

Frame tightening torque values

PART	Q.ty	Thread	Pitch	1409	1409 S	NOTES
Accessories and outfit						
PASSENGER FOOTPEGS to rear subframe retainer	4	M8		22.0		
REAR-VIEW MIRRORS to front subframe retainer	4	M5		6.0		
Twin-seater SIDE BODY PANEL BRACKET to tail guard compartment retainer	2	M5		8.0		
Twin-seater SIDE BODY PANELS to side body panel bracket retainer	6	M4		3.0		
Side stand assembly						
MAGNET retainer for side stand sensor	1					
Side stand PIN retainer	1	M6		8.0		
Side stand PIVOT fastener	1	M8		25.0		GREASE B
HINGE PIN retainer for spring on stand	1	M6		5.0		LOCK 5
Chain-sprocket assembly						
SPROCKET to shaft retainer	1	M10		55.0*		GREASE B
COVER and METAL SHEET to engine block retainer	1	M6				
METAL SHEET COVER and SLAVE CYLINDER to engine block retainer	1	M6				
CHAIN SPLASH GUARD to silencer cover retainers	1	M5				
Light assembly						
SUBFRAME to frame retainer	4	M6		10.0		GREASE B
HEADLIGHT to subframe retainer	2	M5		5.0		GREASE B
HEADLIGHT to headlight fairing retainer	2	M5		5.0		
RESONATOR to conveyor retainer	2	AF		0.5		
RESONATOR to headlight retainer	2	AF		0.5		
CONVEYOR to headlight retainer	2	AF		0.5		
Rear TURN INDICATOR retainer	2	M5		3.0		
TAIL LIGHT to tail guard compartment retainer	1	AF		3.0		
Instrument panel assembly						
SILENT BLOCK to instrument panel tightening	3	M5		1.0		
SILENT-BLOCK to front subframe retainer	3	M5		3.0		
Front fork assembly						
SHAFT to bottom yoke tightening	1			40.0		
Steering DOWEL to bottom yoke retainer	2			10.0		LOCK 2
Front wheel shaft CLAMP tightening	2+2			19.0*		GREASE B
Front wheel shaft CLAMP tightening	1+1				19.0*	GREASE B
FORK SLEEVES to bottom yoke tightening	6			8.0*		GREASE B

SPLASH GUARD to bottom yoke retainer	3			5.0		
Steering RING NUT to pin tightening	1			35.0		GREASE D
Steering head CLAMPS on forks tightening	1			22.0		GREASE B
Steering head CLAMP on steering shaft tightening	2			22.0		GREASE B
Steering DAMPER to frame retainer	1			10.0		LOCK 1
Steering DAMPER EYELET to linkage tightening	1				10.0*	LOCK 2
STEERING DAMPER to handlebar retainer	1			10.0		LOCK 1
Electric-electronic system assembly						
Electric system LOWER SUPPORT to upper support retainer	9			1.0		
BATTERY MOUNT to airbox retainer	4			3.0		
Cable EYELETS to battery retainers	2					
Cable EYELETS to solenoid starter retainers	2	M6		4.0		
EYELETS to starter motor retainer	1	M5		3.0		GREASE D
Engine WIRING CABLEWAY to airbox bottom retainer	3	AF		1.0		
Voltage REGULATOR to battery mount retainer	2	M5		5.0		
Exhaust VALVE MOTOR to bracket retainer	3	M5		6.0		
Exup CLOSING CABLE to silencer bracket tightening	1	M6		2.5		
Exup OPENING CABLE to silencer bracket tightening	1	M6		2.5		
BLACK BOX control unit to airbox retainer	1	M4		3.0		
SMART EC control unit to airbox retainer	1	M4			3.0	
Instrument panel/GPS cover PLUG to cover retainer	2	M4		1.5		
IMU to bracket retainer	2	M6		4.0		
SILENT BLOCK for IMU bracket to bracket retainer	3	M5		3.0		
SILENT BLOCK for IMU bracket to subframe retainer	3	M5		3.0		
STOP SWITCH to LH footpeg tightening	1	M8	1	5.0		
Seat LOCK PLATE to subframe lower cover retainer	4	M5		4.0		
Seat LOCK PLATE to subframe lower cover retainer	1	M22	1.5	3.0		
Ignition switch to frame fastener	2	M6		10.0		
Horn to bottom yoke retainer	1	M8		18.0		LOCK 2
STAND SWITCH to swingarm pivot support retainer	2	M4		3.0		LOCK 2
VIS actuator to bracket retainer	3	M5		6.0		
SECONDARY AIR actuator to support retainer	2	M5		4.0		
MAP SENSOR support to airbox retainer	2	M4		3.0		
Front MAP SENSORS to airbox retainer	2	M4		3.0		
AIR TEMPERATURE sensor to duct retainer	2	AF		1.0		
SPEED sensor to fork axle lug retainer	1	M6		10.0		

