

5. CYLINDER HEAD/CYLINDER/PISTON

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SERVICE INFORMATION

GENERAL

- All cylinder head, cylinder and piston maintenance and inspection can be done with the engine installed.
- Before disassembling the engine, clean the outside of the frame and engine thoroughly to keep dirt and dust out of the cylinder and crankcase.
- Remove all traces of gasket material from the mating surfaces of the cylinder head, cylinder and crankcase.
- Clean all parts before inspecting.
- Before assembling, apply clean 2-stroke engine oil to all sliding surfaces.
- Under racing conditions, the piston and rings should be replaced after 30 hours of running. The piston pin and small end connecting rod bearing should be replaced after 30 hours of running.
- Optional oversize pistons and piston rings are available. Refer to page 1-15.

SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Cylinder head warpage			0.05 (0.002)	0.07 (0.003)
Cylinder	I.D.	A	66.030–66.040 (2.59961–2.60000)	66.07 (2.6012)
		B	66.020–66.029 (2.59921–2.59957)	66.06 (2.6008)
	Taper		—	0.03 (0.001)
	Out of round		—	0.03 (0.001)
	Warpage		—	0.05 (0.002)
Piston, piston pin, piston ring	Piston O.D. (page 5-6)	A	65.960–65.970 (2.59685–2.59724)	65.90 (2.5945)
		B	65.950–65.959 (2.59646–2.59681)	65.89 (2.5941)
	Piston pin bore		18.007–18.013 (0.7089–0.7092)	18.03 (0.710)
	Piston pin O.D.		17.994–18.000 (0.7084–0.7087)	17.98 (0.708)
	Piston pin-to-pin bore clearance		0.007–0.019 (0.0003–0.0007)	0.03 (0.001)
	Piston ring end gap		0.2–0.4 (0.01–0.02)	0.5 (0.02)
Cylinder-to-piston clearance			0.060–0.080 (0.0024–0.0031)	0.14 (0.006)
Connecting rod small end I.D.			21.997–22.009 (0.8660–0.8665)	22.022 (0.8670)

TORQUE VALUES

Cylinder head nut	24–29 N·m (2.4–2.9 kg-m, 17–21 ft-lb)
Cylinder base nut	38–48 N·m (3.8–4.8 kg-m, 27–35 ft-lb)
Engine mounting bolt (10 mm)	50–60 N·m (5.0–6.0 kg-m, 36–43 ft-lb)
Engine hanger pipe bolt (8 mm)	25–35 N·m (2.5–3.5 kg-m, 18–25 ft-lb)
Coolant drain bolt	8–12 N·m (0.8–1.2 kg-m, 6–9 ft-lb)
Spark plug	15–20 N·m (1.5–2.0 kg-m, 11–14 ft-lb)