## Wethead R1200LC GS/GSA

## Tightening torques 0A11 - R 1200 GS

Contents:

- 11: Engine
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11 - Engine	Value
11 11 - Engine block	
Threaded plug for locking at TDC in crankcase	
M16 x 1.5	30 Nm
Bracket, engine guard to crankcase	
M8 x 25	19 Nm
Oil drain plug to crankcase	
M20 x 1.5	42 Nm
Assembly of crankcase	
M10 x 130	Tightening torque, 25 Nm
	Additional angle of rotation, 90°
Engine guard to bracket	
M6 x 20	8 Nm
Anti-twist plate (friction bearing) to crankcase	
M6 x 25	12 Nm
Assembly of crankcase	
M6 x 30	12 Nm
Assembly of crankcase	
M8 x 80	19 Nm
Diaphragm valve to crankcase	
M6 x 16	12 Nm
Threaded plug (connection for oil pressure measurement) in crankcase	
M10 x 1	10 Nm
Coolant drain plug in crankcase	
M10 x 1	15 Nm
Coolant filler adapter in crankcase	
M10 x 1	10 Nm
11 12 - Cylinder head with cover	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
Cylinder head cover to cylinder head	
M6 x 76	10 Nm
Cylinder head to crankcase	
M10 x 110	tighten in diagonally opposite sequence
	1st tightening torque, 5 Nm
	2nd tightening torque, 20 Nm
	3rd tightening torque, 40 Nm
	Additional angle of rotation, 120°
M6 x 25	12 Nm
M6 x 95	12 Nm
Slip pad to cylinder-head cover	12 (11)
M6 x 14	9 Nm
Camshaft bearing cap to cylinder head	3 11111
M6 x 35	tighton altornatoly
IVIO A JJ	tighten alternately 10 Nm
Oil filler screw in cylinder head sover	TO MIII
Oil filler screw in cylinder head cover  M34 x 1.5	9 Nm
	8 Nm
11 14 - Housing cover	
Crankcase cover to crankcase	
M6 x 20	Tightening sequence: see Repair Manual
	12 Nm
Oil tank to front cover	
M5 x 16	5 Nm
11 15 - Crankcase breather	
Breather cover to gearbox cover	
M6 x 20	12 Nm
Breather wheel to crankshaft	
M10 x 1 x 25	40 Nm
11 24 - Conrod with bearings	
Conrod bolt	
M10 x 1 x 50 - 13.9, Replace screw	1st tightening torque, 5 Nm
Thread and seating face of the screw oiled	2nd tightening torque, 20 Nm
	Additional angle of rotation, 150°
	Slacken and then retighten the bolt
	1st tightening torque, 5 Nm
	2nd tightening torque, 20 Nm
	Additional angle of rotation, 150°
11 26 - Starter freewheel, layshaft	
Freewheel housing to alternator	
M8 x 16 - 12.9	35 Nm
Sleeve (axial stop, freewheel gear) to crankcase	
M6 x 50, for re-use	10 Nm
Thread-locking compound (Loctite 243, Medium strength)	
11 31 - Camshaft	
Camshaft sprocket to camshaft	
left exhaust camshaft, M10 x 1.25 x 35 - 10.9	65 Nm
other camshafts, M10 x 1.25 x 25 - 10.9	65 Nm
Trigger for camshaft sensor to camshaft	
M5 x 20	6 Nm
Securing screw for intermediate shaft axle in cylinder head	

Tightening torques 0A11 - R 1200 GS  M6 x 14 8 Nm  Sprocket to intermediate shaft  M6 x 12 10 Nm  other camshafts, M10 x 1.25 x 25 - 10.9 65 Nm  Chain tensioner to cylinder  M18 x 1.5 30 Nm  11 41 - Oil pump with strainer and drive  Oil-pump cover to crankcase  M6 x 16 8 Nm  Oil intake in crankcase  M6 x 20 8 Nm  Threaded plug for oil pressure control valve in crankcase  M24 x 1.5 42 Nm  11 42 - Oil filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  Oil filter adapter to crankcase  M20 x 1.5 35 Nm  11 51 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40 12 Nm  11 53 - Thermostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16 12 Nm  M6 x 16 12 Nm  11 78 - Exhaust controls
M6 x 14  Sprocket to intermediate shaft  M6 x 12  other camshafts, M10 x 1.25 x 25 - 10.9  Chain tensioner to cylinder  M18 x 1.5  10 Nm  I141 - Oil pump with strainer and drive  Oil-pump cover to crankcase  M6 x 16  Oil intake in crankcase  M6 x 20  Threaded plug for oil pressure control valve in crankcase  M24 x 1.5  142 - Oil filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  Oil filter adapter to crankcase  M20 x 1.5  151 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40  1153 - Thermostat and on-engine coolant lines  Coolant adapter to crankcase  M6 x 16  Coolant adapter to crankcase
Sprocket to intermediate shaft  M6 x 12  other camshafts, M10 x 1.25 x 25 - 10.9  Chain tensioner to cylinder  M18 x 1.5  30 Nm  1141-0il pump with strainer and drive  Oil-pump cover to crankcase  M6 x 16  Oil intake in crankcase  M6 x 20  Threaded plug for oil pressure control valve in crankcase  M24 x 1.5  42 Nm  1142-0il filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  Oil filter adapter to crankcase  M20 x 1.5  35 Nm  1151-Coolant pump with drive  Coolant pump to crankcase  M6 x 40  11 Shremostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16  Coolant adapter to crankcase  M6 x 16  Coolant adapter to crankcase
