

6. CYLINDER HEAD/VALVES

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SERVICE INFORMATION

GENERAL

- This section covers the cylinder head, valves, camshaft, rocker arm and cam chain tensioner lifter services. These components can be serviced with the engine in the frame.
- Camshaft lubrication oil is fed to the cylinder head through an oil pipe. Be sure this pipe is not clogged before installation.
- Before assembly, apply molybdenum disulfide grease to the camshaft bearings to provide initial lubrication.
- Pour clean engine oil into the oil pockets in the cylinder head during assembly to lubricate the camshaft lobes.

SPECIFICATIONS

ITEM			STANDARD	SERVICE LIMIT
Cylinder compression			12.5 ± 1.0 kg/cm ² (178 ± 14 psi)	—
Camshaft	Cam height	IN	36.206 mm (1.4254 in)	36.026 mm (1.4183 in)
		EX	36.077 mm (1.4204 in)	35.897 mm (1.4133 in)
	Journal O.D.	R	23.954–23.975 mm (0.9431–0.9439 in)	23.90 mm (0.941 in)
		C	23.934–23.955 mm (0.9420–0.9431 in)	23.90 mm (0.941 in)
		L	19.954–19.975 mm (0.7856–0.7864 in)	19.90 mm (0.784 in)
	Bearing I.D.	R, C	24.000–24.021 mm (0.9449–0.9457 in)	24.05 mm (0.947 in)
		L	20.000–20.021 mm (0.7874–0.7882 in)	20.05 mm (0.789 in)
Oil clearance			0.025–0.067 mm (0.0010–0.0026 in)	0.10 mm (0.004 in)
Cylinder head warpage			—	0.10 mm (0.004 in)
Rocker arm	I.D.		12.000–12.018 mm (0.4724–0.4730 in)	12.05 mm (0.474 in)
	Shaft O.D.		11.966–11.984 mm (0.4711–0.4718 in)	11.92 mm (0.469 in)
	Arm-to-shaft clearance		0.016–0.052 mm (0.0006–0.0020 in)	0.08 mm (0.003 in)
Valve spring	Free length	Inner	38.17 mm (1.503 in)	35.2 mm (1.39 in)
		Outer	41.04 mm (1.616 in)	38.0 mm (1.50 in)
	Preload	Inner	7.0 ± 0.7 kg/31.6 mm (15.4 ± 1.5 lb/1.24 in)	—
		Outer	17.0 ± 1.7 kg/35.1 mm (37.5 ± 3.7 lb/1.38 in)	—
Valve, valve guide	Stem O.D.	IN	5.475–5.490 mm (0.2156–0.2161 in)	5.45 mm (0.215 in)
		EX	5.455–5.470 mm (0.2148–0.2154 in)	5.43 mm (0.214 in)
	Guide I.D.	IN	5.500–5.512 mm (0.2165–0.2170 in)	5.525 mm (0.2175 in)
		EX	5.500–5.512 mm (0.2165–0.2170 in)	5.525 mm (0.2175 in)
	Stem-to-guide clearance	IN	0.010–0.037 mm (0.0004–0.0015 in)	0.12 mm (0.005 in)
		EX	0.030–0.057 mm (0.0012–0.0022 in)	0.14 mm (0.006 in)
Valve seat width			1.2 mm (0.05 in)	1.5 mm (0.06 in)