

## GENERAL INFORMATION

### CYLINDER HEAD/VALVES SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD		SERVICE LIMIT
Cylinder compression at 300 min <sup>-1</sup> (rpm)		1,275 kPa (13.0 kgf/cm <sup>2</sup> , 185 psi)		–
Valve clearance		IN	0.08 ± 0.02 (0.003 ± 0.001)	–
		EX	0.12 ± 0.02 (0.005 ± 0.001)	–
Valve, valve guide	Valve stem O.D.	IN	4.975 – 4.990 (0.1959 – 0.1965)	4.92 (0.194)
		EX	4.955 – 4.970 (0.1951 – 0.1957)	4.90 (0.193)
	Valve guide I.D.	IN/EX	5.000 – 5.012 (0.1969 – 0.1973)	5.04 (0.198)
	Stem-to-guide clearance	IN	0.010 – 0.037 (0.0004 – 0.0015)	0.07 (0.003)
		EX	0.030 – 0.057 (0.0012 – 0.0022)	0.09 (0.004)
Valve seat width	IN/EX	0.9 – 1.1 (0.035 – 0.043)	1.5 (0.06)	
Valve spring	Free length	INNER	38.76 (1.526)	37.89 (1.492)
		OUTER	35.95 (1.415)	35.14 (1.383)
Rocker arm	Arm I.D.	IN/EX	10.000 – 10.015 (0.3937 – 0.3943)	10.10 (0.398)
	Shaft O.D.	IN/EX	9.972 – 9.987 (0.3926 – 0.3932)	9.91 (0.390)
	Arm-to-shaft clearance	IN/EX	0.013 – 0.043 (0.0005 – 0.0017)	0.10 (0.004)
Camshaft	Cam lobe height	IN	32.9935 – 33.2335 (1.29895 – 1.30840)	32.96 (1.298)
		EX	32.8804 – 33.1204 (1.29450 – 1.30395)	32.85 (1.293)
Cylinder head warpage		–		0.05 (0.002)

### CYLINDER/PISTON SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD		SERVICE LIMIT	
Cylinder	I.D.	52.400 – 52.410 (2.0630 – 2.0634)		52.50 (2.067)	
	Out-of-round	–		0.10 (0.004)	
	Taper	–		0.10 (0.004)	
	Warpage	–		0.10 (0.004)	
Piston, piston pin, piston ring	Piston O.D. at 10 mm (0.4 in) from bottom		52.370 – 52.390 (2.0618 – 2.0626)		52.3 (2.059)
	Piston pin hole I.D.		13.002 – 13.008 (0.5119 – 0.5121)		13.04 (0.513)
	Piston pin O.D.		12.994 – 13.000 (0.5116 – 0.5118)		12.96 (0.510)
	Piston-to-piston pin clearance		0.002 – 0.014 (0.0001 – 0.0006)		0.02 (0.001)
	Piston ring end gap	Top	0.10 – 0.25 (0.004 – 0.010)		0.40 (0.016)
		Second	0.10 – 0.25 (0.004 – 0.010)		0.40 (0.016)
		Oil (side rail)	0.20 – 0.70 (0.008 – 0.028)		0.85 (0.033)
	Piston ring-to-ring groove clearance	Top	0.030 – 0.065 (0.0012 – 0.0026)		0.10 (0.004)
Second		0.030 – 0.065 (0.0012 – 0.0026)		0.10 (0.004)	
Cylinder-to-piston clearance		0.010 – 0.040 (0.0004 – 0.0016)		0.10 (0.004)	
Connecting rod small end I.D.		13.016 – 13.034 (0.5124 – 0.5131)		13.04 (0.513)	
Connecting rod-to-piston pin clearance		0.016 – 0.034 (0.0006 – 0.0013)		0.10 (0.004)	

### CLUTCH/GEARSHIFT LINKAGE SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD		SERVICE LIMIT	
Clutch lever free play		10 – 20 (0.4 – 0.8)		–	
Clutch	Spring free length		40.5 (1.59)		39.6 (1.56)
	Disc thickness	Disc A	2.80 – 2.90 (0.110 – 0.114)		2.6 (0.10)
		Disc B	2.80 – 2.90 (0.110 – 0.114)		2.6 (0.10)
	Plate warpage		–		0.20 (0.008)
Clutch outer I.D.		23.000 – 23.021 (0.9055 – 0.9063)		23.08 (0.909)	
Clutch outer guide	O.D.	22.959 – 22.980 (0.9039 – 0.9047)		22.93 (0.903)	
	I.D.	16.991 – 17.009 (0.6689 – 0.6696)		17.04 (0.671)	
Mainshaft O.D. at clutch outer guide		16.966 – 16.984 (0.6680 – 0.6687)		16.95 (0.667)	
Kickstarter idle gear I.D.		20.500 – 20.521 (0.8071 – 0.8079)		20.58 (0.810)	
Kickstarter idle gear bushing	O.D.	20.459 – 20.480 (0.8055 – 0.8063)		20.43 (0.804)	
	I.D.	17.000 – 17.018 (0.6693 – 0.6700)		17.04 (0.671)	
Countershaft O.D. at kickstarter idle gear		16.966 – 16.984 (0.6680 – 0.6687)		16.94 (0.667)	
Kickstarter drive gear I.D.		16.016 – 16.034 (0.6305 – 0.6313)		16.06 (0.632)	
Kickstarter spindle O.D. at kickstarter drive gear		15.966 – 15.984 (0.6286 – 0.6293)		15.94 (0.628)	