M6 x 12       10 Nm         other camshafts, M10 x 1.25 x 25 - 10.9       65 Nm         Chain tensioner to cylinder       30 Nm         M18 x 1.5       30 Nm         11 41 - Oil pump with strainer and drive       Oil-pump cover to crankcase         M6 x 16       8 Nm         Oil intake in crankcase       8 Nm         M6 x 20       8 Nm         Threaded plug for oil pressure control valve in crankcase       42 Nm         M2 x 1.5       42 Nm         11 42 - Oil filter and lines       Oil filter to crankcase         Lubricate sealing ring with engine oil       11 Nm         Oil filter adapter to crankcase       11 Nm         MO if liter adapter to crankcase       12 Nm         M5 x 40       12 Nm         1153 - Thermostat and on-engine coolant lines       Coolant adapter for thermostat to crankcase         M6 x 16       12 Nm          M6 x 16       12 Nm
other camshafts, M10 x 1.25 x 25 - 10.9 Chain tensioner to cylinder M18 x 1.5 30 Nm  1141 - Oil pump with strainer and drive Oil-pump cover to crankcase M6 x 16 0il intake in crankcase M6 x 20 8 Nm Threaded plug for oil pressure control valve in crankcase M24 x 1.5 42 Nm 1142 - Oil filter and lines Oil filter to crankcase Lubricate sealing ring with engine oil 0il filter adapter to crankcase M20 x 1.5 35 Nm 1151 - Coolant pump with drive Coolant pump to crankcase M6 x 40 1153 - Thermostat and on-engine coolant lines Coolant adapter for thermostat to crankcase M6 x 16 Coolant adapter to crankcase
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Oil-pump cover to crankcase  M6 x 16  8 Nm  Oil intake in crankcase  M6 x 20  8 Nm  Threaded plug for oil pressure control valve in crankcase  M24 x 1.5  42 Nm  11 42 - Oil filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  11 Nm  Oil filter adapter to crankcase  M20 x 1.5  35 Nm  11 51 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40  12 Nm  11 53 - Thermostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16  12 Nm  Coolant adapter to crankcase
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Oil intake in crankcase  M6 x 20  Threaded plug for oil pressure control valve in crankcase  M24 x 1.5  11 42 - Oil filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  Oil filter adapter to crankcase  M20 x 1.5  15 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40  11 Nm  11 53 - Thermostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16  12 Nm  Coolant adapter to crankcase
M6 x 20 Threaded plug for oil pressure control valve in crankcase  M24 x 1.5  11 42 - Oil filter and lines  Oil filter to crankcase  Lubricate sealing ring with engine oil  Oil filter adapter to crankcase  M20 x 1.5  35 Nm  11 51 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40  12 Nm  11 53 - Thermostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16  12 Nm  Coolant adapter to crankcase
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11 51 - Coolant pump with drive  Coolant pump to crankcase  M6 x 40  12 Nm  11 53 - Thermostat and on-engine coolant lines  Coolant adapter for thermostat to crankcase  M6 x 16  12 Nm  Coolant adapter to crankcase  M6 x 16  12 Nm
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M6 x 16 12 Nm  Coolant adapter to crankcase 12 Nm  M6 x 16 12 Nm
Coolant adapter to crankcase M6 x 16 12 Nm
M6 x 16 12 Nm
11 78 - Exhaust controls
Oxygen sensor to exhaust manifold
M18 x 1.5 45 Nm
Lubricate thread, Installation tool (Optimoly TA)
12 - Engine electrical system Value
12 12 - Ignition wiring, spark plugs
Spark plug to cylinder head
M10 x 1 12 Nm
12 13 - Ignition coil
Cover for coil to cylinder head
M5 x 20 5 Nm
12 31 - Alternator with drive and fasteners
Rotor to crankshaft
M24 x 1.5 250 Nm
Coil carrier to crankcase
M6 x 20 12 Nm
Stator to coil carrier
M6 x 40 10 Nm
12 32 - Regulator
Voltage regulator to rear-wheel cover
M5 x 25 5 Nm
12 41 - Starter with fastener
Starter to gearbox cover
M6 x 40 12 Nm

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Tightening torques 0A11 - R 1200 GS		
Wiring harness (ground) to starter		
M6 x 10	8 Nm	
Wiring harness (positive) to starter	15.000	
M6, Replace nut	8 Nm	
Thread-locking compound (mechanical)		
12 61 - Oil pressure, oil temperature, oil-level indicators		
Oil-level sensor to gearbox cover		
M6 x 16	8 Nm	
Thread-locking compound (Micro-encapsulated)		
or, Thread-locking compound (Loctite 243, Medium strength)		
12 62 - Coolant temperature		
Coolant-temperature sensor to coolant port		
M12 x 1.5	15 Nm	
12 72 - Transmitter for control unit	15 ((1))	
Crankshaft sensor on crankcase		
M6 x 14	8 Nm	
Camshaft sensor to cylinder head	OMII	
M6 x 16	8 Nm	
13 - Fuel preparation and control	Value	
13 53 - Injection nozzles and lines		
Injection valve to cylinder head		
M5 x 20	5 Nm	
13 64 - Injection valves, start valves		
Cover for injection valve to cylinder head		
M5 x 20	5 Nm	
13 71 - Intake air silencer		
Intake air silencer to tank bracket		
M6 x 25	8 Nm	
13 72 - Air filter		
Air filter cover to intake air silencer		
M5 x 50	in diagonally opposite sequence	
	3 Nm	
16 - Fuel supply	Value	
16 11 - Fuel tank with filler neck		
Tank bracket to frame		
M6 x 12	8 Nm	
Fuel tank to frame		
M8 x 45	19 Nm	
Fuel filler cap to fuel tank		
