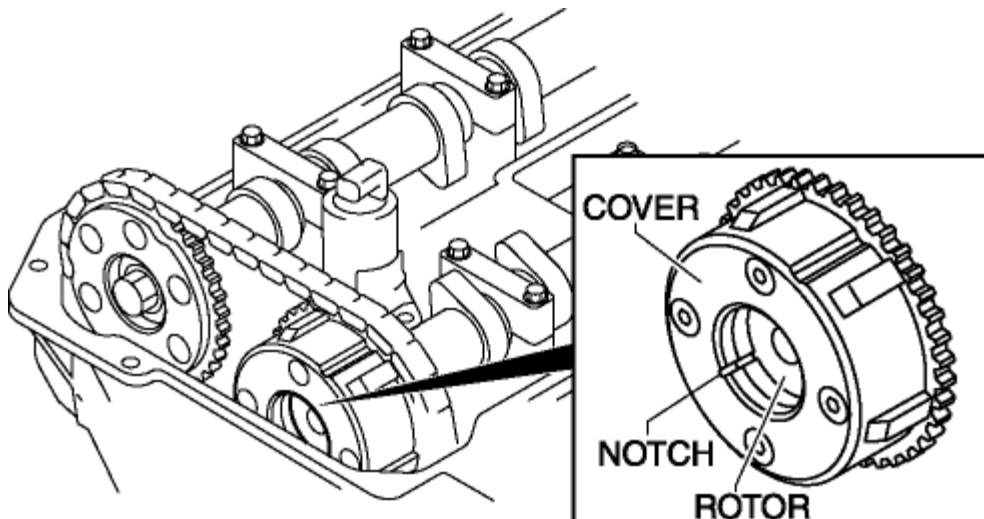


2012 - Mazda6 - Engine

VARIABLE VALVE TIMING ACTUATOR INSPECTION [MZR 2.5]

CAUTION:

- Variable valve timing actuator can not be disassembled because it is a precision unit.
1. Disconnect the negative battery cable.
 2. Remove the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 3. Remove the ignition coils. (See [IGNITION COIL REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 4. Remove the ventilation hose. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 5. Disconnect the camshaft position (CMP) sensor connector.
 6. Disconnect the oil control valve (OCV) connector.
 7. Remove the cylinder head cover. (See [TIMING CHAIN REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)
 8. Confirm that notch of the rotor and notch of the cover at the variable valve timing actuator are aligned and fitted.
 - If the notch of the rotor and notch of the cover are not aligned, turn the crankshaft clockwise two rotations. Verify that notch of the rotor and notch of the cover are aligned.
 - If the both notches are still not aligned, replace the variable valve timing actuator.
 - If, when turning the crankshaft, there is a hitting noise from the variable valve timing actuator each time the cam passes the fully lifted position, it means that the actuator is not secured. Replace the actuator.



9. Install the cylinder head cover. (See [TIMING CHAIN REMOVAL/ INSTALLATION \[MZR 2.5\]](#).)

10. Connect the OCV connector.
11. Connect the CMP sensor connector.
12. Install the ventilation hose. (See [INTAKE-AIR SYSTEM REMOVAL/ INSTALLATION \[MZR 2.5\].](#))
13. Install the ignition coils. (See [IGNITION COIL REMOVAL/ INSTALLATION \[MZR 2.5\].](#))
14. Install the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/ INSTALLATION \[MZR 2.5\].](#))
15. Connect the negative battery cable.

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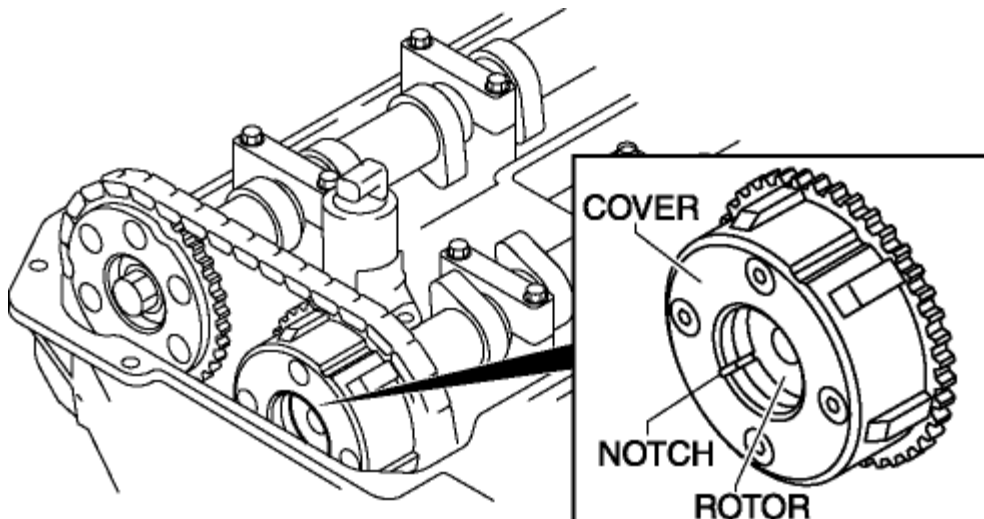
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