

NO.2 CHECK ENGINE LIGHT ILLUMINATES [SKYACTIV-D 2.2]

id0103g1897100

2	CHECK ENGINE LIGHT ILLUMINATES
DESCRIPTION	<ul style="list-style-type: none">Check engine light illuminates incorrectly. <p>Note</p> <ul style="list-style-type: none">If there is a malfunction in the engine system, the PCM stores a DTC and illuminates the check engine light.
POSSIBLE CAUSE	<ul style="list-style-type: none">Emission system malfunction (DTC is stored in PCM)ATX related malfunction (DTC is stored in TCM) (ATX)Short or open circuit in wiring harness between the following terminals:<ul style="list-style-type: none">Instrument cluster terminal B—Front body control module (FBCM) terminal 2KInstrument cluster terminal D—Front body control module (FBCM) terminal 2IFront body control module (FBCM) terminal 2P—PCM terminal 2AKFront body control module (FBCM) terminal 2N—PCM terminal 2ALInstrument cluster malfunction

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INSTRUMENT CLUSTER

INSTRUMENT CLUSTER WIRING HARNESS-SIDE CONNECTOR

W	U	S	Q	O	M	K	I	G	E	C	A
X	V	T	R	P	N	L	J	H	F	D	B

PCM

FBCM WIRING HARNESS-SIDE CONNECTOR

2AA	2Y	2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
2AB	2Z	2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

PCM WIRING HARNESS-SIDE CONNECTOR

2BE	2AZ	2AU	2AP	2AK	2AE	2AA	2W	2S	2O	2K	2G	2C		
2BF	2BA	2AV	2AQ	2AL	2AF	2AB	2X	2T	2P	2L	2H	2D		
2BG	2BB	2AW	2AR	2AM	2AI	2AG	2AC	2Y	2U	2Q	2M	2I	2E	2A
2BH	2BC	2AX	2AS	2AN	2AJ	2AH	2AD	2Z	2V	2R	2N	2J	2F	2B
2BD	2AY	2AT	2AO											

Diagnostic Procedure

STEP	INSPECTION	RESULTS	ACTION
1	VERIFY PCM DTC <ul style="list-style-type: none"> Retrieve PCM DTCs using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	ATX: <ul style="list-style-type: none"> Go to the next step. MTX: <ul style="list-style-type: none"> Go to Step 3.
2	VERIFY TCM DTC <ul style="list-style-type: none"> Retrieve TCM DTCs using the M-MDS. (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [GW6A-EL, GW6AX-EL].) Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [GW6A-EL, GW6AX-EL].)
		No	Go to the next step.

STEP	INSPECTION	RESULTS	ACTION
3	INSPECT COMMUNICATION LINE BETWEEN PCM AND INSTRUMENT CLUSTER <ul style="list-style-type: none"> Inspect for a short or open circuit between the following terminals: <ul style="list-style-type: none"> Instrument cluster terminal B—Front body control module (FBCM) terminal 2K Instrument cluster terminal D—Front body control module (FBCM) terminal 2I Front body control module (FBCM) terminal 2P—PCM terminal 2AK Front body control module (FBCM) terminal 2N—PCM terminal 2AL Is the wiring harness normal? 	Yes	Inspect the instrument cluster. (See INSTRUMENT CLUSTER INSPECTION.) <ul style="list-style-type: none"> If there is any malfunction: <ul style="list-style-type: none"> Repair or replace the malfunctioning part according to the inspection results, then go to the next step. (See INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness, then go to the next step.
4	Verify the test results. <ul style="list-style-type: none"> If normal, return to the diagnostic index to service any additional symptoms. (See SYMPTOM DIAGNOSTIC INDEX [SKYACTIV-D 2.2].) If a malfunction remains, inspect the related Service Information and perform the repair or diagnosis. <ul style="list-style-type: none"> If the vehicle is repaired, troubleshooting is completed. If the vehicle is not repaired or additional diagnostic information is not available, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) 		