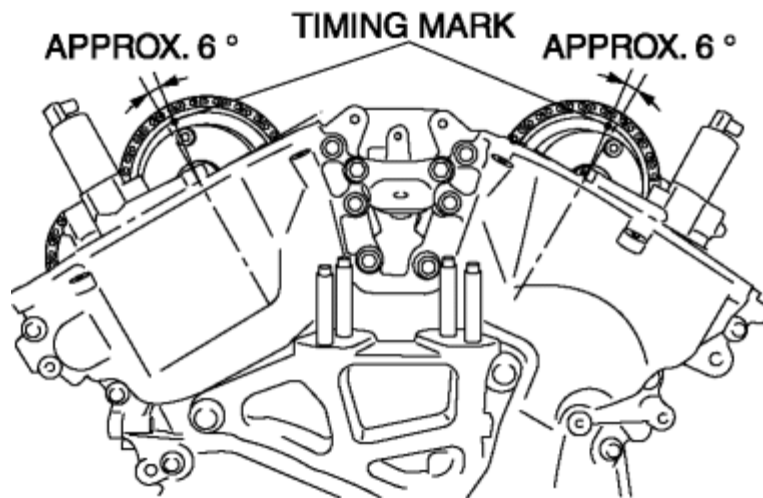


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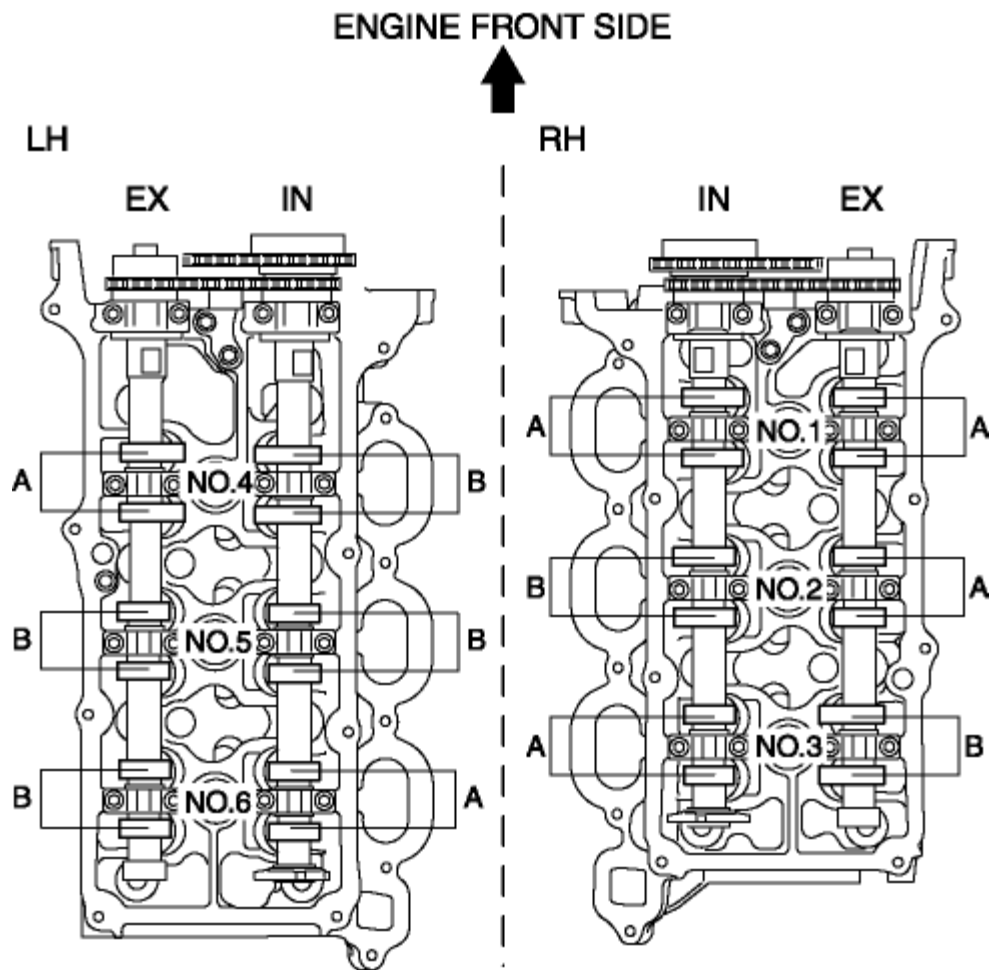
VALVE CLEARANCE INSPECTION/ ADJUSTMENT [MZI 3.7 V6]

Valve Clearance Inspection

1. Disconnect the negative battery cable.
2. Remove the engine cover. (See [ENGINE COVER REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
3. Remove the ventilation hose.
4. Remove the dynamic chamber and throttle body as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
5. Disconnect the wiring harness.
6. Remove the ignition coils. (See [IGNITION COIL REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
7. Remove the dipstick.
8. Remove the cylinder head cover. (See [TIMING CHAIN REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
9. Remove the splash shield (RH).
10. Measure the valve clearance.
 - a. Rotate the crankshaft clockwise and verify that the timing mark of the intake side camshaft sprocket is in the position shown in the figure. In this position, the No.1 cylinder is at the TDC of the compression stroke.



