

DTC P0011 [ZJ, Z6]

B3E010200001W01

DTC P0011	CMP-timing over-advanced
DETECTION CONDITION	<ul style="list-style-type: none"> The actual valve timing is over-advanced from the target valve timing when the OCV is controlled within the maximum valve timing retard condition. Diagnostic support note <ul style="list-style-type: none"> This is a continuous monitor (CCM). The MIL illuminates if the PCM detects the above malfunction condition in the first drive cycle. PENDING CODE is available if the PCM detects the above malfunction condition. FREEZE FRAME DATA is available. The DTC is stored in the PCM memory.
POSSIBLE CAUSE	<ul style="list-style-type: none"> OCV malfunction Spool valve in OCV is stuck in advance position. Variable valve timing actuator is stuck in advance position. Loose timing chain or improper valve timing due to timing chain slippage PCM malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED <ul style="list-style-type: none"> Has FREEZE FRAME DATA been recorded? 	Yes Go to the next step.
		No Record the FREEZE FRAME DATA on the repair order, then go to the next step.
2	VERIFY RELATED REPAIR INFORMATION AVAILABILITY <ul style="list-style-type: none"> Verify related service repair information availability. Is any related repair information available? 	Yes Perform repair or diagnosis according to the available repair information. • If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT OCV FOR MALFUNCTION <ul style="list-style-type: none"> Start the engine. Increase the engine speed. Stop the engine. Remove the OCV. (See OIL CONTROL VALVE (OCV) REMOVAL/INSTALLATION [ZJ, Z6].) <ul style="list-style-type: none"> Inspect the position of the spool valve in the OCV. (See OIL CONTROL VALVE (OCV) INSPECTION [ZJ, Z6].) <ul style="list-style-type: none"> Is the spool valve located at valve retard position? 	Yes Go to the next step.
		No Replace the OCV, then go to Step 6. (See OIL CONTROL VALVE (OCV) REMOVAL/INSTALLATION [ZJ, Z6].)
4	INSPECT STOPPER PIN MECHANISM <ul style="list-style-type: none"> Inspect the stopper pin. (See VARIABLE VALVE TIMING ACTUATOR INSPECTION [ZJ, Z6].) <ul style="list-style-type: none"> Is the stopper pin mechanism normal? 	Yes Go to the next step.
		No Replace the variable valve timing actuator, then go to Step 6. (See VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [ZJ, Z6].)
	INSPECT ROTOR POSITION	VARIABLE VALVE TIMING MECHANISM IS NORMAL Note

5	<ul style="list-style-type: none"> Remove the variable valve timing actuator. (See VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [ZJ, Z6].) Is the rotor position at maximum valve timing retard? 	Yes	<ul style="list-style-type: none"> This DTC is detected by intermittent concern. Intermittent concern might be removed by cleaning mode of variable valve timing control function. <p>Go to the next step.</p>
		No	<p>Replace the variable valve timing actuator, go to the next step.</p> <p>(See VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [ZJ, Z6].)</p>
6	<p>VERIFY TROUBLESHOOTING OF DTC P0011 COMPLETED</p> <ul style="list-style-type: none"> Make sure to reconnect all disconnected connectors. Turn the ignition switch to the ON position (Engine off). Clear the DTC from the PCM memory using the WDS or equivalent. Start the engine. Access RPM PID using the WDS or equivalent. Turn off all electrical loads. Increase and keep the engine speed at 4,500 rpm or more for 5 s. Is the same DTC present? 	Yes	<p>Replace the PCM, then go to the next step.</p> <p>(See PCM REMOVAL/INSTALLATION [ZJ, Z6].)</p>
		No	<p>Go to the next step.</p>
7	<p>VERIFY AFTER REPAIR PROCEDURE</p> <ul style="list-style-type: none"> Perform the "AFTER REPAIR PROCEDURE". <p>(See AFTER REPAIR PROCEDURE [ZJ, Z6].)</p> <ul style="list-style-type: none"> Are any DTCs present? 	Yes	<p>Go to the applicable DTC inspection.</p> <p>(See DTC TABLE [ZJ, Z6].)</p>
		No	<p>DTC troubleshooting completed.</p>