TECHNICAL DATA – ENGINE S5-E, S5-GS 2000

Engine	S5-E (50 Mini Adventure)	S5-GS (50 SX Junior / 50 JR Adventure 50 SX Senior / 50 SR Adventure)	
Design	air cooled single cylinder 2-stroke engine	air cooled single cylinder 2-stroke engine with reed valve inlet	
Displacement	49.8 ccm		
Bore/Stroke	39 / 41.7 mm		
Compression ratio	9 : 1		
Fuel	SUPER fuel, research octane no 95, mixed with 2-stroke oil		
Oil/gasoline ratio	1 : 40 when using high grade 2-stroke oil (Shell Advance Racing X) When in doupt, please contact your importer or use 1 : 33 mix ratio to be on the safe side		
Lubrication	mixture lubrication		
Crankshaft bearing	2 grooved ball bearing		
Connecting rod bearing	needle bearing		
Piston pin bearing	needle bearing		
Piston rings	1 L-ring, 1 rectangular ring	2 rectangular ring	
Primary drive	helical gears, 15 : 52 t, cast	helical gears, 15 : 52 t, milled	
Transmission oil	0.25 I gear oil, 20W30 (Shell Advance VSX4)		
Spark plug	Bosch W 4 AC		
Electrode gap	0.6 mm		
Carburetor	DellOrto SHA 1412	50 SX Junior: Mikuni VM 18-144 50 JR Adventure: Mikuni VM16-519 50 SX Senior / 50 SR Adventure: Mikuni VM 20-364	
Air filter	wet foam type air filter insert		

BASIC CARBURETOR SETTING					
Туре	Dell'Orto SHA 1412	Mikuni VM 16-519	Mikuni VM 18-144	Mikuni VM 20-364	
Main jet	60	70	70	110	
Needle jet		D-8	145	N-6	
Idling jet		25	30	30	
Jet needle		3DJ3-3	4F18-4	4J13-3	
Needle position from top		3rd	4th	3rd	
Air reg. screw open		2,0 turn	1.5 turn	1.5 turn	
Throttle valve		2,5	1	2	

TIGHTENING TORQUES - ENGINE					
Hexagon nut primary gear	M12x1,25	40 Nm (30 ft.lb)			
Hexagon nut flywheel	M8	35 Nm (25 ft.lb)			
Nut for clutch hub	M10	Loctite 242 + 35 Nm (25 ft.lb)			
Nuts cylinder head	M6	12 Nm (8 ft.lb)			
Nuts exhaust pipe	M6	12 Nm (8 ft.lb)			
Oil drain plug	M8	15 Nm (10 ft.lb)			
Other screws engine	M5	7 Nm (5 ft.lb)			
	M6	10 Nm (7 ft.lb)			