

**Bmw K1200lt Service Repair Manual**

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# Repair Manual



**K 1200 LT**

**BMW AG Motorcycle Division  
After Sales**

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UX-VS-2

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Produced in Germany 7/99

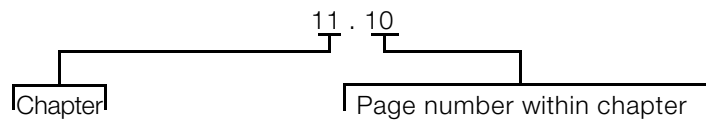
# Introduction

This repair manual will help you to perform all the main maintenance and repair work correctly and efficiently. If it is consulted regularly by workshop personnel it will form a useful addition to the theoretical and practical knowledge acquired at the BMW Training Centre. It is a contribution towards achieving even higher Service quality.

A new issue of this repair manual will be published if amendments or additions (supplements) are needed.

All information in both text and illustrations refers to motorcycles in standard condition or with genuine BMW accessories installed, and not to motorcycles which have been modified in any way to depart from the manufacturer's specification.

- The repair manual is structured in the logical sequence of the work to be performed: Removal, Disassembly, Repair, Assembly, Installation.
- The entire contents are divided into individual chapters, corresponding to the Construction Groups.



An arrow symbol followed by the chapter and page numbers is a reference to another chapter, e.g. **▶▶▶** .....See Group 46

- Work to be performed during an Inspection is described in Group "00". The various inspection routines are numbered I, II, III and IV. This numbering is repeated in the work descriptions which follow, so that work can take place without interruption.
- Use of the BMW special tools needed for certain tasks is described in the work instructions.

If the need arises, repair instructions are also issued in the form of Service Information. This information is of course incorporated into the next issue of the repair manual. We also recommend, as an additional source of information, the Electronic Parts Catalogue (ETC), which contains clear and easy-to-follow illustrations.

If the work described here is restricted to a particular equipment specification, for instance if a specific optional extra (OE) is fitted, this is stated in square brackets at the start of the item concerned, e.g. **[With heated handlebar grips]**.

Please refer to the following pages as well for a description of other symbols used and how to work with it.

BMW AG Motorcycle Division  
After Sales

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## Usage

Each chapter starts with the list of contents.

The list of contents is followed by the Technical Data table.

Chapter 00 "Maintenance and general instructions" details the handover checklist and lists all tightening torques and operating fluids.

## Key to symbols

In this Workshop Manual for the K 1200 LT model, the following symbols are used; their meanings are explained in the table.

Special instructions aimed at improving the work procedures



### Note:

Specific information on operating, inspecting and adjusting work for the motorcycle as well as maintenance procedures.

---



### Caution:

Instructions and precautions specifically intended to prevent damage to the motorcycle. Failure to comply with them could invalidate the warranty.

---



### Caution:

This symbol stands for precautions and measures which are essential in order to protect the rider or other persons from possibly severe or fatal injury.

---

## Contents

Headlines for the work described in the chapter..... with the relevant page number

## Activities

- Activities
- The bullet symbol means that work steps are described in greater detail under another headline
- Preceding activities
- A line indicates work steps described in greater detail under another headline or in another chapter

If the term "release" or "remove" is used:  
the fastener (e.g. screw) must be slackened off and taken out  
or

a component (e.g. fuel rail) must be removed to the extent that other components which it conceals (e.g. throttle-valve rail) are accessible

If the term "loosen" or "slacken" is used:  
the fastener (e.g. screw) must only be slackened off but not taken out



### Tightening torques:

Values are stated if they differ from DIN EN 24 014 or DIN 912 ISO industrial standards.

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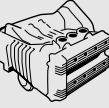
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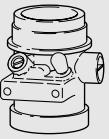
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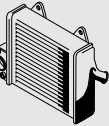
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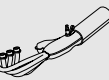
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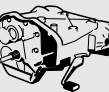
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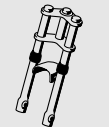
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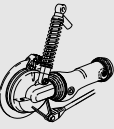
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# BMW AG Motorcycle Division

