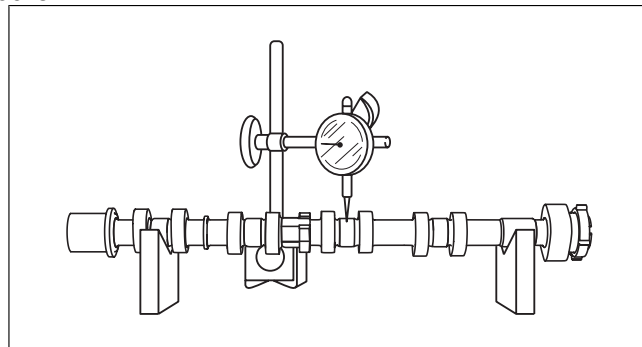


CAMSHAFT INSPECTION

id011000501500

- Set the No.1 and No.5 journals of the camshaft on V-blocks.
- Measure the camshaft runout using the dial gauge.
 - If it exceeds the maximum specification, replace the camshaft.

Maximum camshaft runout
0.030 mm {0.0012 in}



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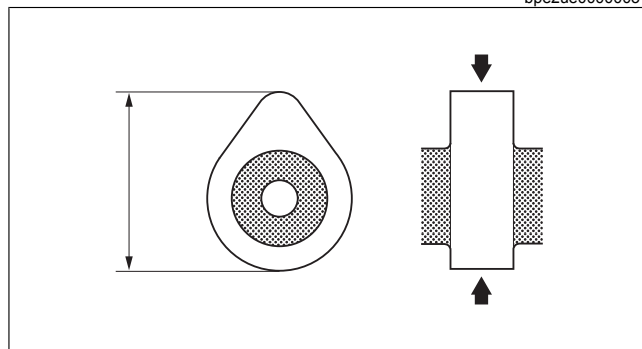
- Measure the cam height using the micrometer as shown in the figure.
 - If it is less than the minimum specification, replace the camshaft.

Standard cam height [SKYACTIV-G 2.0]
IN: 41.57 mm {1.637 in}
EX: 40.37 mm {1.589 in}

Standard cam height [SKYACTIV-G 2.5]
IN: 42.34 mm {1.667 in}
EX: 40.37 mm {1.589 in}

Minimum cam height [SKYACTIV-G 2.0]
IN: 41.50 mm {1.634 in}
EX: 40.30 mm {1.587 in}

Minimum cam height [SKYACTIV-G 2.5]
IN: 42.27 mm {1.664 in}
EX: 40.30 mm {1.587 in}

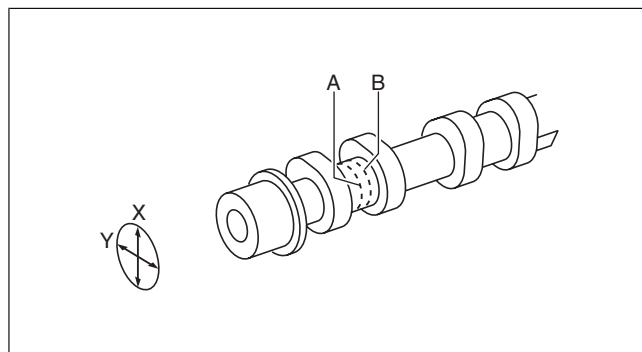


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- Measure the journal diameter using the micrometer. Measurement positions total four and are in the X and Y directions, at two points (A and B) as shown in the figure.
 - If it is less than the minimum specification, replace the camshaft.

Standard camshaft journal diameter
24.96—24.98 mm {0.9827—0.9834 in}

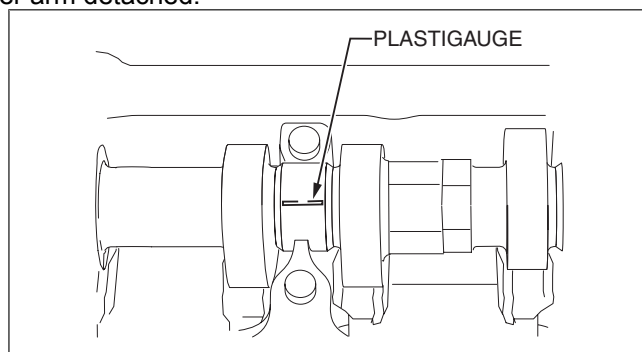
Minimum camshaft journal diameter
24.93 mm {0.9815 in}



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- Measure the camshaft journal oil clearance using the following procedure:
 - Clean the camshaft journal and the journal receptacle part.
 - Put the camshaft on the cylinder head with the rocker arm detached.
 - Cut the plastigauge to the same length as the journal width and position it parallel to the camshaft.
 - Install the camshaft caps. (See CYLINDER HEAD ASSEMBLY (II).)
 - Remove the camshaft caps. (See CYLINDER HEAD DISASSEMBLY (I).)
 - Measure the camshaft journal oil clearance.
 - If it exceeds the maximum specification, replace the cylinder head.

Standard camshaft journal oil clearance
0.035—0.080 mm {0.0014—0.0031 in}



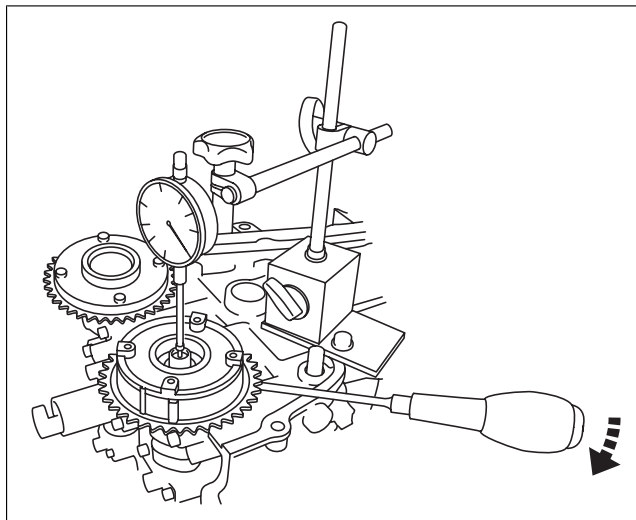
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Maximum camshaft journal oil clearance
0.090 mm {0.0035 in}

6. Measure the camshaft end play using a dial gauge.
- If it exceeds the maximum specification, replace the cylinder head or camshaft.

Standard camshaft end play
0.07—0.22 mm {0.003—0.008 in}

Maximum camshaft end play
0.23 mm {0.0091 in}



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