# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > SRS Control Module (SRSCM) > Description and Operation

# **Description**

The primary purpose of the SRSCM (Supplemental Restraints System Control Module) is to discriminate between an event that warrants restraint system deployment and an event that does not. The SRSCM must decide whether to deploy the restraint system or not. After determining that pretensioners and/or airbag deployment is required, the SRSCM must supply sufficient power to the pretensioners and airbag igniters to initiate deployment.

The SRSCM determines that an impact may require deployment of the pretensioners and airbags from data obtained from impact sensors and other components in conjunction with a safing function.

The SRSCM will not be ready to detect a crash or to activate the restraint system devices until the signals in the SRSCM circuitry stabilize.

It is possible that the SRSCM could activate the safety restraint devices in approximately 2 seconds but is guaranteed to fully function after prove-out is completed.

The SRSCM must perform a diagnostic routine and light a system readiness indicator at key-on. The system must perform a continuous diagnostic routine and provide fault annunciation through a warning lamp indicator in the event of fault detection. A serial diagnostic communication interface will be used to facilitate servicing of the restraint control system.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > SRS Control Module (SRSCM) > Components and Components Location

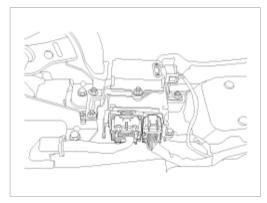
# Components



# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > SRS Control Module (SRSCM) > Repair procedures

#### Removal

- 1. Remove the ignition key from the vehicle.
- 2. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
- 3. Disconnect the DAB, PAB, SAB, CAB and BPT connectors.
- 4. Remove the floor console. (Refer to the Body group console)
- 5. Disconnect the SRSCM harness connector from the SRSCM.



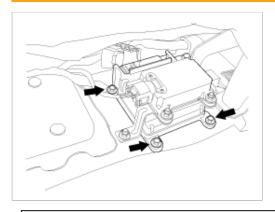
6. Remove the SRSCM mounting bolts(3EA) from the SRSCM, then remove the SRSCM.

#### Installation

- 1. Remove the ignition key from the vehicle.
- 2. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
- 3. Install the SRSCM with the SRSCM mounting bolts.

#### **Tightening torque (SRSCM Mounting Bolt)**

:  $6.9 \sim 8.8 \text{ Nm} (0.7 \sim 0.9 \text{ kgf.m}, 5.1 \sim 6.5 \text{ lb.ft})$ 



#### NOTE

Use new mounting bolts when replacing the SRSCM after a collision.

- 4. Connect the SRSCM harness connector.
- 5. Install the floor console. (Refer to the Body group console)
- 6. Connect the DAB, PAB, SAB, CAB and BPT connectors.
- 7. Reconnect the battery negative cable.
- 8. After installing the SRSCM, confirm proper system operation:
  - A. Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.

### Variant coding

After replacing the SRSCM with a new one, MUST perform the "Variant Coding" procedure.

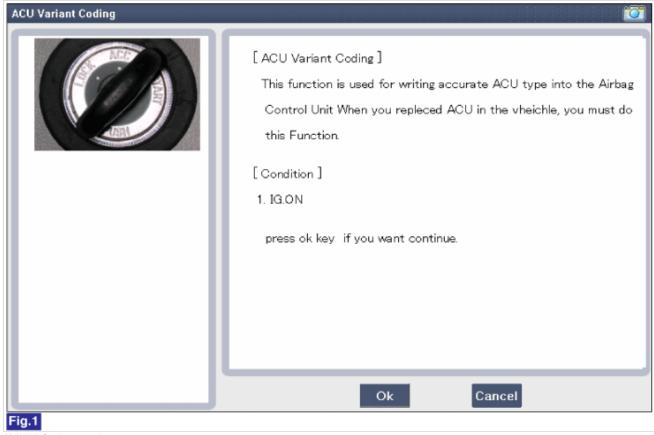
### NOTE

- 1. On SRSCM variant coding mode, the airbag warning lamp is periodically blinking (ON: 0.5sec., OFF: 0.5sec.) until the coding is normally completed.
- 2. If the variant coding is failed, DTC B1762 (ACU Coding Error) will be displayed and the warning lamp will be turned on.
  - In this case, perform the variant coding procedure again after confirming the cause in "DTC Fault State Information". Variant Coding can be performed up to 255 times, but if the number of coding work exceeds 255 times, DTC B1683 (Exceed Maximum coding Number) will be displayed and SRSCM must be replaced.
- 3. If the battery voltage is low (less than 9V), DTC B1102 will be displayed. In this case, charge the battery before anything else, and then perform the variant coding procedure.
  Because, although Variant Coding is normally performed, DTC B1762 (ACU Coding Error) and B1102 (Battery Voltage Low) are displayed simultaneously.

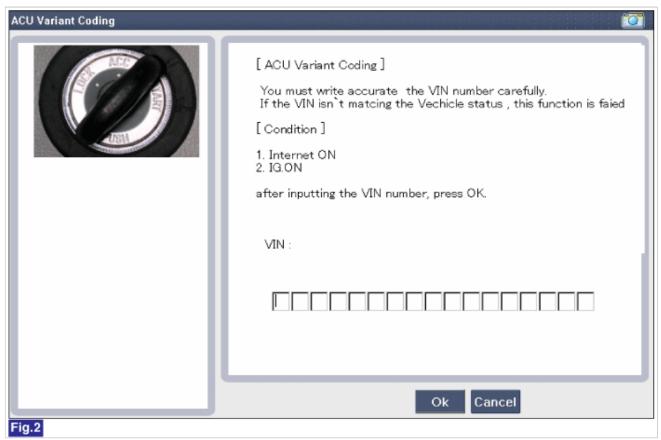
# **Variant coding Procedure**

### ■ On-Line type on GDS

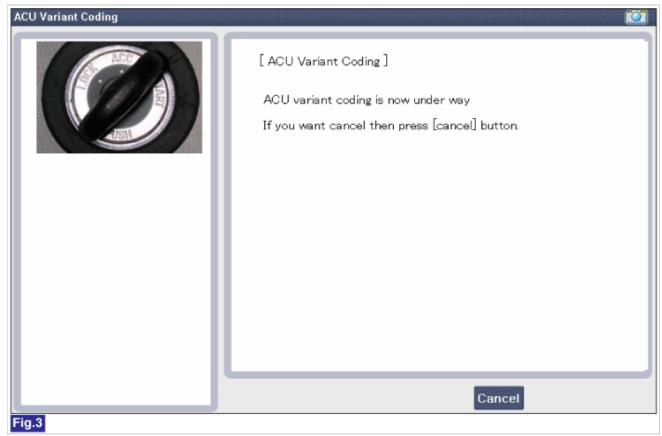
- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON" & Engine "OFF" select vehicle name and airbag system.
- 3. Select Variant coding mode.
- 4. Follow steps on the screen as below.
- 1) Initial ACU Variant Coding screen



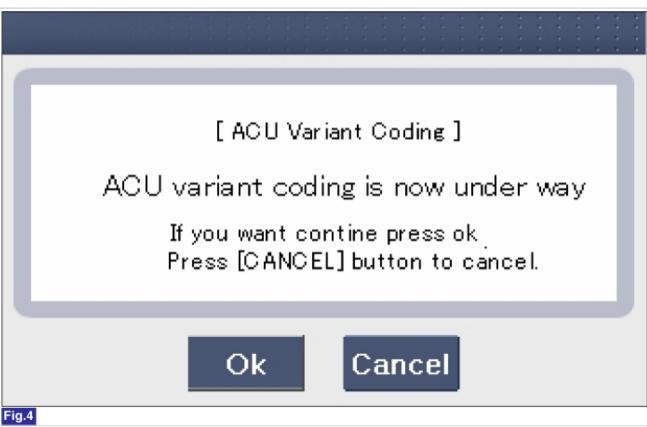
2) VIN Code entering screen



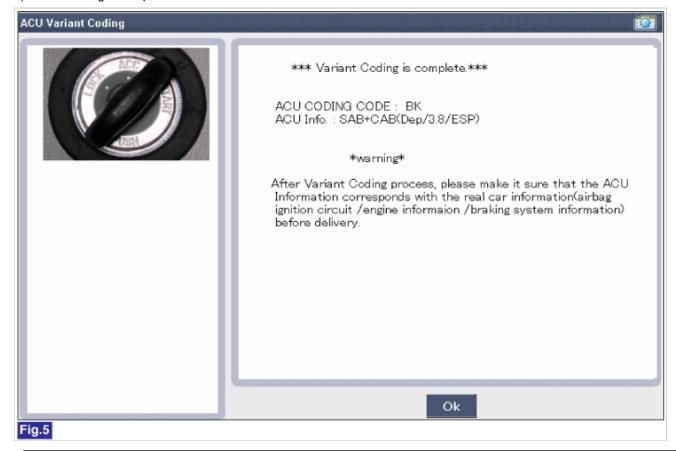
3) Variant coding's proceeding screen-1



4) Variant coding's proceeding screen-2

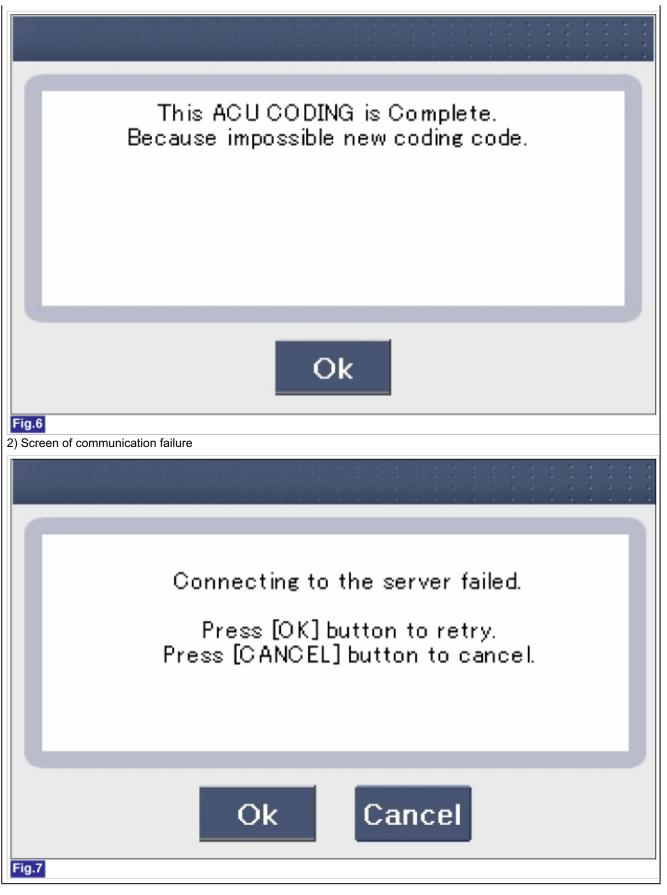


5) Variant coding is completed

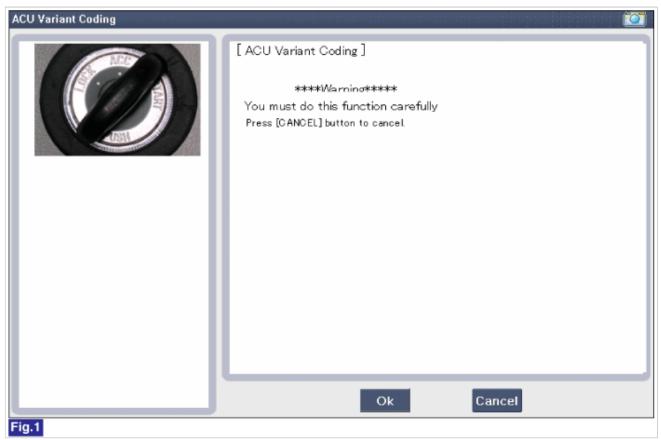


NOTE

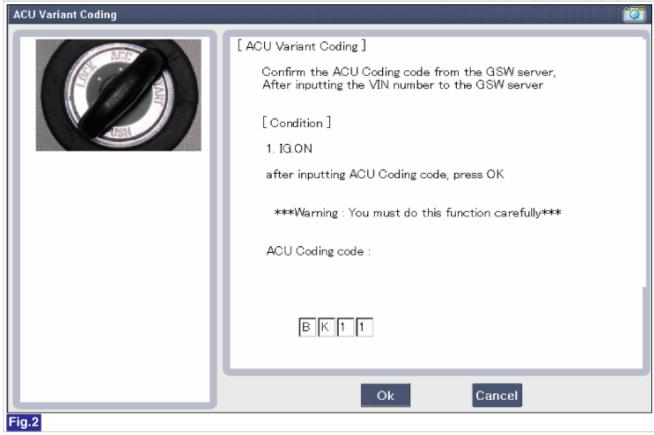
1) Screen of Retrying the Variant coding after finishing variant coding