M5 x 28	4 Nm	
16 14 - Delivery, preparation and measurement, control unit, fuel pump		
Fuel pump to fuel tank		
Union nut	35 Nm	
17 - Cooling	Value	
17 11 - Radiator with fasteners	Calac	
Radiator to front panel carrier		
Special thread for light alloy, 6 x 25	12 Nm	
Radiator to frame	17 14111	
M6 x 25	8 Nm	
IVIO A 23	O IVIII	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
17 13 - Expansion tank	
Expansion tank to intake air silencer	
Screw for plastic, 5.5 x 16	4 Nm
18 - Exhaust system	Value
18 51 - Exhaust system parts with mountings	value
Bracket for exhaust manifold/servomotor to gearbox	
M6 x 25	8 Nm
Servomotor to bracket	O MIII
Screw for plastic, 5 X 12	2 Nm
Exhaust header to cylinder head	2 14111
M8	19 Nm
Cover to silencer / exhaust manifold	13 (4)))
M5 x 10	5 Nm
Clamp to silencer and exhaust manifold	22 Nm
Silencer to rear frame	22 14111
M8 x 35	19 Nm
Clamp to silencer	13 14111
M5 x 16	8 Nm
Thread-locking compound (Loctite 243, Medium strength)	OWIII
Plastic cover to silencer	
M5 x 10	5 Nm
Thread-locking compound (Micro-encapsulated)	5 11111
or, Thread-locking compound (Loctite 243, Medium strength)	
21 - Clutch	Value
21 21 - Clutch with driver plate	Value
Clutch hub to layshaft	
M20 x 1.5, Replace nuts and lubricate with engine oil	Tightening torque, 150 Nm
M20 x 1.3, Replace fluts and lubricate with engine on	Fully slacken nut
	Tightening torque, 150 Nm
Clutch cage to balancing shaft	rightening torque, 150 Mil
M36 x 1.5, Replace nuts and lubricate with engine oil	Tightening torque, 170 Nm
Wiso X 1.3, Replace hats and labricate with engine on	Slacken the nut
	Tightening torque, 250 Nm
Drive gear to clutch cage	rightening torque, 250 Min
M8 x 15.5	22 Nm
Thread-locking compound (Micro-encapsulated)	22 11111
or, Thread-locking compound (Loctite 243, Medium strength)	
Mounting plate to clutch hub	
M6 x 30	10 Nm
lubricate with engine oil	10 11111
21 52 - Clutch actuation (hydraulics)	
Clutch slave cylinder to gearbox cover	
M6 x 20	Tighten the screws twice
,	8 Nm
Clutch line to clutch lever fitting	
M10 x 1	7 Nm
Clutch line to clutch slave cylinder	1
M10 x 1	7 Nm
	: :::::

Wethead R1200LC GS/GSA		
Tightening torques 0A11 - R 1200 GS	•	
Bleed screw to clutch slave cylinder	5 Nm	
·		
23 - Gearbox	Value	
23 11 - Housing with cover		
Gearbox cover to crankcase		
M6 x 25	12 Nm	
Shift-mechanism cover to gearbox cover		
M6 x 20	12 Nm	
23 12 - Bearing in housing, sealing rings		
Retaining plate for fixed mount to gearbox cover		
Inside, M6 x 16	Tightening torque, 8 Nm	
Thread-locking compound (Micro-encapsulated)		
or, Thread-locking compound (Loctite 243, Medium strength)	Additional angle of rotation, 90°	
at end, M6 x 25	Tightening torque, 8 Nm	
Thread-locking compound (Micro-encapsulated)		
or, Thread-locking compound (Loctite 243, Medium strength)	Additional angle of rotation, 90°	
23 14 - Electrical components		
Gearbox potentiometer to gearbox cover		
M5 x 14 - 10.9	5 Nm	
23 31 - Internal gearshift components		
Retaining plate for selector drum to gearbox cover		
M6 x 16	10 Nm	
Thread-locking compound (Micro-encapsulated)		
or, Thread-locking compound (Loctite 243, Medium strength)		
Locking lever on gearbox cover		
M6 x 18	Tightening torque, 8 Nm	
	Additional angle of rotation, 90°	
23 41 - External gearshift components		
Selector lever to selector shaft		
M6 x 30	8 Nm	
Peg (clamp) to shift lever		
M6 x 16	8 Nm	
Gearshift lever to frame		
M8 x 25	19 Nm	
Ball end to shift lever		
M8	19 Nm	
Ball joint to shift rod		
Locknut, M6	8 Nm	
31 - Front axle, front-wheel steering	Value	
31 42 - Telescopic forks	Taide	
Clamping screw for quick-release axle in telescopic fork		
M8 x 35	19 Nm	
Leading link to engine	13 14111	
M14 x 1.5	120 Nm	
Sealing screw in fork plug	120 MIII	
M4 x 8, Replace O-ring	2.5 Nm	
Ball joint to leading link	2.J IVIII	
M14 x 1.5	130 Nm	
Thread-locking compound (Micro-encapsulated)	150 MIII	
• • • • • •		
or, Thread-locking compound (Loctite 2701, High strength)		
Stud bolts in fork bridge		

Wethead R1200LC GS/GSA		
Tightening torques 0A11 - R 1200 GS		
M14 x 1.5	130 Nm	
Thread-locking compound (Micro-encapsulated)	130 Mili	
or, Thread-locking compound (Loctite 243, Medium strength)		
Fork bridge, top, to fork fixed tube		
M10 x 1.25	40 Nm	
Thread-locking compound (mechanical)	40 1411	
or, Thread-locking compound (Loctite 2701, High strength)		
Fork bridge, lower, to slider tube		
M8 x 35	19 Nm	
31 48 - Spring strut, mounting parts	13 11111	
Spring strut, front, to frame and leading link		
M10 x 1.5 x 55 - 10-9	56 Nm	
Thread-locking compound (Micro-encapsulated)	56 11111	
or, Thread-locking compound (Loctite 2701, High strength)		
ride-height sensor to tank bracket		
M5	5 Nm	
Ball end to leading link/ride-height sensor		
M6 x 14.5	8 Nm	
Actuator rod to ride-height sensor		
M6	8 Nm	
32 - Steering	Value	
32 71 - Motorcycle handlebars	Value	
Handlebar weight to handlebar		
