

TECHNICAL DATA – ENGINE S5-E, S5-GS 2001

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 doubt, 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 l gear oil, Shell Advance EP 80	
Spark plug	Bosch W 4 AC	
Electrode gap	0.6 mm	
Carburetor	Dell'Orto SHA 1412	50 SX Junior: Mikuni VM 18-144 50 JR Adventure: Mikuni VM14-117 50 SX Senior / 50 SR Adventure: Mikuni VM 18-144
Air filter	wet foam type air filter insert	

BASIC CARBURETOR SETTING

Type	Dell'Orto SHA 1412	Mikuni VM 14-117	Mikuni VM 18-144
Main jet	60	90	70
Needle jet	—	D-8	145
Idling jet	—	25	30
Jet needle	—	3DJ3-3	4F18-4
Needle position from top	—	3rd	4th
Air/Mixture reg. screw open	—	2,0 turn	1.5 turn
Throttle valve	—	2,5	1

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 243 + 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)