

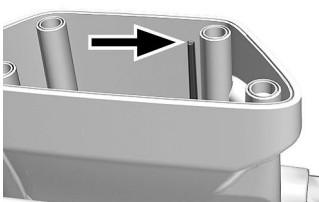

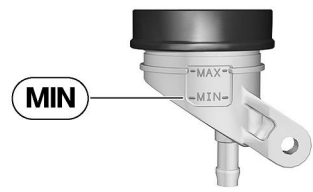
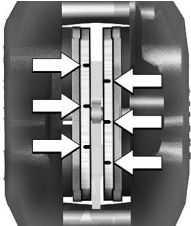
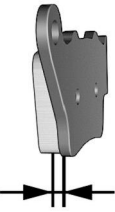


Service data 0A11 - R 1200 GS			
Designation	Condition	Value	Valid
<b>11 - Engine</b>			
Running-in speeds		<5000 min <sup>-1</sup>	
Engine oil, capacity	with filter change	approx. 4.2 l	
	Fluids and lubricants products recommended by <b>BMW Motorrad</b>		
Engine oil, specified level		Between MIN and MAX marks	
			
<b>1134 - Valves with springs</b>			
Inlet valve clearance	Engine cold max 35 °C	0.10...0.17 mm	
Exhaust valve clearance	Engine cold max 35 °C	0.34...0.41 mm	
<b>1212 - Ignition wiring, spark plugs</b>			
Spark plugs, manufacturer and designation		NGK LMAR8D-J	
<b>17 - Cooling</b>			
Cooling system test pressure	Test pressure must remain unchanged: min 5 min	1.5 bar	
Coolant, specified level	Engine cold	Between MIN and MAX marks on the expansion tank	
			
<b>21 - Clutch</b>			
Clutch-fluid level (repairs)	with new clutch liner, reservoir horizontal	Mark in reservoir	
	Hydraulic fluid (Vitamol V10)		
			
<b>33 - Rear axle, rear-wheel drive and rear-wheel guidance</b>			
Rear-wheel drive, oil capacity	Oil change	180 ml	
	Gear oil (Castrol SAF-XO)		
<b>34 - Brakes</b>			

<p>Brake fluid level, front</p> 	<p>Brake-fluid reservoir horizontal, motorcycle upright</p>	<p>It is impermissible for the brake fluid level to drop below the MIN mark.</p>	
<p>Hydraulic fluid (Brake fluid, DOT4)</p>			
<p>Brake fluid level, rear</p> 	<p>Brake-fluid reservoir horizontal, motorcycle upright</p>	<p>It is impermissible for the brake fluid level to drop below the MIN mark.</p>	
<p>Hydraulic fluid (Brake fluid, DOT4)</p>			
<p><b>3411 - front brake</b></p>			
<p>Brake disc thickness, front</p>	<p>When new</p>	<p>4.5 mm</p>	
	<p>Wear limit</p>	<p>4 mm</p>	
<p>Brake-pad wear limit, front</p> 	<p>Friction pad only, without backing plate. The wear indicators (grooves) must be clearly visible.</p>	<p>1.0 mm</p>	
<p><b>3421 - Rear brake</b></p>			
<p>Brake-pad wear limit, rear</p> 	<p>Friction pad only, without backing plate.</p>	<p>1.0 mm</p>	
<p>Brake disc thickness, rear</p>	<p>When new</p>	<p>5 mm</p>	
	<p>Wear limit</p>	<p>min 4.5 mm</p>	
<p><b>330 - Motorcycle wheels</b></p>			
<p>Permissible front wheel imbalance</p>		<p>max 5 g</p>	
<p>Permissible rear wheel imbalance</p>		<p>max 45 g</p>	
<p>Balancing weight for rear wheel Weight must be divided equally across both sides and weights attached to rim on left and right.</p>		<p>max 80 g</p>	
<p>Balancing weight for front wheel Weight must be divided equally across both sides and weights attached to rim on left and right.</p>		<p>max 80 g</p>	

**331 - Wheels with earings**

Vertical runout, front wheel		max 1.5 mm	
Lateral runout, front wheel		max 1.5 mm	
Vertical runout, rear wheel		max 1.5 mm	
Lateral runout, rear wheel		max 1.5 mm	

**332 - res**

Tyre pressure, front	Tyre cold	2.5 bar	
Tyre tread depth, front and rear	For Germany only	min 1. mm	
	Outside Germany	Country-specific legal reuirements	
Tyre pressure, rear	Tyre cold	2. bar	
Wheel valve test pressure		4 bar	

**312 - eadlight**

Distance between headlight and vertical surface For headlight adustment		10 m	
Distance between light/dark cut-off and mark at height of centre of headlight	Suspension set to basic setting and vehicle loaded with 85 kg	10 cm	

**11 11 - Engine lock****hreaded plug or locking at DC in crankcase**

M1 x 1.5	30 Nm	
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**Bracket, engine guard to crankcase**

M8 x 25	1 Nm	
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**il drain plug to crankcase**

M20 x 1.5	42 Nm	
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**Engine guard to racket**

M x 20	8 Nm	
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**11 12 - Clinder head with cover****Clinder head cover to clinder head**

