

GENERAL INFORMATION

TORQUE VALUES

STANDARD FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)	FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)
5 mm bolt and nut	5 (0.5, 3.6)	5 mm screw	4 (0.4, 2.9)
6 mm bolt and nut	10 (1.0, 7)	6 mm screw	9 (0.9, 6.5)
8 mm bolt and nut	22 (2.2, 16)	6 mm flange bolt (8 mm head, small flange)	10 (1.0, 7)
10 mm bolt and nut	34 (3.5, 25)	6 mm flange bolt (8 mm head, large flange)	12 (1.2, 9)
12 mm bolt and nut	54 (5.5, 40)	6 mm flange bolt (10 mm head) and nut	12 (1.2, 9)
		8 mm flange bolt and nut	26 (2.7, 20)
		10 mm flange bolt and nut	39 (4.0, 29)

- Torque specifications listed below are for important fasteners.
- Others should be tightened to standard torque values listed above.

NOTES: 1. Apply oil to the threads and seating surface.
 2. Apply grease to the threads.
 3. Apply locking agent to the threads.
 4. Apply sealant to the threads.
 5. Lock nut: replace with a new one and stake it.
 6. ALOC bolt or screw: replace with a new one.
 7. U-nut.
 8. Apply brake fluid to the threads.

ENGINE	ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
	FRAME/BODY PANEL/EXHAUST SYSTEM:				
	Left crankcase rear cover bolt	5	6	10 (1.0, 7)	
	Exhaust pipe joint stud bolt	4	8	—	Page 2-6
	MAINTENANCE:				
	Spark plug	4	12	14 (1.4, 10)	
	Timing hole cap	1	45	18 (1.8, 13)	NOTE 2
	Valve adjusting hole cap	2	36	15 (1.5, 11)	NOTE 2
	Valve adjusting screw lock nut	6	7	22 (2.2, 16)	NOTE 1
	Engine oil filter cartridge	1	20	26 (2.7, 20)	NOTE 1
	Front engine oil drain bolt	1	12	29 (3.0, 22)	
	Rear engine oil drain bolt	1	12	29 (3.0, 22)	
	LUBRICATION SYSTEM:				
	Oil pressure switch	1	PT 1/8	12 (1.2, 9)	NOTE 4
	Oil pressure switch terminal screw	1	4	2 (0.2, 1.4)	
	Oil strainer bolt	1	6	13 (1.3, 9)	
	Oil pump assembly bolt	1	6	13 (1.3, 9)	
	Oil orifice bolt	1	8	14 (1.4, 10)	NOTE 1
	FUEL SYSTEM:				
	Pulse secondary air injection check valve cover bolt	4	5	5 (0.5, 3.6)	
	Carburetor insulator band screw	2	6	—	Page 5-17
	Intake manifold base band screw	2	6	—	Page 5-17
	Intake manifold vacuum joint	1	5	3 (0.3, 2.2)	
	Intake manifold base socket bolt	4	6	10 (1.0, 7)	
	COOLING SYSTEM:				
	Water pump cover bolt	2	6	13 (1.3, 9)	
	Water pump stud bolt	1	6	—	Page 6-13