## Maintenance schedule

### K 1200 LT



		BMW Inspection at 1,000 km (600 miles)	BMW Service every 10,000 km (6,000 miles)	BMW Inspection every 20,000 km (12,000 miles)	BMW Annual Service
Customer _____	Licence plate No. _____				
Order No. _____	Mechanic's signature _____				
Read out the fault memory with the <b>BMW MoDiTeC</b> unit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check throttle cable play, adjust if necessary		<input type="checkbox"/>		<input type="checkbox"/>	
Change engine oil while at operating temperature <b>If the motorcycle is ridden only for short distances or at outside temperatures below 0°C (32 °F), this work must be done every 3 months or at least every 3,000 km (1,800 miles) *)</b>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change oil in gearbox while at operating temperature <b>at least every 2 years *)</b>				<input type="checkbox"/>	<input type="checkbox"/> every 2 years
Change oil in rear wheel drive while at operating temperature <b>at least every 2 years *)</b>		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> every 2 years
Examine brake pads and discs for wear, replace if necessary *)			<input type="checkbox"/>	<input type="checkbox"/>	
Check the front/rear brake fluid level		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Check operation of brake system and freedom from leaks; repair/replace items if necessary *)				<input type="checkbox"/>	
<b>Replace the brake fluid at least once a year</b>					<input type="checkbox"/>
Check clutch operating fluid level		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Change clutch fluid <b>every 40,000 km (24,000 miles) or at least every 2 years *)</b>				<input type="checkbox"/> 40,000	<input type="checkbox"/> every 2 years
Replace fuel filter *) <b>generally every 40,000 km (24,000 miles), if the fuel is of poor quality, every 20,000 km (12,000 miles)</b>				<input type="checkbox"/> 40,000	
Check and top up, where necessary, coolant level and concentration		<input type="checkbox"/>		<input type="checkbox"/>	
<b>Replace the coolant at least every 2 years*)</b>					<input type="checkbox"/> every 2 years
Check battery acid level, if necessary add distilled water Clean/grease battery terminals if necessary				<input type="checkbox"/>	<input type="checkbox"/>
Replace intake air cleaner element <b>If severe dirt and dust are encountered, replace the intake air cleaner every 10,000 km (6,000 miles) or even more frequently *)</b>				<input type="checkbox"/>	
Check function of side stand contact switch		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grease side stand bearing, check that the centre stand moves freely, and grease it if necessary *)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check the steering damper			<input type="checkbox"/>	<input type="checkbox"/>	
Check tightness of rear wheel studs		<input type="checkbox"/>			
Check rear wheel bearing play by rocking wheel				<input type="checkbox"/>	
Check swinging arm bearings (free of play), adjust if necessary *)		<input type="checkbox"/>		<input type="checkbox"/>	
Clean the inductive sensor on the rear wheel <b>every 40,000 km (24,000 miles) or at least every 2 years *)</b>				<input type="checkbox"/> 40,000	<input type="checkbox"/> every 2 years
Check valve clearances, adjust if necessary				<input type="checkbox"/>	
Replace the lining of the chain tensioning rail and chain guide rail every 60,000 km (36,000 miles)*)				<input type="checkbox"/> 60,000	
Replace spark plugs				<input type="checkbox"/>	
Final inspection with road safety and functional check: – Condition of tires and wheels, tyre pressure – Clutch, gearshift mechanism, hand and foot brake, ABS, steering system – Lighting and signalling equipment, telltale lights, instruments, horn – Reversing aid, radio with remote contro, optional equipment fitted – Trial run if necessary		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*) <b>Charged as an additional item</b>					

