

SERVICE INFORMATION

GENERAL

- This section covers service of the cylinder head, valves and camshaft.
- The camshaft services can be done with the engine installed in the frame. The cylinder head service requires engine removal.
- When disassembling, mark and store the disassembled parts to ensure that they are reinstalled in their original locations.
- Clean all disassembled parts with cleaning solvent and dry them by blowing them off with compressed air before inspection.
- Camshaft lubricating oil is fed through oil passages in the cylinder head. Clean the oil passages before assembling cylinder head.
- Be careful not to damage the mating surfaces when removing the cylinder head cover and cylinder head.

SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD		SERVICE LIMIT
Cylinder compression		1,226 kPa (12.5 kgf/cm ² , 178psi) at 350 rpm		
Valve clearance		IN	0.20 ± 0.03 (0.008 ± 0.001)	–
		EX	0.28 ± 0.03 (0.011 ± 0.001)	–
Camshaft	Cam lobe height	IN	36.36 – 36.60 (1.431 – 1.441)	36.34 (1.431)
		EX	35.34 – 35.58 (1.391 – 1.401)	35.32 (1.391)
	Runout		–	0.05 (0.002)
Oil clearance		0.020 – 0.062 (0.0008 – 0.0024)		0.10 (0.004)
Valve lifter	Valve lifter O.D.	25.978 – 25.993 (1.0228 – 1.0233)		25.97 (1.022)
	Valve lifter bore I.D.	26.010 – 26.026 (1.0240 – 1.0246)		26.04 (1.025)
Valve, valve guide	Valve stem O.D.	IN	3.975 – 3.990 (0.1565 – 0.1571)	3.965 (0.1561)
		EX	3.965 – 3.980 (0.1561 – 0.1567)	3.955 (0.1557)
	Valve guide I.D.	IN/EX	4.000 – 4.012 (0.1575 – 0.1580)	4.04 (0.159)
	Stem-to-guide clearance	IN	0.010 – 0.037 (0.0004 – 0.0015)	0.075 (0.0030)
		EX	0.020 – 0.047 (0.0008 – 0.0019)	0.085 (0.0033)
	Valve guide projection above cylinder head	IN	17.1 – 17.4 (0.67 – 0.69)	–
		EX	13.3 – 13.6 (0.52 – 0.54)	–
	Valve seat width	IN	0.90 – 1.10 (0.035 – 0.043)	1.5 (0.06)
EX		0.90 – 1.10 (0.035 – 0.043)	1.5 (0.06)	
Valve spring free length	IN	Inner	36.17 (1.424)	35.1 (1.38)
		Outer	39.76 (1.565)	38.8 (1.53)
	EX	Inner	35.34 (1.391)	34.4 (1.35)
		Outer	39.05 (1.537)	38.1 (1.50)
Cylinder head warpage		–		0.10 (0.004)

TORQUE VALUES

Cylinder head mounting bolt	47 N·m (4.8 kgf·m, 35 lbf·ft)	Apply molybdenum disulfide oil to the threads and seating surface
Camshaft holder bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply oil to the threads
Cylinder head cover bolt	9.8 N·m (1.0 kgf·m, 7 lbf·ft)	
Breather plate bolt	13 N·m (1.3 kgf·m, 9 lbf·ft)	Apply a locking agent to the threads
PAIR reed valve cover bolt	13 N·m (1.3 kgf·m, 9 lbf·ft)	CT bolt
Cam sprocket bolt	20 N·m (2.0 kgf·m, 14 lbf·ft)	CT bolt
Cam pulse generator rotor bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	Apply a locking agent to the threads
Cam chain tensioner lifter mounting socket bolt	9.8 N·m (1.0 kgf·m, 7 lbf·ft)	Apply a locking agent to the threads
Cam chain tensioner A pivot bolt	9.8 N·m (1.0 kgf·m, 7 lbf·ft)	Apply a locking agent to the threads
Cam chain tensioner B pivot bolt	20 N·m (2.0 kgf·m, 14 lbf·ft)	Apply a locking agent to the threads
Cam chain guide A bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Spark plug	16 N·m (1.6 kgf·m, 12 lbf·ft)	