M10 x 50	40 Nm	
Clamping block (handlebar clamp) on fork bridge	40 1411	
ciamping block (nandicibal ciamp) on fork bridge	tighten in riding direction at the front of the	
M8 x 35	block	
INIO X 55	19 Nm	
Hand protector to bracket	15 11111	
M5 x 14.5	2 Nm	
32 72 - Handlebar lever		
Cap to reservoir		
M4 x 16	2.5 Nm	
Handlebar fitting to handlebar		
M6 x 30	8 Nm	
Lever to handlebar fitting		
M5, Replace nut	7 Nm	
Thread-locking compound (mechanical)		
22. Deem sule many subset duive and many subset suidenes	Value	
33 - Rear axle, rear-wheel drive and rear-wheel guidance	Value	
33 35 - Rear wheel swinging arm with pivot mount, link		
Bevel gears to swinging arm		
M12 x 1.5	100 Nm	
Thread-locking compound (Micro-encapsulated)		
or, Thread-locking compound (Loctite 2701, High strength)		
Locknut (bearing stud) to frame	145 No.	
M24 x 1.25	145 Nm	
Floating bearing stud (swinging arm) to frame	Tieletening tourne 45 No.	
M24 x 1.25	Tightening torque, 15 Nm	
Lubricate thread and bearing seat, Installation tool (Optimoly TA)	Loosen	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
rightoning torquos of the fit is a second	Tightening torque, 7 Nm
Bearing stud, swinging arm to frame, left	rightening torque, 7 Min
M27 x 1.25	100 Nm
Thread-locking compound (Micro-encapsulated)	100 (4)11
or, Thread-locking compound (Loctite 2701, High strength)	
Paralever link to bevel gears	
M10 x 60 - 10.9	56 Nm
Thread-locking compound (Micro-encapsulated)	30 Mili
or, Thread-locking compound (Loctite 2701, High strength)	
Paralever link to frame	
M10 x 60 - 10.9	56 Nm
Thread-locking compound (Micro-encapsulated)	30 Mili
or, Thread-locking compound (Loctite 2701, High strength)	
33 54 - Spring strut, mounting parts	
Spring strut to frame	
M12 x 1.5 x 60	100 Nm
Thread-locking compound (Micro-encapsulated)	100 ((1))
or, Thread-locking compound (Loctite 2701, High strength)	
Spring strut to swinging arm	
M12 x 1.5 x 75 - 10.9	100 Nm
Thread-locking compound (Micro-encapsulated)	100 ((1))
or, Thread-locking compound (Loctite 2701, High strength)	
Retaining plate (ride-height sensor) to frame	
M6 x 35	8 Nm
Ball end (actuator rod) to rear wheel swinging arm	O IVIII
M6	8 Nm
Thread-locking compound (Micro-encapsulated)	OWIII
or, Thread-locking compound (Loctite 243, Medium strength)	
Ball end (actuator rod) to ride-height sensor	
Nut, M6	
Ball end, M6	8 Nm
Thread-locking compound (Micro-encapsulated)	OWN
or, Thread-locking compound (Loctite 243, Medium strength)	
Spray guard to spring strut	
M4 x 6	3 Nm
Thread-locking compound (Loctite 243, Medium strength)	3 1411
33 74 - Bevel gears, rear	
Cover to bevel gears, rear	
M8 x 30, Replace screws	tighten in diagonally opposite sequence
INO X 50, Replace screws	Tightening torque, 10 Nm
	Additional angle of rotation, 45°
33 75 - Housing for bevel gears, rear	, additional diffic of foldition, 40
Oil drain plug in bevel gears	
M12 x 1	20 Nm
Oil filler plug to bevel gears	2011111
M12 x 1.5	20 Nm
34 - Brakes	Value
	value
34 11 - Front brake	
Brake disc to front wheel	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
rightening torques out in 1200 CO	tighten by stages in diagonally opposite
M8 x 27, Replace screw	sequence
Thread-locking compound (Micro-encapsulated)	19 Nm
Brake caliper on telescopic fork	13 14111
M10 x 65	38 Nm
Sensor ring to front wheel	50 WIII
M5 x 10	5 Nm
Bleed screw in front brake caliper	3 11111
M8	10 Nm
Grub screw (brake pads) in brake caliper	6 Nm
34 21 - Rear brake	0 11111
Brake caliper to bevel gears	
M8 x 25	24 Nm
Sensor ring to rear wheel	
M5 x 10	5 Nm
Bleed screw in rear brake caliper	14 Nm
Brake disc to wheel flange	=
2.010 0.00 to 1.110.180	tighten by stages in diagonally opposite
M8 x 15.5, Replace screw	sequence
Thread-locking compound (Micro-encapsulated)	Tightening torque, 12 Nm
Timeda folking composita (imero encapsaratea)	Additional torque, 30 Nm
34 31 - Brake master cylinder	radicional torque) so run
Locknut to piston rod (footbrake cylinder)	
M8	17 Nm
Footbrake cylinder with heel deflector to frame	
M6 x 20	8 Nm
Brake-fluid reservoir to frame	
M6 x 16	8 Nm
34 32 - Brake lines	0.11111
Brake hose cover to strut	
M5 x 12	5 Nm
Brake hose with banjo bolt to components	J
M10 x 1	24 Nm
Brake line to fork bridge	=
M6 x 16	8 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
34 51 - Mechanical, hydraulic components	
ABS pressure modulator on retainer	
M6 x 14.5	8 Nm
35 - Foot operation	Value
•	Value
35 21 - Footbrake lever with connecting linkage Footbrake lever to frame	
	10 Nm
M8 x 25 Cable holder for wheel speed sensor to telescopic forks	19 Nm
Cable holder for wheel-speed sensor to telescopic forks M5 x 10	E Nm
	5 Nm
Wheel-speed sensor to telescopic forks/bevel gears	9 Nm
M6 x 16	8 Nm
36 31 - Wheels with bearings	
Quick-release axle in telescopic forks	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	•
	In No.