SPEED sensor to calliper holder plate retainer	1	M6		10.0	
LAMBDA SENSOR to front manifold tightening	1	M12	1.25	25.0	Pre-applied grease
LAMBDA SENSOR to rear manifold tightening	1	M12	1.25	25.0	Pre-applied grease
LH FAN to LH extractor retainer	3	AF		3.0	
RH FAN to RH extractor retainer	3	AF		3.0	
Front brake assembly					
Rear swinging arm assembly					
LH PIN SUPPORT to engine block retainer	2	M8		25.0	GREASE B
LH PIN SUPPORT clamp tightening	1	M8		20.0*	GREASE B
RH PIN SUPPORT to engine block retainer	2	M8		25.0	GREASE B
RH PIN SUPPORT clamp tightening	1	M8		20.0*	GREASE B
LH SWINGARM SHAFT to engine block tightening	1	M20	1.5	100*	GREASE B
RH SWINGARM SHAFT to engine block tightening	1	M20	1.5	100*	GREASE B
Footpeg holder plate PIN to swinging arm tightening	1	M12	1.25	33.0*	LOCK 5
SWINGING ARM HUB tightening	2	M10		25.0*	GREASE B (Seq.: 1-2-1)
CHAIN SLIDING SHOE to swinging arm retainer	4	M6		5.0	
CHAIN TUNNEL to swinging arm retainer	2	M6		5.0	
Rear brake assembly					
REAR BRAKE CALLIPER to calliper holder plate retainer	2	M8		25.0*	GREASE B
ABS brake system assembly					
ABS CONTROL UNIT SUPPORT to engine block retainer	2	M6		10.0	Pre-applied threadlocker
FRONT BRAKE MASTER CYLINDER to handlebar tube retainer	2	M6		10.0	(Seq.: 1-(UP)-2-1)
FLUID RESERVOIR PLATE to master cylinder retainer	1	M6		10.0	
FLUID RESERVOIR to plate retainer	1	M5		5.0	LOCK 1
BRAKE LINES to master cylinders retainer	2	M10	1	23.0	
BRAKE LINES to control unit retainer	4	M10	1	23.0	
BRAKE LINES to callipers retainer	3	M10	1	23.0	
ABS CONTROL UNIT SEALS to support tightening	1	M6		6.8	LOCK 2
ABS CONTROL UNIT SEALS to support tightening	1	M6		6.8	LOCK 2
FRONT BRAKE CALLIPER to fork axle lug retainer	4	M10	1.25	45.0*	GREASE B Pre-tightening 2Nm
REAR BRAKE MASTER CYLINDER to footpeg holder plate retainer	2	M6		8.0	LOCK 2
FLUID RESERVOIR to bracket on cover retainer	1	M6		2.0	
BRAKE LINE BRACKET on front MUDGUARD retainer	1	M6		4.0	
HOSE GUIDE BRACKET to clutch cover retainer	3	M5		6.0	
FRONT BRAKE LINE to frame retainer	1	M5		5.0	LOCTITE 243
ABS HOSE GUIDE to swinging arm retainer	2	M5		5.0	