M x 7	10 Nm	
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**Cashat earing cap to clinder head**

M x 35	<b>tighten alternatel</b>	
	10 Nm	

**11 31 - Cashat****Cashat sprocket to cashat**

left exhaust camshaft, M10 x 1.25 x 35 - 10.	5 Nm	
other camshafts, M10 x 1.25 x 25 - 10.	5 Nm	

**rigger or cashat sensor to cashat**

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M5 x 20	Nm	
<b>Chain tensioner to clinder</b>		
M18 x 1.5	30 Nm	
<b>11 42 - il ilter and lines</b>		
<b>il ilter to crankcase</b>		
Lubricate sealing ring with engine oil	11 Nm	
<b>12 12 - Ignition wiring, spark plugs</b>		
<b>Spark plug to clinder head</b>		
M10 x 1	12 Nm	
<b>12 41 - Starter with astener</b>		
<b>Starter to gearox cover</b>		
M x 40	12 Nm	
<b>Wiring harness ground to starter</b>		
M x 10	8 Nm	
<b>Wiring harness positive to starter</b>		
M, Replace nut <a href="#">Thread-locking compound (mechanical)</a>	8 Nm	
<b>13 71 - Intake air silencer</b>		
<b>Intake air silencer to tank racket</b>		
M x 25	8 Nm	
<b>13 72 - Air ilter</b>		
<b>Air ilter cover to intake air silencer</b>		
M5 x 50	<b>in diagonall opposite seurence</b>	
	3 Nm	
<b>1 11 - uel tank with iller neck</b>		
<b>uel tank to rae</b>		
M8 x 45	1 Nm	
<b>17 13 - Expansion tank</b>		
<b>Expansion tank to intake air silencer</b>		
Screw for plastic, 5.5 x 1	4 Nm	
<b>1 1 - Exhaust sste parts with ountings</b>		
<b>Bracket or exhaust anioldservootor to gearox</b>		
M x 25	8 Nm	

<b>Exhaust header to cylinder head</b>		
M8	1 Nm	
<b>Clap to silencer and exhaust anifold</b>		
	22 Nm	
<b>Silencer to rear rae</b>		
M8 x 35	1 Nm	
<b>21 2 - Clutch actuation hydraulics</b>		
<b>Clutch slave cylinder to gearox cover</b>		
M x 20	<b>tighten the screws twice</b>	
	8 Nm	
<b>Clutch line to clutch lever fitting</b>		
M10 x 1	7 Nm	
<b>Clutch line to clutch slave cylinder</b>		
M10 x 1	7 Nm	
<b>31 42 - telescopic forks</b>		
<b>Clamping screw or wick -release axle in telescopic fork</b>		
M8 x 35	1 Nm	
<b>32 71 - Motorcycle handlebars</b>		
<b>Handlebar weight to handlebar</b>		
M10 x 50	40 Nm	
<b>32 72 - handlebar lever</b>		
<b>Handlebar fitting to handlebar</b>		
M x 30	8 Nm	
<b>33 7 - Housing of level gears, rear</b>		
<b>Oil drain plug in level gears</b>		
M12 x 1	20 Nm	
<b>Oil filler plug to level gears</b>		
M12 x 1.5	20 Nm	
<b>34 11 - front brake</b>		
<b>Brake disc to front wheel</b>		
M8 x 27, Replace screw Thread-locking compound (Micro-encapsulated)	<b>tighten stages in diagonal opposite sequence</b>	
	1 Nm	
<b>Brake caliper on telescopic fork</b>		
M10 x 5	38 Nm	
<b>Bleed screw in front brake caliper</b>		

<b>34 21 - Rear brake</b>		
<b>Brake caliper to bevel gears</b>		
<b>Bleed screw in rear brake caliper</b>		
<b>Brake disc to wheel flange</b>		
	<b>tighten by stages in diagonally opposite sequence</b>	
<b>36 23 - Electronic components</b>		
<b>Wheel-speed sensor to telescopic forks/bevel gears</b>		
<b>36 31 - Wheels with bearings</b>		
<b>Quick-release axle in telescopic forks</b>		
<b>Rear wheel to wheel flange</b>		
	<b>tighten in diagonally opposite sequence</b>	
<b>RDC sensor to wheel rim</b>		
<b>46 53 - Side stand</b>		
<b>Side stand to pivot mount</b>		
<b>46 62 - Rear-wheel cover, number-plate carrier</b>		
<b>Number-plate carrier to rear frame</b>		
<b>Rear-wheel cover to rear frame</b>		
<b>Spray guard to bevel gears</b>		

<b>46 63 - Motorcycle fairing, windscreen</b>		
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<b>Bracket to windscreen and covers</b>		

<b>Windscreen to windscreen holder</b>		

<b>Cover for fuel tank, centre, to frame</b>		

<b>51 16 - Mirrors, covers, ashtrays, stowage compartments</b>		
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<b>Mirror lock nut to adapter</b>		

<b>Adapter to clamping block</b>		

<b>61 13 - Lug, terminal</b>		
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<b>Wiring harness ground to cylinder head</b>		

<b>61 21 - Battery with holder</b>		
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<b>Wiring harness to battery</b>		