

DTC P242F:00 [SKYACTIV-D 2.2]

id0102s4153400

DTC P242F:00	Diesel particulate filter excess accumulation (exceeded acceptable amount)
DETECTION CONDITION	<ul style="list-style-type: none"> Amount of accumulated soot exceeds 17 g/l {1.06 lb/ft³} for 125 s because of diesel particulate filter clogging. 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 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"> PCM restricts engine torque. Inhibits the EGR control. Inhibits the diesel particulate filter regeneration control. Inhibits engine-stop by operating the i-stop function.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Exhaust gas pressure sensor No.2 connector or terminals malfunction Pipe between exhaust gas pressure sensor No.2 and catalytic converter restriction and/or damaged Diesel particulate filter restriction and/or damaged PCM malfunction
SYSTEM WIRING DIAGRAM	Not applicable

Diagnostic Procedure

STEP	INSPECTION	ACTION
1	IDENTIFY TRIGGER DTC FOR FREEZE FRAME DATA (MODE 2) <ul style="list-style-type: none"> Perform the Freeze Frame PID Data Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) Is the DTC P242F:00 on FREEZE FRAME DATA (Mode 2)? 	Yes Go to the next step.
		No Go to the troubleshooting procedure for DTC on FREEZE FRAME DATA (Mode 2). (See DTC TABLE [SKYACTIV-D 2.2].)
2	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.
3	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.
4	INSPECT EXHAUST GAS PRESSURE SENSOR NO.2 CONNECTOR CONDITION <ul style="list-style-type: none"> Switch the ignition off. Disconnect the exhaust gas pressure sensor No. 2 connector. Inspect for poor connection (such as damaged/pulled-out pins, corrosion). Is there any malfunction? 	Yes Repair or replace the connector and/or terminals, then go to Step 6.
		No Go to the next step.
5	INSPECT EXHAUST GAS PRESSURE SENSOR NO.2 RELATED PIPE <ul style="list-style-type: none"> Visually inspect the exhaust gas pressure sensor No.2 related pipe for restriction and damaged. (See EXHAUST GAS PRESSURE SENSOR INSPECTION [SKYACTIV-D 2.2].) Is there any malfunction? 	Yes Repair or replace the malfunctioning part according to the inspection results, then go to the next step.
		No Replace the catalytic converter, then go to the next step. (See EXHAUST SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

STEP	INSPECTION	ACTION	
6	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 DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the same 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.
7	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.