REAR BRAKE LINE to swinging arm retainer	1	M6		8.0	
Number plate holder assembly					
LOWER NUMBER PLATE HOLDER to upper number plate holder retainer	4	AF		5.0	
NUMBER PLATE HOLDER PLATE to number plate holder retainer	2	M6		5.0	
NUMBER PLATE HOLDER to rear subframe retainer	2	M5		6.0	
CAT'S EYE to number plate holder retainer	2	M4		2.0	
Handlebars - clutch control assembly					
LH handlebar CLAMP tightening	1	M8		22.0	GREASE B
RH handlebar CLAMP tightening	1	M8		22.0	GREASE B
LH HANDLEBAR TUBE to clamp retainer	1	M16	1.5	15.0	
RH HANDLEBAR TUBE to clamp retainer	1	M16	1.5	15.0	
COUNTERWEIGHT to handlebar tube retainer	1+1	M6		8.0	
CLUTCH MASTER CYLINDER to handlebar tube retainer	2	M6		10.0	(Seq.: 1-(UP)-2-1)
FLUID RESERVOIR PLATE to master cylinder retainer	1	M6		10.0	
FLUID RESERVOIR to plate retainer	1	M5		5.0	LOCK 1
BRAKE LINES to master cylinders retainer	2	M10	1	23.0	
BRAKE LINES to callipers retainer	3	M10	1	23.0	
CLUTCH SLAVE CYLINDER to engine block retainer	1	M6		10.0	
SLAVE CYLINDER AND METAL SHEET to engine block retainer	1	M6		10.0	
Rear suspension assembly					
UPPER HALF-SUPPORT to rear head retainer	2	M8		30.0*	GREASE B (On thread only)
HALF-SUPPORTS to engine block retainer	2	M8		35.0*	GREASE B (On thread only)
LOWER HALF-SUPPORT to engine block retainer	2	M8		35.0*	GREASE B (On thread only)
ROCKER ARM to half-support retainer	1	M12	1.75	120.0*	GREASE B (On thread only)
DAMPER to half-support upper retainer	1	M10	1.25	54.0*	GREASE B (On thread and underhead)
DAMPER to rocker arm lower retainer	1	M10	1.25	54.0*	GREASE B (On thread and underhead)
SUSPENSION LINKAGES to rocker arm retainer	1	M12	1.75	120.0*	GREASE B (On thread only)
SUSPENSION LINKAGES to swinging arm retainer	1	M12	1.75	120.0*	GREASE B (On thread only)
Front mudguard assembly					
FRONT MUDGUARD to fork axle lug retainer	4	M6		8.0	Pre-applied threadlocker
Liquid cooling assembly					
RAD DUCT to frame upper retainer	2	M5		6.0	
EXPANSION RESERVOIR to rad duct retainer	3	M5		5.0	

CLAMP tightening on mixer pipe - all pipe	1			2.5	
ALL SLEEVE SUPPORT BRACKET to frame retainer	1	M4		3.0	
CLAMP tightening on all pipe - radiator	1			2.5	
CLAMP tightening on radiator - mixer pipe	1			2.5	
FRONT EXTRACTOR to rad duct upper retainer	2	M5		6.0	
LH EXTRACTOR to front extractor retainer	4	AF		4.0	
RH EXTRACTOR to front extractor retainer	4	AF		4.0	
RH and LH EXTRACTORS to frame retainer	2	M5		6.0	
RAD DUCT to air conveyor retainer	4	M5		6.0	
Footpeg, lever and linkage assembly					
LH FOOTPEG HOLDER PLATE to support retainer	2	M8		25.0*	GREASE B
Gearchange transmission LEVER CLAMP tightening	1	M6		10.0	
DQS to gearchange transmission rod tightening	1	M8		15.0	LOCK 1
DQS ROD to gearchange transmission lever retainer	1	M6		10.0	Pre-applied threadlocker
DQS ROD to gearchange lever retainer	1	M6		10.0	LOCK 1
GEARCHANGE LEVER pivot on LH footpeg holder plate	1	M8		25.0*	GREASE D
HEEL GUARD to LH footpeg holder plate retainer	2	M5		6.0	LOCK 2
RH FOOTPEG HOLDER PLATE to support retainer	2	M8		25.0	GREASE B
GEARCHANGE LEVER pivot on LH footpeg holder plate	1	M8		25.0	GREASE D
Rear brake SPECIAL ADJUSTING SCREW tightening	1	M6		8.0	
Rear BRAKE TRANSMISSION ROD NUT tightening	1	M6		7.5	
Rear brake linkage FORK pivot to brake lever	1	M6		10.0	LOCK 2
HEEL GUARD to RH footpeg holder plate retainer	2	M5		6.0	LOCK 2
Rear mudguard assembly					
REAR MUDGUARD to swinging arm retainer	5	M5		8.0	Pre-applied threadlocker
Front wheel assembly					
VALVE to front wheel tightening	1			9.0	LOCK 2
FRONT BRAKE DISCS to front rim retainer	10	M8		30.0*	
FRONT WHEEL SHAFT tightening	1			63.0*	GREASE B (On thread and underhead)
Rear wheel assembly					
Rear wheel eccentric assembly					GREASE B
SILENT BLOCK to driving flange tightening	6	M10		44.0*	LOCK 2
REAR WHEEL NUT on rear sprocket side tightening	1	M48		230.0*	GREASE B (On thread and underhead)
Rear wheel DRIVING PIN tightening	4	M8		35.0*	LOCK 2
PHONIC WHEEL to rear wheel shaft retainer	4	M5		8.0*	Pre-applied threadlocker

