

DTC P0930:71 [START STOP UNIT]

id0902p6023400

System malfunction location	Shift-lock solenoid circuit malfunction
Detection condition	<ul style="list-style-type: none">The start stop unit detects shift-lock solenoid is stuck on for 30 s or more with the ignition switched ON (engine off or on).
Fail-safe	<ul style="list-style-type: none">Inhibits the shift lock control.
Possible cause	<ul style="list-style-type: none">Selector lever component connector or terminal malfunctionShift-lock solenoid power supply circuit malfunction<ul style="list-style-type: none">Short to ground in wiring harness between ENGINE.IG1 7.5 A fuse and selector lever component terminal AENGINE.IG1 7.5 A fuse malfunctionOpen circuit in wiring harness between IG1 relay and selector lever component terminal AStart stop unit connector or terminal malfunctionShort to ground in the wiring harness between selector lever component terminal H and start stop unit terminal 2GOpen circuit in the wiring harness between selector lever component terminal H and start stop unit terminal 2GShift-lock solenoid malfunctionStart stop unit malfunction

IG1 RELAY

RELAY AND FUSE BLOCK

ENGINE.IG1 7.5A

SHIFT-LOCK SOLENOID (SELECTOR LEVER COMPONENT)

START STOP UNIT

SELECTOR LEVER COMPONENT WIRING HARNESS-SIDE CONNECTOR

START STOP UNIT WIRING HARNESS-SIDE CONNECTOR

Diagnostic Procedure

Step	Inspection	Action	
1	INSPECT SELECTOR LEVER COMPONENT 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 selector lever component 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 7.
2	INSPECT SHIFT-LOCK SOLENOID POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT OR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the selector lever component connector is disconnected. • Connect 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].) • Switch the ignition ON (engine off or on). • Measure the voltage at selector lever component terminal A (vehicle wiring harness side). • Is the voltage B+? 	Yes	Go to the next step.
		No	Inspect the ENGINE.IG1 7.5 A fuse. <ul style="list-style-type: none"> • If a fuse is burnt out: <ul style="list-style-type: none"> — Repair or replace the wiring harness which is shorted to ground. — Replace the burnt out fuse. • If a fuse is damaged: <ul style="list-style-type: none"> — Replace the damaged fuse. • If the fuse is normal: <ul style="list-style-type: none"> — Repair or replace the wiring harness which has an open circuit. Go to Step 7.
3	INSPECT START STOP UNIT 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 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 7.

Step	Inspection	Action
4	INSPECT SHIFT-LOCK SOLENOID CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> Verify that the selector lever component and start stop unit connectors are disconnected. Inspect for continuity between selector lever component terminal H (vehicle wiring harness) and body ground. Is there continuity? 	Yes Repair or replace the wiring harness which is shorted to ground, then go to Step 7.
		No Go to the next step.
5	INSPECT SHIFT-LOCK SOLENOID CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> Verify that the selector lever component and start stop unit connectors are disconnected. Inspect the wiring harness for continuity between selector lever component terminal H (vehicle wiring harness side) and start stop unit terminal 2G (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 7.
6	INSPECT SHIFT-LOCK SOLENOID <ul style="list-style-type: none"> Inspect the shift-lock solenoid. (See SHIFT-LOCK SYSTEM INSPECTION.) Is the shift-lock solenoid normal? 	Yes Go to the next step.
		No Replace the selector lever component, then go to the next step. (See AUTOMATIC TRANSAXLE SHIFT MECHANISM REMOVAL/INSTALLATION.)
7	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 30 min or more. Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].) Is DTC P0930:71 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.
8	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.