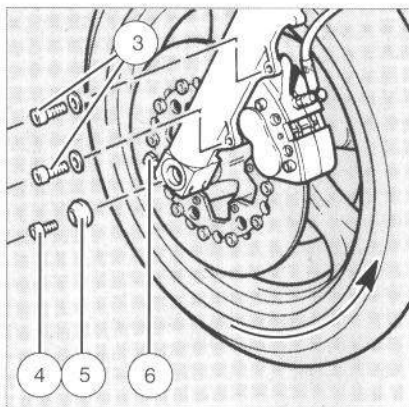
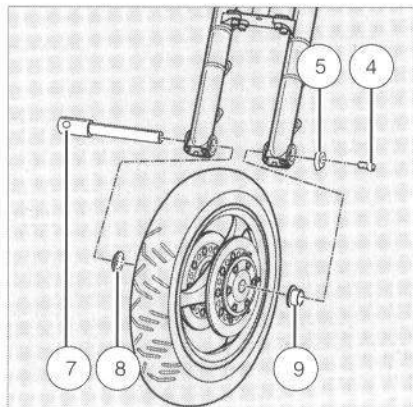
- Withdraw stub axle (7).
- Take out left/right spacing bushings (8,9).
- Take off brake calipers.
- Run front wheel out to the front.

Caution

Do not damage brake discs and pads when removing.

Do not operate handbrake lever with wheel removed.

Keep wheel bearings free of dirt and moisture.



Procedure for installing wheel

- Roll front wheel in between forks. Pay attention to direction of rotation arrow or marking on tire.
- Fit left/right brake caliper onto brake discs.
- Insert spacing bushings.
On left in direction of travel:
wide bushing (8);
On right in direction of travel:
narrow bushing (8).
- Grease stub axle (7).
- Install stub axle from the right (raising wheel at same time).

- Fit on profile disc (5).
- Tighten axle bolt (4).
- Install brake calipers with mounting brackets and tighten bolts (3).
- Tighten left-hand axle clamp bolts (6).
- Remove support from below engine.
- Vigorously compress telescopic forks several times with handbrake applied.
- Tighten right-hand axle clamp bolts.

Check ABS sensor gap

Note

Extreme care must be taken when carrying out this work in order not to interfere with the correct functioning of the system.

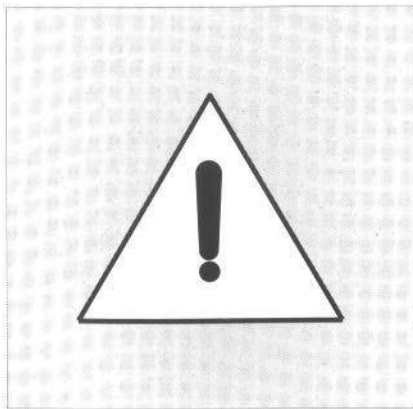
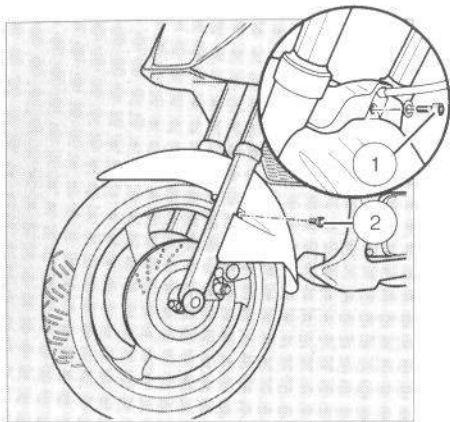
Caution

After fitting wheel, it is essential to check the gap (S) at the point of the maximum distance (chisel punch point "C"), and have it set by your BMW motorcycle dealer or a qualified service technician if necessary.

Gap (S)

Front wheel

0,50...0,55 mm



- **K 1100 LT:** Install rear fender sections.
- **K 1100 LT:** Screw in fastening bolts (1,2) with washers. Tighten gently.

Tightening torques

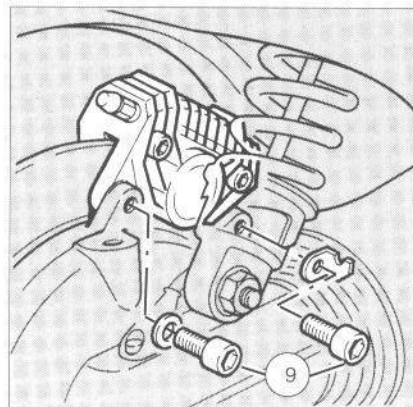
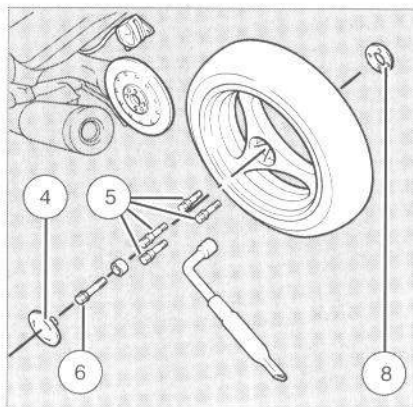
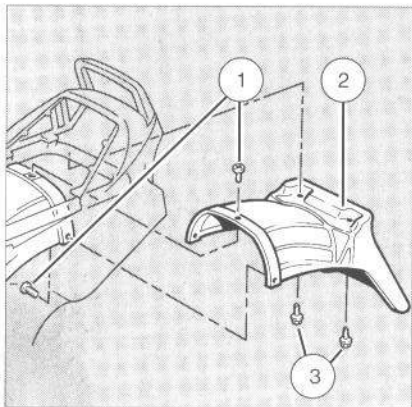
- Axle bolt (6)
 ⇒ **33 Nm (24 ft.lb.).**
- Brake caliper bolt (4)
 ⇒ **32 Nm (23 ft.lb.).**
- Axle clamp bolts (8)
 ⇒ **14 Nm (10 ft.lb.).**

Caution

Do not damage brake discs and pads when installing.

Do not operate handbrake lever with wheel removed.

Have tightening torques checked by your BMW dealer or a qualified service technician.



Removing/installing rear wheel

Tools required

Open ended wrench

– 10 mm.

Allen keys

– 8 mm.

Screwdriver with reversible blade.

Box wrench for wheel studs.

Tubular extension

Procedure for removing wheel

- Place motorcycle on center stand.
- Engage first gear.
- **K 1100 RS:** Unscrew bolts (1,3) for rear wheel cover (2).
- **K 1100 RS:** Take off rear fender.

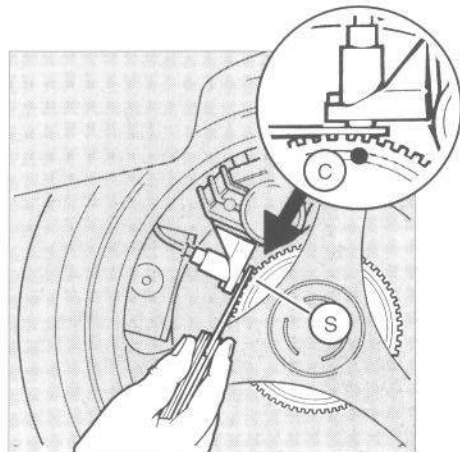
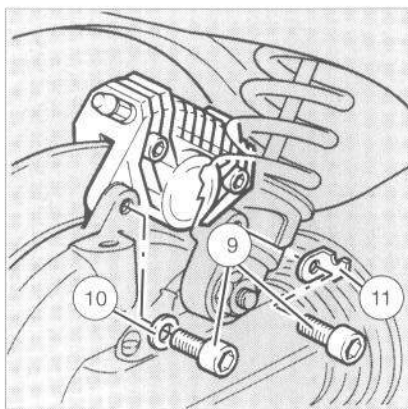
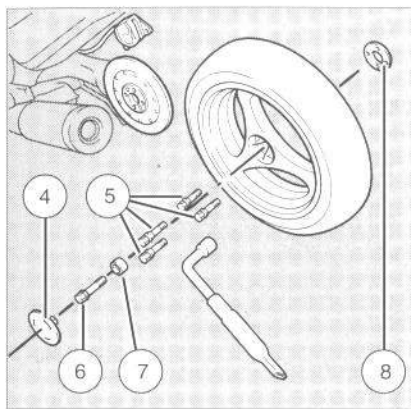
- Remove cover (4) for wheel bolts.
- Unscrew 4 wheel bolts (5).
- Unscrew central bolt (6).

