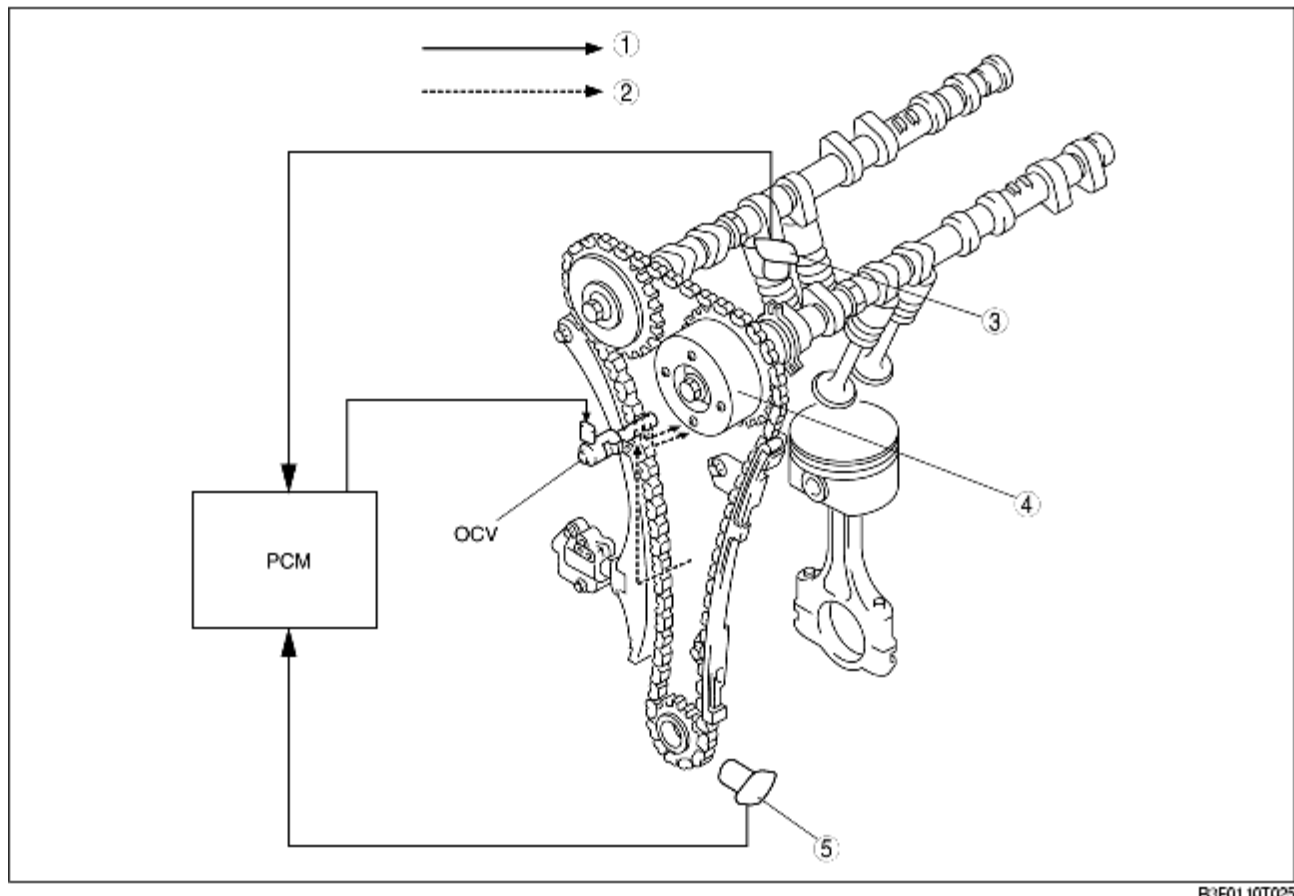


## VARIABLE VALVE TIMING MECHANISM CONSTRUCTION [ZJ, Z6]

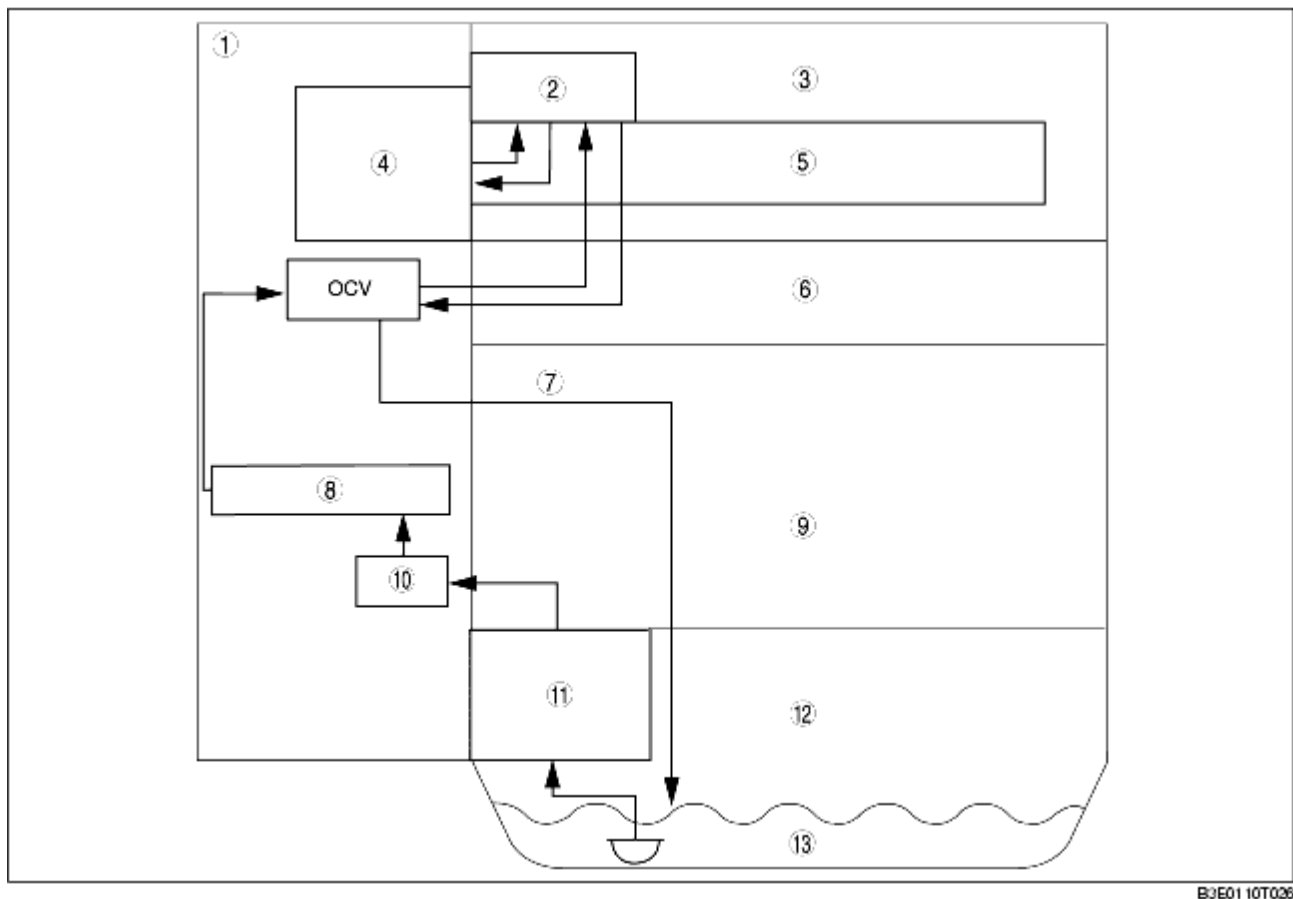
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- The variable valve timing mechanism consists of a variable valve timing actuator, OCV, CKP sensor, CMP sensor, and the PCM.



1	Electric signal
2	Hydraulic pressure
3	CMP sensor
4	Variable valve timing actuator
5	CKP sensor

**Hydraulic Pressure Flow Diagram**



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1	Engine front cover
2	Camshaft cap
3	Cylinder head cover
4	Variable valve timing actuator
5	Intake camshaft
6	Cylinder head
7	Drain
8	Oil passage in engine front cover
9	Cylinder block
10	Oil filter
11	Oil pump
12	Oil pan
13	Oil

### Component and function

Variable valve timing actuator	• Continuously modifies the phases of the intake camshaft and crankshaft at the forward end of the intake camshaft using hydraulic pressure from the OCV.
OCV	• Operated by current (duty signal) from the PCM. Controls the hydraulic oil passages to the variable valve timing actuator.
CKP sensor	• Inputs engine revolution signal to the PCM.
CMP sensor	• Inputs cylinder identification signal to the PCM.
	• Controls the OCV so that optimum valve timing is obtained according to engine

PCM	operation conditions.
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