

Standards and Service Limits

Cylinder Head/Valve Train — Section 6

	MEASUREMENT			STANDARD (NEW)	SERVICE LIMIT
Compression	Check the engine with the starter cranking kPa (kgf/cm ² , psi)	Minimum Maximum variation		980 (10.0, 142) 200 (2.0, 28)	
Cylinder head	Warpage Height			150.95 – 151.05 (5.943 – 5.947)	0.05 (0.002)
Camshaft	End play			0.05 – 0.15 (0.002 – 0.006)	0.5 (0.02)
	Camshaft-to-holder oil clearance			0.050 – 0.089 (0.002 – 0.004)	0.15 (0.006)
	Total runout			0.03 (0.0012) max.	0.04 (0.0016)
	Cam lobe height	M/T IN	Primary	37.086 (1.4601)	
			Mid	38.037 (1.4975)	
		EX	Secondary	37.326 (1.4695)	
			Primary	36.559 (1.4393)	
		A/T IN	Mid	37.398 (1.4724)	
			Secondary	36.741 (1.4465)	
		EX	Primary	37.266 (1.4672)	
			Mid	37.655 (1.4825)	
		EX	Secondary	37.504 (1.4765)	
			Primary	36.559 (1.4393)	
			Mid	37.398 (1.4724)	
			Secondary	36.741 (1.4465)	
Valve	Valve clearance	IN		0.15 – 0.19 (0.006 – 0.007)*3	
		EX		0.17 – 0.21 (0.007 – 0.008)*3	
	Valve stem O.D.	IN		5.475 – 5.485 (0.2156 – 0.2159)	5.445 (0.2144)
		EX		5.45 – 5.46 (0.2146 – 0.2150)	5.42 (0.2134)
	Stem-to-guide clearance	IN		0.025 – 0.055 (0.001 – 0.002)	0.08 (0.003)
		EX		0.05 – 0.08 (0.002 – 0.003)	0.11 (0.004)
Valve seat	Width	IN		0.80 – 1.00 (0.031 – 0.039)	1.5 (0.059)
		EX		1.25 – 1.55 (0.049 – 0.061)	2.0 (0.079)
	Stem installed height	IN		41.55 – 42.35 (1.6358 – 1.6673)	42.435 (1.6707)
		EX		41.55 – 42.35 (1.6358 – 1.6673)	42.435 (1.6707)
Valve spring	Free length	M/T IN	Outer	43.23 (1.7020)*1	
			Inner	43.24 (1.7024)*2	
				39.79 (1.5665)*1	
				39.82 (1.5677)*2	
		EX		46.00 (1.8110)*1	
				45.98 (1.8102)*2	
		A/T IN		44.59 (1.7555)*1	
				44.60 (1.7559)*2	
		EX		47.40 (1.8661)*1	
				47.43 (1.8673)*2	
Valve guide	I.D.		IN and EX	5.51 – 5.53 (0.2169 – 0.2177)	5.53 (0.218)
	Installed height		IN and EX	13.75 – 14.25 (0.541 – 0.561)	
Rocker arm	Arm-to-shaft clearance	Primary and Secondary	IN and EX	0.025 – 0.052 (0.0010 – 0.0020)	0.08 (0.003)
		Mid	IN and EX	0.024 – 0.053 (0.0009 – 0.0021)	0.08 (0.003)

M/T: Manual Transmission A/T: Automatic Transmission

*1: NIHON HATSUJO made, *2: CHUO HATSUJO made.

*3: Measured between the rocker arm and camshaft.