

Unit of length: mm (in)

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 ² , 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 ² , 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