- **K 1100 RS:** Unscrew bolts (9) for brake caliper.
- **K 1100 RS:** Carefully remove brake caliper; place down on swing arm.
- Lift rear wheel off centering spigot and roll out to the rear.
 - Pay attention to shim(s) (8).

Caution

Do not damage brake discs and pads when removing.

Do not operate brake pedal with wheel removed.



Procedure for installing wheel

- Check that wheel centering spigot, contact faces of wheel hub and shims are free of grease.
- Fit shim(s) (8) onto wheel centering spigot.
- Insert rear wheel into hole for centering spigot.
- **K 1100 RS:** Carefully fit brake calipers onto brake discs.
- Screw in the outside wheel bolts (5) with tapered rings until hand-tight, then tighten them to the pre-load torque in a crosswise pattern.
- Tighten central bolt (6) with bushing to specified torque.
- Tighten outside wheel bolts (5) to specified torque in a crosswise pattern.
- Insert cover (4) for wheel/central bolts.
- **K 1100 RS:** Screw in brake caliper bolts (9) with washer (10). Ensure that angle plate (11) for pulse sensor cable is also secured.

Check ABS sensor gap

Note

Extreme care must be taken when carrying out this work in order not to interfere with the correct functioning of the system.

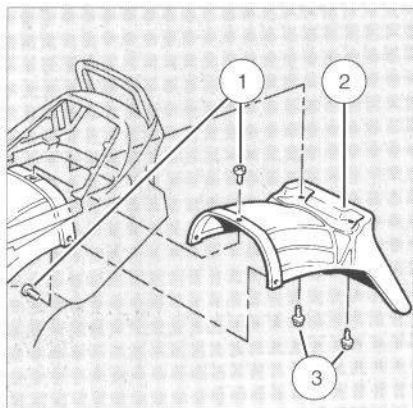
Caution

After fitting wheel, it is essential to check the gap (S) at the point of the maximum distance (chisel punch point "C"), and have it set by your BMW motorcycle dealer or a qualified service technician if necessary.

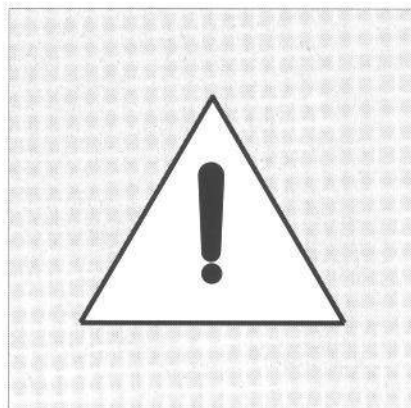
Gap (S)

Rear wheel

0,60 ... 0,65 mm



- **K 1100 RS:** Install rear fender. Pay attention to plastic washers.



Pre-load torque

- Outside wheel bolts (5)
⇒ **50 Nm (36 ft.lb.)**.

Tightening torques

- Wheel/central bolts (5,6)
⇒ **105 Nm (76 ft.lb.)**.
- Brake caliper bolts (9)
⇒ **32 Nm (23 ft.lb.)**.

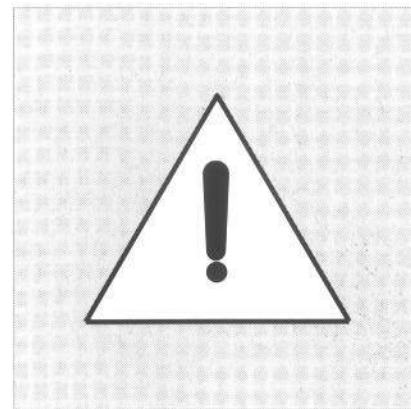
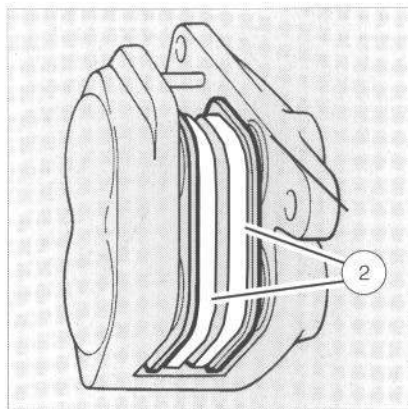
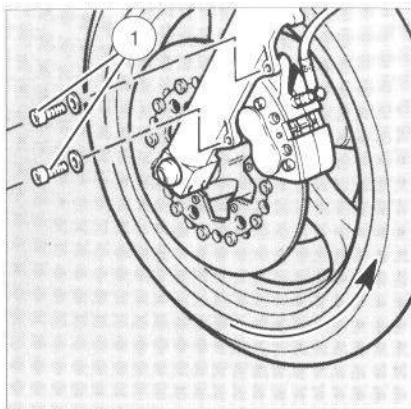
Caution

Do not damage brake discs and pads when installing.

Do not operate brake pedal with wheel removed.

Use only wheel and central bolts with the same length code number.

Have tightening torques checked by your BMW motorcycle dealer or a qualified Service technician.



Checking brake pads

Front wheel

Tools required

Allen keys

- 4 mm,
- 8 mm.

Screwdriver with reversible blade.

Procedure

- Place motorcycle on center stand.
- **K 1100 LT:** Take off front wheel rear fender section (see page 49).
- Remove fastening screws (1) for left/right brake calipers.
- Carefully remove brake calipers.

- Check/measure thickness of brake pads (2).

Minimum pad thickness:

1.5 mm (0.06 in).

- Refit brake calipers in the reverse order.

Tightening torque

Brake caliper screws (1)

⇒ **32 Nm (23 ft.lb.).**

Note

Have work performed on brake system by your BMW motorcycle dealer or a qualified service technician.

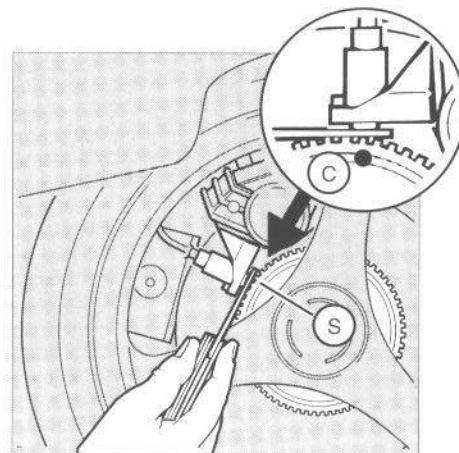
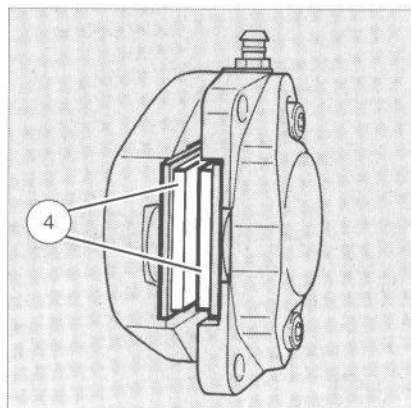
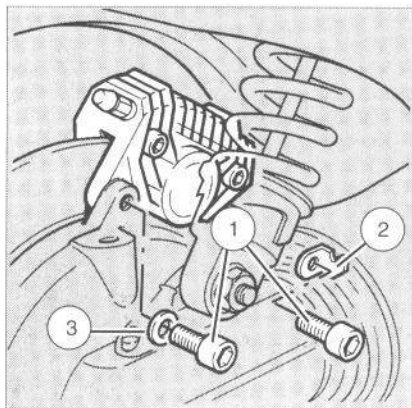
Caution

Do not damage brake discs and pads when removing and installing brake calipers!

