

DTC P0402:00 [SKYACTIV-D 2.2]

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DTC P0402:00	EGR flow excessive detected
DETECTION CONDITION	<ul style="list-style-type: none"> When the following condition is met, the EGR volume is higher than the specification for the target value for a continuous 8 s: MONITORING CONDITIONS <ul style="list-style-type: none"> During EGR control Engine speed: 1,300—2,000 rpm Fuel injection amount: 15—45 mm³/stroke Diagnostic support note <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 the first drive cycle. FREEZE FRAME DATA (Mode 2)/Snapshot data is available. DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> Inhibits the two-stage turbo control. Inhibits the EGR control. Inhibits engine-stop by operating the i-stop function.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Intake shutter valve malfunction EGR valve malfunction (stuck open) Air suction in intake air system (between MAF sensor and turbocharger) PCM malfunction
SYSTEM WIRING DIAGRAM	Not applicable

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 off, then ON (engine off). Perform the Pending Trouble Code Access Procedure and DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) Are any other PENDING CODEs and/or DTCs present? 	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	Go to the next step.
4	INSPECT INTAKE SHUTTER VALVE <ul style="list-style-type: none"> Inspect the intake shutter valve. (See INTAKE SHUTTER VALVE INSPECTION [SKYACTIV-D 2.2].) Is there any malfunction? 	Yes	Replace the intake shutter valve, then go to Step 7. (See INTAKE SHUTTER VALVE REMOVAL/ INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.
5	INSPECT EGR VALVE OPERATION <ul style="list-style-type: none"> Perform the EGR Valve Operation Inspection. (See ENGINE CONTROL SYSTEM OPERATION INSPECTION [SKYACTIV-D 2.2].) Does the EGR valve operate properly? 	Yes	Go to the next step.
		No	Repair or replace the malfunctioning part according to the inspection results, then go to Step 7.
6	INSPECT INTAKE AIR SYSTEM FOR AIR SUCTION <ul style="list-style-type: none"> Visually inspect for looseness and damage between the following: <ul style="list-style-type: none"> MAF sensor and turbocharger Is there any malfunction? 	Yes	Repair or replace the malfunctioning part according to the inspection results, then go to the next step.
		No	Go to the next step.

STEP	INSPECTION	ACTION	
7	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Start the engine and warm it up completely. <p>Caution</p> <ul style="list-style-type: none"> • While performing this step, always operate the vehicle in a safe and lawful manner. • When the M-MDS is used to observe monitor system status while driving, be sure to have another technician with you, or record the data in the M-MDS using the PID/DATA MONITOR AND RECORD capturing function and inspect later. • Drive the vehicle under the FREEZE FRAME DATA (Mode 2)/snapshot data condition. • Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • 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-D 2.2].) Go to the next step.
		No	Go to the next step.
8	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	DTC troubleshooting completed.