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ENGINE (Cont'd)				
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
CYLINDER HEAD/VALVE:				
Spark plug sleeve	2	30	18 (1.8, 13)	NOTE 1
Cylinder head cover bolt	4	8	26 (2.7, 20)	
Cylinder head cap nut	8	10	43 (4.4, 32)	NOTE 1
Cylinder head cap nut	4	8	26 (2.7, 20)	NOTE 1
Cam sprocket bolt	4	7	23 (2.3, 17)	NOTE 3
Cam chain tensioner bolt	4	6	12 (1.2, 9)	
CYLINDER/PISTON				
Cylinder stud bolt	4	8	—	Page 9-8
Cylinder stud bolt	8	10	—	Page 9-8
CLUTCH/GEARSHIFT LINKAGE:				
Clutch pressure plate bolt	5	6	12 (1.2, 9)	
Clutch center lock nut	1	25	186 (19.0, 137)	NOTE 1, 5
Oil pump driven sprocket bolt	1	6	18 (1.8, 13)	NOTE 3
Clutch cover socket bolt	5	6	10 (1.0, 7)	
Timing hole cap cover socket bolt	6	6	10 (1.0, 7)	
Primary drive gear bolt	1	12	137 (14.0, 101)	NOTE 1
Primary driven gear nut	1	25	186 (19.0, 137)	NOTE 1, 5
Shift drum stopper arm pivot bolt	1	6	12 (1.2, 9)	
Shift drum center socket bolt	1	8	23 (2.3, 17)	NOTE 3
Gearshift spindle return spring pin	1	8	23 (2.3, 17)	
Clutch cable holder bolt	1	6	12 (1.2, 9)	
CRANKSHAFT/TRANSMISSION:				
Right crankcase bolt	16	8	26 (2.7, 20)	
Cam chain tensioner setting plate bolt	2	6	12 (1.2, 9)	NOTE 3
Connecting rod bearing cap nut	4	10	59 (6.0, 43)	NOTE 1
Output gear case mounting bolt	4	8	31 (3.2, 23)	
Shift drum bearing setting plate bolt	2	6	12 (1.2, 9)	NOTE 3
Rear balancer shaft bearing setting plate bolt	2	6	12 (1.2, 9)	NOTE 3
Mainshaft bearing setting plate bolt	2	6	12 (1.2, 9)	NOTE 3
Spindle plate bolt	1	6	12 (1.2, 9)	NOTE 3
BATTERY/CHARGING SYSTEM:				
Left crankcase cover socket bolt	13	6	12 (1.2, 9)	
Stator mounting bolt	4	6	10 (1.0, 7)	NOTE 3
Ignition pulse generator mounting bolt	2	6	10 (1.0, 7)	NOTE 3
Alternator wire clamp bolt	1	6	10 (1.0, 7)	NOTE 3
ELECTRIC STARTER/STARTER CLUTCH:				
Starter motor case bolt	2	5	7 (0.7, 5.1)	
Starter motor cable terminal nut	1	6	7 (0.7, 5.1)	
Flywheel bolt	1	12	137 (14.0, 101)	NOTE 1
Starter clutch mounting bolt	6	8	29 (3.0, 22)	NOTE 3
LIGHTS/METERS/SWITCHES:				
Neutral switch	1	10	12 (1.2, 9)	

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FRAME				
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
FRAME/BODY PANELS/EXHAUST SYSTEM:				
Fuel tank mounting bolt	1	8	19 (1.9, 14)	NOTE 6
Fuel valve nut	1	22	34 (3.5, 25)	
Fuel valve lever screw	1	5	1 (0.1, 0.7)	
Rider footpeg mounting bolt	4	10	39 (4.0, 29)	
Gearshift arm pinch bolt	1	6	12 (1.2, 9)	
Exhaust pipe joint nut	4	8	23 (2.3, 17)	
Muffler band bolt	5	8	17 (1.7, 12)	
Muffler mounting bolt	2	8	34 (3.5, 25)	
MAINTENANCE:				
Air cleaner cover screw	5	5	4 (0.4, 2.9)	
Final drive oil filler cap	1	30	12 (1.2, 9)	
Final drive oil drain bolt	1	14	20 (2.0, 14)	
FUEL SYSTEM:				
Air cleaner case mounting screw	3	5	4 (0.4, 2.9)	
Air cleaner case mounting bolt	1	6	10 (1.0, 7)	
ENGINE MOUNTING:				
Engine mounting nut	4	10	39 (4.0, 29)	
Engine hanger plate bolt	10	8	26 (2.7, 20)	
FINAL DRIVE:				
Pinion retainer	1	70	147 (15.0, 108)	
Pinion retainer lock tab bolt	1	6	10 (1.0, 7)	
Pinion joint nut	1	16	108 (11.0, 80)	NOTE 3
Dust guard plate bolt	1	6	10 (1.0, 7)	
Gear case cover bolt	2	10	62 (6.3, 46)	NOTE 3
Gear case cover bolt	6	8	25 (2.6, 19)	
Final gear case assembly mounting nut	4	10	64 (6.5, 47)	
Rear shock absorber lower mount	1	12	54 (5.5, 40)	NOTE 3
FRONT WHEEL/SUSPENSION/STEERING:				
Handlebar upper holder bolt	4	8	26 (2.7, 20)	
Handlebar lower holder nut	2	12	64 (6.5, 47)	NOTE 7
Front brake disc bolt	6	8	42 (4.3, 31)	NOTE 6
Spoke nipple	52	BC4	4 (0.4, 2.9)	
Valve stem nut	1	—	3 (0.3, 2.2)	
Front axle bolt	1	14	59 (6.0, 43)	
Front axle pinch bolt	4	8	22 (2.2, 16)	
Fork center bolt	2	8	20 (2.0, 14)	NOTE 3
Fork cap	2	37	23 (2.3, 17)	
Fork cover bolt	4	6	12 (1.2, 9)	
Fork top bridge pinch bolt	2	8	23 (2.3, 17)	
Fork bottom bridge pinch bolt	2	10	49 (5.0, 36)	
Steering bearing adjustment nut	1	26	21 (2.1, 15)	NOTE 1
Steering bearing adjustment nut lock nut	1	26	—	Page 13-22
Steering stem nut	1	24	103 (10.5, 76)	
Hose/cable guide bolt	2	8	22 (2.2, 16)	NOTE 6
Brake hose clamp bolt	2	6	12 (1.2, 9)	
REAR WHEEL/SUSPENSION:				
Rear brake disc bolt	6	8	42 (4.3, 31)	NOTE 6
Spoke nipple	52	BC4	4 (0.4, 2.9)	
Valve stem nut	1	—	3 (0.3, 2.2)	
Final driven flange nut	5	12	88 (9.0, 65)	NOTE 7
Rear axle nut	1	18	110 (11.2, 81)	NOTE 7
Rear shock absorber mounting bolt	4	8	26 (2.7, 20)	
Rear brake hose clamp bolt	3	6	12 (1.2, 9)	NOTE 6
Swingarm left pivot bolt	1	30	103 (10.5, 76)	
Swingarm right pivot bolt	1	30	14 (1.4, 10)	
Swingarm right pivot bolt lock nut	1	30	113 (11.5, 83)	