Do not operate handbrake lever with brake calipers removed!

Ensure brake pads have at least minimum thickness!

Have tightening torques checked by your BMW motorcycle dealer or a qualified service technician!



Rear wheel

Tools required

Allen key

- 8 mm.

Procedure

- Place motorcycle on center stand.
- Remove screws (1) for brake caliper.
- Take off angle plate (2) for pulse sensor cable and washers (3).
- Carefully remove brake caliper.
- Check thickness of brake pads (4).
Minimum pad thickness:
1.5 mm (0.06 in).
- Install in the reverse order.

Tightening torque

Brake caliper screws (1)
⇒ 32 Nm (23 ft.lb.).

Note

Have work performed on brake system by your BMW motorcycle dealer or a qualified service technician.

Caution

Do not damage brake discs and pads when removing and installing brake calipers!

Do not operate handbrake lever with brake calipers removed!

Ensure brake pads have at least minimum thickness!

Have tightening torques checked by your BMW motorcycle dealer or a qualified service technician!

Check ABS sensor gap

Note

Extreme care must be taken when carrying out this work in order not to interfere with the correct functioning of the system.

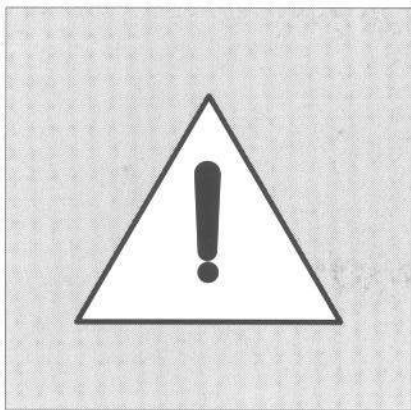
Caution

After fitting brake caliper, it is essential to check the gap (S) at the point of the maximum distance (chisel punch point "C"), and have it set by your BMW motorcycle dealer or a qualified service technician if necessary.

Gap (S)

Rear wheel
mm

0,60 ... 0,65



Electrical system

Caution

Perform work on the electrical system only when ignition is switched off or battery negative cable disconnected!

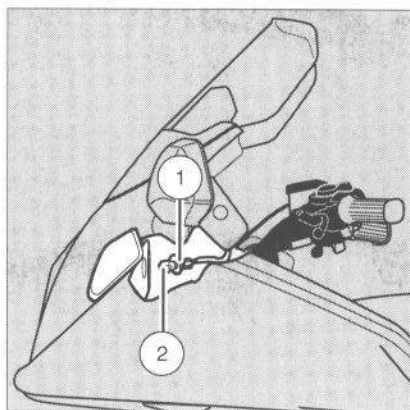
Do not touch any live parts when engine is running or there may be a risk of a fatal accident!

Note

Do not touch new bulbs with your bare fingers.

Use a clean, dry cloth to install.

If touching bulb cannot be avoided, remove finger prints before use.



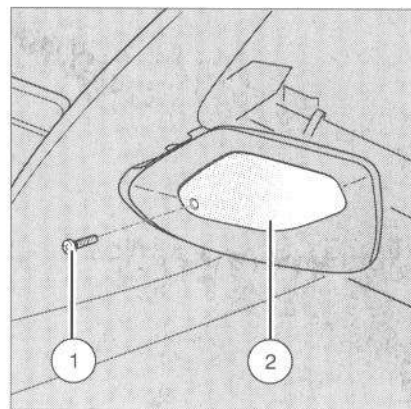
K 1100 LT

Renewing front turn-signal bulb

Work sequence

Perform removal/installation work from the top. (Reach through between storage compartment, instrument cluster and handlebar.)

- Place motorcycle on centre stand.
- Turn handlebar to left or right.
- Release the bulb holder by turning it to the left, and pull it out.
- Press the bulb (2) in and turn it to the left to release it. Take the bulb out.
- Insert the new bulb (2) into the holder, press in and turn to the right to secure
- Insert the bulb holder in its catch again and secure by turning it to the right.



K 1100 RS

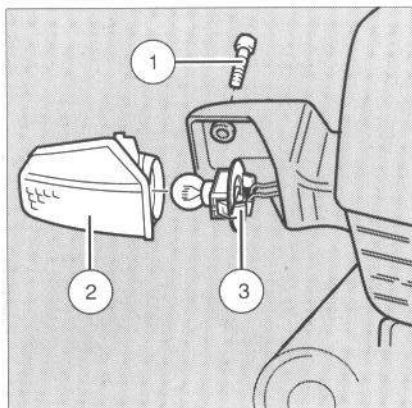
Renewing front turn-signal bulb

Tools required

Screwdriver with reversible blade

Work sequence

- Place motorcycle on centre stand.
- Take out the retaining screw (1).
- Take off the flasher cover (2).
- Press the bulb in and turn it to the left to release it. Take the bulb out.
- Insert the new bulb into the holder, press in and turn to the right to secure.
- Insert the flasher unit and screw it on firmly.



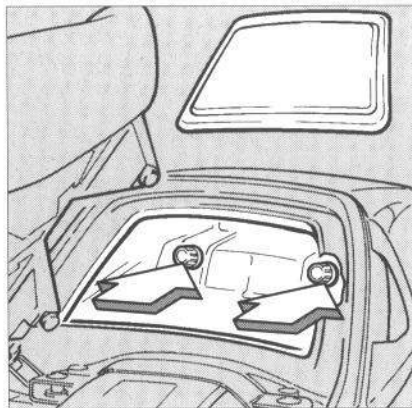
Renewing rear turn-signal bulb

Tools required

Screwdriver with reversible blade

Work sequence

- Place motorcycle on centre stand.
- Take out retaining screw (1).
- Take out flasher cover (2).
- Press plastic catch (3) to release bulb holder, and remove it.
- Press bulb in and turn to left to release. Take the bulb out.
- Insert new bulb into catch and turn to right to secure.
- Install in the reverse order of work.
- Front/rear indicator bulbs: ⇒ 12 V/21 W



Renewing rear light bulb and brake light bulb

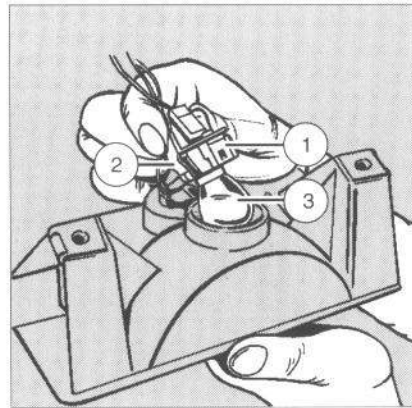
No tools required.

Procedure for removing bulb

- Place motorcycle on center stand.
- Open the dual seat. Remove the cover from the storage compartment.
- Take out the two knurled screws (arrow).
- Detach the rear light assembly.

