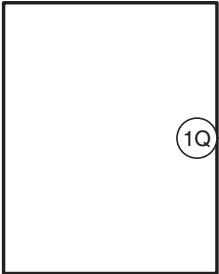
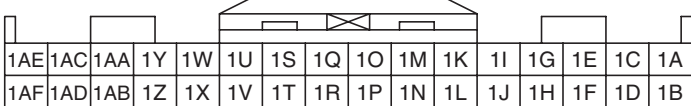

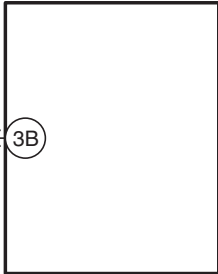
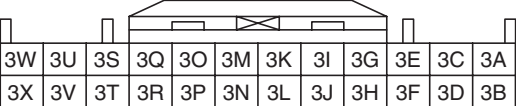



DTC U0028:87 [START STOP UNIT]

id0902p6023900

System malfunction location	Communication error with rear body control module (RBCM)
Detection condition	• Start stop unit detects communication error with rear body control module (RBCM) 10 times continuously .
Fail-safe	—
Possible cause	<ul style="list-style-type: none"> • Rear body control module (RBCM) connector or terminal malfunction • Start stop unit connector or terminal malfunction • Short to ground in wiring harness between start stop unit terminal 1Q and rear body control module (RBCM) terminal 3B • Open circuit in wiring harness between start stop unit terminal 1Q and rear body control module (RBCM) terminal 3B • Rear body control module (RBCM) malfunction • Start stop unit malfunction
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>START STOP UNIT</p>  <p>START STOP UNIT WIRING HARNESS-SIDE CONNECTOR</p>   </div> <div style="text-align: center;"> <p>RBCM</p>  <p>RBCM WIRING HARNESS-SIDE CONNECTOR</p>   </div> </div> <p>The diagram shows a communication line between terminal 1Q of the Start Stop Unit and terminal 3B of the RBCM. Below each unit is a detailed pinout table for its wiring harness-side connector, and a small icon of the connector with a plug.</p>	

Diagnostic Procedure

Step	Inspection	Action
1	INSPECT REAR BODY CONTROL MODULE (RBCM) CONNECTOR CONDITION	Yes
	<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 rear body control module (RBCM) connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is the connector normal? 	No
		Go to the next step.
		Repair or replace the connector, then go to Step 6.

Step	Inspection	Action
2	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 6.
3	INSPECT REAR BODY CONTROL MODULE (RBCM) CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the rear body control module (RBCM) connector and start stop unit connector are disconnected. • Inspect for continuity between rear body control module (RBCM) terminal 3B (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 6.
		No Go to the next step.
4	INSPECT REAR BODY CONTROL MODULE (RBCM) CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Verify that the rear body control module (RBCM) connector and start stop unit connector are disconnected. • Inspect the wiring harness for an open circuit between start stop unit terminal 1Q (vehicle wiring harness side) and rear body control module (RBCM) terminal 3B (vehicle wiring harness side). • Is there continuity? 	Yes Go to the next step.
		No Repair or replace the wiring harness which has an open circuit, then go to Step 6.
5	INSPECT REAR BODY CONTROL MODULE (RBCM) <ul style="list-style-type: none"> • Inspect the rear body control module (RBCM). (See REAR BODY CONTROL MODULE (RBCM) INSPECTION.) • Is the rear body control module (RBCM) normal? 	Yes Go to the next step.
		No Replace the rear body control module (RBCM), then go to the next step. (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.)
6	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].) • Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].) • Is DTC U0028:87 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.
7	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.