M12 x 20	30 Nm
Rear wheel to wheel flange	
M10 x 1.25 x 40	tighten in diagonally opposite sequence
	60 Nm
Metal valve in rim	
Thread 1/8 inch	12 Nm
Thread-locking compound (Loctite 243, Medium strength)	
Nipple on spoke	
M4	1st tightening torque, 1 Nm
	2nd tightening torque, 4 Nm
Thread locking compound for spoke nipples	
Grubscrew, M4	2 Nm
RDC sensor to wheel rim	
M8 x 25, use thread-locking compound for repair	9 Nm
Thread-locking compound (Loctite 243, Medium strength)	
46 - Frame and mounted components	Value
46 51 - Motorcycle frame	
Rear frame to main frame	
Top, M10 x 30	56 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 2701, High strength)	
Main frame to engine	
top front, M12 x 255 - 10.9	100 Nm
Thread-locking compound (Micro-encapsulated)	100 1111
or, Thread-locking compound (Loctite 243, Medium strength)	
bottom rear, M10 x 45	55 Nm
bottom front, M10 x 45	55 Nm
top rear, M12 x 210	100 Nm
Thread-locking compound (Micro-encapsulated)	100 MIII
or, Thread-locking compound (Loctite 243, Medium strength)	
46 53 - Side stand	
Side stand to pivot mount	35 Nm
M10 x 1, Use thread-locking compound	33 NIII
Thread-locking compound (Loctite 2701, High strength)	
Threaded pin (side-stand spring) in frame	38 Nm
M10 x 1.5	38 NITI
46 54 - Luggage system	
Luggage rack base to luggage rack	
M6 x 20	5 Nm
Luggage carrier to rear frame	
M8 x 20	19 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
M8 x 40	19 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
Luggage carrier to rear frame	
M8	19 Nm
Thread-locking compound (Loctite 243, Medium strength)	
46 61 - Front-wheel cover	

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
Front-wheel cover, top, to fairing bracket	T
M5 x 14.5	2 Nm
	2 INTI
Front-wheel cover to telescopic forks/fork bridge	2 N
M5 x 14.5	2 Nm
46 62 - Rear-wheel cover, number-plate carrier	
Number-plate carrier to rear frame	
M6 x 17.5	8 Nm
Rear-wheel cover to rear frame	
M6 x 17.5	8 Nm
Spray guard to bevel gears	
M6 x 20	8 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
Tail section to rear frame	
Front, M8 x 40	19 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
Rear, M8 x 25	19 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
46 63 - Motorcycle fairing, windscreen	
Bracket to windscreen and covers	
M5 x 14.5	2 Nm
Front panel carrier, left/right to frame	
M8 x 30	19 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
Trim panels	
M5	2 Nm
Windscreen to windscreen holder	
M5 x 10	4 Nm
Front panel carrier, centre, to frame	4 Mili
M6 x 50	12 Nm
Thread-locking compound (Micro-encapsulated)	12 MIII
or, Thread-locking compound (Loctite 243, Medium strength) Front panel carrier, left/right to front panel carrier, centre	
	O Nov.