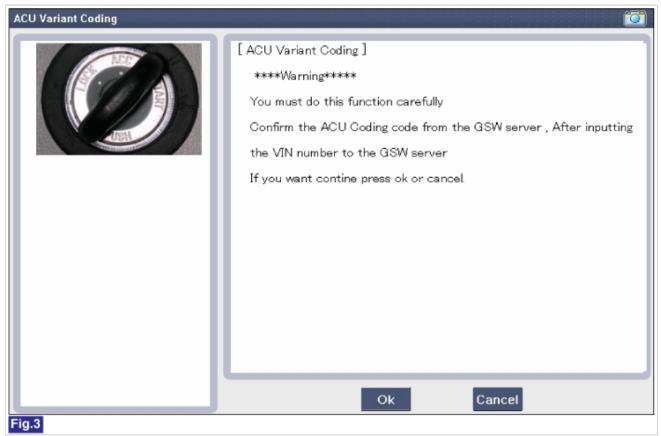
- Off-line type on GDS (This can be used when not connecting to internet)
- 1) Initial ACU Variant Coding screen



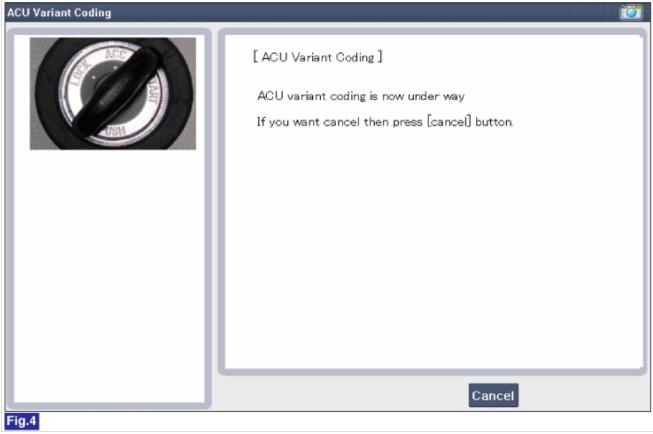
2) ACU CODING Code entering screen



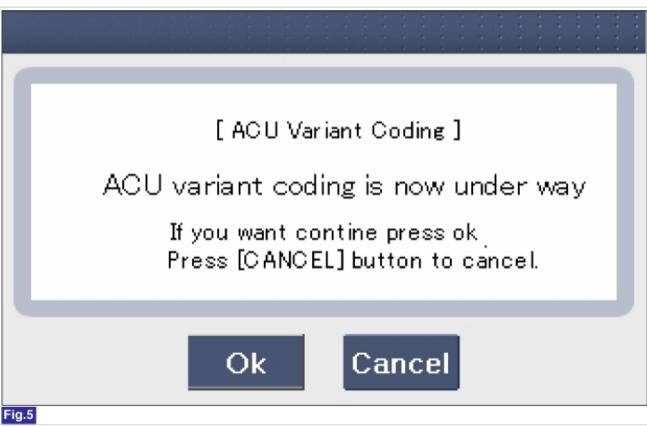
3) Screen of rechecking ACU CODING code's entering



4) Variant coding's proceeding screen-1



5) Variant coding's proceeding screen-2



6) Variant coding is completed



NOTE

1) Screen of Retrying the Variant coding after finishing variant coding



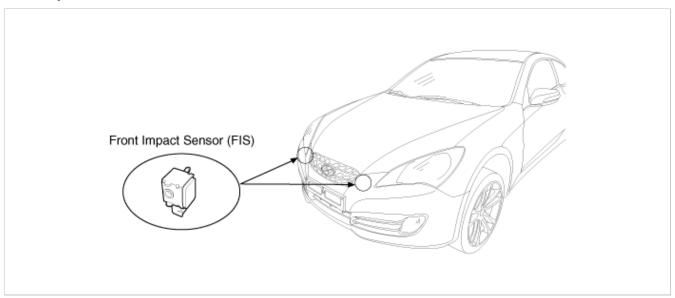
# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Front Impact Sensor (FIS) > Description and Operation

# **Description**

The front impact sensor (FIS) is installed in the Front End Module (FEM). They are remote sensors that detect acceleration due to a collision at its mounting location. The primary purpose of the Front Impact Sensor (FIS) is to provide an indication of a collision. The Front Impact Sensor (FIS) sends acceleration data to the SRSCM.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Front Impact Sensor (FIS) > Components and Components Location

# Components

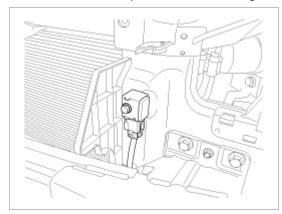


# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Front Impact Sensor (FIS) > Repair procedures

#### Removal

### CAUTION

- Removal of the airbag must be performed according to the precautions/ procedures described previously.
- Before disconnecting the front impact sensor connector, disconnect the front airbag connector(s).
- Do not turn the ignition switch ON and do not connect the battery cable while replacing the front impact sensor.
- 1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
- 2. Remove the front bumper. (Refer to the Body group-Bumper)
- 3. Disconnect the Front Impact Sensor connector.
- 4. Remove the Front Impact Sensor mounting nut.



5. Remove the Front Impact Sensor.

## Installation

## CAUTION

- Do not turn the ignition switch ON and do not contact the battery cable while replacing the front impact sensor.
- 1. Install the new Front Impact Sensor.
- 2. Tighten the Front Impact Sensor mounting nut.

## **Tightening torque**

:  $6.8 \sim 8.8 \text{ Nm} (0.7 \sim 0.9 \text{ kgf.m}, 5.1 \sim 6.5 \text{ lb.ft})$ 

- 3. Connect the Front Impact Sensor connector and install the front bumper. (Refer to the Body group-Bumper)
- 4. Reconnect the battery negative cable.
- 5. After installing the Front Impact Sensor, confirm proper system operation:
  - A. Turn the ignition switch ON the SRS indicator light should be turned on for about six seconds and then go off.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Side Impact Sensor (SIS) > Description and Operation

# **Description**

Side Impact Sensor (SIS) system consists of two Front-SIS which are installed at each center of the front door module (LH and RH) and two Rear-SIS which are installed at each rear pillar nearby (LH and RH).

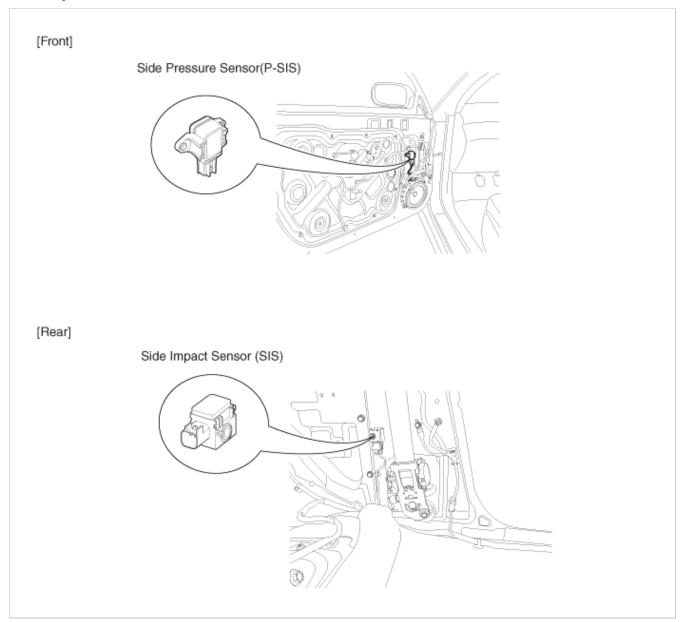
Front-Side Impact Sensor (F-SIS) is also called P-SIS because that detects pressure due to collision at its mounting location.

Rear-Side Impact Sensor (R-SIS) is also called A-SIS because that detects acceleration.

SRSCM decides deployment or not of the airbag and the time of deployment through the collision signal of SIS when the collision occurred.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Side Impact Sensor (SIS) > Components and Components Location

# Components



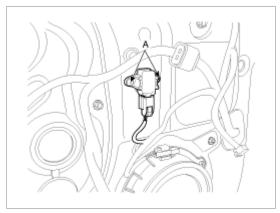
# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Side Impact Sensor (SIS) > Repair procedures

### Removal

#### **Side Pressure Sensor**

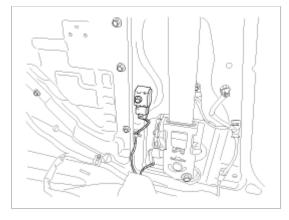
# CAUTION

- Removal of the airbag must be performed according to the precautions/procedures described previously.
- Before disconnecting the side impact sensor connector(s), disconnect the side airbag connector (s).
- Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.
- 1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
- 2. Remove the front door trim. (Refer to the Body group- front door)
- 3. Disconnect the side pressure sensor connector and remove the side pressure sensor after removing 2 rivets (A).



# **Side Impact Sensor**

- 1. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
- 2. Remove the rear seat. (Refer to the Body group- Seat)
- 3. Remove the luggage side trim. (Refer to the Body group-Interior trim)
- 4. Disconnect the side impact sensor connector.
- 5. Loosen the side impact sensor mounting bolt and remove the side impact sensor.



### Installation

#### **Side Pressure Sensor**

CAUTION

- Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.
- 1. Install the new side pressure sensor with 2 rivets then connect the side pressure sensor connector.
- 2. Install the front door trim. (Refer to the Body group- front door)
- 3. Reconnect the battery negative cable.
- 4. After installing the side pressure sensor, confirm proper system operation:
  - A. Turn the ignition switch ON, the SRS indicator light should be turned on for about six seconds and then go off.

# **Side Impact Sensor**

## CAUTION

- Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.
- 1. Install the new side impact sensor with the bolt then connect the SRS harness connector to the side impact sensor.

### **Tightening torque**

- : 6.8 ~ 8.8 Nm (0.7 ~ 0.9 kgf.m, 5.1 ~ 6.5 lb.ft)
- 2. Install the luggage side trim. (Refer to the Body group- Interior trim)
- 3. Install the rear seat . (Refer to the Body group- Seat)
- 4. Reconnect the battery negative cable.
- 5. After installing the side impact sensor, confirm proper system operation:
  - A. Turn the ignition switch ON, the SRS indicator light should be turned on for about six seconds and then go off.

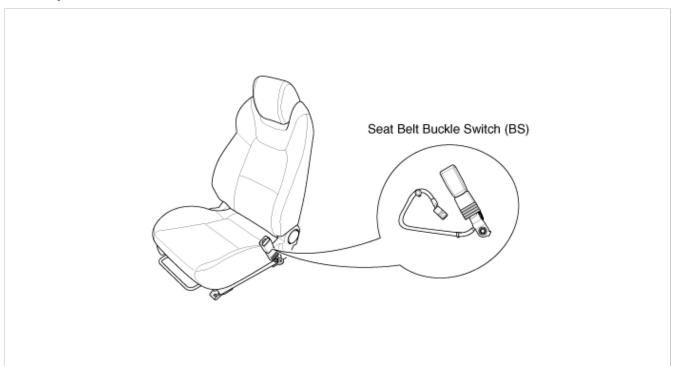
# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Seat Belt Buckle Switch (BS) > Description and Operation

# **Description**

The SRSCM shall monitor the status of the driver and front passenger seat belt buckle. The SRSCM provides one pin each for the driver and front passenger seat belt buckle status input. The seat belt buckle circuit operates from internal boost voltage supplied by the SRSCM, and uses chassis ground for the signal return. The buckle status shall modify the SRSCM deployment. If the buckle status is unbuckled, the corresponding pretensioner will be deactivated.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Seat Belt Buckle Switch (BS) > Components and Components Location

# Components

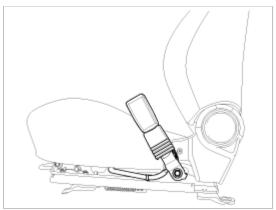


# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Seat Belt Buckle Switch (BS) > Repair procedures

## Removal

- 1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
- 2. Remove the front seat assembly. (Refer to the Body group- Seat)
- 3. Loosen the seat belt buckle mounting bolt and remove the seat belt buckle switch.

4.



## Installation

# CAUTION

Be sure to install the harness wires not to be pinched or interfered with other parts.

- 1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
- 2. Remove the ignition key from the vehicle.
- 3. Install the seat belt buckle switch.

