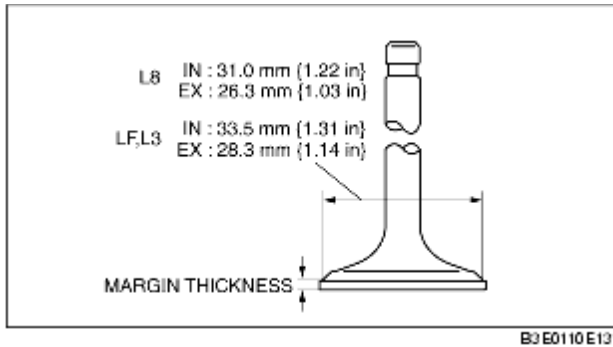


# VALVE, VALVE GUIDE INSPECTION

B3E011012111201

1. Measure the valve head margin thickness of each valve.

- If it is less than the specification, replace the valve.



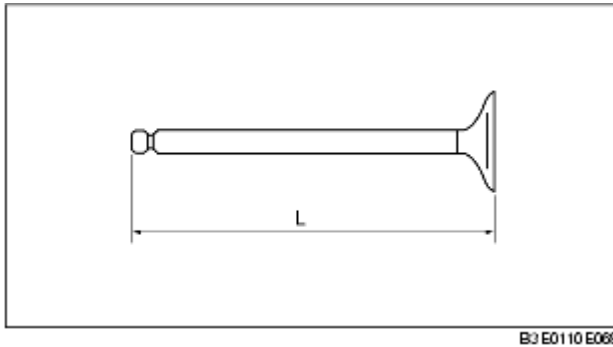
## Margin thickness

IN: 1.62 mm {0.0637 in}

EX: 1.82 mm {0.0716 in}

2. Measure the length of each valve. Replace the valve if necessary.

- If it is less than the specification, replace the valve.



## Standard length L

IN: 102.99-103.79 mm {4.055-4.086 in}

EX: 104.25-105.05 mm {4.105-4.135 in}

## Minimum length L:

IN: 102.99 mm {4.055 in}

EX: 103.79 mm {4.086 in}

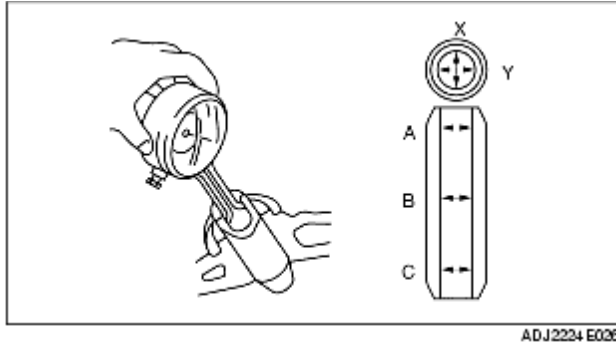
3. Measure the stem diameter of each valve in X and Y directions at the three points (A, B, and C) as indicated in the figure.

- If it exceeds the specification, replace the valve.

**Standard diameter****IN: 5.470-5.485 mm {0.2154-0.2159 in}****EX: 5.465-5.480 mm {0.2152-0.2157 in}****Minimum diameter****IN: 5.440 mm {0.2142 in}****EX: 5.435 mm {0.2140 in}**

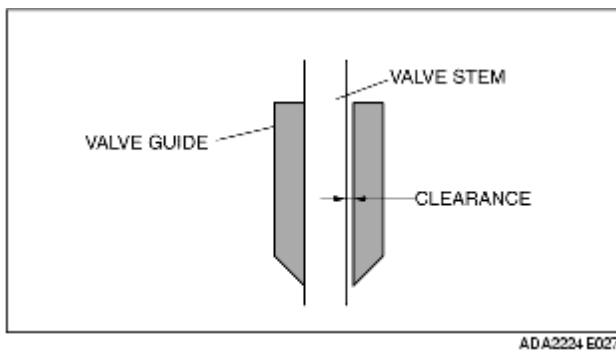
4. Measure the inner diameter of each valve guide in X and Y directions at the three points (A, B, and C) as indicated in the figure.

- If not as specified, replace the valve guide.

**Standard Inner diameter****5.509-5.539 mm {0.2169-0.2180 in}**

5. Calculate the valve stem to guide clearance by subtracting the outer diameter of the valve stem from the inner diameter of the corresponding valve guide.

- If it exceeds the specification, replace the valve and/or the valve guide.

**Standard clearance:****IN: 0.024-0.069 mm {0.0009-0.0027 in}****EX: 0.029-0.074 mm {0.0012-0.0029 in}****Maximum clearance:****0.10 mm {0.004 in}**

6. Measure the protrusion height (dimension A) of each valve guide without lower valve spring seat.

- If not within the specified, replace the valve guide.

**Standard diameter:**  
**12.2-12.8 mm {0.481-0.503 in}**