- b. Measure the valve clearance of location A shown in the figure.
 - If it is not within the specification, replace the tappet and adjust the valve clearance to the median value of the standard.



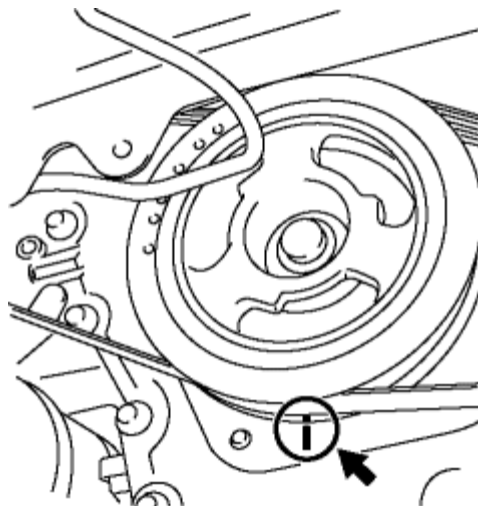
Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

NOTE:

- Make sure to note down the measured values for choosing the suitable replacement tappets.

c. Mark the crank pulley and engine front cover as shown in the figure.



d. Rotate the crankshaft clockwise **360 °** so that the No.5 cylinder is at TDC of the

compression stroke.

e. Measure the valve clearance of location B shown in the figure.

- If it is not within the specification, replace the tappet and adjust the valve clearance to the median value of the standard.

Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

NOTE:

- Make sure to note down the measured values for choosing the suitable replacement tappets.

11. Install in the reverse order of removal.

Valve Clearance Adjustment

1. Follow the cylinder head gasket replacement procedure and remove the camshafts and camshaft sprocket as a single unit. (See [CYLINDER HEAD GASKET REPLACEMENT \[MZI 3.7 V6\]](#).)
2. Remove the tappet.
3. Install an appropriate tappet based on the results of the valve clearance inspection.

- $\text{Selected tappet} = \text{Removed tappet thickness} + \text{Measured valve clearance} - \text{Standard valve clearance}$

Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

4. Install in the reverse order of removal.

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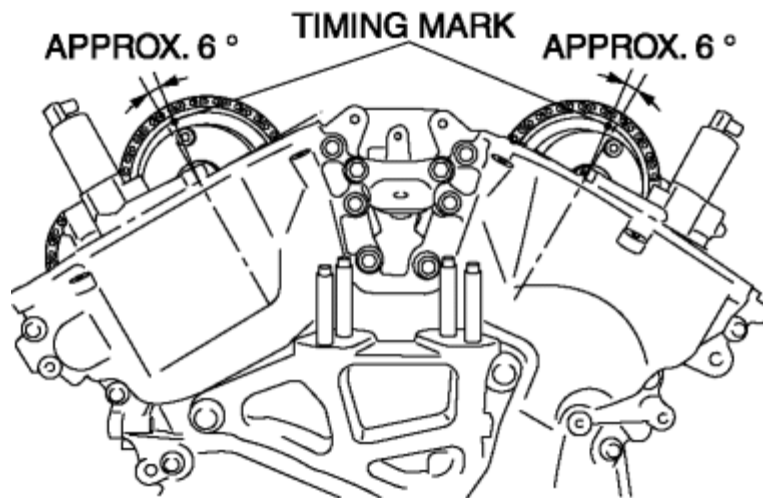
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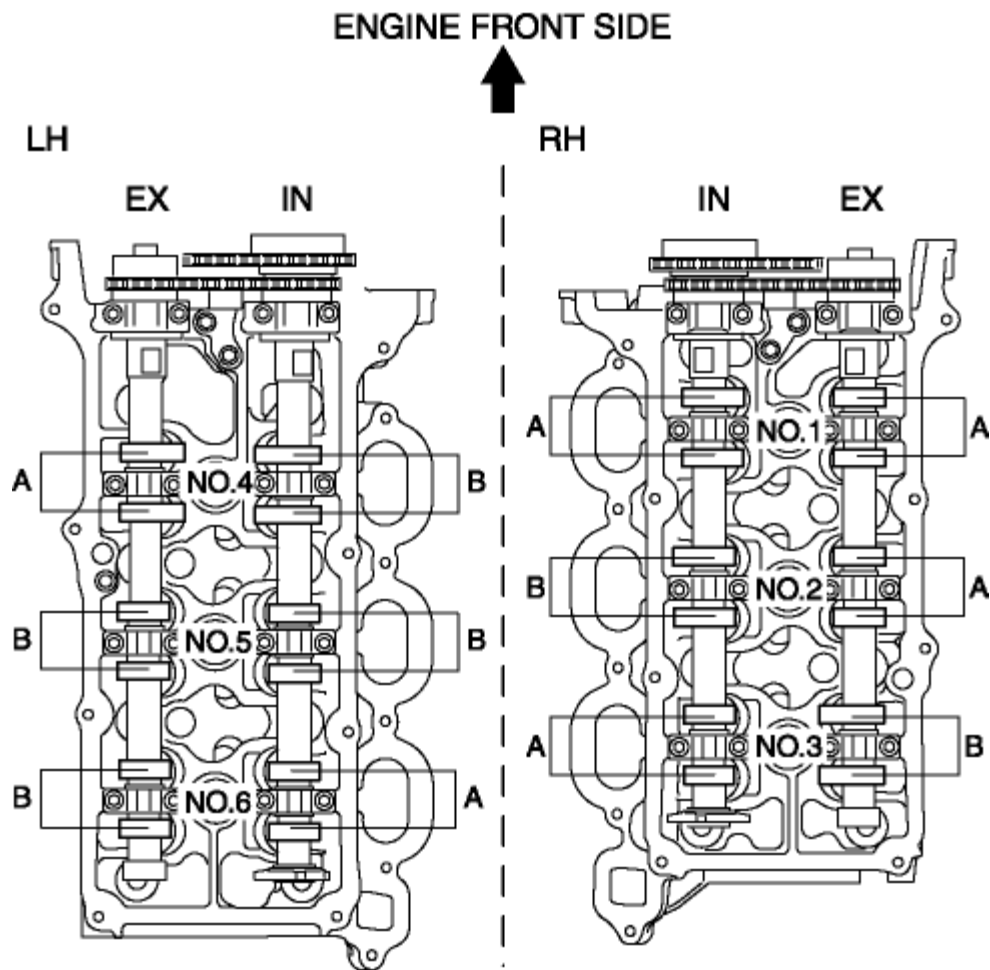
VALVE CLEARANCE INSPECTION/ ADJUSTMENT [MZI 3.7 V6]