Light assembly:

Top light	⇒	brake
Bottom light	⇒	rear



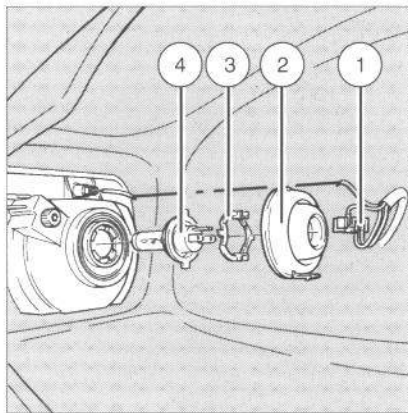
- Remove the bulb insert (1) by pressing in plastic catch (2).
- Press the brake/rear light bulb (3) to the rear and release it from its holder by turning it to the left. Take out the bulb.
- Install in the reverse order of work.
- Brake light: ⇒ 12 V/21 W
- Rear light: ⇒ 12 V/10 W

Note

Do not touch new bulbs with your bare fingers.

Use a clean, dry cloth for installing.

If touching bulb cannot be avoided, remove finger prints before use.



Renewing headlight bulb

No tools required

Procedure for removing bulb

Remove/install bulb through bottom fairing opening.

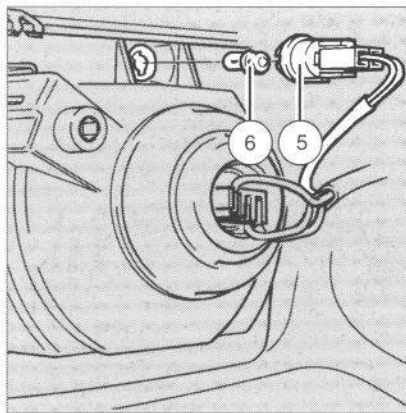
- Place motorcycle on center stand.
- Take off multiple connector (1).
- Remove rubber seal (2).
- Release locking ring (3) by turning to the left. Remove bulb (4).
- Install bulb in the reverse order.

– Headlight bulb ⇒ **60/55 W**

Note

Do not touch new bulbs with your bare fingers.

Use a clean, dry cloth for installing.



Renewing parking light bulb

No tools required

Procedure

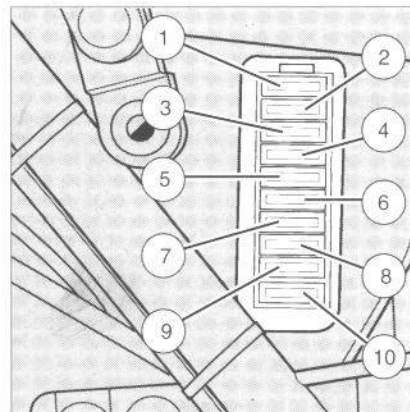
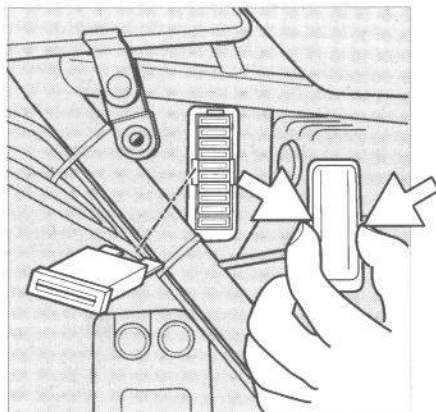
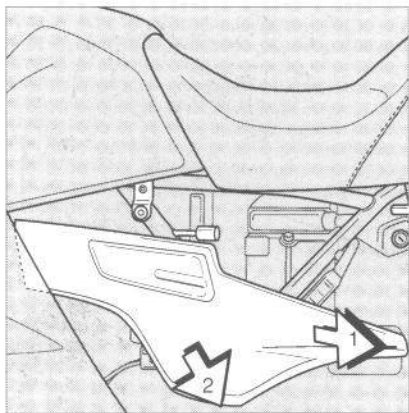
- Place motorcycle on center stand.
 - Release bulb holder (5) by turning to the left.
 - Release bulb (6) by pressing in and turning to the left at the same time.
 - Install bulb in the reverse order.
- Parking light bulb ⇒ **12 V/4 W**

Note

Do not touch new bulbs with your bare fingers.

Use a clean, dry cloth for installing.

If touching bulb cannot be avoided, remove finger prints before use.



Renewing fuses

No tools required.

Procedure

- Place motorcycle on centre stand.
- Take off the battery cover as shown in the drawing.

- Compress transparent cover slightly at the sides (arrows) and withdraw.
- Pull blown fuse out of holder.
- Insert new fuse (spare fuses in tool kit).
- Install parts in the reverse order.

Note

Do not repair blown fuses.

If fuse blows frequently, have electrical system checked by your BMW motorcycle dealer or qualified Service technician.

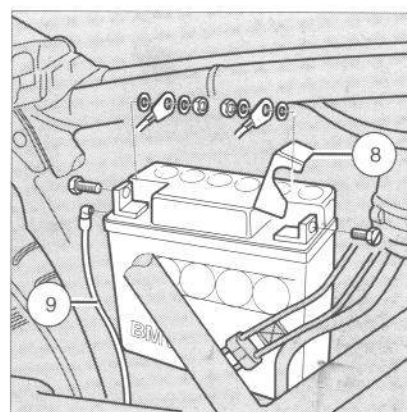
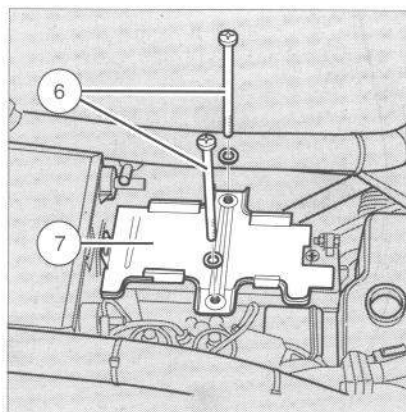
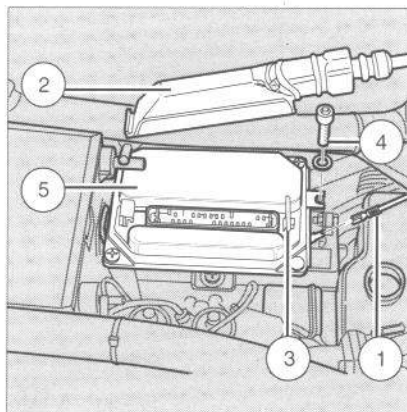
Electrical circuits and fuses

Fuse assignment:

1	Instrument cluster, rear/brake lights	15 A.
2	Parking light	15 A.
3	Indicator lights, clock	15 A.
4	Power socket	15 A.
5	Motronic	15 A.
6	Fuel pump	15 A.
7	Two-tone horns, fan	15 A.
8	Special equipment option	15 A.
9	Special equipment option	15 A.
10	Special equipment option	15 A.

Caution

Use only specified fuse types and ratings.



Removing and installing battery

Tools required

Allen keys

- 4 mm

Open ended wrench

- 10mm

Screwdriver with reversible blade.

Procedure for removing battery

- Place motorcycle on center stand.
- **Switch off ignition!**
- Open the dualseat.
- Remove right battery cover.
- Disconnect earth/ground (1) on plug of injection control unit.
- After releasing the snap catch (3), detach plug from injection control unit.
- Remove retaining screw (4) from the injection control unit.

- Remove injection control unit (5) by lifting out backwards and upwards.
- Remove battery holder retaining screws (6).
- Remove retaining plate (7).
- Use a screwdriver to lift up protective cap (8) at positive terminal.
- Disconnect battery cables.
⇒ **first of all from negative terminal.**
⇒ **then from positive terminal.**
- Pull battery ventilation hose (9) out of battery housing.
- Lift out battery to the rear/up the way (arrow).

