

Engine Block — Section 7

	MEASUREMENT		STANDARD (NEW)	SERVICE LIMIT
Cylinder block	Warpage of deck surface		0.07 (0.003) max.	0.10 (0.004)
	Bore diameter	A or I B or II	90.010-90.020 (3.5437-3.5441) 90.000-90.010 (3.5433-3.5437)	90.07 (3.546) 90.07 (3.546)
	Bore taper		—	0.05 (0.002)
	Reboring limit		--	0.5 (0.02)
Piston	Skirt O.D. (at 17 mm (0.67 in) from bottom of skirt)	NO LETTER (A)	89.986-90.004 (3.5427-3.5435)	89.97 (3.5421)
		B	89.976-89.994 (3.5424-3.5431)	89.96 (3.5417)
	Clearance in cylinder		—	0.0825 (0.0032)
	Groove width (for ring)	Top Second Oil	1.22-1.23 (0.0480-0.0484) 1.22-1.23 (0.0480-0.0484) 2.805-2.820 (0.1104-0.1110)	1.25 (0.0492) 1.25 (0.0492) 2.84 (0.1118)
Connecting rod	End play installed on crankshaft		0.15-0.30 (0.006-0.012)	0.40 (0.016)
Piston ring	Ring-to-groove clearance	Top	0.030-0.055 (0.001-0.002)	0.13 (0.005)
		Second	0.030-0.055 (0.001-0.002)	0.13 (0.005)
	Ring end gap	Top	0.25-0.40 (0.010-0.016)	0.60 (0.024)
		Second Oil	0.35-0.50 (0.014-0.020) 0.20-0.70 (0.008-0.028)	0.75 (0.030) 0.80 (0.031)
Crankshaft	Main journal diameter		63.976-64.000 (2.5187-2.5197)	—
	Journal taper		0.005 (0.0002) max.	0.010 (0.0004)
	Rod journal diameter		49.976-50.000 (1.9676-1.9685)	—
	Journal out-of-round		0.004 (0.0002) max.	0.006 (0.0002)
	End play		0.10-0.35 (0.004-0.014)	0.45 (0.018)
Bearings	Runout		0.015 (0.0006) max.	0.03 (0.001)
	Main bearing-to-journal oil clearance		0.024-0.048 (0.0009-0.0019)	0.050 (0.0020)
	Rod bearing-to-journal oil clearance		0.040-0.060 (0.0016-0.0024)	0.060 (0.0024)