

TORQUE VALUES

STANDARD TORQUE VALUES

FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)	FASTENER TYPE	TORQUE N·m (kgf·m, lbf·ft)
5 mm bolt and nut	5.2 (0.5, 3.8)	5 mm screw	4.2 (0.4, 3.1)
6 mm bolt (Include SH flange bolt) and nut	10 (1.0, 7)	6 mm screw	9.0 (0.9, 6.6)
		6 mm flange bolt (Include NSHF) and nut	12 (1.2, 9)
8 mm bolt and nut	22 (2.2, 16)	8 mm flange bolt and nut	27 (2.8, 20)
10 mm bolt and nut	34 (3.5, 25)	10 mm flange bolt and nut	39 (4.0, 29)
12 mm bolt and nut	54 (5.5, 40)		

ENGINE & FRAME TORQUE VALUES

FRAME BODY PANELS/EXHAUST SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Seat cowl assembly screw	2	4	0.9 (0.1, 0.7)	
Brake/tail/license light mounting socket bolt	1	6	10 (1.0, 7)	
Reflector mounting nut	1	5	1.7 (0.2, 1.3)	
Turn signal light mounting screw	4	6	2.5 (0.3, 1.8)	
Luggage box lid assembly screw	9	4	0.9 (0.1, 0.7)	
Luggage box lid lock plate mounting screw	2	6	4.0 (0.4, 3.0)	
Luggage box lid mounting socket bolt	3	6	12 (1.2, 9)	
Luggage box lid hinge nut	1	6	12 (1.2, 9)	U-nut
Gearshift arm pinch bolt (NC700X/XA/S/SA)	1	6	12 (1.2, 9)	ALOC bolt; replace with a new one.
Muffler cover socket bolt	1	6	10 (1.0, 7)	
Muffler band bolt	1	8	17.5 (1.8, 13)	
Exhaust pipe joint nut	3	8	28 (2.9, 21)	See page 2-34
Exhaust pipe stud bolt	3	8	–	See page 2-35

GENERAL INFORMATION

MAINTENANCE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Air cleaner housing cover screw	6	5	1.1 (0.1, 0.8)	
Spark plug	2	14	22 (2.2, 16)	
Valve adjusting screw lock nut	8	7	14 (1.4, 10)	Apply engine oil to the threads and seating surface.
Camshaft maintenance cap	1	36	4.0 (0.4, 3.0)	See page 3-12
Timing hole cap	1	14	10 (1.0, 7)	Apply grease to the threads.
Crankshaft hole cap	1	30	15 (1.5, 11)	Apply grease to the threads.
Engine oil drain bolt	1	12	30 (3.1, 22)	
Engine oil filter cartridge	1	20	26 (2.7, 19)	Apply engine oil to the threads.
Oil filter boss	1	20	–	See page 3-14 Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Rear axle nut	1	18	98 (10.0, 72)	U-nut
Drive chain adjuster lock nut	2	8	21 (2.1, 15)	
Drive sprocket bolt	1	10	54 (5.5, 40)	
Driven sprocket nut	5	12	108 (11.0, 80)	U-nut
Master cylinder reservoir cover screw	4	4	1.5 (0.2, 1.1)	
Rear brake reservoir mounting bolt	1	6	10 (1.0, 7)	
Rear master cylinder push rod lock nut	1	8	17 (1.7, 13)	
Parking brake adjuster bolt lock nut (NC700XD/SD)	1	8	17 (1.7, 13)	
Sidestand pivot bolt	1	10	–	See page 3-27 Apply grease to the sliding surface.
Sidestand pivot nut	1	10	39 (4.0, 29)	U-nut
Sidestand switch bolt	1	6	10 (1.0, 7)	ALOC bolt; replace with a new one.

