

## 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) and nut	12 (1.2, 9)
10-mm bolt and nut	34 (3.5, 25)	6-mm flange bolt (10-mm head) and nut	12 (1.2, 9)
12-mm bolt and nut	54 (5.5, 40)	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 sealant to the threads.
  2. Apply locking agent to the threads.
  3. Apply grease to the threads and seating surface.
  4. Apply oil to the threads and seating surface.
  5. Stake.
  6. Left hand threads.
  7. U-nut.
  8. ALOC bolt: replace with a new one.
  9. Break-off bolt.

ENGINE	ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
<b>MAINTENANCE:</b>					
	Spark plug	4	12	14 (1.4, 10)	
	Crankshaft hole cap	1	30	15 (1.5, 11)	NOTE 3
	Timing hole cap	1	22	15 (1.5, 11)	NOTE 3
	Valve adjusting screw lock nut	6	7	23 (2.3, 17)	NOTE 4
	Oil drain bolt	1	14	29 (3.0, 22)	
	Oil filter cartridge	1	20	10 (1.0, 7)	NOTE 4
	Vacuum plug	2	5	3 (0.3, 2.2)	
<b>LUBRICATION SYSTEM:</b>					
	Oil pressure switch	1	PT 1/8	12 (1.2, 9)	NOTE 1
	Oil pressure switch terminal screw	1	4	2 (0.2, 1.4)	
	Oil pump bolt	5	6	13 (1.3, 9)	
<b>FUEL SYSTEM:</b>					
	Air cleaner housing stay bolt	1	6	12 (1.2, 9)	
<b>COOLING SYSTEM:</b>					
	Water pump bolt	5	6	13 (1.3, 9)	
<b>CLUTCH/GEARSHIFT LINKAGE:</b>					
	Clutch lifter plate bolt	4	6	12 (1.2, 9)	
	Clutch center lock nut	1	18	127 (13.0, 94)	NOTE 4, 5
	Primary drive gear bolt	1	12	88 (9.0, 65)	NOTE 4
	Gearshift return spring pin bolt	1	8	23 (2.3, 17)	
	Oil pump driven sprocket bolt	1	6	15 (1.5, 11)	NOTE 2
<b>ALTERNATOR/STARTER CLUTCH:</b>					
	Flywheel bolt	1	12	127 (13.0, 94)	NOTE 4, 6
	Stator mounting bolt	4	6	12 (1.2, 9)	NOTE 2
	Stator wire holder bolt	1	6	12 (1.2, 9)	NOTE 2
	Starter clutch housing bolt	6	8	29 (3.0, 22)	NOTE 2

ENGINE (Cont'd)				
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
<b>CYLINDER HEAD/VALVES:</b>				
Cylinder head cover bolt	4	6	10 (1.0, 7)	
Overhead cover bolt	8	6	12 (1.2, 9)	
Cam sprocket bolt	4	7	23 (2.3, 17)	NOTE 2
Cam chain tensioner mounting bolt	4	6	10 (1.0, 7)	
Camshaft holder 8-mm bolt	6	8	23 (2.3, 17)	
8-mm nut	4	8	23 (2.3, 17)	
Cylinder head 8-mm bolt	4	8	23 (2.3, 17)	NOTE 4
10-mm nut	8	10	47 (4.8, 35)	NOTE 4
Cylinder head fin mounting bolt	15	6	10 (1.0, 7)	
<b>CRANKCASE/CRANKSHAFT/TRANSMISSION:</b>				
Crankcase 8-mm bolt	14	8	23 (2.3, 17)	
Connecting rod bearing cap nut	8	8	33 (3.4, 25)	NOTE 4
Drive chain guide plate bolt	2	6	12 (1.2, 9)	
Neutral switch	1	10	12 (1.2, 9)	