# BMW AG Motorcycle Division

## Pre-delivery check

### K 1200 LT



<p>Customer _____</p> <p>Order No. _____</p>	<p>Licence plate No. _____</p> <p>Mechanic's signature _____</p>	<p><b>BMW</b> <b>Pre-delivery check</b></p>
<p>Check the shipping crate for damage</p>		
<p>Unpacking the motorcycle</p> <ul style="list-style-type: none"> <li>- unpack</li> <li>- inspect for damage</li> <li>- check that delivery is complete</li> </ul> <p>Motorcycle keys Top case lock cylinder Toolkit and helmet lock Documentation Top case (packed separately) Optional extras</p>		<input type="checkbox"/>
<p>Installing remaining items on motorcycle</p> <ul style="list-style-type: none"> <li>- Fit front wheel and mudguard</li> <li>- Fit the mirror</li> <li>- Fit the right-hand side footrest and passenger footrest plate</li> <li>- Fit engine spoiler, reversing aid actuation, bumpers</li> <li>- Install the top case</li> </ul>		<input type="checkbox"/>
<p>Fill and charge the battery (mark with charging date)</p>		<input type="checkbox"/>
<p>Check the front/rear brake fluid level</p>		<input type="checkbox"/>
<p>Check clutch fluid level</p>		<input type="checkbox"/>
<p>Check tyre pressures</p>		<input type="checkbox"/>
<p>Check rear wheel studs for tightness (note correct tightening torque)</p>		<input type="checkbox"/>
<p>Fit antenna, windshield</p>		<input type="checkbox"/>
<p>Checking and adjusting the motorcycle</p> <ul style="list-style-type: none"> <li>- Check function of side stand contact switch</li> <li>- Seat</li> <li>- Top case</li> <li>- Headlight, spring strut</li> </ul>		<input type="checkbox"/>
<p>Add fuel</p>		<input type="checkbox"/>
<p>Final inspection and function check</p> <ul style="list-style-type: none"> <li>- Check engine oil when engine is cold</li> <li>- Clutch, gearshift mechanism, reversing aid</li> <li>- Lighting and signalling equipment, telltale lights, instruments</li> <li>- Check radio for operation</li> <li>- Hand brake and foot brake, ABS</li> <li>- Check optional equipment for operation CD player, on-board computer, cruise control</li> <li>- Trial run if necessary</li> </ul>		<input type="checkbox"/>
<p>Confirm pre-delivery check in Service and Technical Booklet</p>		<input type="checkbox"/>
<p>Final cleaning</p>		<input type="checkbox"/>
<p>Motorcycle handed over on:</p>		



# 00 Maintenance and general instructions

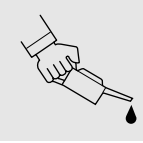
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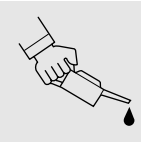
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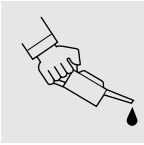


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## Tightening torques

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Connection	Nm	
<b>11 Engine</b>		
<b>Cylinder head</b>		
Cylinder head bolts		
Joint torque	20	Oiled before installation
Wrench angle	90°	
Cylinder head cover	9	
Heat shield for cylinder-head cover	5	
Coolant stub pipe	9	
Intake stub pipe	9	
<b>Split conrods</b>		
Split-conrod bearing	20	
Wrench angle	80°	
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Model	K 1200 LT	
Connection	Nm	
<b>11 Engine</b>		
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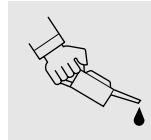
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Model	K 1200 LT
Connection	Nm
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Reverse gear switch to actuating shaft	9
Switch unit, reverser to gearbox	9
Actuator lever, reverser	6 (clean thread + Loctite 243)
Cover, reverser to gearbox housing	10
Cover plate, reverser	10 (clean thread + Loctite 243)
Threaded pin M 6 in cover, reverser	5 (clean thread + Loctite 243)



Model	K 1200 LT
Connection	Nm
<b>31 Front forks</b>	
Fork bridge to frame (nut micro-encapsulated)	130 (clean thread + new nut or Loctite 2701)
Fork stanchion to fork bridge	45
Steering damper to slider tube bridge (screw micro-encapsulated)	21 (clean thread + new screw or Loctite 243)
Steering damper to leading link	21 (clean thread + new screw or Loctite 243)
Leading link to fork slider bridge (nut micro-encapsulated)	130 (clean thread + Loctite 2701)
Ball joint to fork slider bridge	230
Leading link to fork slider bridge	130 (clean thread + Loctite 2701)
Leading link to frame	107 (clean thread + Loctite 243)
Clamp, leading link M 8	21
Spring strut to leading link	43
Suspension strut to frame	43
Slider tube bridge to slider tube	21 (clean thread + new screw or Loctite 243)
Brake distributor to holder, sliding tube right	9
Oil drain plug in slider tube	12
Vent screw, stanchion	3
<b>32 Steering</b>	
Brake-lever fitting to handlebar	5
Clutch-lever fitting to handlebar	5
Handlebar to fork bridge	21
Bearing screw, brake and clutch levers	5 (clean thread + Loctite 2701)