

6. Measure the manifold contact surface distortion in the four directions as shown.

**Distortion: 0.15 mm { 0.006 in } max.**

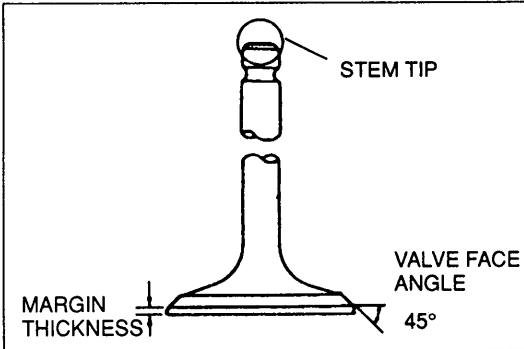
7. If distortion exceeds the maximum, grind the surface or replace the cylinder head.

**Grinding: 0.20 mm { 0.008 in } max.**

**VALVE MECHANISM**

**Valve and Valve Guide**

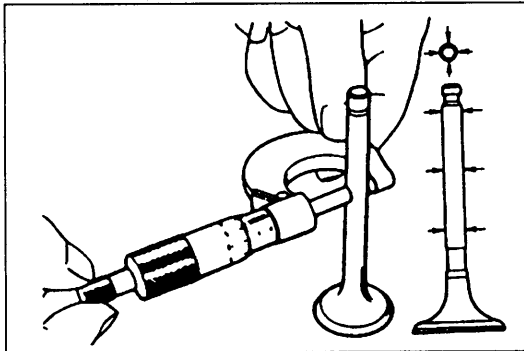
1. Inspect each valve for the following. Replace or resurface the valve if necessary.
  - (1) Damaged or bent stem
  - (2) Rough or damaged face
  - (3) Damaged or unevenly worn stem tip
2. Measure the valve head margin thickness of each valve. Replace the valve if necessary.



**Margin thickness**

**IN : 0.9 mm { 0.035 in }**  
**EX : 1.0 mm { 0.039 in }**

3. Measure the length of each valve.



**Length**

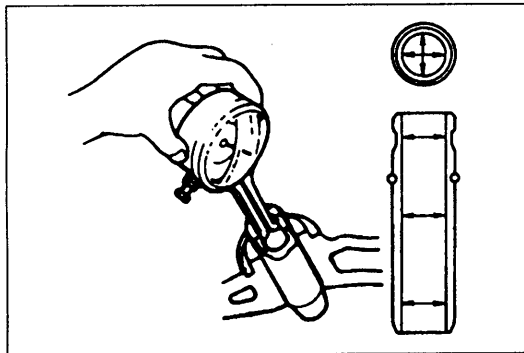
**Standard**

**IN : 101.89 mm { 4.0114 in }**  
**EX : 101.99 mm { 4.0153 in }**

**Minimum**

**IN : 100.39 mm { 3.9524 in }**  
**EX : 100.49 mm { 3.9563 in }**

4. Measure the stem diameter of each valve at the points shown.



**Diameter**

**IN : 5.970—5.985 mm { 0.2351—0.2356 in }**  
**EX : 5.965—5.980 mm { 0.2349—0.2354 in }**

**Minimum**

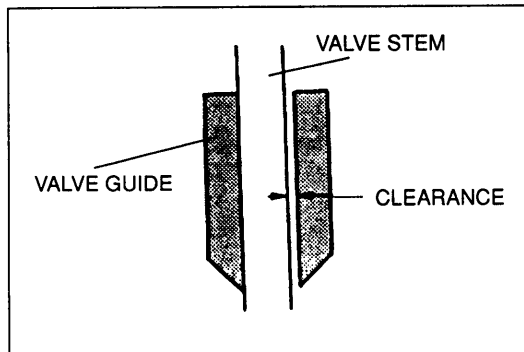
**IN : 5.920 mm { 0.2331 in }**  
**EX : 5.915 mm { 0.2329 in }**

5. Measure the inner diameter of each valve guide at the points shown.

**Inner diameter**

**IN : 6.01—6.03 mm { 0.2367—0.2374 in }**  
**EX : 6.01—6.03 mm { 0.2367—0.2374 in }**

6. Calculate the valve stem-to-guide clearance. Subtract the outer diameter of the valve stem from the inner diameter of the corresponding valve guide.



**Clearance**

**IN : 0.025—0.060 mm { 0.0010—0.0023 in }**  
**EX : 0.030—0.065 mm { 0.0012—0.0025 in }**

**Maximum: 0.20 mm { 0.008 in }**