

# SECTION 10 - AIDS FOR MAINTENANCE

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# Torque Specifications

DRIVE TRAIN COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Engine Mounting Bolt	Frame	6.6	48
Engine Mounting Bracket Cap Screws	Frame	2.6	19
Rear Axle Housing	Swing Arm	10.0	72
Hub Nut	Front Axle Rear Axle	6.5 10	47 72
Wheel Lug Nuts	Hub	5.0	36
Rear Driven Sprocket Mounting Bolt**	Driven Sprocket Hub	5.4	39
Rear Axle Nut**	Axle	18	130
Engine Drive Sprocket Bolt**	Output Shaft	1.0	7.0
EXHAUST COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Exhaust Pipe	Engine	2.3	16.5
Muffler Connection Bolt	Exhaust Pipe	2.3	16.5
Muffler Mounting Bolt	Frame	2.3	16.5
ELECTRICAL COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Neutral Switch Cap Screw	Engine	0.7	5.0
Cooling Fan Thermo-Switch	Radiator	2.0	14.5
Engine Coolant Temperature Switch	Cylinder Head	1.2	9.0
Starter Motor Lead Cable Nut	Starter	0.6	4.0
Starter Motor Through-Bolt	Right-Side Cover	1.2	9.0
STEERING COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Handlebar Clamp Bolt	Steering Head	2.3	16.5
Steering Post Holder Bolt	Frame	2.3	16.5
Steering Post Nut	Steering Post	4.8	35
Upper And Lower Ball Joint Nuts	Steering Knuckle	4.3	31
Tie Rod End Nut	Steering Knuckle	5.8	43
Tie Rod Lock Nut	Tie Rod	2.9	21
BRAKE COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Brake Hose Union Bolt	Master Cylinders/ Calipers	2.3	16.5
Brake Disc Cap Screw** (Front/Rear)	Hub (F)/Flange (R)	2.3	16.5
Brake Air Bleeder Valve	Caliper	0.7	5.0
Brake Caliper Mounting Cap Screw	Steering Knuckle/ Swing Arm	1.0	7.0
Brake Master Cylinder (Front/Rear)	Handlebar/Frame	1.0	7.0
Brake Caliper Holder Pin (Front/Rear)	Brake Caliper	1.8	13
Brake Caliper Slide Pin (Front/Rear)	Brake Caliper	2.3	16.5
Front Brake Pipe Nut	Brake Line/Junction Block	1.6	11.5
Brake Caliper (Rear)	Swing-Arm Housing	2.6	19

BRAKE COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Brake Pad Mounting Pins	Caliper	1.8	13
Rear Master Cylinder Push Rod Lock Nut	Push Rod	1.8	13
Rear Brake Pedal Nut **	Frame	1.1	8.0
Parking Brake Cap Screw	Caliper	2.8	20
Parking Brake Adjuster Lock Nut	Caliper	1.8	13
CHASSIS COMPONENTS			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Footrest Mounting Cap Screw **	Frame	5.5	40
SUSPENSION COMPONENTS (Front)			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
A-Arm Pivot Nut	Frame	6.5	47
Front Shock Absorber Mounting Nuts** (Upper/Lower)	Frame	5.8	43
SUSPENSION COMPONENTS (Rear)			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Swing-Arm Pivot Nut	Frame	8.4	61
Rear Shock Absorber Mounting Nuts (Upper/Lower)	Frame Swing-Arm	5.8 5.5	43 40
Front Arm Nut	Front Arm	7.7	56
Rear Arm Nut	Rear Arm	7.7	56
ENGINE/TRANSMISSION			
Part	Part Bolted To	Torque	
		kg-m	ft-lb
Valve Cover	Cylinder Head	1.4	10
Spark Plug	Cylinder Head	1.1	8.0
Cylinder Head	10 mm 6 mm Cylinder Cylinder	4.65 1.0	33.5 7.0
Oil Galley Plug	Cylinder Head	1.4	10
Cylinder Nuts	Crankcase	1.0	7.0
Camshaft Journal	Cylinder Head	1.0	7.0
Balancer Driven Gear	Balancer Shaft	5.0	36
Primary Drive Gear	Driveshaft	14	101
Magneto Rotor/Flywheel	Crankshaft	12	87
Clutch Sleeve Hub	Primary Drive	7.0	50.5
Crankcase Cap Screws	Crankcase	1.1	8.0
Engine Oil Level Plug	Crankcase	0.6	4.0
Engine Oil Drain	Crankcase	2.1	15
Engine Oil Drain	Oil Tank	1.15	8.5
Shift Arm Stopper	Left Case	1.9	14
Shift Cam Driven Gear	Shifter Shaft	2.4	17
Camshaft Chain Tensioner Adjuster	Cam Chain Tensioner	1.0	7.0
Camshaft Chain Tensioner Mounting	Cylinder Head	1.0	7.0
Camshaft Chain Tension Spring Holder	Cam Chain Tensioner	3.0	22
Oil Hose Union Bolt	Crankcase	2.3	16.5
Timing Plug	Left Case	2.3	16.5
Fuel Valve	Gas Tank	0.4	3.0

\* w/Blue Loctite #243

\*\* w/Red Loctite #271

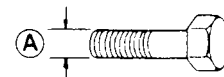
\*\*\* w/Green Loctite #609

# Torque Conversions

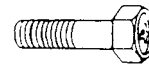
ft-lb	kg-m	ft-lb	kg-m	ft-lb	kg-m	ft-lb	kg-m	ft-lb	kg-m
1	0.1	21	2.9	41	5.7	61	8.4	81	11.2
2	0.3	22	3.0	42	5.8	62	8.6	82	11.3
3	0.4	23	3.2	43	5.8	63	8.7	83	11.5
4	0.6	24	3.3	44	6.1	64	8.9	84	11.6
5	0.7	25	3.5	45	6.2	65	9.0	85	11.8
6	0.8	26	3.6	46	6.4	66	9.1	86	11.9
7	1.0	27	3.7	47	6.5	67	9.3	87	12.0
8	1.1	28	3.9	48	6.6	68	9.4	88	12.2
9	1.2	29	4.0	49	6.8	69	9.5	89	12.3
10	1.4	30	4.2	50	6.9	70	9.7	90	12.5
11	1.5	31	4.3	51	7.1	71	9.8	91	12.6
12	1.7	32	4.4	52	7.2	72	10.0	92	12.8
13	1.8	33	4.6	53	7.3	73	10.1	93	12.9
14	1.9	34	4.7	54	7.5	74	10.2	94	13.0
15	2.1	35	4.8	55	7.6	75	10.4	95	13.1
16	2.2	36	5.0	56	7.7	76	10.5	96	13.3
17	2.4	37	5.1	57	7.9	77	10.7	97	13.4
18	2.5	38	5.3	58	8.0	78	10.8	98	13.6
19	2.6	39	5.4	59	8.2	79	10.9	99	13.7
20	2.8	40	5.5	60	8.3	80	11.1	100	13.8

## Tightening Torque (General Bolts)

Type of Bolt	Thread Diameter A (mm)	Tightening Torque	
		kg-m	ft-lb
(Conventional or 4 Marked Bolt)	5	0.2-0.4	1.5-3.0
	6	0.4-0.7	3.0-5.0
	8	1.0-1.6	7.0-11.5
	10	2.2-3.5	16.0-25.5
(7 Marked Bolt)	5	0.3-0.6	2.0-4.5
	6	0.8-1.2	6.0-8.5
	8	1.8-2.8	13.0-20.0
	10	4.0-6.0	29.0-43.5



Conventional Bolt



4 Marked Bolt



7 Marked Bolt

# NOTES