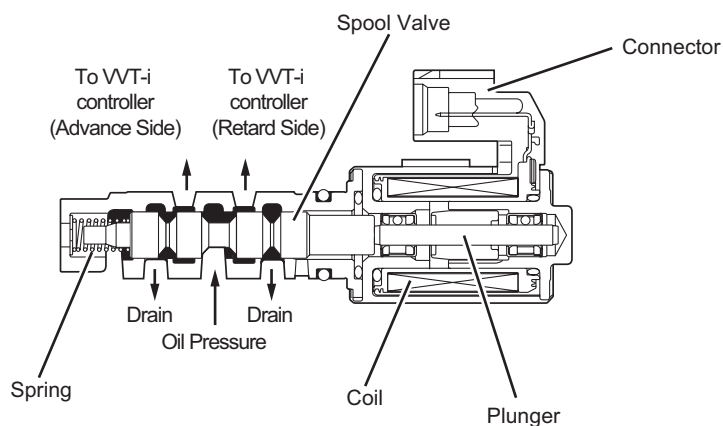


Camshaft Timing Oil Control Valve

- The camshaft timing oil control valve controls the spool valve position in accordance with the duty control from the engine ECU.
- When the engine is stopped, the camshaft timing oil control valve is in the most retarded state.

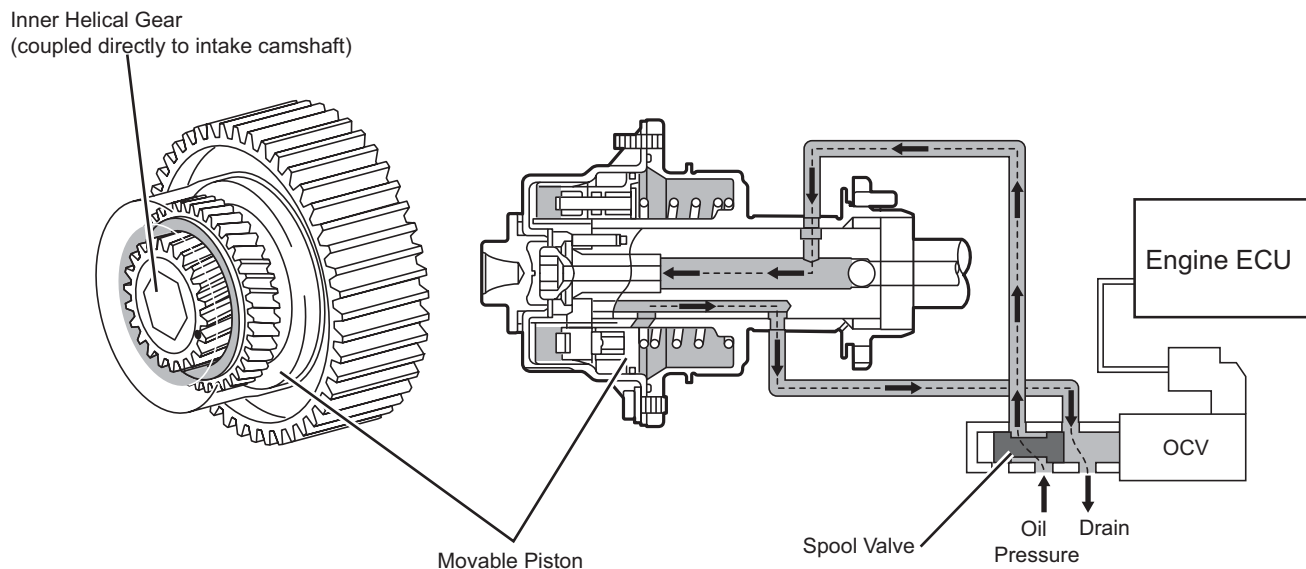


*The illustration shows the OCV for the right bank.

A4270109P

Advance

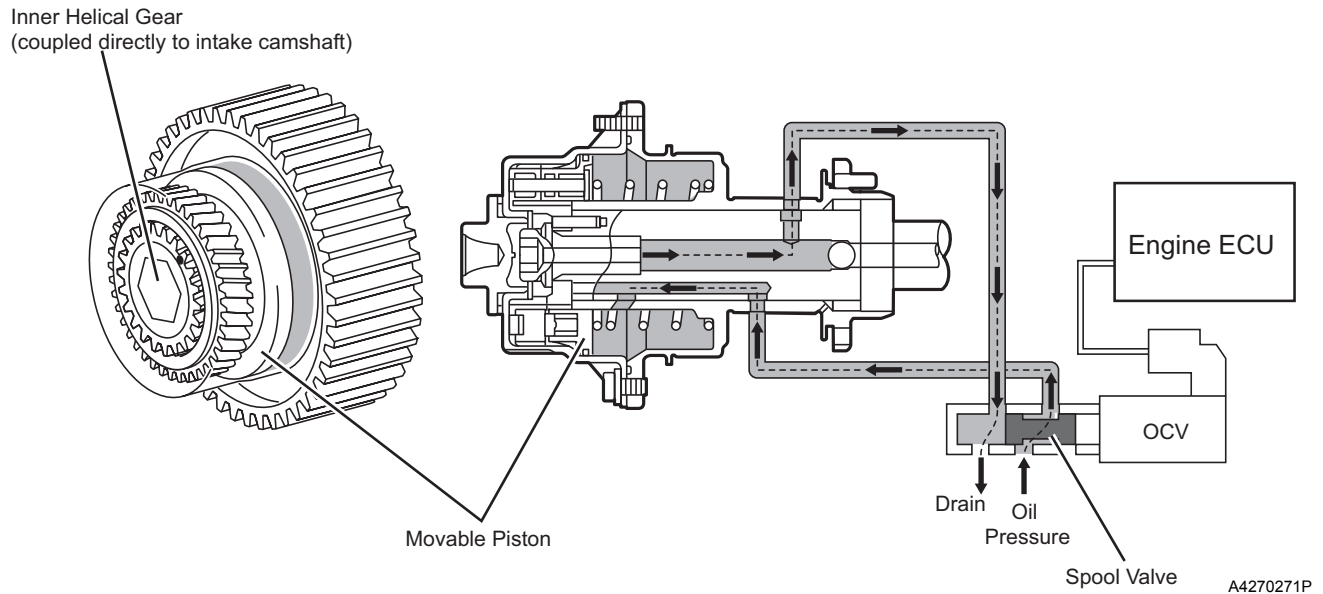
- When the camshaft timing oil control valve is positioned as illustrated in accordance with the advance signal from the engine ECU, the oil pressure is applied to the chamber at the advance side. Then, the twist of the helical spline causes the camshaft to rotate in the direction of timing advance.



A4270270P

Retard

- When the camshaft timing oil control valve is positioned as illustrated in accordance with the retard signal from the engine ECU, the oil pressure is applied to the chamber at the retard side. Then, the twist of the helical spline causes the camshaft to rotate in the direction of timing retard.



Hold

- The engine ECU calculates the target timing angle according to the traveling state to perform control as described above. After setting at the target timing, the valve timing is held by keeping the camshaft timing oil control valve in the neutral position unless the traveling state changes. This adjusts the valve timing at the desired target position and prevents the engine oil from running out when it is unnecessary.