# GENERAL INFORMATION

FRAME	ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
<b>FRAME/BODY PANELS/EXHAUST SYSTEM:</b>					
	Footpeg bracket bolt	4	10	34 (3.5, 25)	
	Exhaust pipe joint nut	4	8	25 (2.5, 18)	
	Muffler mounting nut	2	8	26 (2.7, 20)	
	Exhaust pipe joint pipe bolt	1	8	20 (2.0, 14)	
	Seat mounting bolt	2	8	26 (2.7, 20)	
	Rear fender bolt	2	10	64 (6.5, 47)	
	Shock absorber stud bolt	1	14	108 (11.0, 80)	
	Left grab rail mounting nut	1	24	88 (9.0, 65)	
	Fuel tank bolt	1	8	19 (1.9, 14)	
	Fuel valve	1	22	34 (3.5, 25)	
	Fuel valve screw	1	5	0.6 (0.06, 0.43)	
	Left crankcase rear cover bolt	1	6	12 (1.2, 9)	
<b>MAINTENANCE:</b>					
	Side stand assembly bolt	2	10	49 (5.0, 39)	
	Spoke nipple	104	4	4 (0.4)	
<b>COOLING SYSTEM:</b>					
	Radiator mounting bolt	1	6	1 (0.1, 0.7)	
	Fan motor switch	1	16	18 (1.8, 13)	
<b>ENGINE REMOVAL/INSTALLATION:</b>					
	Front engine upper/lower mounting nut	2	10	54 (5.5, 40)	
	Rear engine mounting nut	1	10	54 (5.5, 40)	
	Front engine bracket bolt	2	8	26 (2.7, 20)	
	Rear engine bracket bolt	2	8	26 (2.7, 20)	
	Gearshift arm pinch bolt	1	6	12 (1.2, 9)	
	Drive sprocket fixing plate bolt	2	6	10 (1.0, 7)	
<b>CLUTCH/GEARSHIFT LINKAGE:</b>					
	Gearshift pedal pivot bolt	1	10	34 (3.5, 25)	
<b>FRONT WHEEL/SUSPENSION/STEERING:</b>					
	Steering stem nut	1	24	103 (10.5, 76)	
	Steering bearing adjustment nut	1	26	—	page 13-28
	Steering bearing adjustment lock nut	1	26	—	page 13-29
	Top bridge pinch bolt	2	8	26 (2.7, 20)	
	Bottom bridge pinch bolt	2	10	49 (5.0, 36)	
	Handlebar upper holder bolt	4	8	23 (2.3, 17)	
	Handlebar lower holder nut	2	8	23 (2.3, 17)	
	Front axle bolt	1	14	59 (6.0, 43)	
	Front axle pinch bolt	4	8	22 (2.2, 16)	
	Front brake disc bolt	6	8	42 (4.3, 31)	NOTE 8
	Fork cap	2	38	22 (2.2, 16)	
	Fork socket bolt	2	8	20 (2.0, 14)	NOTE 2
<b>REAR WHEEL/BRAKE/SUSPENSION:</b>					
	Rear axle nut	1	18	93 (9.5, 69)	NOTE 7
	Driven sprocket nut	5	12	88 (9.0, 65)	NOTE 7
	Shock absorber upper/lower mounting bolt	4	8	26 (2.7, 20)	
	Swingarm pivot nut	1	14	88 (9.0, 65)	NOTE 7
	Swingarm pivot adjusting bolt	1	26	25 (2.5, 18)	
	Swingarm pivot lock nut	1	26	64 (6.5, 47)	
	Drive chain slider screw	2	5	3 (0.3, 2.2)	
	Rear brake stopper arm nut	2	8	20 (2.0, 14)	
	Rear brake arm bolt	1	8	28 (2.9, 21)	
	Rear brake middle rod joint bolt	1	10	34 (3.5, 25)	

FRAME (Cont'd)	ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N-m (kgf-m, lbf-ft)	REMARKS
<b>HYDRAULIC BRAKE:</b>					
	Brake caliper mounting bolt	2	8	30 (3.1, 22)	NOTE 8
	Brake caliper pin bolt	1	8	13 (1.3, 9)	NOTE 2
	Brake caliper bracket pin bolt	1	8	27 (2.8, 20)	NOTE 2
	Pad pin	1	10	18 (1.8, 13)	
	Pad pin plug	1	10	3 (0.3, 2.2)	
	Brake caliper bleed valve	1	8	6 (0.6, 4.3)	
	Brake lever pivot bolt	1	6	1 (0.1, 0.7)	
	pivot nut	1	6	6 (0.6, 4.3)	
	Brake master cylinder holder bolt	2	6	12 (1.2, 9)	
	Brake master cylinder reservoir cap screw	2	4	2 (0.2, 1.4)	
	Front brake light switch screw	1	4	1 (0.1, 0.7)	
	Brake hose oil bolt	2	10	34 (3.5, 25)	
<b>BATTERY/CHARGING SYSTEM:</b>					
	Battery case cover screw	1	6	9 (0.9, 6.5)	
<b>ELECTRIC STARTER:</b>					
	Starter motor cable terminal nut	1	6	10 (1.0, 7)	
<b>LIGHTS/METER/SWITCHES:</b>					
	Side stand switch mounting bolt	1	6	10 (1.0, 7)	
	Thermosensor	1	PT 1/8	8 (0.8, 5.8)	NOTE 1
	Ignition switch mounting bolt	2	6	12 (1.2, 9)	NOTE 9
	Horn mounting bolt	1	8	21 (2.1, 15)	
	Speedometer cover bolt	2	6	10 (1.0, 7)	
<b>OTHERS:</b>					
	Side stand pivot bolt	1	10	10 (1.0, 7)	
	lock nut	1	10	29 (3.0, 22)	
	Tool box cover screw	3	4	2 (0.2, 1.4)	