### **Tightening Torque**

: 39.2 ~ 53.9 Nm (4.0 ~ 5.5 kgf.m, 28.9 ~ 39.8 lb.ft)

- 4. Install the front seat assembly. (Refer to the Body group- Seat)
- 5. Reconnect the battery negative cable.
- 6. After installing the Seat Belt Buckle Switch, confirm proper system operation:
  - A. Turn the ignition switch ON; the SRS indicator should be turned on for about six seconds and then go off.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Passenger Occupant Detecting Sensor (PODS) > Description and Operation

# **Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbags and/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant. This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

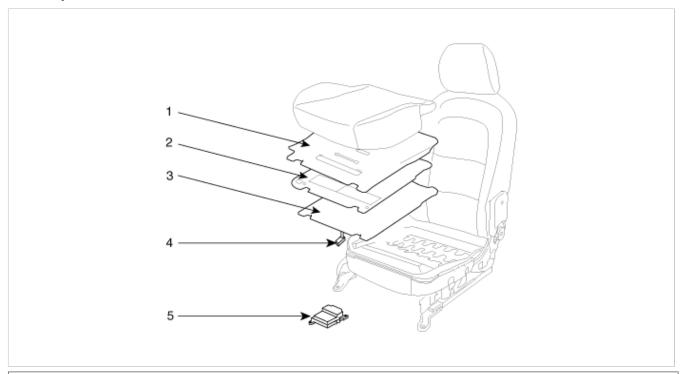
However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximity sensor.

The Passive Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushion and suspension to measure the occupant's loading force on the vehicle seat. The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU), both of which are mounted under the seat pan. The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Passenger Occupant Detecting Sensor (PODS) > Components and Components Location

## Components



- 1. Bladder: Sense occupant weight and provide fluid pressure input to Pressure Sensor.
- 2. Backer Board: Provide stable and smooth reaction surface for Bladder, together with Felt Pad.
- 3. Felt Pad : Provide stable reaction surface for Bladder, together with Backer Board, and protect BladderAssembly from the seat frame environment.
- 4. Pressure Sensor: Sense pressure input from Bladder and convert the pressure input to a voltage signalfor ECU.
- 5. ECU: Utilizing data from the Pressure Sensor, BTS (Belt Tension sensor), and Compensation Tables, determine if PAB (Passenger Airbag) will be suppressed.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Passenger Occupant Detecting Sensor (PODS) > Repair procedures

### Removal

- 1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
- 2. Remove the front passenger seat assembly. (Refer to the Bdy group- Seat)
- 3. Remove the seat cushion as an assembly. (Refer to the Bdy group- Seat)

#### Installation

- 1. Install the PODS equipped seat front assembly. (Refer to the Bdy group- Seat)
- 2. Reconnect the battery negative cable.
- 3. After installing the PODS, confirm proper system operation:

A. Turn the ignition switch ON; the SRS indicator should be turned on for about six seconds and then go off. Telltale lamp will turn on for 4 seconds and be turned off for 4 seconds. After the &econds, it shall remain off if the PODS does not require suppression and the passenger airbag is enabled.

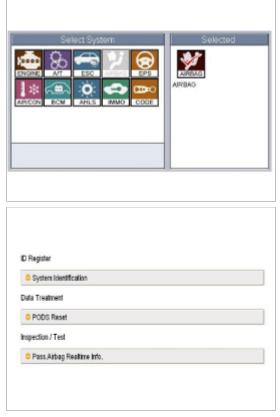


B sure to perform PODS reset with scantool after replcacing PODS equipped seat cushion.

# PODS Re-zero procedure

Wu should perform PODS Re-zero procedure after service or replacement about all part of the passenger seat.

- 1. Ignition OFF, connect scantool.
- 2. Ignition ON"& Engine OFF, select Airbag system and PODS Reset"mode.



- 3. The scantool will show the two PODS RESET function steps.
  - (1) Erase PODS ECU diagnostic codes.
  - (2) PODS ECU initialization.



4. Press the Olfoutton to erase the PODS related diagnostic codes.



5. Press Olfoutton to initialize the PODS.



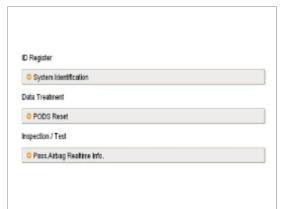
# CAUTION

This step must be done PODS re-zero, when the front passenger seat is empty.

6. The PODS initialization procedure will be performed.



7Check PODS situation with selecting "Pass. Airbag Realtime Info" after performing PODS Reset procedure.

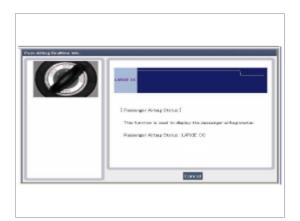


8Perform inspection with pressing Olbutton.



9Finish the procedure with pressing cancel button if there is no problem after inspecting each status as below.

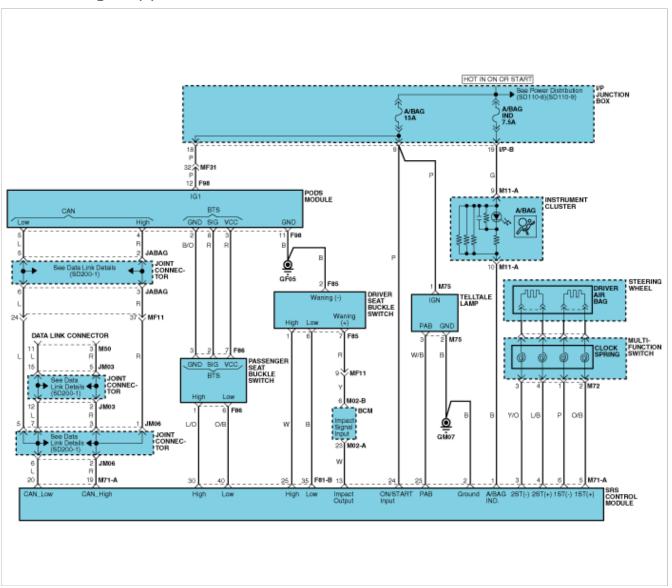




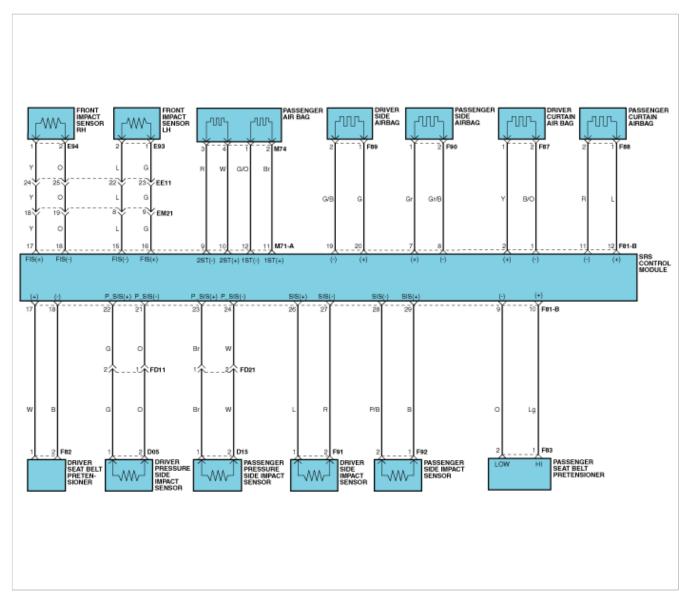


# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Schematic Diagrams

# **Circuit Diagram (1)**



Circuit Diagram (2)



# **SRSCM Connector Terminal**

#### **Harness Connector**

6	5	4	3	2	1
12	11	10	9	8	7
18	17	16	15	14	13
24	23	22	21	20	19

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11
30	29	28	27	26	25	24	23	22	21
40	39	38	37	36	35	34	33	32	31

CONNECTOR A CONNECTOR B

Shorting bar ( ): located on the upper side of pin 1 and 2 of SRSCM connector A

Note: For short circuit check, shorting bar must be opened. Use a plastic clip as a shorting bar opener for disconnecting shorting bar.

Pin	Function (Connector A)	Pin	Function (Connector B)
1	Airbag Warning Lamp (Shorting bar opener)	1	Curtain Airbag [Driver] Low
2	Power Ground (Shorting bar opener)	2	Curtain Airbag [Driver] High
3	(2nd stage) Driver Airbag Low	3	-
4	(2nd stage) Driver Airbag High	4	-
5	(1st stage) Driver Airbag High	5	-

6	(1st stage) Driver Airbag Low	6	-
7	-	7	Side Airbag [Passenger] High
8	-	8	Side Airbag [Passenger] Low
9	(2nd stage) Passenger Airbag Low	9	Seat Belt Pretensioner [Passenger] Low
10	(2nd stage) Passenger Airbag High	10	Seat Belt Pretensioner [Passenger] High
11	(1st stage) Passenger Airbag High	11	Curtain Airbag [Passenger] Low
12	(1st stage) Passenger Airbag Low	12	Curtain Airbag [Passenger] High
13	Crash Output	13	-
14	-	14	-
15	Front Impact Sensor [Driver] Low	15	-
16	Front Impact Sensor [Driver] High	16	-
17	Front Impact Sensor [Passenger] High	17	Seat Belt Pretensioner [Driver] High
18	Front Impact Sensor [Passenger] Low	18	Seat Belt Pretensioner [Driver] Low
19	CAN High (PODS and OBD)	19	Side Airbag [Driver] Low
20	CAN High (PODS and OBD)	20	Side Airbag [Driver] High
21	-	21	Side Impact Sensor [Driver] Low
22	-	22	Side Impact Sensor [Driver] High
23	Telltale Warning Lamp	23	Side Impact Sensor [Passenger] High
24	Power supply (Ignition)	24	Side Impact Sensor [Passenger] Low
		25	Seat Belt Buckle Switch [Driver] High
		26	Side Impact Sensor [Driver] High
		27	Side Impact Sensor [Driver] Low
		28	Side Impact Sensor [Passenger] Low
		29	Side Impact Sensor [Passenger] High
		30	Seat Belt Buckle Switch [Passenger] High
		31	-
		32	-
		33	-
		34	-
		35	Seat Belt Buckle Switch [Driver] Low
		36	-
		37	-
		38	-
		39	-
		40	Seat Belt Buckle Switch [Passenger] Low

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > Troubleshooting

# **Diagnostic Trouble Code (DTC) Table**

DTC Code	Trouble description	Remar
B1101	Battery voltage high	
B1102	Battery voltage low	
B1326	FIS(Front Impact Sensor) - Driver short to Ground	
B1327	FIS(Front Impact Sensor) - Driver short to Battery	
B1328	FIS(Front Impact Sensor) - Driver defect	
B1329	FIS(Front Impact Sensor) - Driver communication error	
B1330	FIS(Front Impact Sensor) - Driver Wrong ID	
B1331	FIS(Front Impact Sensor) - Passenger short to Ground	
B1332	FIS(Front Impact Sensor) - Passenger short to Battery	
B1333	FIS(Front Impact Sensor) - Passenger defect	
B1334	FIS(Front Impact Sensor) - Passenger communication error	
B1335	FIS(Front Impact Sensor) - Passenger Wrong ID	
B1341	Remote Crash Sensors Cross Coupling	
B1346	Driver airbag resistance too High (1st stage)	
B1347	Driver airbag resistance too Low (1st stage)	
B1348	Driver airbag resistance circuit short to ground (1st stage)	
B1349	Driver airbag resistance circuit short to battery (1st stage)	
B1352	Passenger airbag resistance too High (1st stage)	
B1353	Passenger airbag resistance too Low (1st stage)	
B1354	Passenger airbag resistance circuit short to ground (1st stage)	
B1355	Passenger airbag resistance circuit short to battery (1st stage)	
B1361	Pretensioner front - Driver resistance too high	
B1362	Pretensioner front - Diver resistance too low	
B1363	Pretensioner front - Driver resistance circuit short to ground	
B1364	Pretensioner front - Driver resistance circuit short to battery	
B1367	Pretensioner front - Passenger resistance too high	
B1368	Pretensioner front - Passenger resistance too low	
B1369	Pretensioner front - Passenger resistance circuit short to ground	
B1370	Pretensioner front - Passenger resistance circuit short to battery	
B1378	Side airbag front - Driver resistance too high	
B1379	Side airbag front - Driver resistance too low	
B1380	Side airbag front - Driver resistance circuit short to ground	
B1381	Side airbag front - Driver resistance circuit short to battery	
B1382	Side airbag front - Passenger resistance too high	
B1383	Side airbag front - Passenger resistance too low	
B1384	Side airbag front - Passenger resistance circuit short to ground	

