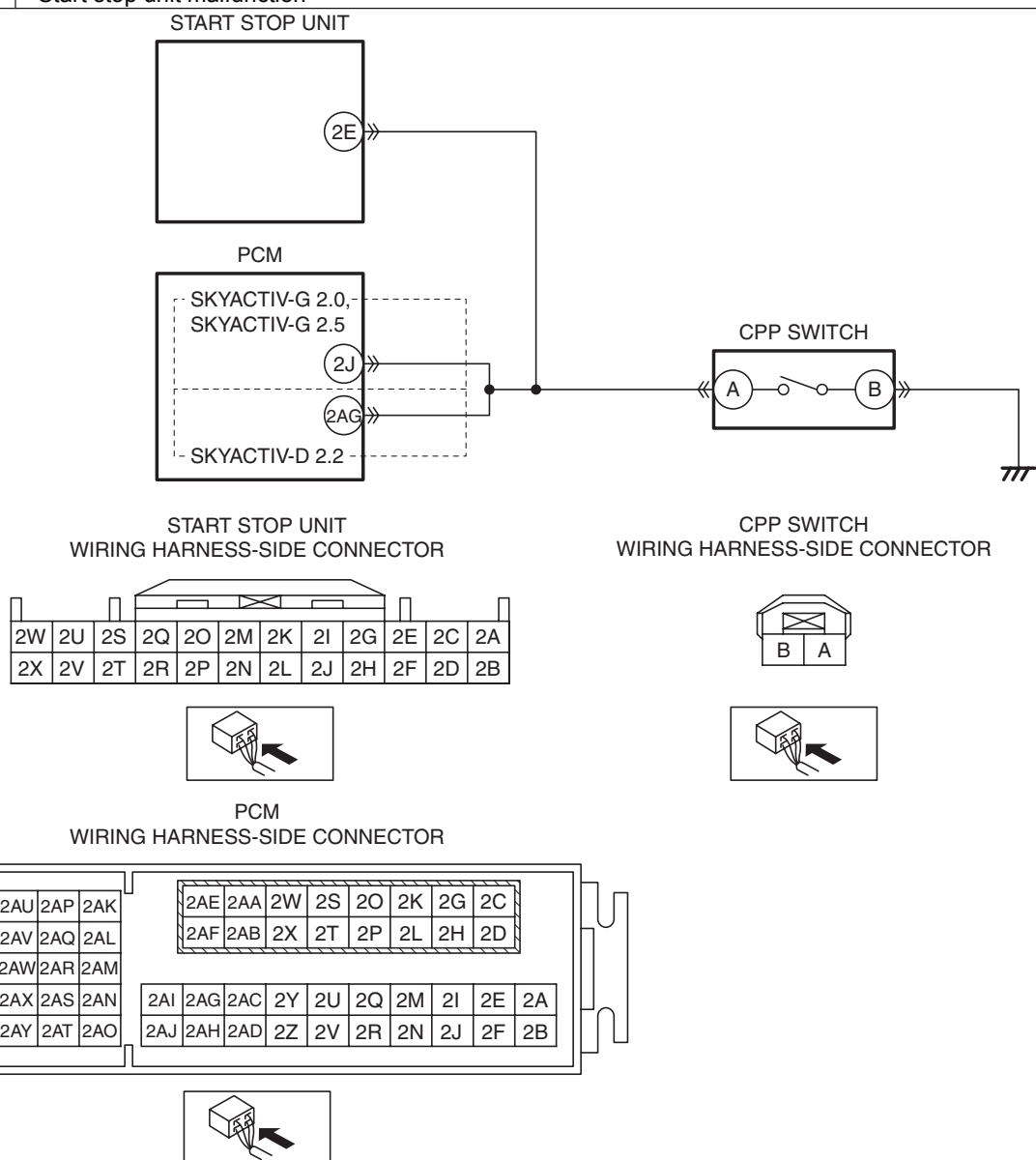


DTC P0830:23 [START STOP UNIT]

