

DTC P058A:00	Current sensor problem
DETECTION CONDITION	<ul style="list-style-type: none"> The following conditions are met: <ul style="list-style-type: none"> Current sensor internal malfunction Battery voltage malfunction Battery fluid temperature malfunction Diagnostic support note This is a continuous monitor (other). The check engine light does not illuminate. FREEZE FRAME DATA (Mode 2)/Snapshot data is not available. The DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> Inhibits engine-stop by operating the i-stop function. Inhibits a part of the generator output control.
POSSIBLE CAUSE	<ul style="list-style-type: none"> Current sensor connector or terminals malfunction Front body control module (FBCM) connector or terminals malfunction Short to power supply in wiring harness between the following terminals: <ul style="list-style-type: none"> Battery positive terminal—Current sensor terminal A Current sensor terminal B—Front body control module (FBCM) terminal 2E PCM connector or terminals malfunction Short to power supply in wiring harness between the following terminals: <ul style="list-style-type: none"> Front body control module (FBCM) terminal 2P—PCM terminal 2AK Front body control module (FBCM) terminal 2N—PCM terminal 2AL Current sensor malfunction Front body control module (FBCM) malfunction PCM malfunction

CURRENT SENSOR WIRING HARNESS-SIDE CONNECTOR

FBCM WIRING HARNESS-SIDE CONNECTOR

PCM WIRING HARNESS-SIDE CONNECTOR

Diagnostic Procedure

STEP	INSPECTION		ACTION
1	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.
2	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].) • Are any other PENDING CODEs and/or DTCs present? 	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No	Go to the next step.
3	INSPECT CURRENT SENSOR CONNECTOR CONDITION <p>Note</p> <ul style="list-style-type: none"> • Always disconnect current sensor connector before disconnecting the negative battery cable. <ul style="list-style-type: none"> • Switch the ignition to off. • Disconnect the current sensor 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 10.
		No	Go to the next step.
4	INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the front body control module (FBCM) 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 10.
		No	Go to the next step.
5	INSPECT CURRENT SENSOR CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the current sensor and front body control module (FBCM) connectors are disconnected. • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — Current sensor terminal A — Current sensor terminal B • Is the voltage above B+? 	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to Step 10.
		No	Go to the next step.
6	INSPECT PCM CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the PCM connector. • Switch the ignition to off. • 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 10.
		No	Go to the next step.

STEP	INSPECTION	ACTION	
7	INSPECT FRONT BODY CONTROL MODULE (FBCM) CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the current sensor, front body control module (FBCM) and PCM connectors are disconnected. • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — Front body control module (FBCM) terminal 2P — Front body control module (FBCM) terminal 2N • Is the voltage above B+? 	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to Step 10.
		No	Go to the next step.
8	INSPECT CURRENT SENSOR <ul style="list-style-type: none"> • Inspect the current sensor. (See CURRENT SENSOR INSPECTION [SKYACTIV-G 2.0].) • Is there any malfunction? 	Yes	Replace the current sensor, then go to Step 10. (See CURRENT SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)
		No	Go to the next step.
9	INSPECT FRONT BODY CONTROL MODULE (FBCM) <ul style="list-style-type: none"> • Inspect the front body control module (FBCM). (See FRONT BODY CONTROL MODULE (FBCM) INSPECTION.) • Is there any malfunction? 	Yes	Replace the front body control module (FBCM), then go to the next step. (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.)
		No	Go to the next step.
10	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 KOEO or KOER self test. (See KOEO/KOER SELF TEST [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.
11	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.