Caution

It is essential to disconnect negative/positive cables in the correct order! Disconnect battery terminals only when ignition and accessories are switched off!

Procedure for installing battery

- Install battery in the reverse order.
- Connect battery terminal cables.
⇒ **first positive terminal.**
⇒ **then negative terminal.**
- Grease terminal posts.

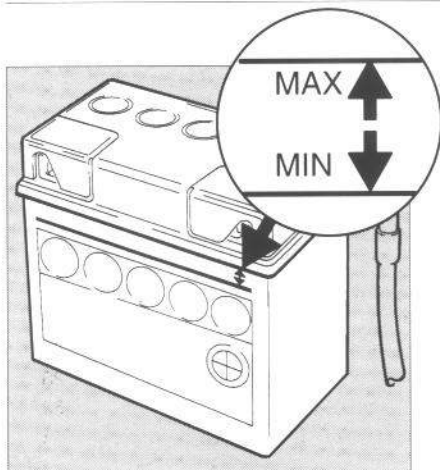
Note

Do not overtighten the battery holder screws (6).

Caution

Do not kink battery ventilation hose (9)! It is essential to connect positive/negative terminal cables in the correct order!

Connect battery terminal cables only when ignition and accessories are switched off!



Checking electrolyte level

Procedure

- Read off electrolyte level at MIN/MAX markings.

Note

Use only distilled water for topping up battery.

Remove filler plugs and screw in with a coin.

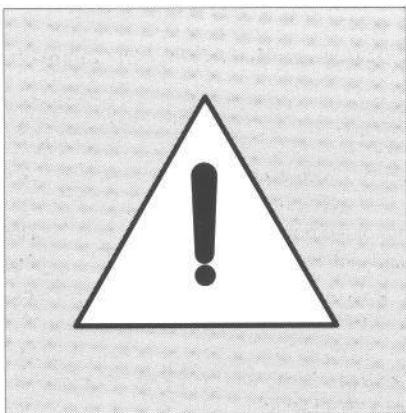
Caution

Battery acid is corrosive to metal or enamel surfaces.

Before recharging or removing a battery, always switch off engine and disconnect the terminals.

Never run the engine without the battery connected, or else the alternator may be destroyed.

Check that battery venting hose is routed correctly, and open.



Warning:

The battery contains sulfuric acid. Avoid contact with skin, eyes or clothing. Antidote: EXTERNAL-Flush with water, INTERNAL-Drink large quantities of water or milk.

Follow with milk of magnesia, beaten egg or vegetable oil.

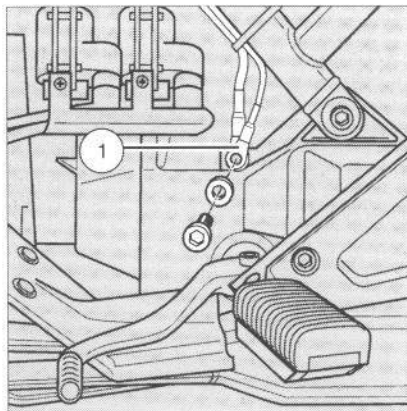
Call physician immediately. Eyes: Flush with water and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flames and cigarettes away. Always shield eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN!

Recharge battery only in a well ventilated area.

Filler caps must be tight.



Maintenance instructions

- If the motorcycle is not ridden for more than a month, disconnect battery terminals.

Procedure:

Unscrew the negative cable (1) at the gear box and insulate it.

- Top up distilled water to MAX mark.
- Store battery in a cool and dry place.
- Check electrolyte level regularly.
- Suggestion: Connect the BMW motorcycle battery charger for 1 day every 4 weeks to maintain optimum battery life.

Caution

Improper treatment of battery invalidates battery warranty!

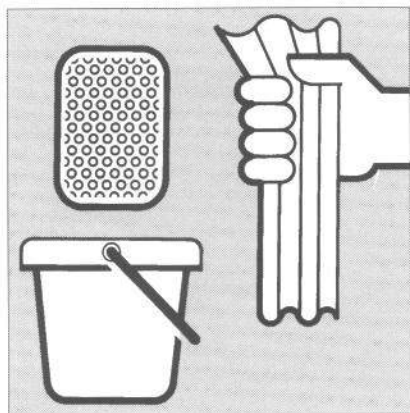
Caution

Motorcycle is fitted with digital electronic engine control (MOTRONIC)! Do not touch live parts when engine running! Risk of fatal accident!

Malfunction	Possible cause	Remedial action	Page
Engine will not start or is difficult to start	Ignition key not in correct position	Refer to operating instructions	41
	Ignition kill switch not turned on	Refer to operating instructions	41
	Prop stand folded down	Refer to operating instructions	34
	Power supply interrupted	Fuse 5 blown	60
	Gear engaged, clutch lever not pulled up	Select neutral or disengage clutch	43
	Fuel tank empty	Refuel	28
	Fuel pump not working	Fuse 6 blown	60
	Throttle twistgrip/choke not operating properly	Refer to operating instructions	42
	Air filter element blocked	Renew	
	Spark plug(s) faulty/damp	Renew	
	Spark plug leads/caps damp	Dry with compressed air jet	
Battery insufficiently charged	Charge battery	62	
Coolant temperature too high, warning light remains on all the time (comes on above 115 °C)	Coolant too low	Trace and repair any leaks; add coolant	29
	Electric fan not switching on automatically (at 105 °C)	Fuse 7 blown	60

Note

Any more serious faults, and other faults not described on pages 45...68, should be entrusted to a BMW motorcycle dealer or qualified service technician for attention.



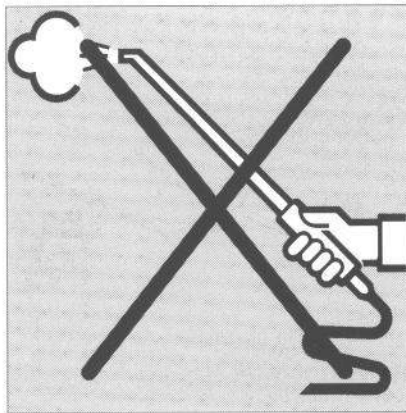
Cleaning/Care

Most motorcycle owners are familiar with the way an admiring crowd of all ages gathers round a sparkling clean motorcycle whenever it is parked for a few minutes.

Who would not be just a little proud to receive this public recognition of his efforts.

Of course, there are many successful methods of cleaning. Most motorcyclists have devised their own ways of tackling the job.

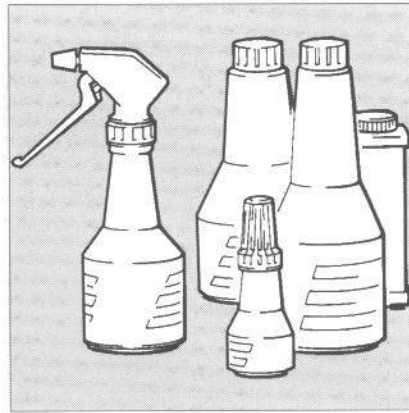
In view of the problems that can occur even with modern cleaning products and equipment, and the very real risk of damaging the motorcycle or spoiling its appearance, we have compiled a few hints which may be useful.



