

TECHNICAL DATA – ENGINE S5-E, S5-T, S5-GS '97

Engine	S5-E (Adventure)	S5-T (Pro Junior)	S5-GS (Pro Senior)
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 : 50 when using high grade 2-stroke oil, When in doubt, please contact your importer or use 1 : 40 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	
Rear wheel ratio	11 : 44 t		
Transmission oil	0.25 l SAE 80		
Spark plug	Bosch W 4 AC	Bosch W 7 AC	Bosch W 4 AC
Electrode gap	0.6 mm		
Carburetor	Dellorto SHA 14	Dellorto SHA 14 (EU) / Mikuni VM 18 (USA)	
Air filter	wet foam type air filter insert		

TOLERANCES AND FITTING CLEARANCES				
Engine		S5-E	S5-T	S5-GS
Crankshaft	run out of crank stud	max. 0.050 mm	max. 0.050 mm	max. 0.050 mm
Conrod bearing	radial play	max. 0.020 mm	max. 0.020 mm	max. 0.020 mm
	axial play	max. 0.045 mm	max. 0.045 mm	max. 0.045 mm
Cylinder	diameter bore	max. 39.026 mm	max. 39.024 mm	max. 39.024 mm
Piston	fitting clearance	max. 0.070 mm	max. 0.028 mm	max. 0.028 mm
Piston ring	piston ring end gap	max. 0.55 mm	max. 0.55 mm	max. 0.55 mm

TIGHTENING TORQUES - ENGINE		
Hexagon nut primary gear	M 12x1,25	40 Nm (30 ft.lb)
Hexagon nut flywheel	M 8	35 Nm (25 ft.lb)
Nut for clutch hub	M 10 Loctite 242 +	35 Nm (25 ft.lb)
Nuts cylinder head	M 6	10 Nm (7 ft.lb)
Nuts exhaust pipe	M 6	10 Nm (7 ft.lb)
Oil drain plug	M 8	15 Nm (11 ft.lb)
Other screws engine	M 5	6 Nm (5 ft.lb)
	M 6	10 Nm (7 ft.lb)

BASIC CARBURETOR SETTING		
Type	Dell'Orto SHA 1412	Mikuni VM 18
Main jet	58	70
Needle jet	--	145
Idling jet	--	30
Jet needle	--	4F18-4
Needle position from top	--	4
Mixt. reg. screw open	--	1,5 turn
Throttle valve	--	1