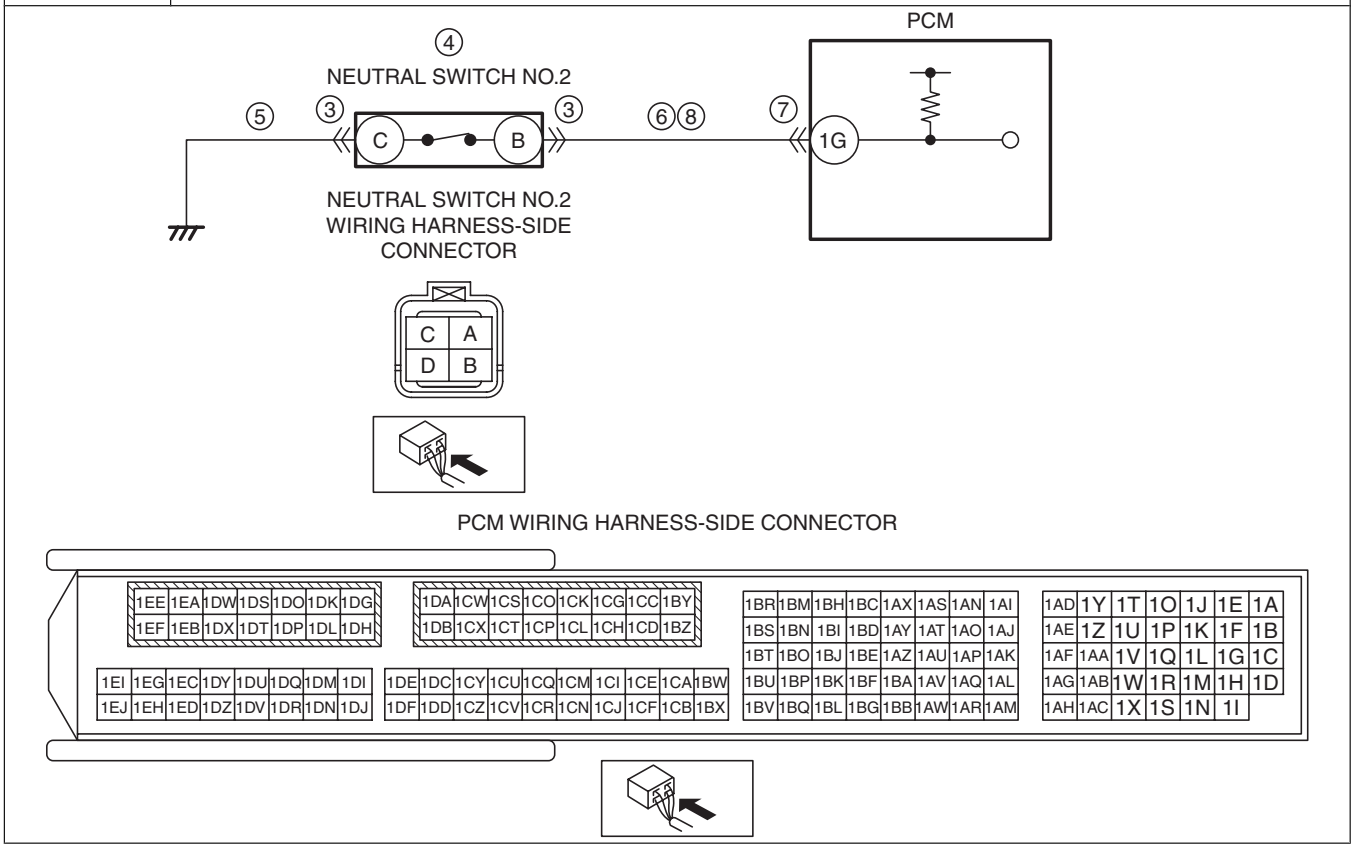
DTC P07BE:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

id0102h4950300

DTC P07BE: 00	**Transmission indeterminate failure (failed to neutral)**
DETECTION CONDITION	• Correlation malfunction between neutral switches No.1 and No.2. **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. • DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	• Flashes the i-stop warning light (amber) and inhibits engine-stop by operating the i-stop function.
POSSIBLE CAUSE	• Neutral switch No.2 connector or terminals malfunction • Neutral switch No.2 malfunction • Open circuit in wiring harness between neutral switch No.2 terminal C and body ground • Short to ground in wiring harness between neutral switch No.2 terminal B and PCM terminal 1G • PCM connector or terminals malfunction • Open circuit in wiring harness between neutral switch No.2 terminal B and PCM terminal 1G • PCM malfunction



Diagnostic Procedure

STEP	INSPECTION		ACTION
1	**VERIFY RELATED SERVICE INFORMATION AVAILABILITY** • 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** • 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-G 2.0, SKYACTIV-G 2.5].) • Is the PENDING CODE/DTC P0850:00 also present?	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC P0850:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	Go to the next step.

STEP	INSPECTION		ACTION
3	**INSPECT NEUTRAL SWITCH NO.2 CONNECTOR CONDITION** • Switch the ignition off. • Disconnect the neutral switch 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 9.
		No	Go to the next step.
4	**INSPECT NEUTRAL SWITCH NO.2** • Inspect the neutral switch No.2. (See NEUTRAL SWITCH INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is there any malfunction?	Yes	Replace the back-up light switch, then go to Step 9. (See BACK-UP LIGHT SWITCH REMOVAL/ INSTALLATION [C66M-R, C66MX-R].)
		No	Go to the next step.
5	**INSPECT NEUTRAL SWITCH NO.2 GROUND CIRCUIT FOR OPEN CIRCUIT** • Verify that the neutral switch No.2 connector is disconnected. • Inspect for continuity between neutral switch No. 2 terminal C (wiring harness-side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 9.
6	**INSPECT NEUTRAL SWITCH NO.2 SIGNAL CIRCUIT FOR SHORT TO GROUND** • Verify that the neutral switch No.2 connector is disconnected. • Inspect for continuity between neutral switch No. 2 terminal B (wiring harness-side) and body ground. • Is there continuity?	Yes	If the short to ground circuit could be detected in the wiring harness: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected in the wiring harness: • Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Go to Step 9.
		No	Go to the next step.
7	**INSPECT PCM CONNECTOR CONDITION** • Disconnect the PCM 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 9.
		No	Go to the next step.
8	**INSPECT NEUTRAL SWITCH NO.2 SIGNAL CIRCUIT FOR OPEN CIRCUIT** • Verify that the neutral switch No.2 and PCM connectors are disconnected. • Inspect for continuity between neutral switch No. 2 terminal B (wiring harness-side) and PCM terminal 1G (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
9	**VERIFY DTC TROUBLESHOOTING COMPLETED** • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Go to the next step.
		No	Go to the next step.
10	**VERIFY AFTER REPAIR PROCEDURE** • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	DTC troubleshooting completed.