

CYLINDER HEAD/VALVES

Measure and record each valve guide I.D.

SERVICE LIMIT: IN/EX: 5.040 mm (0.1984 in)

Subtract each valve stem O.D. from the corresponding guide I.D. to obtain the stem-to-guide clearance.

STANDARDS:

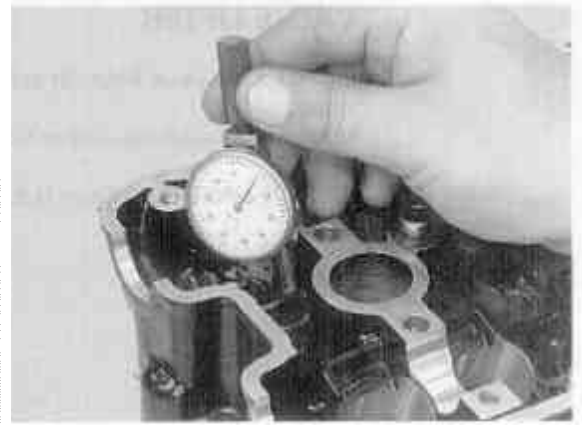
IN: 0.010–0.037 mm (0.0004–0.0015 in)

EX: 0.025–0.052 mm (0.0010–0.0020 in)

If the stem-to-guide clearance is out of standard, determine if a new guide with standard dimensions would bring the clearance within tolerance. If so, replace any guides as necessary and ream to fit. If the stem-to-guide clearance is out of standard with the new guides, replace the valves and guides.

NOTE:

Reface the valve seats whenever the valve guides are replaced (page 8-17).



VALVE GUIDE REPLACEMENT

Chill the replacement valve guides in the freezer section of a refrigerator for about an hour. Heat the cylinder head to 100–150 °C (212–300 °F) with a hot plate or oven.

▲ WARNING

To avoid burns, wear heavy gloves when handling the heated cylinder head.

CAUTION:

Do not use a torch to heat the cylinder head; it may cause warping.

Support the cylinder head and drive out the valve guides from combustion chamber side of the cylinder head.

TOOL:

Valve guide driver, 5 mm 07942-MA600000