B1385	Side airbag front - Passenger resistance circuit short to battery	
B1395	Firing loops interconnection fault	
B1400	SIS(Side Impact Sensor) front - Driver defect	
B1401	SIS(Side Impact Sensor) front - Driver circuit short to Ground	
B1402	SIS(Side Impact Sensor) front - Driver circuit short to Battery	
B1403	SIS(Side Impact Sensor) front - Passenger defect	
B1404	SIS(Side Impact Sensor) front - Passenger circuit short to Ground	
B1405	SIS(Side Impact Sensor) front - Passenger circuit short to Battery	
B1409	SIS(Side Impact Sensor) front - Driver communication error	
B1410	SIS(Side Impact Sensor) front - Passenger communication error	
B1414	SIS(Side Impact Sensor) front - Driver Wrong ID	
B1415	SIS(Side Impact Sensor) front - Passenger wrong ID	
B1473	Inflatable Curtain airbag - Driver resistance too high	
B1474	Inflatable Curtain airbag - Driver resistance too low	
B1475	Inflatable Curtain airbag - Driver resistance circuit short to ground	
B1476	Inflatable Curtain airbag - Driver resistance circuit short to battery	
B1477	Inflatable Curtain airbag - Passenger resistance too high	
B1478	Inflatable Curtain airbag - Passenger resistance too low	
B1479	Inflatable Curtain airbag - Passenger resistance circuit short to ground	
B1480	Inflatable Curtain airbag - Passenger resistance circuit short to battery	
B1481	2nd Stage Driver airbag resistance too high	
B1482	2nd Stage Driver airbag resistance too low	
B1483	2nd Stage Driver airbag resistance circuit short to ground	
B1484	2nd Stage Driver airbag resistance circuit circuit leakage to battery	
B1485	2nd Stage Passenger airbag resistance too high	
B1486	2nd Stage Passenger airbag resistance too low	
B1487	2nd Stage Passenger airbag resistance circuit short to ground	
B1488	2nd Stage Passenger airbag resistance circuit short to battery	
B1489	PODS(Passenger Occupant Detecting System) ECU defect	
B1490	PODS(Passenger Occupant Detecting System) Sensor(Bladder) defect	
B1493	PODS(Passenger Occupant Detecting System) communication error	
B1494	PODS(Passenger Occupant Detecting System) wrong ID	
B1495	BTS(Belt - Tension Sensor) defect	
B1496	PODS(Passenger Occupant Detecting System) not calibrated	
B1511	Buckle Switch Driver open or short to Battery	
B1512	Buckle Switch Driver short or short to Ground	
B1513	Buckle Switch Passenger open or short to Battery	
B1514	Buckle Switch Passenger short or short to Ground	
B1515	Buckle Switch Driver Defect (Cross Coupling)	

B1516	Buckle Switch Passenger Defect (Cross Coupling)	
B1517	Buckle Switch Driver Instability	
B1518	Buckle Switch Passenger Instability	
B1620	Internal fault - Replace ECU	
B1650	Crash recorded in 1st stage only (Frontal - Replace ECU)	
B1651	Crash recorded in front - Driver side airbag (Replace ECU)	
B1652	Crash recorded in front - Passenger side airbag (Replace ECU)	
B1657	Crash recorded in Belt pretensioner only	
B1658	Belt pretensioner 6 times deployment	
B1670	Crash recorded in full stage (Frontal - Replace ECU)	
B1683	Exceed Maximum Coding Number	
B1684	ACU configuration is different	
B1738	P-SIS front – Driver Wrong ID	
B1739	P-SIS front – Driver Defect	
B1740	P-SIS front – Driver Short to Ground	
B1741	P-SIS front – Driver Short to Battery	
B1742	P-SIS front – Driver Communication Error	
B1744	P-SIS front - Passenger Wrong ID	
B1745	P-SIS front - Passenger Defect	
B1746	P-SIS front - Passenger Short to Ground	
B1747	P-SIS front - Passenger Short to Battery	
B1748	P-SIS front - Passenger Communication Error	
B1762	ACU Coding Error	
B2500	Warning lamp failure	
B2502	Passenger airbag Telltale lamp failure	

### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1101 Battery Voltage High

### **General Description**

SRSCM (Supplemental Restraints System Control Module) checks input voltage when "IG ON" to make air bag system work properly.

If input voltage is out of normal range, there can be malfunction in system operation. In this case, Check battery and charging system.

# **DTC Description**

The SRSCM sets DTC B1101 and turns warning light on if voltage above threshold value is detected for more than 4 sec. (If voltage within threshold value is detected When the SRSCM returns to normal condition. SRSCM regards DTC as being cleared and turns warning light off).

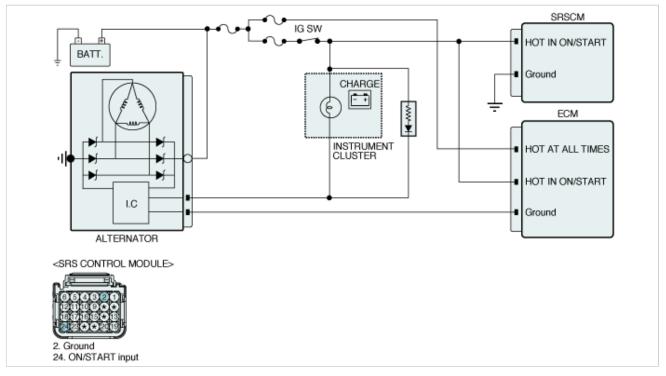
# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Check voltage	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	Open/Short circuit in power
Threshold Value		• Vbatt ≥ 17	harness.  Open/Short circuit in ground
Diagnostic	Qualification	More than 4 sec	harness. • Faulty charging system.
Time	De-Qualification	More than 4 sec	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Idle & WOT	Approx. 8.38 ≤ Vbatt ≤ 17

### **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.

3. Monitor the "Battery Voltage" parameter on the Scantool.

Specification: Approx. 8.38 ≤ Vbatt ≤ 17

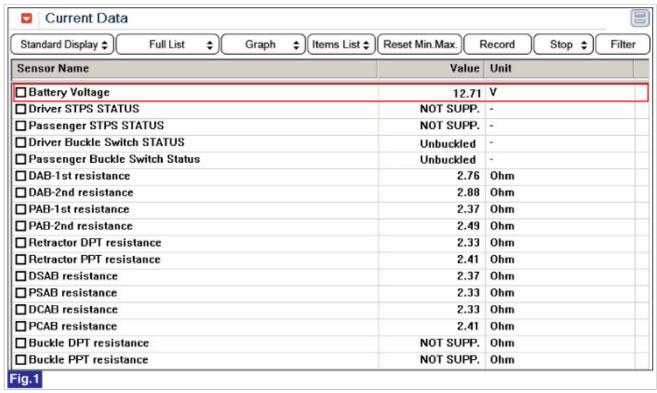


Fig.1) Normal Data

4. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YE	ES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
N	0	► Go to "Charging System Inspection" procedure.

### **Charging System Inspection**

- 1. Engine "ON", headight and heatwire "ON".
- 2. Measure voltage between the battery terminal (+) and (-) maintaining ENG. RPM 2,500RPM (idle) over 2 minutes.

Specification : Approx. 8.38 ≤ Vbatt ≤ 17

3. Is the measured voltage within specifications?

YES	► Go to "Power Circuit Inspection" procedure.
NO	► Substitute with a known-good alternator and check for proper operation.  If the problem is corrected, replace alternator and then go to "Verification of Vehicle Repair" procedure.

## **Power Circuit Inspection**

- 1. Ignition "OFF'.
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect the SRSCM connector.
- 4. Connect the battery (-) terminal cable and start engine.
- 5. Measure voltage between power terminal of the SRSCM harness connector and chassis ground.

Specification : Approx. 8.38 ≤ Vbatt ≤ 17

6. Is the measured voltage within specifications?

YES	► Go to "Ground circuit inspection" procedure.
NO	► Thoroughly check all connectors (and connections) for looseness, bending, corrosion, contamination, deterioration, and/or damage.
	Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

## **Ground Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect the SRSCM connector.
- 4. Measure resistance between ground terminal of the SRSCM harness connector and chassis ground.

**Specification**: Approx. 1  $\Omega$  below.

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

After a repair, it is essential to verify that the fault has been corrected.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

#### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1102 Battery Voltage Low

#### **General Description**

SRSCM (Supplemental Restraints System Control Module) checks input voltage when "IG ON" to make air bag system work properly.

If input voltage is out of normal range, there can be malfunction in system operation. In this case, Check battery and charging system.

# **DTC Description**

The SRSCM sets DTC B1102 and turns warning light on if voltage below threshold value is detected for more than 4 sec. (If voltage within threshold value is detected When the SRSCM returns to normal condition. SRSCM regards DTC as being cleared and turns warning light off)...

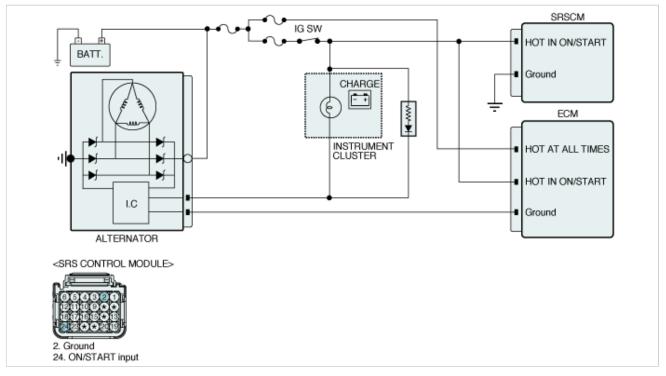
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	Poor connection of connected     part
Enable Conditions		• Ignition "ON"	part.  Open/Short circuit in power
Threshold Value		• Vbatt ≤ 8.38	harness.  • Open/Short circuit in ground
Diagnostic Time	Qualification	More than 4 sec	harness.  • Faulty charging system.
	De-Qualification	More than 4 sec	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Idle & WOT	Approx. 8.38 ≤ Vbatt ≤ 17

#### **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.

3. Monitor the "Battery Voltage" parameter on the Scantool.

Specification: Approx. 8.38 ≤ Vbatt ≤ 17

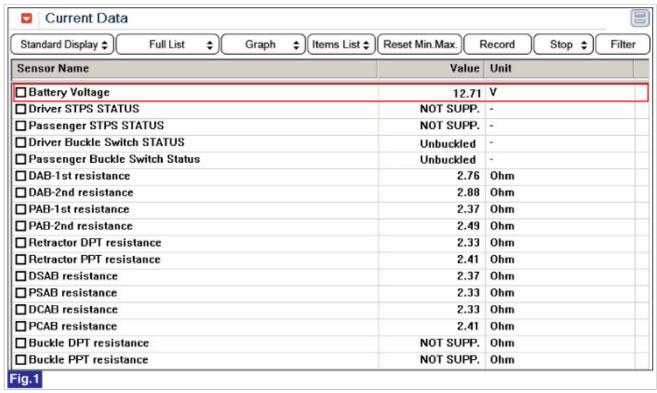


Fig.1) Normal Data

4. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YE	ES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
N	0	► Go to "Charging System Inspection" procedure.

#### **Charging System Inspection**

- 1. Engine "ON", headight and heatwire "ON".
- 2. Measure voltage between the battery terminal (+) and (-) maintaining ENG. RPM 2,500RPM (idle) over 2 minutes.

Specification : Approx. 8.38 ≤ Vbatt ≤ 17

3. Is the measured voltage within specifications?

YES ► Go to "Power Circuit Inspection" procedure.	
110	► Substitute with a known-good alternator and check for proper operation.  If the problem is corrected, replace alternator and then go to "Verification of Vehicle Repair" procedure.

#### **Power Circuit Inspection**

- 1. Ignition "OFF'.
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect the SRSCM connector.
- 4. Connect the battery (-) terminal cable and start engine.
- 5. Measure voltage between power terminal of the SRSCM harness connector and chassis ground.

Specification : Approx. 8.38 ≤ Vbatt ≤ 17

6. Is the measured voltage within specifications?

YES	► Go to "Ground circuit inspection" procedure.
NO	► Thoroughly check all connectors (and connections) for looseness, bending, corrosion, contamination, deterioration, and/or damage.
	Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

# **Ground Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect the SRSCM connector.
- 4. Measure resistance between ground terminal of the SRSCM harness connector and chassis ground.

**Specification**: Approx. 1  $\Omega$  below.

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1326 FIS(Front Impact Sensor)-Driver Short to Ground

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

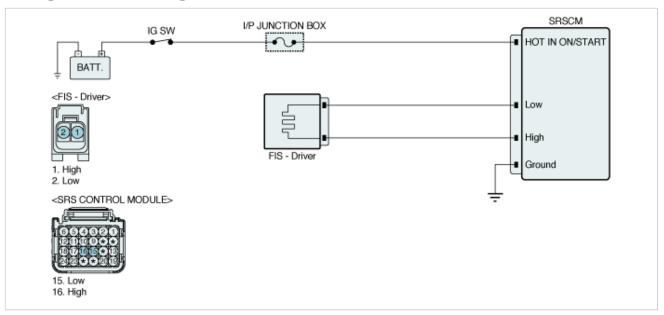
# **DTC Description**

The SRSCM sets DTC B1326 if there is short to ground in DFIS harness.

