

# Specifications

## Torque Values

### Engine

Item	Qty	Thread dia (mm)	N-m	Torque kg-m	ft-lb	Remarks
Spark plug	6	12	15	1.6	11	
Carburetor insulator band screw	4	5	5	0.5	3.6	
Intake manifold vacuum tube joint	4	5	2.8	0.28	2	
Water hose clamp screw	2	4	2.0	0.2	1.4	
Coolant temperature sensor	1	PT 1:8	12	1.2	9	NOTE 1
Thermostatic fan motor switch	1	16	18	1.8	13	
Engine coolant temperature sensor	1	12	28	2.8	20	
Reverse switch	1	10	12	1.2	9	
Reverse shifter shaft bolt	1	6	14	1.4	10	NOTE 2
<b>Lubrication</b>						
Oil pressure switch	1	PT 1/8	12	1.2	9	NOTE 1
Engine oil drain bolt	1	14	35	3.5	25	
Engine oil filter cartridge	1	20	10	1.0	7	
Engine oil filter boss	1	20	17	7.7	12	NOTE 2
<b>Cylinder Head</b>						
Cylinder head bolt (9 mm bolt)	16	9	45	4.5	33	NOTE 3
Timing belt driven pulley bolt	2	8	27	2.7	20	
Camshaft holder bolt	16	8	20	2.0	14	
Hydraulic valve adjuster stopper plug	12	14	30	3.0	22	
Cylinder head cover bolt	12	6	12	1.2	9	
Timing belt tensioner bolt	4	8	26	2.6	19	NOTE 2
Cylinder head sealing bolt	6	18	45	4.5	33	NOTE 2
<b>Clutch</b>						
Clutch hose/pipe oil bolt	3	10	35	3.5	25	
Clutch slave cylinder bleed valve	1	8	9	0.9	7	
Clutch bleed pipe bolt	1	6	12	1.2	9	NOTE 2
Clutch center lock nut	1	22	130	13.0	94	
Clutch outer lock nut	1	40	190	19.0	137	NOTE 2/5
<b>Alternator</b>						
Front cover attaching screw	3	4	2	0.2	1.4	NOTE 2
Couple A mounting nut	1	14	58	5.8	42	NOTE 2
Couple B mounting nut	1	14	58	5.8	42	
<b>Rear Engine Case</b>						
Starter one-way clutch socket bolt	6	6	16	1.6	12	NOTE 2
Starter clutch mounting bolt	1	12	75	7.5	54	
Alternator drive gear bolt	6	8	27	2.7	20	NOTE 6
Final drive gear lock nut	1	22	190	19.0	137	NOTE 2/4/5
Output shaft lock nut	1	30	190	19.0	137	NOTE 5
Oil pump driven sprocket bolt	1	6	18	1.8	13	NOTE 2
<b>Gearshift</b>						
Shift arm lock bolt	1	8	25	2.5	18	
Shift drum center bolt	1	8	28	2.8	20	
Shift drum lock arm bolt	1	6	12	1.2	9	NOTE 2
Shift arm return spring pin	1	8	25	2.5	18	
<b>Engine Case/Crankshaft/Transmission</b>						
Engine case bolt (10 mm)	8	10	35	3.5	25	NOTE 6
(8 mm)	4	8	26	2.6	19	
(6 mm)	10	6	12	1.2	9	
Engine case sealing bolt (20 mm)	4	20	45	4.5	33	NOTE 2
(18 mm)	2	18	45	4.5	33	NOTE 2
Mainshaft lock nut	1	22	190	19.0	137	NOTE 4/5
Crankshaft main bearing cap bolt	8	10	70	7.0	51	NOTE 6
Connecting rod cap nut	8	8	32	3.2	23	NOTE 6
Timing belt drive pulley bolt	1	12	75	7.5	54	

#### NOTES:

1. Apply sealant to the threads.
2. Apply locking agent to the threads.
3. Apply molybdenum disulfide oil to the threads and flange surfaces.
4. Left-handed threads.
5. Stake (2 places).
6. Apply oil to the threads and flange surfaces.
7. Torque wrench scale reading using a special tool.
8. Apply grease to the threads and flange surfaces.