PGM-FI SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
ECT sensor	1	10	12 (1.2, 9)	
Bank angle sensor mounting bolt	2	6	10 (1.0, 7)	
O ₂ sensor	1	12	24.5 (2.5, 18)	

IGNITION SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Timing hole cap	1	14	10 (1.0, 7)	Apply grease to the threads.
Right crankcase cover wire clamp bolt (NC700XD/SD)	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip

ELECTRIC STARTER

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Starter motor terminal nut	1	6	10 (1.0, 7)	

FUEL SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Fuel pump mounting nut	6	6	12 (1.2, 9)	For tightening sequence (page 7-14)
Air cleaner connecting hose band screw	1	4	1.5 (0.2, 1.1)	
Insulator band screw	2	5	–	See page 7-18

GENERAL INFORMATION

COOLING SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Water hose band screw	6	–	–	See page 8-9 See page 8-10 See page 8-14
Fan motor shroud mounting bolt	3	6	8.4 (0.9, 6.2)	
Fan motor mounting screw	3	4	2.7 (0.3, 2.0)	
Cooling fan mounting nut	1	3	1.0 (0.1, 0.7)	Apply locking agent to the threads.

LUBRICATION SYSTEM

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Engine oil filter cartridge	1	20	26 (2.7, 19)	Apply engine oil to the threads.

CYLINDER HEAD/VALVES

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Cylinder head cover socket bolt	3	6	10 (1.0, 7)	
Breather plate mounting bolt	8	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Rocker arm shaft bolt	3	8	29 (3.0, 21)	Apply engine oil to the threads and seating surface.
Camshaft maintenance cap	1	36	4.0 (0.4, 3.0)	See page 10-11 See page 10-28
Cam chain tensioner bolt	2	6	12 (1.2, 9)	
Cam sprocket bolt	1	10	56 (5.7, 41)	Apply engine oil to the threads and seating surface.
Water hose band screw	6	–	–	See page 10-16
Insulator band screw	1	5	–	See page 10-25
Cylinder head special bolt	6	9	44 (4.5, 32)	Apply molybdenum oil solution to the threads and seating surface.

CLUTCH/GEARSHIFT LINKAGE (NC700X/XA/S/SA)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Clutch center lock nut	1	18	128 (13.1, 94)	Apply engine oil to the threads and seating surface. Lock nut; replace with a new one and stake.
Clutch lifter plate bolt	4	6	12 (1.2, 9)	
Primary drive gear mounting bolt	1	10	93 (9.5, 69)	Apply engine oil to the threads and seating surface.
Shift drum stopper arm pivot bolt	1	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Shift drum center socket bolt	1	8	23 (2.3, 17)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Gearshift pedal adjuster lock nut	2	6	10 (1.0, 7)	
Gearshift pedal pivot bolt	1	8	27 (2.8, 20)	

GENERAL INFORMATION

DUAL CLUTCH TRANSMISSION (DCT) (NC700XD/SD)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Solenoid valve stopper plate bolt	1	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Right crankcase cover wire clamp bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Linear solenoid valve body mounting bolt	6	6	–	For tightening sequence (page 12-101)
Shift spindle angle sensor bolt	1	6	12 (1.2, 9)	
Primary drive gear mounting bolt	1	10	93 (9.5, 69)	Apply engine oil to the threads and seating surface.
Reduction gear cover bolt	3	6	14 (1.4, 10)	
TR sensor bolt	1	6	12 (1.2, 9)	
Shift control motor bolt	3	6	14 (1.4, 10)	
Shift drum center bolt	1	8	23 (2.3, 17)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Drum shifter guide plate bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Clutch line EOP sensor	3	10	19.6 (2.0, 14)	
EOT sensor	1	10	14 (1.4, 10)	Apply engine oil to the threads and seating surface.

ALTERNATOR/STARTER CLUTCH

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Flywheel mounting bolt	1	12	157 (16.0, 116)	Left hand thread Apply engine oil to the threads and seating surface.
Starter clutch socket bolt	6	8	30 (3.1, 22)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Alternator stator mounting bolt	4	6	10 (1.0, 7)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Alternator wire clamp bolt	1	6	10 (1.0, 7)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip