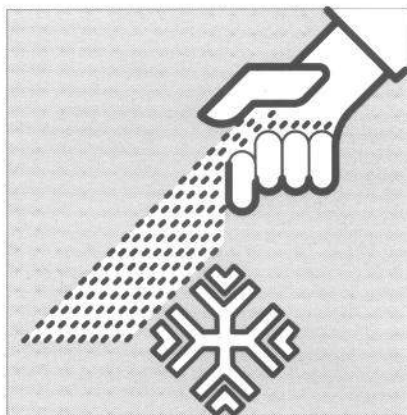
Caution

We do not recommend high-pressure water or steam cleaners, because the powerful pressure may damage normal seals at the wheels, etc., may uplift paint damaged by stones and may also penetrate the breather covers at the gearbox and final drive and electrical or electronic equipment and fittings and the hydraulic brake system. The consequences can often be expensive to repair, and may actually cause a safety hazard.

- A better approach: spray very dirty areas, e.g. wheels and transmission, with an approved mild-action engine or cold cleaner, allow this to soak in for the period of time specified by the supplier and then wash it off with a mild spraying water jet. Place the motorcycle on the side stand so that the motorcycle is tilted to the left to drain water from the top of the engine. Finally, dry thoroughly.



- **After washing the motorcycle down in this way, it is advisable to test the brakes.**
- Rubber and plastic components, particularly flashing turn indicators, rear light, instrument cluster, switches, etc., must be protected against cleansers and solvents.
- Wash paintwork with a mild, non alkaline dishwashing liquid and plenty of clean water, using a clean sponge or wash-leather. Remove dead insects in the same way.
- Clean/care for fairing sections only with approved BMW cleaning/care products. Do not scratch windscreen.
- Remove tar stains only with approved removers. Rinse down thoroughly afterwards.
- Treat chrome parts and paintwork regularly with suitable approved BMW care products.

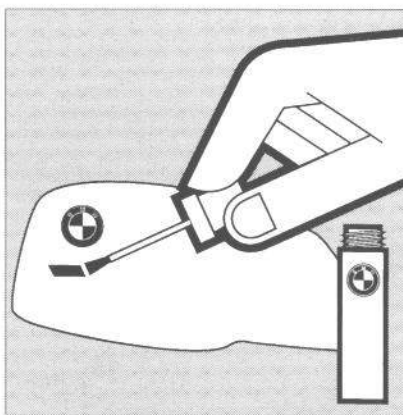


Removing road salt

- Clean motorcycle at the end of your ride immediately with cold water.
 - ⇒ **Do not use warm water as this increases the chemical action of the salt!**
- Dry motorcycle thoroughly.
- Use a commercial wax-based corrosion proofing agent to treat rims, engine, swing arms and chrome parts.
- Rub/polish cleaned and dried fairing sections with an approved wax product.

Caution

Do not use steam cleaners or high pressure washing equipment!

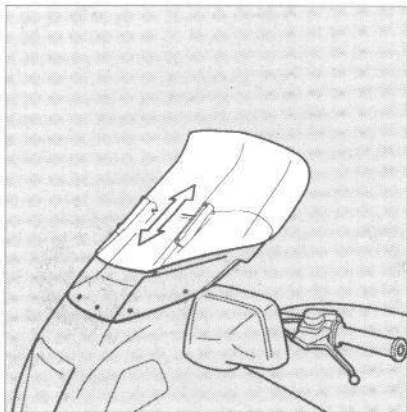


Touching up paint damage

- Touch up minor paint damage caused by flying stones or similar with BMW Touch Up Stick.
 - ⇒ **Paint color indicated on decal below dualseat.**
 - ⇒ **Pay attention to manufacturer's instructions for use.**
- Have major damage to paintwork attended to by your BMW dealer.
- Only through proper care will your motorcycle finish be maintained. Avoid prolonged exposure to sunlight or your paint finish may fade or be damaged eventually. Cover your motorcycle when not in use.

Caring for exhaust system

- Treat discolorations to exhaust system (caused by operation and exposure to environment) with S100 Finish Restorer metal polish.

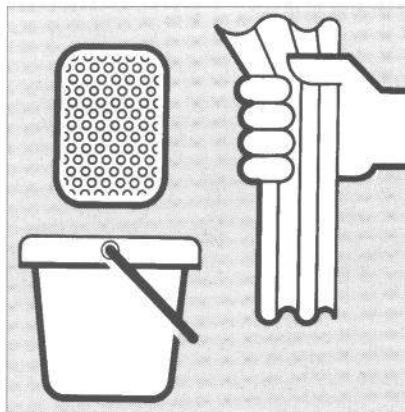


Check the windshield

Warning:

Check mounting hardware periodically. A loose mount places undue stress on the windshield and could possibly result in premature failure.

Never ride your motorcycle with loose or missing windshield mounting hardware. Check the hardware tightness regularly.



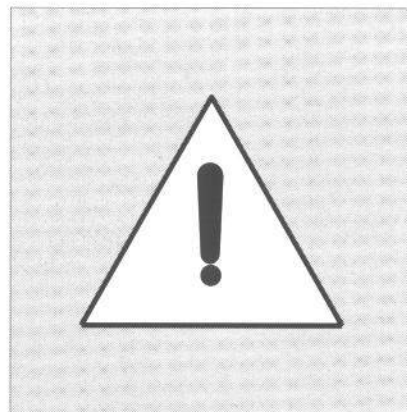
Care and cleaning windshield

Your windshield is made of prime G.E. Lexan[®] FMR hardcoated polycarbonate sheet. Always pre-rinse screen with water to remove grit and soften dirt. Wash with mild liquid soap, lots of warm water, and a clean soft cloth or sponge. Rinse well to remove all soap residue. Dry with a chamois, flannel or moist sponge to prevent water spots. Paint, grease; Use a cotton ball moistened with turpentine, follow with wash as described above. This also works on label residue.

If a hairline scratch or abrasion occurs on your windshield it can be minimized with a non-silicone polish. The polish will make cleaning easier and fill scratches, making them invisible. Recommended products:

Meguiar's Mirror Glaze Professional Plastic Cleaner #17 BMW P/N 88 88 2 000 003

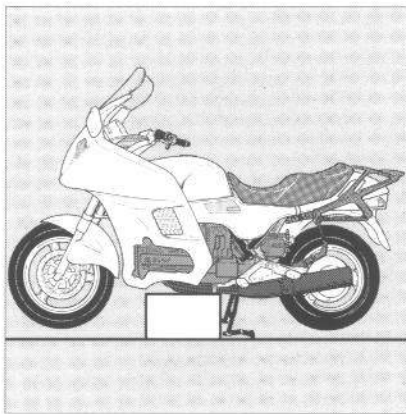
Meguiar's Mirror Glaze Professional Plastic Polish #10 BMW P/N 88 88 2 000 004



Caution

Do not clean Lexan[®] hardcoated polycarbonate in hot sun or high temperature. Powered, abrasive, or alkaline cleaners will damage the windshield. Never scrape the windshield with a razor blade or other sharp instrument as permanent damage will result.

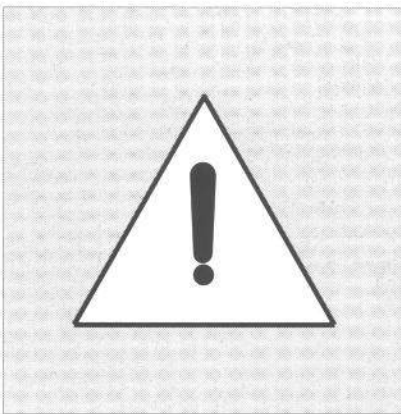
Your BMW windshield is constructed from surface-hardcoated polycarbonate sheet which may not be compatible with certain cleaning or rain-shedding products, particularly (but not limited to) those of acidic origin. These products can penetrate the hardcoating, particularly around the edges and areas of stress (sharply formed bends) creating foggy or glare spots. Damage resulting from these products is not covered under the BMW Limited Warranties.



