

## HYDRAULIC VARIABLE VALVE TIMING ACTUATOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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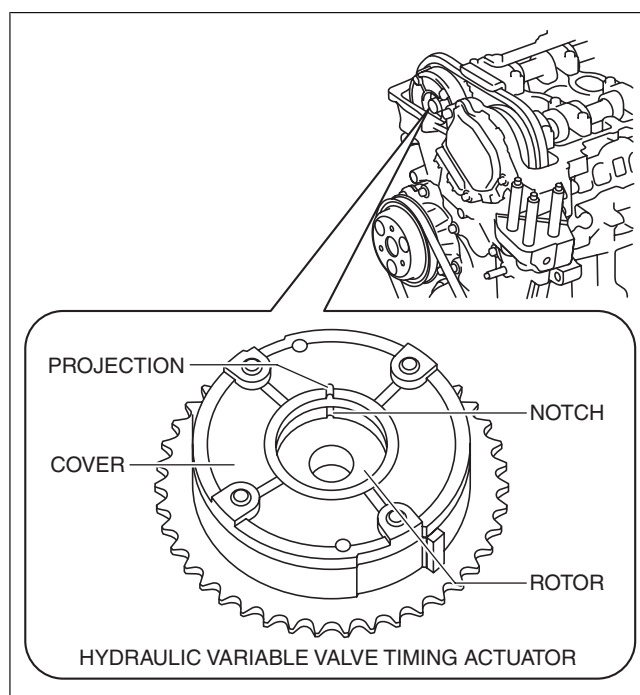
### Warning

- A hot engine can cause severe burns. Turn off the engine and wait until it is cool before servicing.

### Caution

- Do not disassemble the hydraulic variable valve timing actuator because it is a precision unit.

1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].)
2. Remove the plug hole plate. (See PLUG HOLE PLATE REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
3. Remove the ignition coil/ion sensors. (See IGNITION COIL/ION SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
4. Remove the cylinder head cover. (See TIMING CHAIN REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
5. Verify that the notch of the rotor and projection of the cover on the hydraulic variable valve timing actuator are aligned and fitted.
  - If the notch of the rotor and projection of the cover are not aligned, rotate the crankshaft in the direction the engine rotates two turns and verify that they are aligned.
  - If the notch of the rotor and projection of the cover are still not aligned, replace the hydraulic variable valve timing actuator. (See ELECTRIC VARIABLE VALVE TIMING ACTUATOR, HYDRAULIC VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
  - If, when turning the crankshaft, there is a slapping noise from the hydraulic variable valve timing actuator each time before the cam reaches its maximum lift, it means that the actuator is not secured. Replace the hydraulic variable valve timing actuator. (See ELECTRIC VARIABLE VALVE TIMING ACTUATOR, HYDRAULIC VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
6. Install in the reverse order of removal.



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