## Frame

Item	Qty	Thread dia (mm)	N-m	Torque kg-m	ft-lb	Remarks
<b>Engine Mount:</b>						
Engine mount nut	7	10	40	4.0	29	
Engine bracket bolt	4	8	25	2.5	18	
Subframe bolt (10 mm socket bolt)	4	10	40	4.0	29	
(10 mm flange bolt)	1	10	40	4.0	29	
(8 mm flange bolt)	1	8	25	2.5	18	
Exhaust pipe joint nut	12	6	10	1.0	7	
Side stand pivot	1	10	22	2.2	16	
Center stand pivot	1	8	18	1.8	13	
Chamber protector bolt	6	6	10	1.0	7	
Brake disc bolt	18	8	40	4.0	29	
<b>Handlebar:</b>						
Handlebar upper holder bolt	4	8	25	2.5	18	NOTE 8
Front master cylinder holder bolt	2	6	12	1.2	9	
Clutch master cylinder holder bolt	2	6	12	1.2	9	
<b>Front:</b>						
Axle pinch bolt	4	8	22	2.2	16	
Axle bolt	1	14	90	9.0	65	
Steering stem nut	1	24	100	10.0	72	
Steering stem adjustment nut	1	26	19	1.9	14	See page 12-44
Anti-dive case socket bolt (A & SE)	8	6	8	0.8	6	NOTE 2
(I)	4	6	8	0.8	6	NOTE 2
Fork bottom socket bolt	2	8	20	2.0	14	NOTE 2
Fork bolt	2	37	23	2.3	17	
Fork leg upper pinch bolt	2	8	22	2.2	16	
Fork leg lower pinch bolt	4	10	55	5.5	40	
<b>Rear:</b>						
Axle pinch bolt	1	8	32	3.2	23	
Axle nut	1	18	110	11.0	80	
Rear wheel damper holder bolt	5	6	20	2.0	14	
Left shock absorber mount bolt (Upper)	1	8	23	2.3	17	
(Lower)	1	18	70	7.0	51	
Right shock absorber mount bolt (Upper)	1	8	23	2.3	17	
(Lower)	1	8	23	2.3	17	
Air hose bolt (A & SE)	3	8	6	0.6	4	
Air hose special bolt (with seat) (A & SE)	1	10	15	1.5	11	
Outlet air hose joint (A & SE)	2	8	6	0.6	4	
Air pressure sensor (A & SE)	1	8	10	1.0	7	
Air distributor solenoid valve mounting screw (A & SE)	4	5	3	0.3	2	
Swing arm right pivot bolt	1	30	100	10.0	72	
Swing arm left pivot bolt	1	30	19	1.9	14	
Swing arm left lock nut	1	30	100	10.0	72	NOTE 7
<b>Final Drive:</b>						
Pinion bearing retainer	1	70	150	15.0	108	
Pinion joint nut	1	16	110	11.0	80	
Gear case cover bolt (10 mm)	2	10	63	6.3	46	NOTE 2
(8 mm)	6	8	26	2.6	19	
Final drive gear case mounting nut	4	10	65	6.5	47	
Final drive gear case drain bolt	1	14	20	2.0	14	
Dust guard plate bolt	1	6	10	1.0	7	
Retainer lock washer bolt	1	6	10	1.0	7	
<b>NOTES:</b>						
1. Apply sealant to the threads.			5. Stake (2 places).			
2. Apply locking agent to the threads.			6. Apply oil to the threads and flange surfaces.			
3. Apply molybdenum disulfide oil to the threads and flange surfaces.			7. Torque wrench scale reading using a special tool.			
4. Left-handed threads.			8. Apply grease to the threads and flange surfaces.			

# Specifications

## Torque Values (cont'd)

### Frame

Item	Qty	Thread dia (mm)	N-m	Torque kg-m	ft-lb	Remarks
<b>Hydraulic Brake:</b>						
Caliper bleed valve	3	8	6	0.6	4	
Front caliper bracket bolt (A & SE)	2	8	23	2.3	17	
Anti-dive piston bolt (A & SE)	2	6	12	1.2	9	
(I)	1	6	12	1.2	9	
Left front caliper bracket bolt (I)	2	8	31	3.1	22	
Right front caliper bracket bolt (I)	1	8	23	2.3	17	
Front pad pin plug	4	10	2.5	0.25	1.8	
Front pad pin	4	10	18	1.8	13	
Brake hose bolt	6	10	35	3.5	25	
Rear caliper retainer bolt	1	6	11	1.1	8	
Rear caliper bolt	1	8	23	2.3	17	
Rear caliper pin bolt	1	12	28	2.8	20	
Metal brake line nut	4	10	17	1.7	12	
<b>Others:</b>						
Brake disc bolt	18	8	40	4.0	29	
<b>Miscellaneous:</b>						
Side stand pivot bolt	1	10	10	1.0	7	
Side stand lock nut	1	10	29	2.9	21	
Side stand switch mounting bolt	1	6	10	1.0	7	
Center stand pivot bolt	1	8	18	1.8	13	
Exhaust pipe joint nut	12	6	10	1.0	7	
Tail spoiler mounting bolt (SE)	4	6	6	0.6	4.3	
Passenger footrest bracket bolt (SE)	4	8	26	2.6	19	
Passenger footrest cover bolt (I)	2	6	10	1.0	7	
Flairing inner cover bolt	2	6	10	1.0	7	
Air cleaner tube joint screw	2	5	0.3	0.03	0.2	
Starter motor cable nut	2	-	0.5	0.05	0.4	
Antenna lock nut	1	8	10	1.0	7	

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

### Standard Torque Values

Item	Torque Values N-m (kg-m, ft-lb)	Item	Torque Values N-m (kg-m, ft-lb)
5 mm bolt and nut	5 (0.5, 4)	5 mm screw	4 (0.4, 3)
6 mm bolt and nut	19 (1.0, 7)	6 mm screw and 6 mm flange bolt with 8mm head	9 (0.9, 7)
8 mm bolt and nut	22 (2.2, 16)	6 mm flange bolt and nut	12 (1.2, 9)
10 mm bolt and nut	35 (3.5, 25)	8 mm flange bolt and nut	27 (2.7, 20)
12 mm bolt and nut	55 (5.5, 40)	10 mm flange bolt and nut	40 (4.0, 29)