Storing motorcycle

Procedure

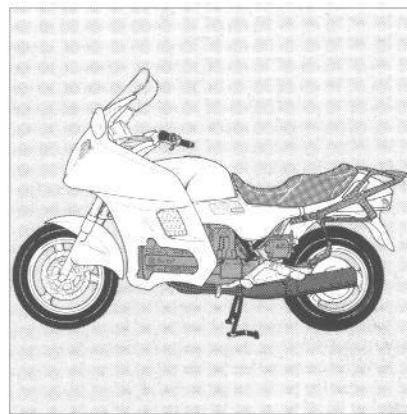
- Clean motorcycle (see page 64).
- Remove battery (see page 61). Pay attention to maintenance instructions (see page 62)!
- Lubricate brake pedal and clutch lever joints, center and side stand bearings.
- Spray bright metal/chrome parts with S 100 Corrosion Protectant.
- Store motorcycle in a dry room on center stand.
- Place block under the engine so that both wheels are off the ground.



Note

Before the motorcycle is laid up out of use, ask your authorized BMW motorcycle dealer to change the engine oil and renew the oil filter element.

Work needed in connection with laying up the motorcycle or restoring it to the road is best combined with an Inspection or Oil Service performed by your authorized BMW motorcycle dealer .



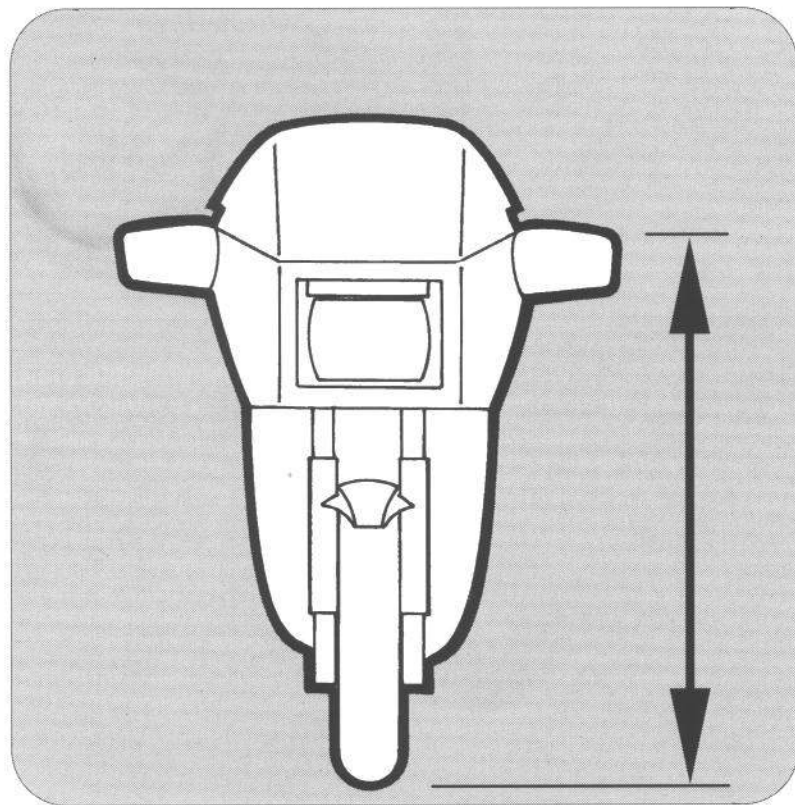
Restoring motorcycle to use

Procedure

- Remove protective coatings applied to exterior.
- Clean motorcycle (see page 64).
- Install fully-charged battery (see page 61).
- Treat battery terminal posts and clips with protective grease.
- Check/correct tire inflation pressure (see page 33).
- Check brakes (see pages 30-32).
- Perform safety checks (see pages 25-36).



Specifications



And just as important:

Technical data and descriptions

- Engine (70)
- Power transmission (71)
- Frame (72, 73)
- Fuels, lubricants etc. (74, 75)
- Electrical systems (76)
- Dimensions (77)
- Weights (78)

() Figure in brackets ⇒ Page on which item is described.

Technical data and descriptions

Engine		K 1100 LT	K 1100 RS
Type		Patented longitudinal in-line flat-four, compact four-stroke engine with four valves per cylinder and two overhead camshafts, watercooling, and digital engine electronics (MOTRONIC) with deceleration fuel cutoff.	
Displacement	ccm	1093	
Max. permissible engine speed	rpm	8900	
Max. continuous engine speed	rpm	8500	
Idle speed	rpm	950 +50	
Bore/stroke	mm	70,5/70	
Compression ratio		11.0:1	
Type of fuel		Unleaded middle or premium grade fuel, minimum octane number 89 (Anti Knock Index $(R+m)/2$) or minimum octane number 95 (RM) and 85 (MM).	

Transmission**K 1100 LT****K 1100 RS****Clutch**

Single dry plate, mounted on output shaft and revolving in opposite direction to crankshaft, with lever-action disc spring, aluminium forged flywheel and asbestos-free clutch linings; responsive mechanical release action with low release forces; clutch lever force approx. 70 N.

Clutch plate \varnothing

mm (in)

180

(7.08)

Gear box

Constant-mesh 5-speed gearbox with integral shock-absorber and weight-reducing aluminium components.

Gear ratios

1st = 4.497

2nd = 2.959

3rd = 2.304

4th = 1.879

5th = 1.611

Power transmission from gearbox to rear wheel

Propeller shaft encapsulated in single swing arm (BMW PARALEVER), with universal joint and integral torsion damper at gearbox and axle drive ends.

Rear wheel drive

Crown wheel and bevel pinion with palloid gear pattern running in antifriction bearings, with rear wheel attached directly to flange formed on back of crown wheel. Integral castellated ring and inductive transmitter supply ratio-independent pulses to electronic speedometer.

Final drive ratio (Standard version)

2,75 : 1

2,82 : 1

Number of teeth

33/12

31/11

Frame and suspension

K 1100 LT

K 1100 RS

Frame

Single-section torsionally rigid lattice tube frame enclosing engine and gear box assembly as stressed element; **not approved for sidecar or trailer attachment.**

Location of Vehicle Identification Number (V.I.N.)

On center right frame tube strut.

Suspension

Front

Long-stroke responsive telescopic fork with travel dependent hydraulic dampers and progressive spring rates.

Total spring travel

mm (in)

135 (5.31)

Stanchion diameter

mm (in)

41.7 (1.64)

Rear

Variable single swing arm made from high-strength light alloy with thrust rod support (BMW PARALEVER) and gas-filled spring strut (travel-dependent damping) with progressive spring rates, four-position setting to suit varying loads.

Total spring travel (at wheel)

mm (in)

120 (4.72)

Swing arm length

mm (in)

450 (17.72)

Max lock angle of front wheel

2 x 34 °

Front wheel caster

At unladen weight

mm (in)

96 (3.78)

In normal-load position with 75 kg (165 lbs) rider

mm (in)

101 (3.98)

Frame and suspension

Wheels and tires

K 1100 LT

K 1100 RS

BMW light alloy cast wheels with U-spoke design, radial low-profile tires.

Front wheel

with inclined shoulder rim and double hump

Size and designation

2.50 x 18 MT - H2

3.50 x 17 MT - H2

Tire size and designation

110/80 V18 TUBELESS

120/70 ZR17 TUBELESS

Rear wheel

with inclined shoulder rim and double hump

Size and designation

3,00 x 17 MT - H2

4,50 x 18 MT - H2

Tire size and designation

140/80 - VB17 TUBELESS

160/60 - ZR18 TUBELESS

Tire pressures with cold tires

One-up front

bar (p.s.i.)

