

TECHNICAL DATA – ENGINE 2005 AC

ENGINE	50 AC SENIOR ADVENTURE	50 AC MINI ADVENTURE
Design	single cylinder 2-stroke engine, with reed valve inlet	
Displacement	49.0 ccm	
Bore/Stroke	39.5 / 40 mm	
Fuel	Lead-free SUPER FUEL (ROZ 95), mixed with 2-stroke oil	Lead-free SUPER FUEL (ROZ 95)
Lubrication	mixture lubrication	separate lubrication
Oil/gasoline ratio	1 : 40	–
2-stroke oil	high-grade two-stroke oils for mixture lubrication (Motorex Cross Power 2T)	high-grade two-stroke oils for separate lubrication (Motorex Cross Power 2T)
Crankshaft bearing	2 grooved ball bearing	
Connecting rod bearing	needle bearing	
Piston pin bearing	needle bearing	
Piston rings	1 rectangular ring	
Primary drive	straight cut spur gears, 16 : 57 t	
Transmission oil	0.15-0.2 liter gear oil Dexron II (Motorex ATF Super)	
Spark plug	NGK BR 8 ECM	
Electrode gap	0.6 mm	
Carburetor	Dell'Orto PHVA 14 DS	Dell'Orto PHVA 12 XS
Airfilter	wet foam type air filter insert	

BASIC CARBURETOR SETTING		
MODEL	50 SENIOR ADVENTURE	50 MINI ADVENTURE
Type	Dell'Orto PHVA 14 DS	Dell'Orto PHVA 12 XS
Main jet	80 (70)	65 (70)
Needle jet	211 FA	211 FA
Idling jet	45	38
Jet needle	A10	A10
Needle position from top	3.	4.
Air/Mixture reg. screw open	3.5	4
Slide	40	40
Starting jet	60	60

TOLERANCES AND FITTING CLEARANCES		
Crankshaft	run out of crank stud	max. 0.050 mm / 0.00196 in
Crankshaft webs	outer dimension	38 mm \pm 0,05 mm
Conrod bearing	radial play	max. 0.030 mm / 0.00118 in
Piston	fitting clearance	0.055-0.065 mm/0.0021-0.0025 in (AC)/0.045-0.055 mm/0.0017-0.0021 in (LC)
Piston ring	end gap	max. 0.20 mm / 0.00780 in
Clutch shoes	outer diameter	new 82.5 mm / 3.25 in
Clutch drum	diameter	0.10 - 0.20 mm / 0.00394 - 0.00787 in
Clutch springs (AC)	length	min. 19.6 mm

TIGHTENING TORQUES - ENGINE		
Hexagon nut primary gear	M14x1,25	40 Nm (30 ft.lb)
Hexagon nut ignition rotor	M10x1,25	20 Nm (15 ft.lb)
Hexagon nut of clutch hub	M10x1,25	Loctite 243 + 35 Nm (26 ft.lb)
HH bolts clutch shoes	M6	Loctite 243 + 12 Nm (9 ft.lb)
Cylinder head bolts	M7	15 Nm (11 ft.lb)
Cylinder base nuts	M8	18 Nm (13 ft.lb)
Allen head bolt-Stator	M5	Loctite 243 + 8 Nm (6 ft.lb)
Oil plug	M16	5 Nm (4 ft.lb)
Oil drain plug	M10	15 Nm (11 ft.lb)
Other bolts engine	M5	7 Nm (5 ft.lb)
	M6	10 Nm (7 ft.lb)
	M8	30 Nm (22 ft.lb)

TIGHTENING TORQUES - CHASSIS		
Hexagon nuts front/rear axle	M12x1	40 Nm (30 ft.lb)
Hexagon nut swing arm bolt	M12	40 Nm (30 ft.lb)
HH bolts of top triple clamp	M8	20 Nm (15 ft.lb)
HH bolts of bottom triple clamp	M8	15 Nm (11 ft.lb)
HH bolts handlebar clamp	M8	20 Nm (15 ft.lb)
Shock absorber top/bottom	M10	45 Nm (34 ft.lb)
Allen head bolt - Handlebar support	M10	Loctite 243 + 40 Nm (30 ft.lb)
Front brake caliper	M8	Loctite 243 + 20 Nm (15 ft.lb)
Front brake disk	M6	Loctite 243 + 10 Nm (7 ft.lb)
Spoke nipple	M4	3 Nm (4 ft.lb)
Other bolts chassis	M5	6 Nm (8 ft.lb)
	M6	10 Nm (7 ft.lb)
	M8	25 Nm (33 ft.lb)
	M10	45 Nm (34 ft.lb)