

**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	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)
		B	89.976-89.994 (3.5424-3.5431)
	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)
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)
		Second	0.030-0.055 (0.001-0.002)
	Ring end gap	Top Second Oil	0.25-0.40 (0.010-0.016) 0.35-0.50 (0.014-0.020) 0.20-0.70 (0.008-0.028)
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)
	Runout	0.015 (0.0006) max.	0.03 (0.001)
Bearings	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)

**Engine Lubrication — Section 8**

	MEASUREMENT	STANDARD (NEW)	SERVICE LIMIT
Engine oil	Capacity ℓ (US qt, Imp qt)	6.3 (6.7, 5.5) for engine overhaul 5.0 (5.3, 4.4) for oil change, including filter	
Oil pump	Displacement ℓ (US qt, Imp qt)/min @rpm	68 (72, 60) @6,000	
	Inner-to-outer rotor radial clearance	0.02-0.18(0.001-0.007)	0.20 (0.008)
	Pump housing-to-outer rotor radial clearance	0.10-0.19 (0.004-0.007)	0.20 (0.008)
	Pump housing-to-outer rotor axial clearance	0.02-0.07 (0.001-0.003)	0.12 (0.005)
Relief valve	Pressure setting with oil temperature 176°F (80°C) kPa (kg/cm <sup>2</sup> , psi) at idle at 3,000 rpm	70 (0.7, 10) min. 350 (3.5, 50) min.	

**Cooling — Section 10**

	MEASUREMENT	STANDARD (NEW)
Radiator	Engine coolant capacity ℓ (US qt, Imp qt) (including engine, heater, cooling line and expansion tank)	M/T: 16.0 (16.9, 14.1) for overhaul 12.0 (12.7, 10.6) for coolant change
	Expansion tank capacity 2.1 ℓ (2.2 US qt, 1.8 Imp qt)	A/T: 16.5 (17.4, 14.5) for overhaul 12.0 (12.7, 10.6) for coolant change
Expansion tank cap	Opening pressure kPa (kg/cm <sup>2</sup> , psi)	95-125 (0.95-1.25, 14-18)
Thermostat	Start to open °F (°C)	169-176 (76-80)
	Fully open °F (°C)	194 (90)
	Valve lift at fully open	10 (0.39) min.
Water pump	Displacement ℓ (US qt, Imp qt)/min @rpm	150 (159, 132) @6,000
Cooling fan	Thermoswitch "ON" temperature (low) °F (°C)	183 ± 2 (84 ± 1.2)
	Thermoswitch "OFF" temperature (low) °F (°C)	Subtract 11 ± 3 (6 ± 2) from the actual "ON" temperature (low)
	Thermoswitch "ON" temperature (high) °F (°C)	194 ± 2 (90 ± 1.2)
	Thermoswitch "OFF" temperature (high) °F (°C)	Subtract 11 ± 3 (6 ± 2) from the actual "ON" temperature (high)

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