

## Deceleration Device

Item		Standard
Engine oil	Replacement	0.15L
	Disassembly	0.15L
Recommended deceleration engine oil		SAE15W-40/SF

## Starting motor

Item		Standard	Limit
Starting motor	Brush length	10mm	7mm

## Crankshaft 、 Piston、 Cylinder

Item			Standard (mm)		Limit (mm)	
			VR150			
Crankshaft	Shaft big end side	Axial clearance	0.16-0.304		0.5	
		Radial clearance	0.005-0.017		0.05	
	Play of crankshaft		--		0.10	
Piston	Piston installing direction		The seal “in” toward inlet side		--	
	Outer diameter of Piston		57.97-57.99		57.92	
	Piston pin inner diameter		15.002-15.008		15.04	
	Piston pin outer diameter		14.994-15.000		14.98	
	Shaft small end side inner diameter		15.016-15.034		15.05	
	Clearance of cylinder& piston		0.02-0.04		0.08	
	Clearance of piston & pin		0.002-0.014		0.04	
	Clearance of pin & shaft		0.016-0.040		0.06	
	Clearance between Piston ring & groove	Piston ring (一)	0.02-0.044		0.07	
		Piston ring (二)	0.02-0.044		0.07	
	Piston ring end gap	Piston ring (一)	0.15-0.30		0.45	
		Piston ring (二)	0.10-0.25		0.45	
		Oil ring	0.2-0.7		0.9	
Installing direction, piston ring		Upper seal		--		
Cylinder	Inner diameter		58-58.019		58.049	
	Upper distortion		--		0.05	
	Roundness		--		--	
	Column		--		0.05	