id0902p6023100

System malfunction location	CPP switch circuit malfunction
Detection condition	<ul style="list-style-type: none"> Start stop unit detects clutch switch is stuck on for 10 s or more.
Fail-safe	<ul style="list-style-type: none"> Change to the back-up mode. Perform the control with CPP switch turned off.
Possible cause	<ul style="list-style-type: none"> DTCs are stored in the PCM. CPP switch connector or terminal malfunction CPP switch malfunction PCM connector or terminal malfunction Short to ground in the wiring harness between the following terminals: <ul style="list-style-type: none"> CPP switch terminal A—PCM terminal 2J (SKYACTIV-G 2.0, SKYACTIV-G 2.5) CPP switch terminal A—PCM terminal 2AG (SKYACTIV-D 2.2) Start stop unit connector or terminal malfunction Short to ground in wiring harness between start stop unit terminal 2E and CPP switch terminal A Start stop unit malfunction



Diagnostic Procedure

Step	Inspection		Action
1	VERIFY PCM DTCs <ul style="list-style-type: none"> Perform the DTC inspection for the PCM using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) Is the DTC displayed? 	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See DTC TABLE [SKYACTIV-D 2.2].)
		No	Go to the next step.
2	INSPECT CPP SWITCH CONNECTOR CONDITION <ul style="list-style-type: none"> Switch the ignition to off. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) Disconnect the CPP switch connector. Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. Is the connector normal? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 8.
3	INSPECT CPP SWITCH <ul style="list-style-type: none"> Inspect the CPP switch. (See CLUTCH PEDAL POSITION (CPP) SWITCH INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See CLUTCH PEDAL POSITION (CPP) SWITCH INSPECTION [SKYACTIV-D 2.2].) Is the CPP switch normal? 	Yes	Go to the next step.
		No	Replace the CPP switch, then go to the Step 8. (See CLUTCH PEDAL POSITION SWITCH REMOVAL/ INSTALLATION [C66M-R, C66MX-R].) (See CLUTCH PEDAL POSITION SWITCH REMOVAL/ INSTALLATION [D66M-R, D66MX-R].)
4	INSPECT PCM CONNECTOR CONDITION <ul style="list-style-type: none"> Disconnect the PCM connector. Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. Is the connector normal? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 8.
5	INSPECT CPP SWITCH CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> Verify that the PCM and CPP switch connectors are disconnected. Inspect for continuity between CPP switch terminal A (vehicle wiring harness side) and body ground. Is there continuity? 	Yes	Repair or replace the wiring harness which is shorted to ground, then go to Step 8.
		No	Go to the next step.
6	INSPECT START STOP UNIT CONNECTOR CONDITION <ul style="list-style-type: none"> Disconnect the start stop unit connector. Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. Is the connector normal? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 8.

Step	Inspection	Action
7	INSPECT CPP SWITCH CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the start stop unit and CPP switch connectors are disconnected. • Inspect for continuity between CPP switch terminal A (vehicle wiring harness side) and body ground. • Is there continuity? 	Yes Repair or replace the wiring harness which has a short to ground, then go to the next step.
		No Go to the next step.
8	VERIFY THAT REPAIRS HAVE BEEN COMPLETED <ul style="list-style-type: none"> • Reconnect all the disconnected connectors. • Reconnect the disconnected negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].) • Switch the ignition ON (engine off or on) and wait for 10 min or more. • Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].) • Is DTC P0830:23 displayed? 	Yes Repeat the inspection from Step 1. • If the malfunction recurs, replace the start stop unit, then go to the next step. (See START STOP UNIT REMOVAL/INSTALLATION.)
		No Go to the next step.
9	VERIFY IF OTHER DTCs DISPLAYED <ul style="list-style-type: none"> • Are any other DTCs displayed? 	Yes Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [START STOP UNIT].)
		No DTC troubleshooting completed.