

## TECHNICAL DATA – ENGINE 50 AC 2003

Engine	50 AC (mixture lubrication)	50 AC (separate lubrication)
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 (Shell Advance Racing X)	high-grade two-stroke oils for separate lubrication (Shell Advance Ultra 2)
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 (Shell Donax TA)	
Spark plug	NGK BR 8 ECM	
Electrode gap	0.6 mm	
Carburetor	DellOrto PHVA 14 DS	DellOrto PHVA 12 XS
Air filter	wet foam type air filter insert	

### BASIC CARBURETOR SETTING

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

### TIGHTENING TORQUES - ENGINE

Primary gear nut	M14x1,25	40 Nm
Hexagon nut ignition rotor	M10x1,25	20 Nm
Nut of clutch hub	M10x1,25	Loctite 243 + 30 Nm
Cylinder head screws	M7	15 Nm
Cylinder base nuts	M8	18 Nm
Allen head bolt -Stator	M5x25	Loctite 243 + 8 Nm
Oil plug	M16	5 Nm
Oil drain plug	M10	15 Nm
Other engine bolts	M5	7 Nm
	M6	10 Nm
	M8	30 Nm