

# 8. CYLINDER HEAD/VALVE

|                                    |            |   |             |
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## SERVICE INFORMATION

### GENERAL

- This section covers service of the camshafts, cylinder head and valves.
- The camshafts, cylinder head and valves can be serviced with the engine installed in the frame.
- When disassembling, mark and store the disassembled parts to ensure that they are reinstalled in their original locations.
- Clean all disassembled parts with cleaning solvent and dry them by blowing them off with compressed air before inspection.
- Camshaft lubricating oil is fed through oil passages in the cylinder head. Clean the oil passages before assembling cylinder head.
- Be careful not to damage the mating surfaces when removing the cylinder head cover and cylinder head.

### SPECIFICATIONS

Unit: mm (in)

| ITEM  |  | STANDARD                                       | SERVICE LIMIT   |
|---|--|--|-----------------|
| Cylinder compression at 350 min <sup>-1</sup> (rpm) |  | 1,128 kPa (11.5 kgf/cm <sup>2</sup> , 164 psi) | ————            |
| Valve clearance                                     |  | IN 0.16 (0.006)                                | ————            |
|   |  | EX 0.31 (0.012)                                | ————            |
| Camshaft  | Cam lobe height                            | IN 40.080 – 40.240 (1.5779 – 1.5842)           | 39.780 (1.5661) |
|   |  | EX 40.230 – 40.390 (1.5839 – 1.5902)           | 39.930 (1.5720) |
|   | Runout                                     | ————   | 0.05 (0.002)    |
| Oil clearance                                       |  | 0.020 – 0.062 (0.0008 – 0.0024)                | 0.088 (0.0035)  |
| Valve lifter  | Valve lifter O.D.                          | 33.978 – 33.993 (1.3377 – 1.3383)              | 33.97 (1.337)   |
|   | Valve lifter bore I.D.                     | 34.010 – 34.026 (1.3390 – 1.3396)              | 34.04 (1.340)   |
| Valve,<br>valve guide                               | Valve stem O.D.                            | IN 5.975 – 5.990 (0.2352 – 0.2358)             | 5.965 (0.2348)  |
|   |  | EX 5.965 – 5.980 (0.2348 – 0.2354)             | 5.955 (0.2344)  |
|   | Valve guide I.D.                           | IN/EX 6.000 – 6.012 (0.2362 – 0.2367)          | 6.040 (0.2378)  |
|   | Stem-to-guide clearance                    | IN 0.010 – 0.037 (0.0004 – 0.0015)             | 0.075 (0.0030)  |
|   |  | EX 0.020 – 0.047 (0.0008 – 0.0019)             | 0.085 (0.0033)  |
|   | Valve guide projection above cylinder head | 14.0 – 14.2 (0.55 – 0.56)                      | ————            |
| Valve seat width                                    | IN 1.1 – 1.3 (0.04 – 0.05)                 | 1.7 (0.07)                                     |                 |
|   | EX 1.3 – 1.5 (0.05 – 0.06)                 | 1.9 (0.07)                                     |                 |
| Valve spring  | Free length                                | Inner 37.0 (1.46)                              | 36.0 (1.42)     |
|   |  | Outer 41.9 (1.65)                              | 40.9 (1.61)     |
| Cylinder head warpage                               |  | ————   | 0.10 (0.004)    |