GENERAL INFORMATION

CRANKCASE/TRANSMISSION/BALANCER

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Mainshaft bearing set plate bolt	3	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Shift drum bearing set plate bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Balancer shaft bearing set plate bolt	3	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Crankcase main journal bolt (new)	6	9	20 (2.0, 15) + 150°	See page 14-30 Replace with a new one.
Crankcase 10 mm bolt	1	10	39 (4.0, 29)	
Crankcase 8 mm bolt	3	8	24 (2.4, 18)	
Crankcase 8 x 45 mm bolt	1	8	24 (2.4, 18)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Crankcase 6 mm bolt	8	6	12 (1.2, 9)	

CRANKSHAFT/PISTON/CYLINDER

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Crankpin bearing cap bolt	4	6	10 (1.0, 7) + 90°	See page 15-7 See page 15-12 Replace with a new one. Apply engine oil to the threads and seating surface.
Crankcase main journal bolt (retightening)	6	9	20 (2.0, 15) + 120°	See page 15-9 Apply engine oil to the threads and seating surface.

ENGINE REMOVAL/INSTALLATION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Rear lower engine hunger nut	1	12	59 (6.0, 44)	
Front lower engine hunger bolt	2	12	54 (5.5, 40)	
Upper engine hunger bolt	2	12	54 (5.5, 40)	
Rear upper engine hunger nut	1	12	54 (5.5, 40)	
Step holder mounting socket bolt	4	8	32 (3.3, 24)	
Drive sprocket bolt	1	10	54 (5.5, 40)	
Starter motor terminal nut	1	6	10 (1.0, 7)	
Water hose band screw	2	–	–	See page 16-18 See page 16-19 See page 16-24 See page 16-25

GENERAL INFORMATION

FRONT WHEEL/SUSPENSION/STEERING

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Handlebar holder bolt	4	8	22 (2.2, 16)	
Handlebar switch housing screw	4	5	2.5 (0.3, 1.8)	
Front master cylinder holder bolt	2	6	12 (1.2, 9)	
Handlebar weight mounting screw	2	6	10 (1.0, 7)	ALOC screw; replace with a new one.
Front brake disc mounting bolt	5	8	42 (4.3, 31)	ALOC bolt; replace with a new one.
Front axle	1	18	74 (7.5, 55)	Apply grease to the sliding surface.
Front axle pinch bolt	1	8	22 (2.2, 16)	
Fork socket bolt	2	8	20 (2.0, 15)	Apply locking agent to the threads.
Bottom bridge pinch bolt	2	10	39 (4.0, 29)	
Fork cap	2	37	22 (2.2, 16)	
Top bridge pinch bolt	2	8	22 (2.2, 16)	
Front brake caliper mounting bolt	2	8	30 (3.1, 22)	ALOC bolt; replace with a new one.
Steering stem adjusting nut	1	26	23 (2.3, 17)	See page 17-38 Apply engine oil to the threads.
Steering stem adjusting lock nut	1	26	—	See page 17-38
Steering stem nut	1	24	103 (10.5, 76)	See page 17-38
Clutch lever pivot bolt (NC700X/XA/S/SA)	1	6	1.0 (0.1, 0.7)	Apply grease to the sliding surface.
Clutch lever pivot nut (NC700X/XA/S/SA)	1	6	6.0 (0.6, 4.4)	

REAR WHEEL/SUSPENSION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Driven sprocket nut	5	12	108 (11.0, 80)	U-nut
Rear brake disc mounting bolt	5	8	42 (4.3, 31)	ALOC bolt; replace with a new one.
Rear axle nut	1	18	98 (10.0, 72)	U-nut
Shock absorber mounting nut	2	10	44 (4.5, 32)	U-nut
Shock arm nut	1	10	44 (4.5, 32)	U-nut
Shock link nut	2	10	44 (4.5, 32)	U-nut
Drive chain slider mounting screw	2	5	5.9 (0.6, 4.4)	
Swingarm pivot nut	1	18	98 (10.0, 72)	U-nut
Step holder mounting socket bolt	4	8	32 (3.3, 24)	
Gearshift arm pinch bolt (NC700X/XA/S/SA)	1	6	12 (1.2, 9)	ALOC bolt; replace with a new one.