Front, M6 x 16, Replace screw	8 Nm
Rear, M6 x 30, Replace screw	8 Nm
Cover for fuel tank, centre, to frame	
M6 x 25	8 Nm
46 71 - Engine fasteners, footrests	
Footrest plate (rear) to rear frame	
M8 x 30 - 10.9	38 Nm
Thread-locking compound (Micro-encapsulated)	
or, Thread-locking compound (Loctite 243, Medium strength)	
Cap to rear footrest plate	
M4 x 12	1.5 Nm
Left heel deflector to frame	
M6 x 12	8 Nm
51 - Trim panels	Value

Wethead R1200LC GS/GSA	
Tightening torques 0A11 - R 1200 GS	
51 16 - Mirrors, covers, ashtrays, stowage compartments	
Mirror (lock nut) to adapter	
Left-hand thread, M10 x 1.25	22 Nm
Adapter to clamping block	
M10 x 14 - 4.8	25 Nm
51 25 - Other fasteners	
Ignition/steering lock to fork bridge	
Non-removable screw, M8, Replace screw	20 Nm
Thread-locking compound (Micro-encapsulated)	
52 - Seats and seat bench	Value
52 53 - Seat	
Latch, rear seat, to rear carrier	
Screw for plastic, 4 x 10	1 Nm
Seat adjuster to frame	
M6 x 14.5	4 Nm
61 - General vehicle electrics	Value
61 13 - Plug, terminal	Talac
Wiring harness (ground) to cylinder head	
M6 x 10	8 Nm
Battery-positive connection point to battery carrier	OWN
M6 x 14	2 Nm
61 21 - Battery with holder	21111
Wiring harness to battery	
M6 x 10	5 Nm
61 31 - Switch, sensor	511111
Multifunction switch to grip unit	
Screw for plastic, 2.5 x 15	0.4 Nm
Cover to multifunction switch	
Screw for plastic, 2.5 x 15	0.4 Nm
Throttle twistgrip/handlebar grip, left, to handlebar	
M3.5 x 30	1.5 Nm
Clutch switch to handlebar fitting	
Screw for plastic, 2.2 x 22	0.4 Nm
61 33 - Horn	
Horn to front panel carrier	
M8 x 18	19 Nm
61 34 - On-board sockets, cigarette lighter	
On-board socket to front panel carrier	
M18 x 1	3 Nm
61 36 - Relay	
Wiring harness to starter relay	
M6, Replace nut	6 Nm
Thread-locking compound (mechanical)	
63 - Lights	Value
63 12 - Headlight	
Headlight to front panel carrier	
M6 x 20	5 Nm
63 13 - Flashing turn indicators, front	3100
Flashing turn indicator to front panel carrier	
M6 x 16	4 Nm
INO A 10	111111

Tightening torques 0A11 - R 1200 GS 63 23 - Flashing turn indicator to number-plate carrier M6 x 20 3 3 Nm 65 - Audio, navigation, information systems 55 90 - Navigation, yielden 55 90 - Navigation, information systems Left retainer to front panel carrier M6 x 18 8 Nm K6 x 18 8 Nm K6 x 18 8 Nm K6 x 18 8 Nm K7 - Optional accessories, motorcycle Value 77 - Optional accessories, motorcycle 77 - Optional access	Wethead R1200LC GS/GSA  Tightening torques 0A11 - R 1200 GS		
63 23 - Hashing turn indicators, rear			
Flashing turn indicator to number-plate carrier  M6 x 20  3 Nm  55 - Audio, navigation, information systems  65 - Audio, navigation, information systems  65 - Audio, navigation systems  Left retainer to front panel carrier  M6 x 18  8 Nm  8 Nm  77 - Optional accessories, motorcycle  77 11 - Exhaust system  Sports silencer to rear frame  M8 x 35  19 Nm  Heat shield to exhaust manifold  Clamp  Screw, M5 x 12  Sports silencer to exhaust manifold  Clamp  Sorts, M5 x 12  Sports silencer to exhaust manifold  10 Nm  77 14 - Engine guard, crash bars  Crash bar to engine  M8 x 35  19 Nm  Pipe clamp with retaining plate to frame tube  M6 x 16  M7 x 14 - Manifold to engine guard to retaining plate  M6 x 16  M6 x 16  M8 x 30  M9 Nm  M9 x 20  M9 x 20  M9 Nm  M9 x 20  M9 x 20			
65 90 - Audigation, information systems 65 90 - Navigation systems 16 1	Flashing turn indicator to number-plate carrier		
Left retainer to front panel carrier  M6 x 18  Right retainer to front panel carrier  M6 x 16  77 - Optional accessories, motorcycle  78 - Optional accessories, motorcycle  79 - Optional accessories, motorcycle  70 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  72 - Optional accessories, motorcycle  73 - Optional accessories, motorcycle  74 - Optional accessories, motorcycle  75 - Optional accessories, motorcycle  77 - Optional accessories, motorcycle  7	M6 x 20	3 Nm	
Left retainer to front panel carrier  M6 x 18  Right retainer to front panel carrier  M6 x 16  77 - Optional accessories, motorcycle  78 - Optional accessories, motorcycle  79 - Optional accessories, motorcycle  70 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  71 - Optional accessories, motorcycle  72 - Optional accessories, motorcycle  73 - Optional accessories, motorcycle  74 - Optional accessories, motorcycle  75 - Optional accessories, motorcycle  77 - Optional accessories, motorcycle  7	65 - Audio, navigation, information systems	Value	
Left retainer to front panel carrier  M6 x 18  M6 x 16  A Nm  77 - Optional accessories, motorcycle  77 - Optional accessories, motorcy	•		
M6 x 18  Right retainer to front panel carrier  M6 x 16  S Nm  77 - Optional accessories, motorcycle  Value  77 11 - Exhaust system  Sports silencer to rear frame  M8 x 35  Heat shield to exhaust manifold  Clamp  Sorrew, M5 x 12  S Nm  Sorrew, M5 x 12  S Nm  Sorrew, M5 x 12  S Nm  Sorrew, M6 x 12  S Nm  Sorts silencer to exhaust manifold  10 Nm  77 14 - Engine guard, crash bars  Crash bar to engine  M6 x 16  Enduro engine guard to retaining plate to frame tube  M6 x 16  Enduro engine guard to tretaining plate  M6 x 16  Enduro engine guard to bracket  M6 x 25  Spacers (engine protection bar) to frame  M6 x 20  Spacers (engine protection bar) to frame  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encaps			
M6 x 16  77 - Optional accessories, motorcycle 77 11 - Exhaust system Sports silencer to rear frame M8 x 35  19 Nm  Screw, M5 x 12  3 Nm  77 14 - Engine guard, crash bars Crash bar to engine M6 x 16  Enduro engine guard to retaining plate to frame tube M6 x 16  Enduro engine guard to retaining plate M6 x 16  Enduro engine guard to bracket M6 x 16  Enduro engine guard to bracket M6 x 16  Shom  Spacers (engine protection bar) to frame M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to fraire M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micr	'	8 Nm	
