



## Valve Inspection

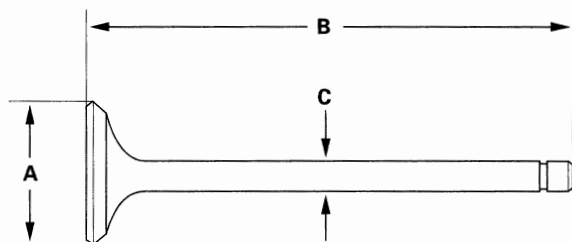
1. Remove the valves (see page 6-42).
2. Measure the valve in these areas.

### Intake Valve Dimensions

<b>A Standard (New):</b>	<b>34.90–35.10 mm</b> (1.374–1.382 in.)
<b>B Standard (New):</b>	<b>115.70–116.30 mm</b> (4.555–4.579 in.)
<b>C Standard (New):</b>	<b>5.485–5.495 mm</b> (0.2159–0.2163 in.)
<b>C Service Limit:</b>	<b>5.455 mm (0.2148 in.)</b>

### Exhaust Valve Dimensions

<b>A Standard (New):</b>	<b>29.90–30.10 mm</b> (1.177–1.185 in.)
<b>B Standard (New):</b>	<b>113.90–114.50 mm</b> (4.484–4.508 in.)
<b>C Standard (New):</b>	<b>5.450–5.460 mm</b> (0.2146–0.2150 in.)
<b>C Service Limit:</b>	<b>5.420 mm (0.2134 in.)</b>



## Valve Stem-to-Guide Clearance Inspection

1. Remove the valves (see page 6-42).
2. Slide the valve out of its guide about 10 mm (0.39 in.), then measure the guide-to-stem clearance with a dial indicator while rocking the stem in the direction of normal thrust (wobble method).

- If the measurement exceeds the service limit, recheck it using a new valve.
- If the measurement is now within the service limit, reassemble using a new valve.
- If the measurement with a new valve still exceeds the service limit, go to step 3.

### Intake Valve Stem-to-Guide Clearance

<b>Standard (New):</b>	<b>0.04–0.09 mm</b> (0.002–0.004 in.)
<b>Service Limit:</b>	<b>0.16 mm (0.006 in.)</b>

### Exhaust Valve Stem-to-Guide Clearance

<b>Standard (New):</b>	<b>0.11–0.16 mm</b> (0.004–0.006 in.)
<b>Service Limit:</b>	<b>0.22 mm (0.009 in.)</b>



3. Subtract the O.D. of the valve stem, measured with a micrometer, from the I.D. of the valve guide, measured with an inside micrometer or ball gauge. Take the measurements in three places along the valve stem and three places inside the valve guide. The difference between the largest guide measurement and the smallest stem measurement should not exceed the service limit.

### Intake Valve Stem-to-Guide Clearance

<b>Standard (New):</b>	<b>0.020–0.045 mm</b> (0.0008–0.0018 in.)
<b>Service Limit:</b>	<b>0.08 mm (0.003 in.)</b>

### Exhaust Valve Stem-to-Guide Clearance

<b>Standard (New):</b>	<b>0.055–0.080 mm</b> (0.0022–0.0031 in.)
<b>Service Limit:</b>	<b>0.11 mm (0.004 in.)</b>