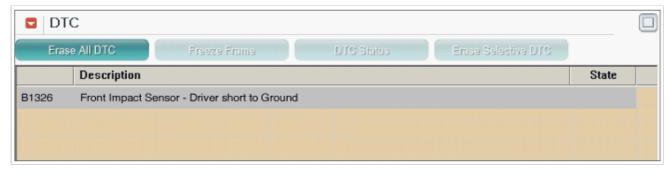
#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	
Threshold Value		DFIS no acceleration data, and line voltage < 3V	Short to ground in harness.
Diagnostic Time	Qualification	• Ini(Start Up):2.1s (2 times) • Steady:500µs x 8 + 2.2s (2 times)	Faulty DFIS.     Faulty SRSCM.
	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Main harness circuit inspection" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect DFIS connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "FIS-Driver ( + )" or "FIS-Driver ( )" of the DFIS harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

YES ► Go to "Component Inspection" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DFIS connector .

- 5. Substitute the DFIS and check for proper operation.
- 6. Is DTC present problem?

		► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
► Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" produced in the problem.		► Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1327 FIS(Front Impact Sensor)-Driver Short to Battery

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

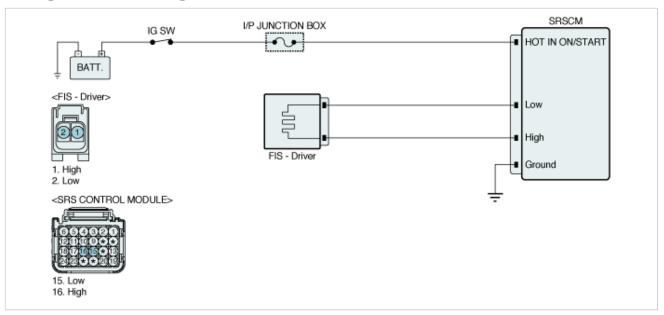
# **DTC** Description

The SRSCM sets DTC B1327f there is short to power harness in DFIS harness.

# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTO	C Strategy	Check voltage	
Enabl	e Conditions	• Ignition "ON"	
Thres	shold Value	DFIS no acceleration data, and line voltage ≯1V	Short to power in harness.
Diagnostic	Qualification	<ul> <li>Ini(Start Up):0.2s (100ms x 2)</li> <li>Steady:500µs x 8 + 2.2s (2 times)</li> </ul>	<ul><li>Faulty DFIS.</li><li>Faulty SRSCM.</li></ul>
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect DFIS connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "FIS-Driver ( + )" or "FIS-Driver ( )" of the DFIS harness connector and chassis ground.

Specification: 0V

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.

- 4. Disconnect DFIS connector .
- 5. Substitute the DFIS and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	S	► Go to the applicable troubleshooting procedure.
NO	)	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1328 FIS(Front Impact Sensor)-Driver Defect

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

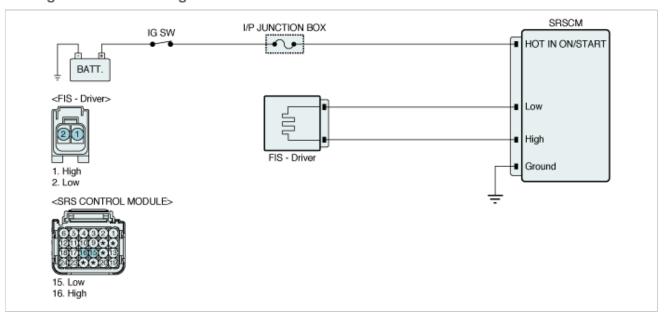
# **DTC Description**

The SRSCM sets DTC B1328 if there is any fault in Driver side front impact sensor.

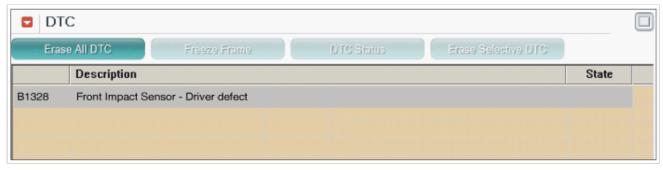
#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		DFIS send defect code     DFIS output is not expected value	Poor connection of connected part.
Diagnostic	Qualification	• Ini(Start Up):100 ms (500µs x 20) • Steady:1s (10ms x 100)	Faulty DFIS.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):IGN off -≫n     Steady:IGN off -≫n	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DFIS connector.
- 5. Substitute the DFIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1329 FIS(Front Impact Sensor)-Driver Communication error

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

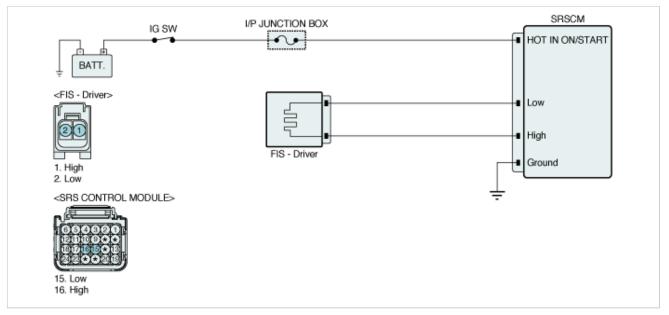
# **DTC** Description

The SRSCM sets DTC B1329 if there is any error in communication between DFIS and SRSCM

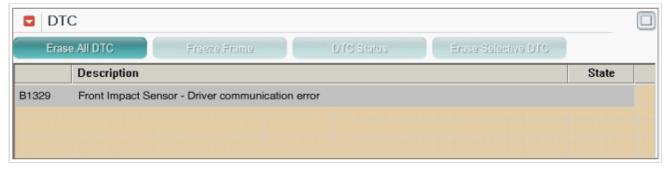
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions  Threshold Value		• Ignition "ON"	Poor connection of connected part. Faulty DFIS.
		DFIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	<ul> <li>Ini(Start Up):2.5 ~ 3.1s (2 times)</li> <li>Steady:500 μs x 8 + 2.3~2.9s (2 times)</li> </ul>	• Faulty SRSCM.
riille	De-Qualification	• 1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES ► Go to "W/Harness Inspection" procedure.	
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DFIS connector.
- 5. Substitute the DFIS and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1330 FIS(Front Impact Sensor)-Driver Wrong ID

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

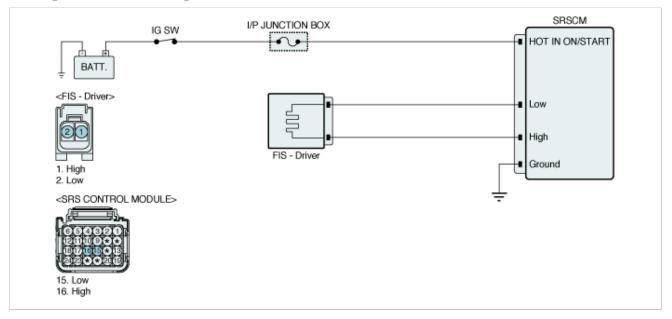
# **DTC Description**

The SRSCM sets DTC B1330 if DFIS with wrong ID is detected

# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions Threshold Value		• Ignition "ON"	
		DFIS ID is different from programmed in ACU	<ul><li>Faulty DFIS with wrong ID.</li><li>Faulty SRSCM.</li></ul>
Diagnostic	Qualification	• 1 time	T duty of tools.
Time	De-Qualification	• 1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DFIS connector.
- 5. Substitute the DFIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
МО	► Substitute a known-good DFIS, and check for proper operation.  If the problem is corrected, replace DFIS and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES ► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
	NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1331 FIS(Front Impact Sensor)-Passenger Short to Ground

# **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

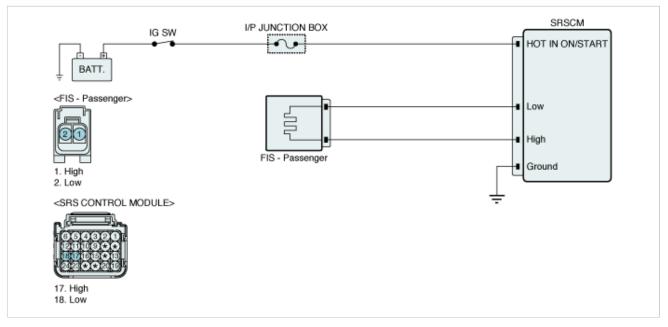
# **DTC Description**

The SRSCM sets DTC B1331 if there is short to ground in PFIS harness.

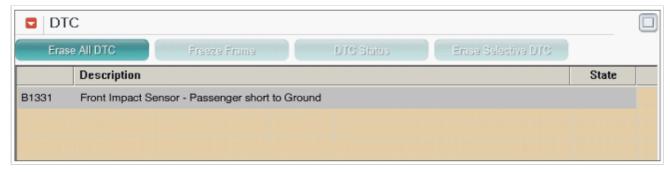
#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	
Threshold Value		PFIS no acceleration data, and line voltage < 3V	Short to ground in harness.
Diagnostic	Qualification	<ul> <li>Ini(Start Up):2.1s (2 times)</li> <li>Steady:500µs x 8 + 2.2s (2 times)</li> </ul>	Faulty PFIS.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.		▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
	NO	► Go to "Main harness circuit inspection" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect PFIS connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "FIS-Passenger ( + )" or "FIS-Passenger ( )" of the PFIS harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PFIS connector.

- 5. Substitute the PFIS and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur
NO	► Substitute a known-good PFIS, and check for proper operation.  If the problem is corrected, replace PFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1332 FIS(Front Impact Sensor)-Passenger Short to Battery

# **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

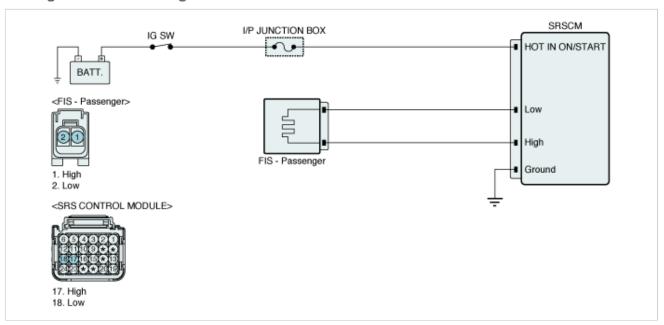
# **DTC Description**

The SRSCM sets DTC B1332 if there is short to power harness in PFIS harness.

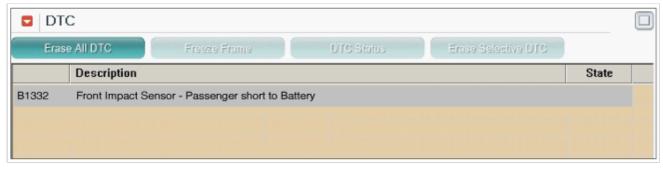
#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	Short to power in harness.
Threshold Value		PFIS no acceleration data, and line voltage >11V	
Diagnostic Time	Qualification	• Ini(Start Up):0.2s (100ms x 2) • Steady:500µs x 8 + 2.2s (2 times)	Faulty PFIS.     Faulty SRSCM.
	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
► Go to "Main harness circuit inspection" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect PFIS connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "FIS-Passenger ( + )" or "FIS-Passenger ( )" of the PFIS harness connector and chassis ground.

Specification: 0V

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.

- 4. Disconnect PFIS connector.
- 5. Substitute the PFIS and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur
NO	► Substitute a known-good PFIS, and check for proper operation.  If the problem is corrected, replace PFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	S	► Go to the applicable troubleshooting procedure.
NO	)	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1333 FIS(Front Impact Sensor)-Passenger Defect

# **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

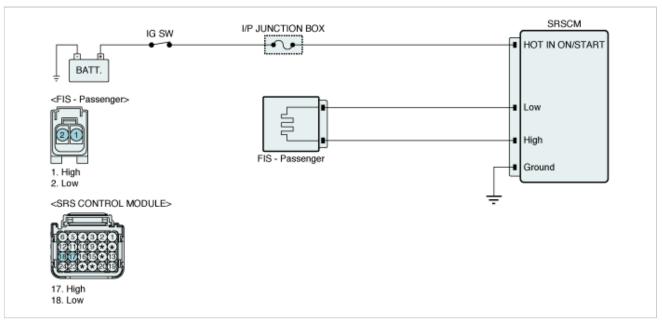
# **DTC Description**

The SRSCM sets DTC B1333 if there is any fault in Passenger side front impact sensor

# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		PFIS send defect code PFIS output is not expected value	Poor connection of connected part.
Diagnostic Time	Qualification	<ul><li>Ini(Start Up):100 ms (500µs x 20)</li><li>Steady:1s (10ms x 100)</li></ul>	Faulty PFIS.     Faulty SRSCM.
	De-Qualification	<ul><li>Ini(Start Up):IGN off -&gt; on</li><li>Steady:IGN off -&gt; on</li></ul>	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PFIS connector.
- 5. Substitute the PFIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PFIS, and check for proper operation.  If the problem is corrected, replace PFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1334 FIS(Front Impact Sensor)-Passenger Communication error

# **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

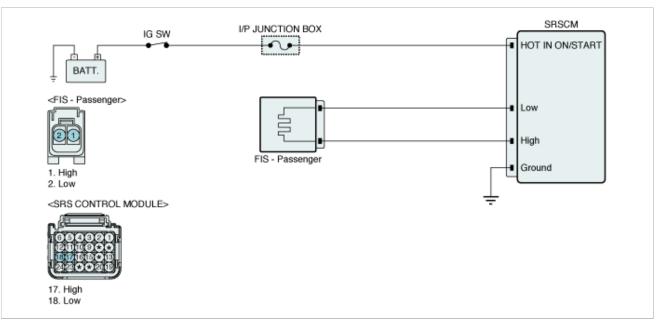
# **DTC Description**

The SRSCM sets DTC B1334 if there is any error in communication between PFIS and SRSCM

# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	<ul> <li>Poor connection of connected part.</li> <li>Faulty PFIS.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		PFIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic	Qualification	• 1 time	Faulty SRSCM.
Time	De-Qualification	• 1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PFIS connector.
- 5. Substitute the PFIS and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur.  ► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	
NO	► Substitute a known-good PFIS, and check for proper operation.  If the problem is corrected, replace PFIS and then go to "Verification of Vehicle Repair" procedure.	

