

DTC P0014:00 [SKYACTIV-G 2.0]

id0102h1008000

DTC P0014:00	Exhaust CMP timing over-advanced
DETECTION CONDITION	<ul style="list-style-type: none"> The actual exhaust valve timing is over-advanced by specification from the target exhaust valve timing for specified period when the oil control valve (OCV) is controlled in the feedback mode. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none"> ECT: above 60 °C {140 °F} <p>Diagnostic support note</p> <ul style="list-style-type: none"> This is a continuous monitor (CCM). The check engine light illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM. PENDING CODE is available if the PCM detects the above malfunction condition during first drive cycle. FREEZE FRAME DATA (Mode 2)/Snapshot data is available. The DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> Performs the exhaust variable valve timing control with a maximum cam retard request.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Low engine oil pressure Loose timing chain or improper exhaust valve timing due to timing chain slippage OCV malfunction <ul style="list-style-type: none"> Spool valve in OCV is stuck in advanced position Engine oil runners are clogged or have leakage: <ul style="list-style-type: none"> Between oil pressure switch and OCV Between OCV and hydraulic variable valve timing actuator In hydraulic variable valve timing actuator PCM malfunction
SYSTEM WIRING DIAGRAM	—

Diagnostic Procedure

STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED <ul style="list-style-type: none"> Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded? 	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
2	VERIFY RELATED SERVICE INFORMATION AVAILABILITY <ul style="list-style-type: none"> Verify related Service Information availability. Is any related Service Information available? 	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	VERIFY RELATED PENDING CODE AND/OR DTC <ul style="list-style-type: none"> Switch the ignition to off, then to ON (engine off). Perform the Pending Trouble Code Access Procedure and DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0].) Is the PENDING CODE/DTC P2090:00 or P2091:00 also present? 	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC P2090:00 [SKYACTIV-G 2.0].) (See DTC P2091:00 [SKYACTIV-G 2.0].)
		No	Go to the next step.
4	VERIFY ENGINE OIL PRESSURE <ul style="list-style-type: none"> Start the engine. Does the engine oil pressure warning light illuminate? 	Yes	Inspect the engine oil pressure. (See OIL PRESSURE INSPECTION [SKYACTIV-G 2.0].) Repair or replace the malfunctioning part according to the inspection results, then go to Step 8.
		No	Go to the next step.
5	VERIFY TIMING CHAIN INSTALLATION <ul style="list-style-type: none"> Stop the engine. Remove the timing chain cover. (See TIMING CHAIN REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) Is the exhaust camshaft timing mark at the correct point? 	Yes	Go to the next step.
		No	Reinstall the timing chain, then go to Step 8. (See TIMING CHAIN REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)

STEP	INSPECTION	ACTION
6	INSPECT OCV <ul style="list-style-type: none"> Inspect the OCV. (See OIL CONTROL VALVE (OCV) INSPECTION [SKYACTIV-G 2.0].) Is there any malfunction? 	Yes Replace the OCV, then go to Step 8. (See OIL CONTROL VALVE (OCV) REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)
		No Go to the next step.
7	INSPECT ENGINE OIL RUNNER <ul style="list-style-type: none"> Inspect the engine oil runners for clogging or leakage: <ul style="list-style-type: none"> Between oil pressure switch and OCV Between OCV and hydraulic variable valve timing actuator In hydraulic variable valve timing actuator Is there any clogging or leakage? 	Yes Repair or replace the suspected runner, then go to the next step.
		No Hydraulic variable valve timing mechanism is normal. Note <ul style="list-style-type: none"> This DTC is detected as an intermittent concern. The intermittent concern might be removed using the cleaning mode of the hydraulic variable valve timing control function. Go to the next step.
8	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> Make sure to reconnect all disconnected connectors. Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) Perform the Drive Mode 03 (Variable Valve Timing, A/F Sensor Heater, HO2S Heater, A/F Sensor, HO2S and TWC Repair Verification Drive Mode). (See OBD DRIVE MODE [SKYACTIV-G 2.0].) Is the PENDING CODE for this DTC present? 	Yes Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) Go to the next step.
		No Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) Are any DTCs present? 	Yes Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No DTC troubleshooting completed.