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FRAME (Cont'd)				
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
BRAKE SYSTEM:				
Brake caliper bleed valve	2	8	6 (0.6, 4.3)	
Front master cylinder reservoir cap screw	2	4	2 (0.2, 1.4)	
Brake pad pin	2	10	18 (1.8, 13)	
Brake pad pin plug	2	10	3 (0.3, 2.2)	
Brake hose oil bolt	4	10	34 (3.5, 25)	
Front brake lever pivot bolt	1	6	1 (0.1, 0.7)	
Front brake lever pivot nut	1	6	6 (0.6, 4.3)	
Front brake light switch screw	1	4	1 (0.1, 0.7)	
Front master cylinder holder bolt	2	6	12 (1.2, 9)	
Rear brake reservoir mounting bolt	1	6	10 (1.0, 7)	
Rear master cylinder push rod joint nut	1	8	18 (1.8, 13)	
Rear master cylinder mounting bolt	2	6	12 (1.2, 9)	
Rear brake pedal pivot nut	1	8	26 (2.7, 20)	NOTE 7
Front brake caliper bracket pin	1	8	13 (1.3, 9)	NOTE 3
Front brake caliper pin	1	10	27 (2.8, 20)	NOTE 3
Front brake caliper mounting bolt	2	8	30 (3.1, 22)	NOTE 6
Rear brake caliper stopper pin bolt	1	18	69 (7.0, 51)	NOTE 6
Rear brake caliper bracket pin bolt	1	8	23 (2.3, 17)	
Rear brake caliper pin	1	10	27 (2.8, 20)	
Brake pipe joint bolt	2	10	17 (1.7, 12)	NOTE 8
Brake hose 2-way joint mounting bolt	2	6	12 (1.2, 9)	
LIGHTS/METERS/SWITCHES:				
Fuel tank top cover socket bolt	7	5	4 (0.4, 2.9)	
Ignition switch mounting bolt	2	6	10 (1.0, 7)	
Ignition switch cover screw	1	4	2 (0.2, 1.4)	
Fan motor switch	1	16	18 (1.8, 13)	
Side stand switch bolt	1	6	10 (1.0, 7)	NOTE 6
Thermostatic switch	1	PT 1/8	8 (0.8, 5.8)	NOTE 4
Horn mounting bolt	1	8	21 (2.1, 15)	
OTHERS:				
Side stand pivot bolt	1	10	10 (1.0, 7)	
Side stand pivot lock nut	1	10	29 (3.0, 22)	NOTE 7
Gearshift pedal pivot bolt	1	8	26 (2.7, 20)	
Muffler bracket bolt	2	10	74 (7.5, 54)	