VALVE to rear wheel tightening	1			9.0	LOCK 2
REAR WHEEL NUT on rim side tightening	1	M48		230.0*	GREASE B (On thread and underhead)
Tank assembly					
FRONT BRACKETS to tank retainer	2	M6		6.0	LOCK 1
TANK to subframe FRONT retainer	2	M5		6.0	
TANK to subframe REAR retainer	2	M5		6.0	
DUAL LOCK to tank retainer	4	M4		3.0	
Exhaust assembly					
FRONT BANK guide surfaces on exhaust cross bar	2+2				GREASE B
FRONT PIPE SET to head retainer	1+1	M6		10.0	GREASE B (On thread and underhead)
REAR PIPE SET to head retainer	3+3	M6		10.0	
SILENCER to (LH) half-support retainer	1	M8		22.0	
SILENCER to (RH) bracket retainer	1	M8		22.0	
LH SILENCER COVER to silencer retainer	2	M5		5.0	
RH SILENCER COVER to silencer retainer	2	M5		5.0	
RH and LH SILENCER COVER to silencer retainer	2	M5		5.0	
FRONT MANIFOLD HEAT GUARD to front bank retainer	3	M5		5.0	
STARTER MOTOR HEAT GUARD to front heat guard retainer	1	M5		5.0	
REAR MANIFOLD HEAT GUARD retainer	3	M5		5.0	
PLASTIC HEAT GUARD to subframe retainer	4	M6		8.0	Pre-applied threadlocker
PLASTIC HEAT GUARD retainer	5	M5		5.0	
METAL SHEET HEAT GUARD to central plastic heat guard retainer	2	M5		5.0	
METAL SHEET HEAT GUARD to side plastic heat guard retainer	2	M5		5.0	
GUIDE BRACKET to side plastic heat guard retainer	1	M6		8.0	
WIRING COVER to central plastic heat guard retainer	2	M5		5.0	
TIE BASE PLATE to plastic heat guard retainer	3	AF		2.0	
Seat assembly					
RIDER SEAT to tail guard compartment retainer	2	M5		5.0	
Frame assembly					
FRAME SUPPORT to rear head retainer	3	M8		24.0*	GREASE B (On thread and underhead)
FRAME to engine retainer	4	M12		90.0*	GREASE B (On thread and underhead)
EXTRACTOR SPECIAL SCREW to frame tightening	2	M5		5.0	
EXTRACTOR SPECIAL SCREW to frame tightening	2	M5		5.0	
LH SUBFRAME COVER to subframe retainer	2	M4		3.0	
RH SUBFRAME COVER to subframe retainer	2	M4		3.0	