M6 x 16  77 - Optional accessories, motorcycle 77 11 - Exhaust system Sports silencer to rear frame M8 x 35  19 Nm  Screw, M5 x 12  3 Nm  77 14 - Engine guard, crash bars Crash bar to engine M6 x 16  Enduro engine guard to retaining plate to frame tube M6 x 16  Enduro engine guard to retaining plate M6 x 16  Enduro engine guard to bracket M6 x 16  Enduro engine guard to bracket M6 x 16  Shom  Spacers (engine protection bar) to frame M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to fraire M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micr	Right retainer to front panel carrier		
77 11 - Exhaust system  Sports silencer to rear frame  M8 x 35  Heat shield to exhaust manifold  Clamp  Sorew, M5 x 12  3 Nm  Sports silencer to exhaust manifold  10 Nm  77 14 - Engine guard, crash bars  Crash bar to engine  M8 x 35  19 Nm  Pipe clamp with retaining plate to frame tube  M6 x 16  Enduro engine guard to retaining plate  M6 x 16  Enduro engine guard to retaining plate  M6 x 16  Enduro engine guard to bracket  M6 x 25  Spacers (engine protection bar) to frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, top  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)  77 25 - Frame, footrests, mounted parts  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)  Or, Thread-locking compound (Micro-encapsulated)  77 27 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-en		8 Nm	
Sports silencer to rear frame  M8 x 35  19 Nm  Clamp  3 Nm  Screw, M5 x 12  3 Nm  Sports silencer to exhaust manifold  10 Nm  77 14 - Engine guard, crash bars  Crash bar to engine  M8 x 35  Pipe clamp with retaining plate to frame tube  M6 x 16  8 Nm  Enduro engine guard to retaining plate  M6 x 16  8 Nm  Enduro engine guard to bracket  M6 x 16  Enduro engine guard to bracket  M6 x 16  Enduro engine guard to bracket  M6 x 25  Spacers (engine protection bar) to frame  M8 x 30  Thread-locking compound (Micro-encapsulated)  or, Thread-locking thin frame to engine  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Threa	77 - Optional accessories, motorcycle	Value	
M8 x 35  Heat shield to exhaust manifold  Clamp  3 Nm  Screw, M5 x 12  3 Nm  Sports sliencer to exhaust manifold  10 Nm  77 14 - Enging guard, crash bars  Crash bar to engine  M8 x 35  Pipe clamp with retaining plate to frame tube  M6 x 16  B Nm  Pipe clamp with retaining plate to frame tube  M6 x 16  B Nm  Enduro engine guard to retaining plate  Finduro engine guard to bracket  M6 x 25  Savers (engine protection bar) to frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  Or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest,  M8 x 20  Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest,  M8 x 20  Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest,  M8 x 20  Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, footrests, mounted parts  M8 x 20  3 Nm	77 11 - Exhaust system		
Heat shield to exhaust manifold Clamp 3 Nm Screw, M5 x 12 3 Nm Sports silencer to exhaust manifold 10 Nm 7714-Engine guard, crash bars Crash bar to engine M8 x 35 Pipe clamp with retaining plate to frame tube M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to bracket M6 x 25 Spacers (engine protection bar) to frame M8 x 20 19 Nm Thread-locking compound (Micro-encapsulated) Or, Thread-locking compound (Micro-encapsulated) M8 x 25 Mount to carrier M8 x 25 Thread-locking compound (Micro-encapsulated) Or, Thread-locking compound (Micro-encapsulated) Or, Thread-locking compound (Micro-encapsulated) Or ash bar with frame to engine Rear bottom, M10 x 45 Ty 25 - Frame, footrests, mounted parts Mount to carrier M8 x 20 Chapter of the footrest of the foot	Sports silencer to rear frame		
Clamp Screw, M5 x 12 Sports silencer to exhaust manifold 77 14 - Engine guard, crash bars Crash bar to engine M8 x 35 Pipe clamp with retaining plate to frame tube M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to bracket M6 x 16 Enduro engine guard to bracket M8 x 25 Spacers (engine protection bar) to frame M8 x 20 Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar with frame to engine Rear bottom, M10 x 45 77 25 - Frame, footrests, mounted parts M8 x 25 M8 x 25 M9 x 20 M9 x 30 M9 x 40	M8 x 35	19 Nm	
Screw, M5 x 12   3 Nm   5 Nm	Heat shield to exhaust manifold		
Sports silencer to exhaust manifold 10 Nm 77.14 - Engine guard, crash bars Crash bar to engine M8 x 35 19 Nm	Clamp	3 Nm	
77 14 - Engine guard, crash bars Crash bar to engine M8 x 35 Nipe clamp with retaining plate to frame tube M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to bracket  Enduro engine guard to bracket M6 x 25 Spacers (engine protection bar) to frame M8 x 20 In read-locking compound (Micro-encapsulated) Or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top M8 x 30 Crash bar with frame to engine Rear bottom, M10 x 45 T7 25 - Frame, footrests, mounted parts Mount to carrier M8 x 25 Nount to carrier Nount to carrier M8 x 25 Nount to carrier Nou	Screw, M5 x 12	3 Nm	
Crash bar to engine  M8 x 35  19 Nm  Pipe clamp with retaining plate to frame tube  M6 x 16  Enduro engine guard to retaining plate  M6 x 16  8 Nm  Enduro engine guard to bracket  M6 x 25  8 Nm  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)	•	10 Nm	
M8 x 35 Pipe clamp with retaining plate to frame tube  M6 x 16 Enduro engine guard to retaining plate M6 x 16 Enduro engine guard to bracket M6 x 25 Spacers (engine protection bar) to frame M8 x 20 Ip Nm  M8 x 30 Ip Nm  M8 x 30 Ip Nm  M8 x 30 Ip Nm  Crash bar with frame to engine Rear bottom, M10 x 45 Ty 25 - Frame, footrests, mounted parts M8 x 25 Mount to carrier M8 x 25 Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest M8 x 20 Ip Nm  Clamping block to footrest Ip Nm  M8 x 20 Ip Nm  Thread-locking compound (Micro-encapsulated) Ip Nm  Ip Nm	77 14 - Engine guard, crash bars		
Pipe clamp with retaining plate to frame tube  M6 x 16  8 Nm  Enduro engine guard to retaining plate  M6 x 16  8 Nm  Enduro engine guard to bracket  8 Nm  Enduro engine guard to bracket  M6 x 25  8 Nm  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  20 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  20 Nm  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)	Crash bar to engine		