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1335 FIS(Front Impact Sensor)-Passenger Wrong ID

#### **General Description**

Front Impact Sensor(FIS)located at both sides of the front of engine room detects head-on collision. When FIS delivers and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag. and if both FIS and safing sensor detects collision simultaneously, SRSCM operates front air bag.

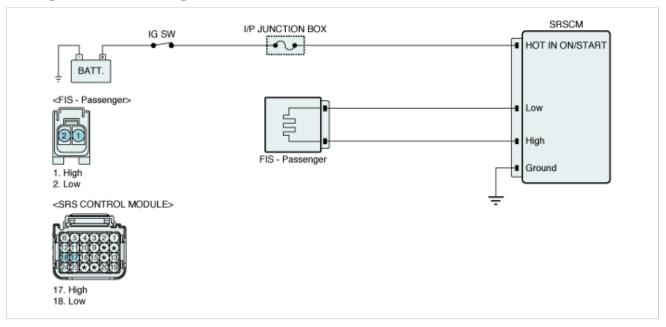
# **DTC Description**

The SRSCM sets DTC B1335 if PFIS with wrong ID is detected.

# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	Faulty PFIS with wrong ID.     Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		PFIS ID is different from programmed in ACU	
Diagnostic	Qualification	• 1 time	Tadity of toolin.
Time	De-Qualification	• 1 time	

# **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PFIS connector.
- 5. Substitute the PFIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedur</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PFIS, and check for proper operation.  If the problem is corrected, replace PFIS and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	YES ► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1341 Remote Crash Sensors Cross Coupling

#### **General Description**

The airbag system checks a short between sensors in order to operate an impact sensor. Among the impact sensors, such as Front Impact Sensor(FIS), Pressure-Side Impact Sensor(P-SIS), and Side Impact Sensor(SIS), if there is a short among them, DTC code would be set.

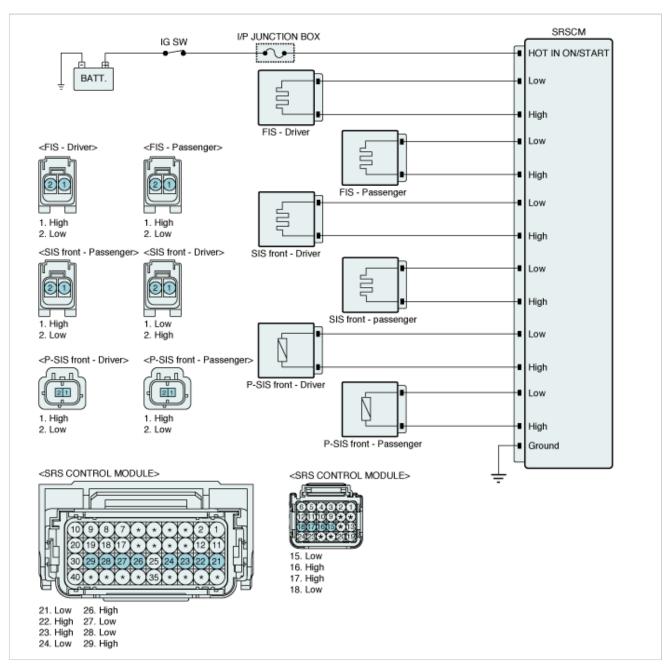
# **DTC Description**

If there is a short between each impact sensor's circuit, this DTC would be set. For example, if there is a short between front impact sensor's circuit and side impact sensor's circuit, this DTC would be set and recorde in the ACU. At this time, the ACU makes warning lamp turn on to let a driver know.

# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Monitor the current of PWM type	Short between impact sensor's
Enab	le Conditions	• Ignition "ON"	circuits
Threshold Value		Short between impact sensor's circuits	<ul> <li>Impact sensor's circuit and connection</li> </ul>
Diagnostic	Qualification	More than one time	SRSCM circuit and connection     Faulty SRSCM.
Time	De-Qualification	More than one time	

**Diagnostic Circuit Diagram** 



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.	
NO	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.	
	Thoroughly check release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.  • Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.	

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

	YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
► Go to "Main harness circuit inspection" procedure.		► Go to "Main harness circuit inspection" procedure.	

# **Main harness Circuit Inspection**

- 1. Measure resistance of FIS, SIS and P-SIS
  - (1) Ignition "OFF".
  - (2) Disconnect (-) cable from battery and wait for more than 1 minute.
  - (3) Disconnect FIS, SIS and P-SIS connector and then disconnect SRSCM connector.
  - (4) Measure resistance among circuits of FIS, SIS and P-SIS.

Specfication :  $\infty \Omega$ 

(5) Is the measured resistance within specifications?

➤ Check for short between ignition circuits of FIS, SIS, P-SIS. If the condition of har component is OĶthis fault is caused by SRSCM internal error so replace a known-g and then go to "Verification of vehicle Repair" procedure.	
▶ Repair or replace it and then go to"Verification of vehicle repair" procedure.	

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1346 Driver Airbag Resistance too High (1st stage)

#### **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and two inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

#### CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

#### **DTC** Description

The SRSCM sets DTC B1346 if the measured resistance value of DAB circuit is more than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

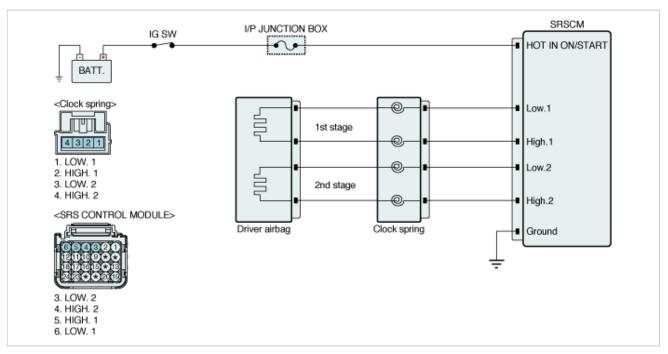
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	<ul><li>Poor connection of connected part.</li><li>Poor connection between shorting bar and release pin.</li></ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 1st stage Squib resistance ≥ 6.6Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty DAB.     Faulty Clock spring.     Faulty SRSCM.
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



# **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Driver airbag(1st stage) <  $6.6\Omega$ 

### Reference:

In a case of an open in the Driver airbag(1st stage) circuit : FAIL In a case of a short to battery in the Driver airbag(1st stage) circuit: FAIL

In a case of a short to ground in the Driver airbag(1st stage) circuit : FAIL

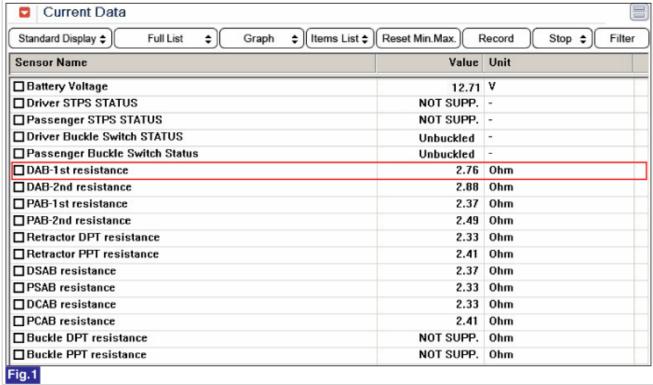


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Squib Circuit Inspection" procedure.

# **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	➤ Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" and "High.1" of the Clock Spring harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.1" and "High.1" of the DAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
МО	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1347 Driver Airbag Resistance too Low (1st stage)

# **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and two inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

# CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC** Description

The SRSCM sets DTC B1347 if the measured resistance value of DAB circuit is less than the threshold value  $(1.0\Omega)$  \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

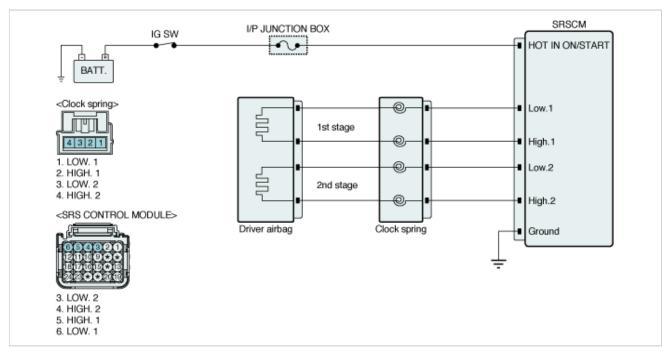
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTO	C Strategy	Check Resistance	Poor connection of connected
Enable	e Conditions	• Ignition "ON"	part.  • Poor connection between
Thres	shold Value	• DAB 1st stage Squib resistance $\leq 0.9\Omega$	shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	<ul><li>Faulty DAB.</li><li>Faulty Clock spring.</li></ul>
Time	De-Qualification	More than 5s	• Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



# **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(1st stage) resistance" parameter on the Scantool.

**Specification**:  $0.9\Omega$ < Resistance of Driver airbag(1st stage) <  $6.6\Omega$ 

### Reference:

In a case of an open in the Driver airbag(1st stage) circuit: FAIL
In a case of a short to battery in the Driver airbag(1st stage) circuit: FAIL
In a case of a short to ground in the Driver airbag(1st stage) circuit: FAIL

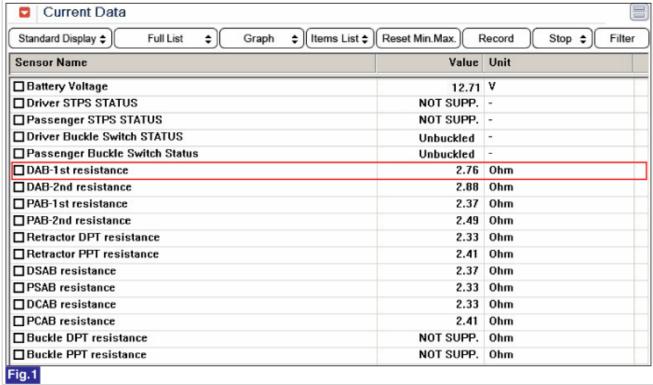


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Squib Circuit Inspection" procedure.

# **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

## WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	► Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" and "High.1" of the Clock Spring harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
110	▶ Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.1" and "High.1" of the DAB harness connector.

Specification : approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1348 Driver Airbag resistance circuit short to Ground (1st stage)

## **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and two inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

# CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC** Description

The SRSCM sets DTC B1348 if there is a short to ground in DAB harness

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while

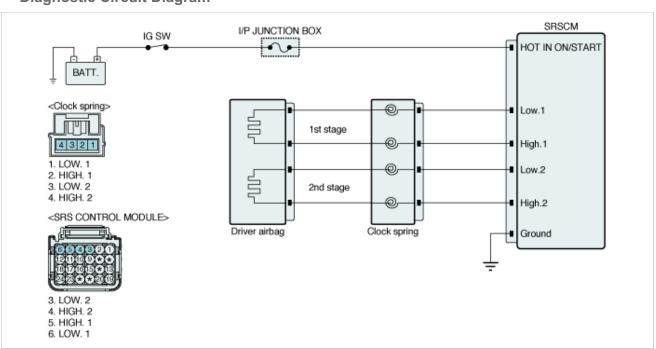
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to ground in DAB harness.
Enable Conditions		• Ignition "ON"	<ul> <li>Poor connection of connected part.</li> <li>Faulty DAB.</li> </ul>
Threshold Value		DAB 1st stage Squib line Voltage is < 0.9V	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty Clock spring.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Driver airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Driver airbag(1st stage) circuit: FAIL

In a case of a short to battery in the Driver airbag(1st stage) circuit: FAIL In a case of a short to ground in the Driver airbag(1st stage) circuit: FAIL

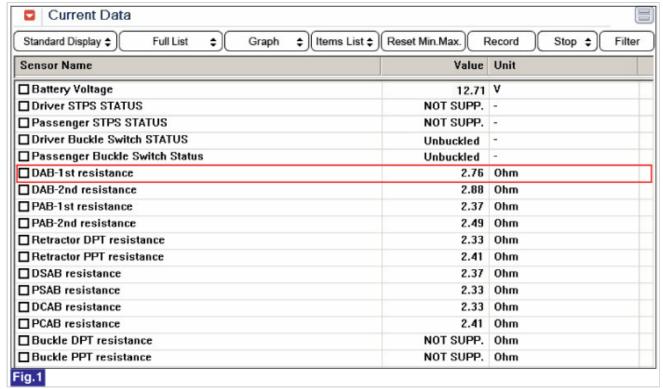


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	NO ► Go to "Squib Circuit Inspection" procedure.	