Valve Clearance Inspection

1. Disconnect the negative battery cable.
2. Remove the engine cover. (See [ENGINE COVER REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
3. Remove the ventilation hose.
4. Remove the dynamic chamber and throttle body as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
5. Disconnect the wiring harness.
6. Remove the ignition coils. (See [IGNITION COIL REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
7. Remove the dipstick.
8. Remove the cylinder head cover. (See [TIMING CHAIN REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)
9. Remove the splash shield (RH).
10. Measure the valve clearance.
 - a. Rotate the crankshaft clockwise and verify that the timing mark of the intake side camshaft sprocket is in the position shown in the figure. In this position, the No.1 cylinder is at the TDC of the compression stroke.



- b. Measure the valve clearance of location A shown in the figure.
 - If it is not within the specification, replace the tappet and adjust the valve clearance to the median value of the standard.



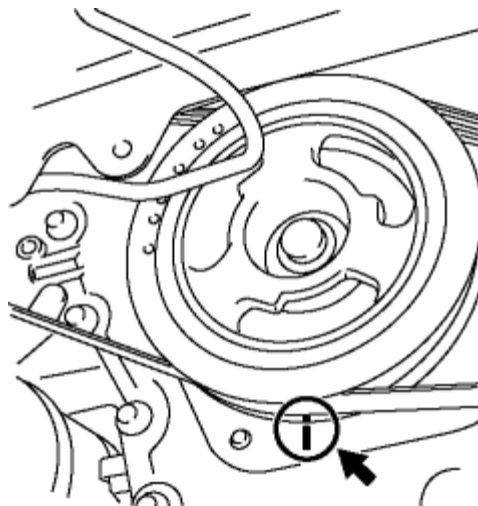
Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

NOTE:

- Make sure to note down the measured values for choosing the suitable replacement tappets.

c. Mark the crank pulley and engine front cover as shown in the figure.



d. Rotate the crankshaft clockwise **360 °** so that the No.5 cylinder is at TDC of the

compression stroke.

e. Measure the valve clearance of location B shown in the figure.

- If it is not within the specification, replace the tappet and adjust the valve clearance to the median value of the standard.

Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

NOTE:

- Make sure to note down the measured values for choosing the suitable replacement tappets.

11. Install in the reverse order of removal.

Valve Clearance Adjustment

1. Follow the cylinder head gasket replacement procedure and remove the camshafts and camshaft sprocket as a single unit. (See [CYLINDER HEAD GASKET REPLACEMENT \[MZI 3.7 V6\]](#).)

2. Remove the tappet.

3. Install an appropriate tappet based on the results of the valve clearance inspection.

- $\text{Selected tappet} = \text{Removed tappet thickness} + \text{Measured valve clearance} - \text{Standard valve clearance}$

Standard valve clearance [Engine cold]

- IN: 0.150—0.250 mm {0.00591—0.00984 in}
- EX: 0.300—0.400 mm {0.0119—0.0157 in}

4. Install in the reverse order of removal.

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