SUBFRAME to frame retainer	1+1	M8		31.0*	Replace upon every removal/refitting
SUBFRAME to rear head retainer	1+1	M8		35.0*	Replace upon every removal/refitting
SUBFRAME JOINTING CROSS MEMBER to subframe retainer	2	M8		18.0	
Rider SEAT SUPPORT BRACKET to subframe retainer	4	M6		8.0	
TAIL GUARD COMPARTMENT to subframe FRONT retainer	2	M8		22.0*	
TAIL GUARD COMPARTMENT to subframe REAR retainer	1	M8		22.0*	
LATCH PLATE to tail guard compartment retainer	2	M5		5.0	
Passenger STRAP to subframe retainer	2	M8		18.0	
Oil cooler					
OIL COOLER to rad duct retainer	2	M5		6.0	
OIL HOSE to cooler tightening	2	M20	1.5	15.0	
OIL HOSE GUIDE PLATE to sump retainer	2	M6		10.0	LOCTITE 1
Air intake-oil breathing assembly					
UPPER AIRBOX to lower airbox retainer	2	M4		3.0	
FRONT AIR DUCT to frame retainer	4	M5		6.0	
REAR AIR DUCT to frame retainer	4	M5		6.0	
CYCLONE SEPARATOR to frame retainer	1	M4		3.0	
Fuel supply assembly					
GAC to tank retainer	6	M5		5.0	GREASE B
INTAKE MANIFOLD to head retainer	8	M8		10.0*	
THROTTLE BODY to intake manifolds retainer	16	M5		8.0	Pre-applied threadlocker
FIXED FUNNELS to throttle body retainer	8	M5		6.0	Pre-applied threadlocker
FUNNEL SLIDING STUD BOLT to throttle body tightening	4	M12	1.25	5.0	LOCK 5
LINKAGE SUPPORT to throttle body retainer	4	M5		8.0	LOCK 1
INJECTOR CAPS to intake manifold retainer	4	M4		3.0	
FUEL DISTRIBUTOR to airbox bottom retainer	1	AF		1.0	
INJECTOR CAPS to airbox cover retainer	4	M4		3.0	
CANISTER BRACKET to engine block retainer	2	M6		10.0	
Fairing assembly					
HEADLIGHT FAIRING to subframe retainer	2	M5		5.0	
PLEXIGLAS to headlight fairing retainer	6	M4		0.2	
LH HALF-FAIRINGS retainer	3	M5		2.5	
LH HALF-FAIRING to frame extractor retainer	1	M5		5.0	
LH HALF-FAIRING to headlight fairing retainer	2	M5		2.5	
RAD-DUCT to LH half-fairing retainer	1	M5		2.5	

LH HALF-FAIRING to footpeg support rear retainer	1	M5	6.0	
RH HALF-FAIRINGS retainer	3	M5	2.5	
RH HALF-FAIRING to frame extractor retainer	1	M5	5.0	
RH HALF-FAIRING to headlight fairing retainer	2	M5	2.5	
RAD-DUCT to RH half-fairing retainer	1	M5	2.5	
RH HALF-FAIRING to footpeg support rear retainer	1	M5	6.0	
FAIRINGS/DUCT to headlight fairing retainer	1	M5	2.5	
LOWER HALF-FAIRINGS to rad-duct retainer	1	M5	5.0	
LOWER HALF-FAIRINGS retainer	2	M5	2.5	
TANK COVER to upper half-fairings retainer	2+2	M5	2.5	
LH FRAME EXTRACTOR to radiator cowl retainer	1	M5	2.5	
RH FRAME EXTRACTOR to radiator cowl retainer	1	M5	2.5	
INSTRUMENT PANEL COVER to front subframe retainer	4	M5	3.0	
SWITCH COVER to special screw retainer	2	M5	8.0	
PANELS to instrument panel cover retainer	1+1	M5	2.5	
PANELS to switch cover and upper half-fairings retainer	1+1	M5	2.5	
SUBFRAME COVER to subframe retainer	2	M5	6.0	
SUBFRAME COVER to tail guard compartment retainer	2	M5	2.5	
TAIL GUARD to subframe cover retainer	4	M5	2.5	

*dynamic safety-critical point; tightening torque tolerance must be Nm $\pm 5\%$.