2.2

(31.9)

rear

bar (p.s.i.)

2.5

(36.3)

Two-up front

bar (p.s.i.)

2.5

(36.3)

rear

bar (p.s.i.)

2.9

(42.0)

Tire tread depth (minimum recommendation)

Front wheel

mm (in)

2

(0.079)

Rear wheel

mm (in)

3

(0.118)

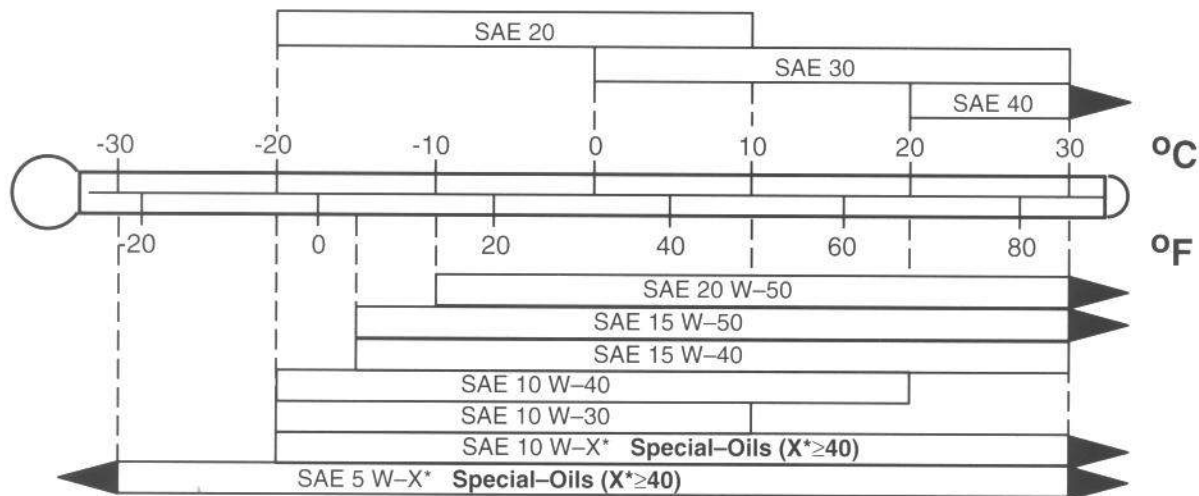
Note legal requirements concerning minimum tread depth.

Oils and lubricants

K 1100 LT

K 1100 RS

Engine oil



Proprietary HT oil for spark-ignition engines with API-Classification SF, SG or SH; extensions CD and CE are permitted; or Proprietary HT oil for spark-ignition engines with CCMC-Classification G4 or G5; extension PD2 is permitted.

Viscosity class related to outside temperature.

The temperature limits of the SAE classes may be exceeded for brief intervals.

The "special oils" are approved in name by BMW AG and available from your authorized BMW motorcycle dealer.

All engine oils sold by BMW are subjected to permanent BMW quality control.

Oil additives of all kinds are rejected by the manufacturer.

Engine oil capacities

without filter change	l (qts)	3.50	(3.70)
with filter change	l (qts)	3.75	(4.00)

Oils and lubricants**K 1100 LT****K 1100 RS****Gear oil**

Proprietary Hypoid gear oil, API Class GL 5

Gearbox capacity	l (fl.oz.)	0.8	(27.00)
Rear wheel drive capacity	l (fl.oz.)	0.25	(8.45)

Viscosity class at outside temperature

above 5 °C	SAE	90
below 5 °C	SAE	80
Alternatively	SAE	80 W 90

Telescopic fork oil – approved grades

BMW oil for telescopic fork

Capacity per left fork leg	cc (fl.oz.)	350 +/- 10 (11.81 +/- 0.30)
Capacity per right fork leg	cc (fl.oz.)	400 +/- 10 (13.50 +/- 0.30)

Steering bearing lubrication and other lubrication points

Proprietary anti-friction grease, useful temperature range 30 °C...+140 °C, pour point 150 °C...230 °C, high corrosion protection, good water/oxidation resistance; e.g. Shell Retinax A.

Battery terminal posts – oxidation protection

Acid-free grease, e.g. Vaseline

Brake fluid

BMW DOT 4, ATE "SL" DOT 4, Castrol Disc Brake, DOW ET 504 Shell Donax DOT 4, Hydraulic DOT 4

Engine coolant

BMW Anti-Freeze/coolant or proprietary longlife antifreeze and corrosion inhibitor.

Caution**Use only antifreeze and corrosion inhibitors free of nitrite!**

Capacity	l (qts.)	3 + 0,4 (3.17 + 0.42)	(in expansion tank)
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Electrical system		K 1100 LT	K 1100 RS
Battery		12V BMW-Mareg low-maintenance, run-flat resistant BMW Nr. 61 21 2 306 125	
Ignition timing (full load)	°CS	6...31 (advance)	
Spark plugs		M 12 x 1.25 thread	
Approved makes and types		Bosch XR 5 DC, Beru 12R-5 DU	
Electrode gap	mm (in)	0.6 + 0.1 (0.024 + 0.004)	
Maximum Electrode Gap	mm (in)	0.9 (0.035)	
Circuit protection		"Minifuse" (flatpin) fuses, 10 circuits	
Load rating	A	15	
Headlight		Halogen rectangular headlight with three-stage manual headlight beam throw adjustment.	
Bulb			
Headlight high/dipped beam		H4 Halogen 12V 55/60W, asymmetric dipped beam	
Parking light	DIN 72601	12V 4W, standard designation T/4	
Rear light: Tail light	DIN 72601	12V 10W, standard designation R 19/10	
Brake light	DIN 72601	12V 21W, standard designation P 25-1	
Turn signal lights	DIN 72601	12V 21W (4x), standard designation P 25-1	
Turn signal telltale lights	DIN 72601	12V 4W (2x), standard designation T 8/4	
Other telltale lights and instrument lighting	DIN 72601	12V 3W (13x), standard designation W 10/3	

Dimensions		K1100LT		K1100RS	
Overall length	mm (in)	2250	(88.59)	2230	(87.86)
Width over mirrors	mm (in)	915	(36.03)	802	(31.60)
Width over handlebars (with weights)	mm (in)	765	(30.12)	710	(27.97)
Width over rider's footrests	mm (in)	620	(24.41)	620	(24.43)
Width over pillion footrests	mm (in)	745	(29.33)	675	(26.60)
Max. height (excl. mirrors)	mm (in)	1450	(57.09)	1260	(49.64)
Seat height at unladen weight	mm (in)	810	(31.89)	800	(31.52)
Wheel base					
At unladen weight	mm (in)	1565	(61.61)	1565	(61.61)
In normal-load position with 75 kg (165 lbs) rider	mm (in)	1560	(61.42)	1558	(61.39)
Ground clearance					
At unladen weight					
In normal-load position	mm (in)	118	(4.65)		
Turning circle	m (ft)	5,2	(17.06)	5,4	(17.71)

Weights		K 1100 LT		K 1100 RS	
Dry weight (without fuel, coolant, lubricant, tools)	kg (lbs)	250	(551.14)	244	(538.02)
Unladen weight (ready for road, with full tank)	kg (lbs)	290	(639.32)	268	(590.94)
Gross weight limit	kg (lbs)	500	(1102.27)	485	(1069.43)
Wheel load limits					
Front	kg (lbs)	200	(440.92)	180	(396.90)
Rear	kg (lbs)	317	(698.84)	305	(672.53)
Axle load distribution front/rear					
at unladen weight	%	50/50		49/51	
in normal load position with 75 kg (165 lbs) rider	%	46,4/53,6		46/54	

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