M6 x 16 Enduro engine guard to retaining plate  M6 x 16 Enduro engine guard to bracket  M6 x 25  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Toash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine  Rear bottom, M10 x 45  To Shar with frame to engine  Rear bottom, M10 x 45  To Shar with frame to engine  Shar to carrier  M8 x 25  20 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  20 Nm  To 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)		19 Nm	
Enduro engine guard to retaining plate  M6 x 16  8 Nm  Enduro engine guard to bracket  M6 x 25  8 Nm  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  20 Nm  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)			
M6 x 16 Enduro engine guard to bracket  M6 x 25 Spacers (engine protection bar) to frame  M8 x 20 19 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top M8 x 30 19 Nm Crash bar with frame to engine Rear bottom, M10 x 45 T7 25 - Frame, footrests, mounted parts M0 x 15 M0 x 15 Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20 20 Nm T7 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20 Trhead-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		8 Nm	
Enduro engine guard to bracket  M6 x 25  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine  Rear bottom, M10 x 45  55 Nm  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  Mount to carrier  M8 x 25  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)			
M6 x 25  Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  20 Nm  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)		8 Nm	
Spacers (engine protection bar) to frame  M8 x 20  19 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts Mount to carrier M8 x 25  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20  20 Nm  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)			
M8 x 20 Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top M8 x 30 19 Nm Crash bar with frame to engine Rear bottom, M10 x 45 77 25 - Frame, footrests, mounted parts Mount to carrier M8 x 25 20 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20 20 Nm 77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20 3 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)		8 Nm	
Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier M8 x 25  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  78 3 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)			
or, Thread-locking compound (Loctite 243, Medium strength) Crash bar to frame, top  M8 x 30  19 Nm  Crash bar with frame to engine Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier M8 x 25  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		19 Nm	
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Crash bar with frame to engine  Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  Con Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  Cover for hole for grab handle to rear frame  M8 x 20  Cover for hole for grab handle to rear frame  M8 x 20  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Micro-encapsulated)		10 Nm	
Rear bottom, M10 x 45  77 25 - Frame, footrests, mounted parts  Mount to carrier  M8 x 25  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest  M8 x 20  20 Nm  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		19 MIII	
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M8 x 25 Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) Clamping block to footrest M8 x 20 20 Nm  77 30 - Mounted parts, trim panels Cover for hole for grab handle to rear frame M8 x 20 3 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength) M8 x 40 3 Nm Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated)			
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or, Thread-locking compound (Loctite 243, Medium strength)  Clamping block to footrest  M8 x 20  20 Nm  77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated)  or, Thread-locking compound (Loctite 243, Medium strength)  Thread-locking compound (Loctite 243, Medium strength)  Thread-locking compound (Loctite 243, Medium strength)		20 11111	
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77 30 - Mounted parts, trim panels  Cover for hole for grab handle to rear frame  M8 x 20  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		20 Nm	
Cover for hole for grab handle to rear frame  M8 x 20  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		2011111	
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Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		3 Nm	
or, Thread-locking compound (Loctite 243, Medium strength)  M8 x 40  3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)			
M8 x 40 3 Nm  Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)			
Thread-locking compound (Micro-encapsulated) or, Thread-locking compound (Loctite 243, Medium strength)		3 Nm	
or, Thread-locking compound (Loctite 243, Medium strength)	Thread-locking compound (Micro-encapsulated)		
	77 42 - Mounted parts, cases		

Wethead R1200LC GS/GSA  Tightening torques 0A11 - R 1200 GS		
M4 x 12	1.5 Nm	
77 44 - Mounted parts, topcase, luggage carrier		
Topcase rack with grab handle to rear frame		
M8 x 35	19 Nm	
Thread-locking compound (Loctite 243, Medium strength)		
M8 x 40	19 Nm	
Thread-locking compound (Loctite 243, Medium strength)		
Cover to carrier plate		
M5 x 14.5	2 Nm	
Topcase rack to grab handle		
M6 x 20	5 Nm	
Carrier plate to rear frame		
M8 x 35	19 Nm	
M8 x 50	19 Nm	
77 45 - Tank rucksack		
Front attachment for tank rucksack to frame		
M6 x 28	8 Nm	
77 51 - Lights		
LED auxiliary headlight to bracket		
M6 x 40	6 Nm	
Bracket, LED auxiliary headlight to front panel carrier		
M6 x 30	8 Nm	
Thread-locking compound (mechanical)		
or, Thread-locking compound (Loctite 243, Medium strength)		
Bracket to cockpit fairing		
M5 x 17.5	2 Nm	
Headlight guard to attachment		
M6 x 10	5 Nm	
77 53 - Switches, small items, control unit		
Additional switch to clamping block		
M5 x 14	3 Nm	