GENERAL INFORMATION

HYDRAULIC BRAKE

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Brake caliper bleed valve (NC700X/S)	2	8	5.4 (0.6, 4.0)	
Brake caliper bleed valve (NC700XA/XD/SA/SD)	3	8	5.4 (0.6, 4.0)	
Master cylinder reservoir cover screw	4	4	1.5 (0.2, 1.1)	
Rear brake reservoir mounting bolt	1	6	10 (1.0, 7)	
Brake pad pin	2	10	17 (1.7, 13)	
Rear brake caliper mounting bolt	1	8	22 (2.2, 16)	ALOC bolt; replace with a new one.
Front master cylinder holder bolt	2	6	12 (1.2, 9)	
Brake hose oil bolt (NC700X/S)	4	10	34 (3.5, 25)	
Brake hose oil bolt (NC700XA/XD/SA/SD)	5	10	34 (3.5, 25)	
Front brake light switch screw	1	4	1.2 (0.1, 0.9)	
Front brake lever pivot bolt	1	6	1.0 (0.1, 0.7)	Apply 0.10 g (0.004 oz) silicone grease to the sliding surface.
Front brake lever pivot nut	1	6	5.9 (0.6, 4.4)	
Rear master cylinder mounting bolt	2	6	12 (1.2, 9)	
Step holder mounting socket bolt	4	8	32 (3.3, 24)	
Rear master cylinder hose joint screw	1	4	1.5 (0.2, 1.1)	Apply locking agent to the threads.
Rear master cylinder push rod lock nut	1	8	17 (1.7, 13)	
Front brake caliper pin	1	8	22 (2.2, 16)	Apply locking agent to the threads. Apply 0.4 g (0.01 oz) silicone grease to the sliding surface.
Front brake caliper bracket pin	1	8	12 (1.2, 9)	Apply locking agent to the threads. Apply 0.4 g (0.01 oz) silicone grease to the sliding surface.
Front brake caliper mounting bolt	2	8	30 (3.1, 22)	ALOC bolt; replace with a new one.
Rear brake caliper pin	1	12	27 (2.8, 20)	Apply 0.4 g (0.01 oz) silicone grease to the sliding surface.
Parking brake caliper mounting bolt (NC700XD/SD)	2	8	31 (3.2, 23)	ALOC bolt; replace with a new one.
Parking brake caliper pin bolt (NC700XD/SD)	1	8	22 (2.2, 16)	Apply locking agent to the threads.
Parking brake pad pin (NC700XD/SD)	2	8	17 (1.7, 13)	ALOC bolt; replace with a new one.
Parking brake adjuster bolt lock nut (NC700XD/SD)	1	8	17 (1.7, 13)	
Parking brake cable mounting nut (NC700XD/SD)	1	10	10 (1.0, 7)	

ANTI-LOCK BRAKE SYSTEM (ABS) (NC700XA/XD/SA/SD)

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Step holder mounting socket bolt	4	8	32 (3.3, 24)	
Brake pipe joint nut	14	10	14 (1.4, 10)	Apply brake fluid to the threads and sliding surface.
PCV mounting bolt	2	6	12 (1.2, 9)	
Delay valve mounting bolt	2	6	12 (1.2, 9)	

GENERAL INFORMATION

LIGHTS/METERS/SWITCHES

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Turn signal light mounting screw	4	6	2.5 (0.3, 1.8)	
Combination meter mounting screw	3	5	1.0 (0.1, 0.7)	
Combination meter back cover mounting screw (NC700S/SA/SD)	4	3	0.3 (0.03, 0.2)	
EOP switch	1	PT 1/8	18 (1.8, 13)	Apply sealant to the threads.
Ignition switch mounting bolt	2	8	25 (2.5, 18)	One way bolt; replace with a new one.
Neutral switch	1	10	12 (1.2, 9)	
Parking brake switch screw (NC700XD/SD)	1	4	1.2 (0.1, 0.9)	

OTHERS

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Cam chain tensioner set plate bolt	1	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width; 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Camshaft cap	1	20	30 (3.1, 22)	
Gearshift spindle return spring pin	1	8	23 (2.3, 17)	
Main step rubber mounting bolt	2	5	5.1 (0.5, 3.8)	ALOC bolt; replace with a new one.
Main step cap bolt	2	6	12 (1.2, 9)	