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.	
NO	► Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.	

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" or "High.1" of the clock spring harness connector and chassis ground.

### Specification: ∞

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	▶ Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.



Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.1" or "High.1" of the DAB harness connector and chassis ground.

# Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1349 Driver Airbag resistance circuit short to Battery (1st stage)

## **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and two inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

# CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC** Description

The SRSCM sets DTC B1349 if there is a short to power in DAB harness

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

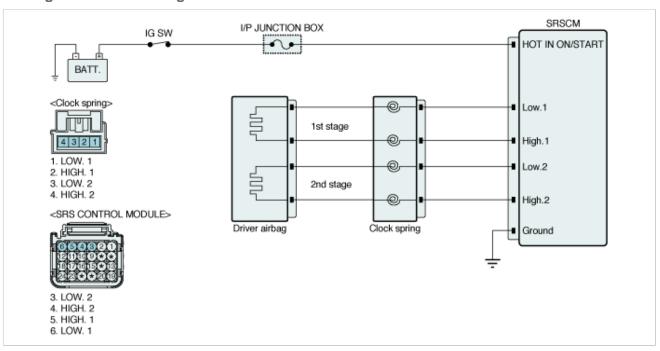
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to power in DAB harness.
Enable Conditions		• Ignition "ON"	Poor connection of connected
Threshold Value		DAB 1st stage Squib line voltage is > 2.9V	part. • Faulty DAB.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty Clock spring.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Driver airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Driver airbag(1st stage) circuit: FAIL

In a case of a short to battery in the Driver airbag(1st stage) circuit: FAIL In a case of a short to ground in the Driver airbag(1st stage) circuit: FAIL

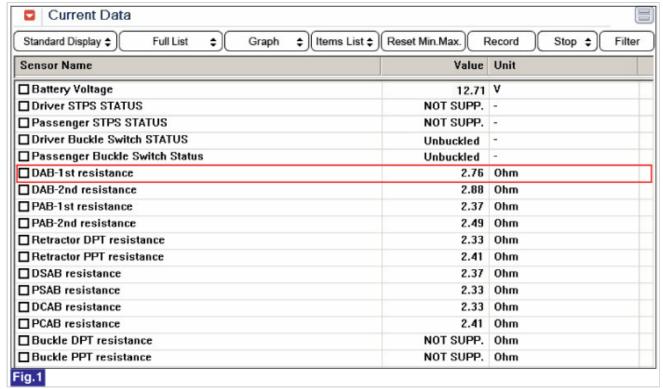


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.

### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or 2Ω resistor.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	► Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure Voltage between terminal "Low.1" or "High.1" of the clock spring harness connector and chassis ground.

Specification: 0V

6. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF" and wait at least one minutes.
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the main harness.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.



Lay Removed DAB facing upward for unexpected air bag deploy.

5. Measure voltage between terminal "Low.1" or "High.1" of the DAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1352 Passenger Airbag Resistance too High (1st Stage)

# **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

# CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC Description**

The SRSCM sets DTC B1352 if the measured resistance value of PAB circuit is more than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while

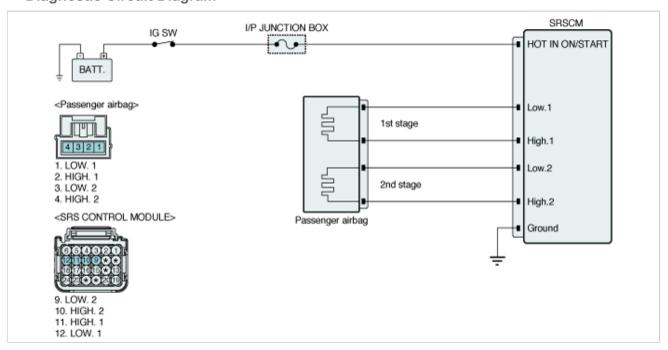
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Threshold Value		• PAB 1st stage Squib resistance ≥ 6.6Ω	Poor connection between     shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Passenger airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Passenger airbag(1st stage) circuit: FAIL

In a case of a short to battery in the Passenger airbag(1st stage) circuit: FAIL In a case of a short to ground in the Passenger airbag(1st stage) circuit: FAIL

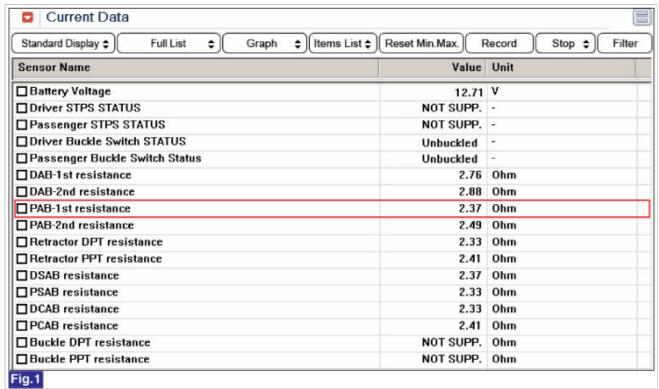


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.  Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" and "High.1" of the PAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1353 Passenger Airbag Resistance too Low (1st stage)

# **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

# CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC Description**

The SRSCM sets DTC B1353 if the measured resistance value of PAB circuit is less than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

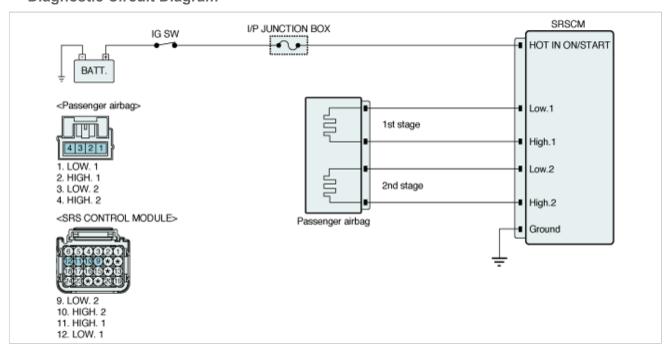
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Threshold Value		• PAB 1st stage Squib resistance ≤ 0.9Ω	Poor connection between shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Passenger airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Passenger airbag(1st stage) circuit : FAIL

In a case of a short to battery in the Passenger airbag(1st stage) circuit: FAIL In a case of a short to ground in the Passenger airbag(1st stage) circuit: FAIL

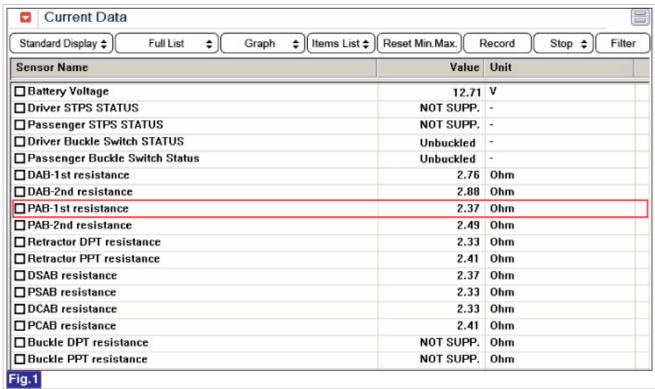


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YE	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
	Repair of replace as necessary and then go to Verification of Verifice Repair procedure.
N	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" and "High.1" of the PAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1354 Passenger Airbag Resistance Circuit Short to Ground (1st Stage)

# **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

# CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC Description**

The SRSCM sets DTC B1354 if there is a short to ground in PAB harness

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

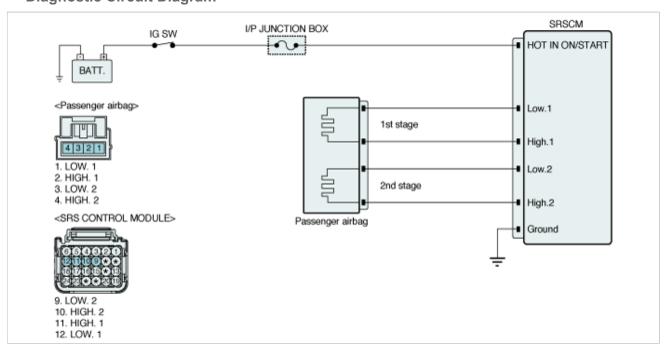
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	OL II DADI
Enable Conditions		• Ignition "ON"	<ul><li>Short to ground in PAB harness.</li><li>Poor connection of connected part.</li></ul>
Threshold Value		PAB 1st stage Squib line Voltage is < 0.9V	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	<ul><li>Faulty PAB.</li><li>Faulty SRSCM.</li></ul>
Time	De-Qualification	More than 5s	- Taulty Stadivi.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Passenger airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Passenger airbag(1st stage) circuit : FAIL

In a case of a short to battery in the Passenger airbag(1st stage) circuit: FAIL In a case of a short to ground in the Passenger airbag(1st stage) circuit: FAIL

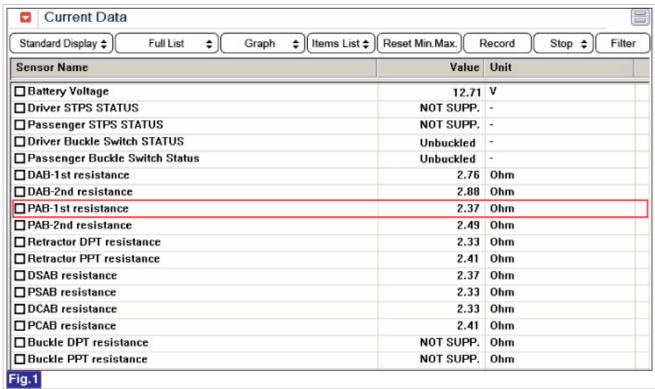


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YE	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
	Repair of replace as necessary and then go to Verification of Verifice Repair procedure.
N	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.1" or "High.1" of the PAB harness connector and chassis ground.

### Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1355 Passenger Airbag Resistance Circuit Short to Battery (1st Stage)

# **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

# CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC Description**

The SRSCM sets DTC B1355 if there is a short to power in PAB harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

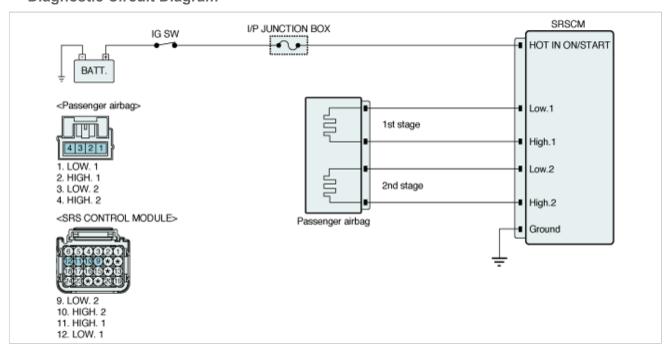
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	01 11
Enable Conditions		• Ignition "ON"	<ul><li>Short to power in PAB harness.</li><li>Poor connection of connected</li></ul>
Threshold Value		PAB 1st stage Squib line voltage is > 2.9V	part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty PAB.     Faulty SRSCM.
Time	De-Qualification	More than 5s	- Taulty Ortoom.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(1st stage) resistance" parameter on the Scantool.

### Specification:

 $0.9\Omega$ < Resistance of Passenger airbag(1st stage) <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Passenger airbag(1st stage) circuit : FAIL

In a case of a short to battery in the Passenger airbag(1st stage) circuit: FAIL In a case of a short to ground in the Passenger airbag(1st stage) circuit: FAIL

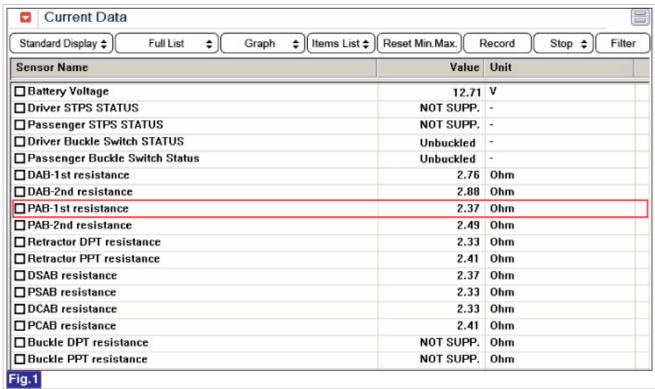


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YE	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
	Repair of replace as necessary and then go to Verification of Verifice Repair procedure.
N	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Measure voltage between terminal "Low.1" or "High.1" of the PAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

### Verification of Vehicle Repair

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.

▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1361 Pretensioner Front-Driver Resistance too High

# **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

# CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1361 if the measured resistance value of DBPT circuit is more than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

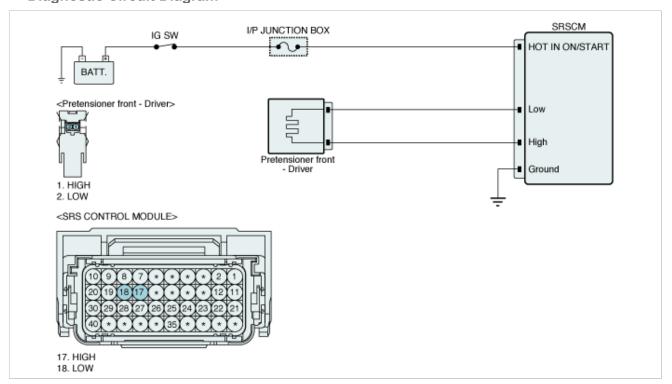
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	<ul> <li>Poor connection of connected part.</li> <li>Poor connection between shorting bar and release pin.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		• DBPT resistance ≥ 6.6Ω	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty DBPT.     Faulty SRSCM.
Time	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Driver resistance" parameter on the Scantool.

# Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Driver circuit: FAIL

In a case of a short to battery in the Pretensioner front-Driver circuit: FAIL In a case of a short to ground in the Pretensioner front-Driver circuit: FAIL

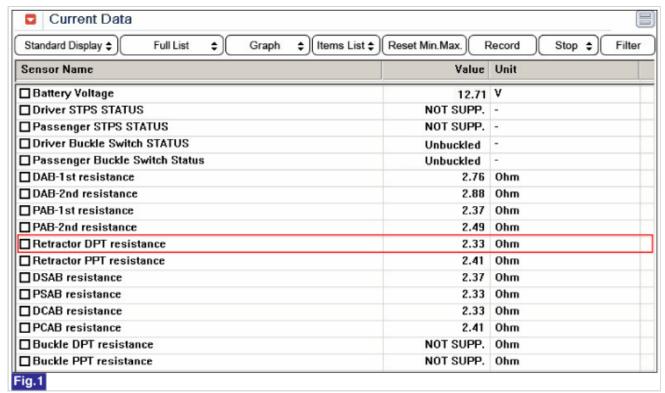


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good DBPT assembly, and check for proper operation.  If the problem is corrected, replace DBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DBPT harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
ИО	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1362 Pretensioner Front-Driver Resistance too Low

## **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

## CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1362 if the measured resistance value of DBPT circuit is less than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

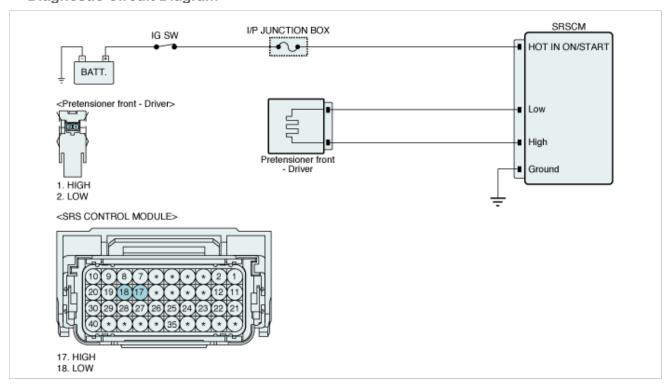
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	
Thre	shold Value	• DBPT resistance ≤ 0.9Ω	<ul> <li>Poor connection between shorting bar and release pin.</li> </ul>
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty DBPT.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Driver resistance" parameter on the Scantool.

## Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Driver circuit: FAIL

In a case of a short to battery in the Pretensioner front-Driver circuit: FAIL In a case of a short to ground in the Pretensioner front-Driver circuit: FAIL

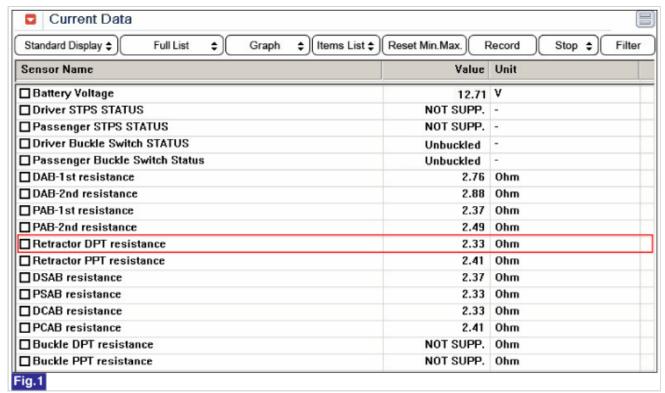


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DBPT assembly, and check for proper operation.  If the problem is corrected, replace DBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DBPT harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
ИО	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1363 Pretensioner front-Driver resistance circuit short to Ground

## **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

# CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1363 if there is a short to ground in DBPT harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

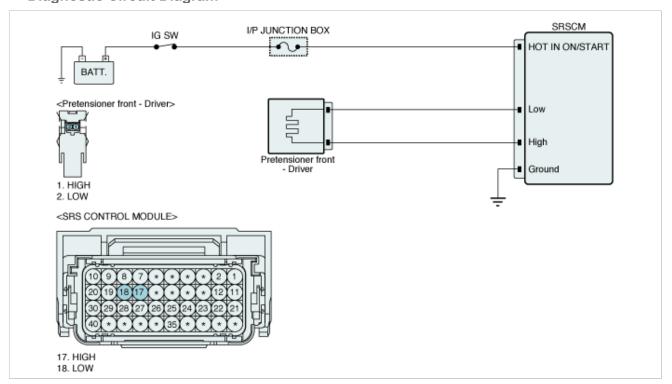
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Short to ground in DBPT harness.
Enable Conditions		• Ignition "ON"	
Thres	shold Value	DBPT Squib line Voltage is < 0.9V	<ul> <li>Poor connection of connected part.</li> </ul>
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty DBPT.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Driver resistance" parameter on the Scantool.

## Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Driver circuit: FAIL

In a case of a short to battery in the Pretensioner front-Driver circuit: FAIL In a case of a short to ground in the Pretensioner front-Driver circuit: FAIL

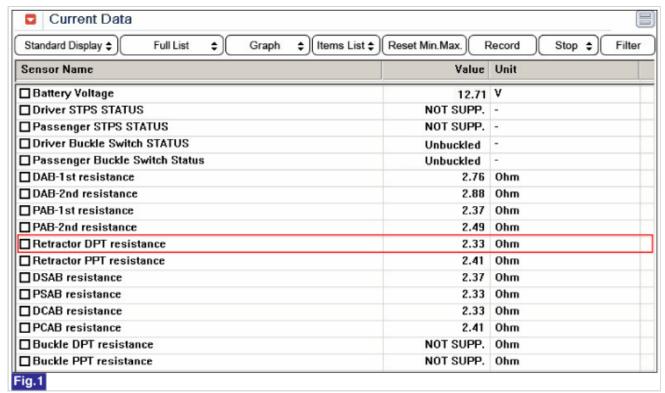


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DBPT assembly, and check for proper operation.  If the problem is corrected, replace DBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the DBPT harness connector and chassis ground.

#### Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO ► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1364 Pretensioner front-Driver resistance circuit short to Battery

### **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

# CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1364 if there is a short to power in DBPT harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

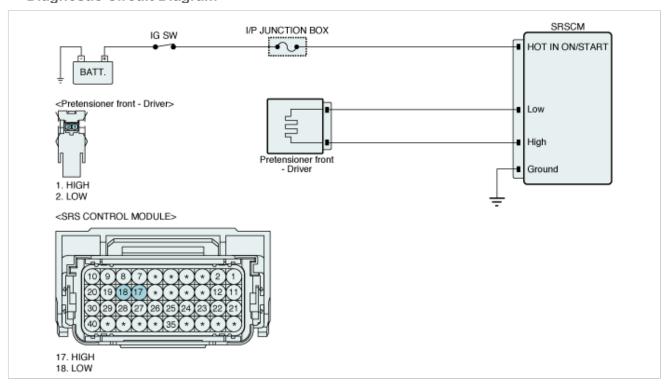
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	0, ,,
Enable Conditions		• Ignition "ON"	Short to power in DBPT harness.     Poor connection of connected
Threshold Value		DBPT Squib line voltage is > 2.9V	part.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty DBPT.     Faulty SRSCM.
	De-Qualification	More than 5s	r duity Credow.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Driver resistance" parameter on the Scantool.

## Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Driver circuit: FAIL

In a case of a short to battery in the Pretensioner front-Driver circuit: FAIL In a case of a short to ground in the Pretensioner front-Driver circuit: FAIL

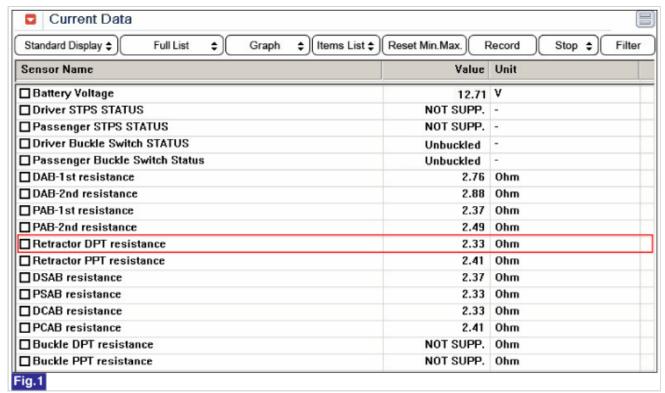


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO ► Go to "Squib Circuit Inspection" procedure.	

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	➤ Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DBPT assembly, and check for proper operation.  If the problem is corrected, replace DBPT and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DBPT connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the DBPT harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO ► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1367 Pretensioner Front-Passenger Resistance too High

### **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

## CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1367 if the measured resistance value of PBPT circuit is more than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

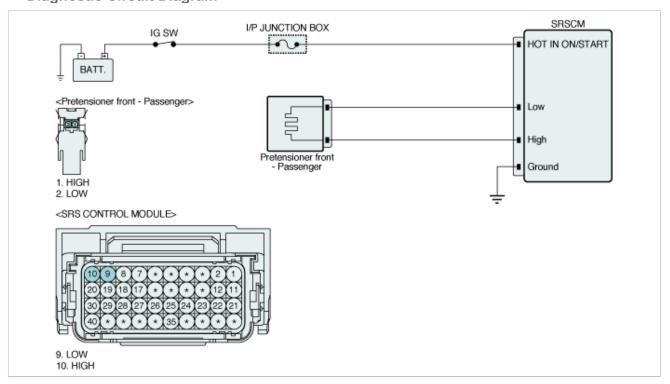
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PBPT resistance ≥ 6.6Ω	<ul> <li>Poor connection between shorting bar and release pin.</li> </ul>
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty PBPT.     Faulty SRSCM.
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Passenger<  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Passenger circuit: FAIL

In a case of a short to battery in the Pretensioner front-Passenger circuit: FAIL In a case of a short to ground in the Pretensioner front-Passenger circuit: FAIL

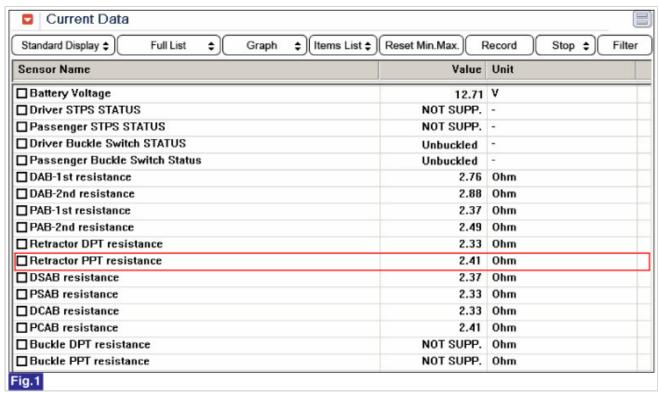


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PBPT assembly, and check for proper operation.  If the problem is corrected, replace PBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PBPT harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.		► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1368 Pretensioner Front-Passenger Resistance too Low

### **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

## CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1368 if the measured resistance value of PBPT circuit is less than the threshold value.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

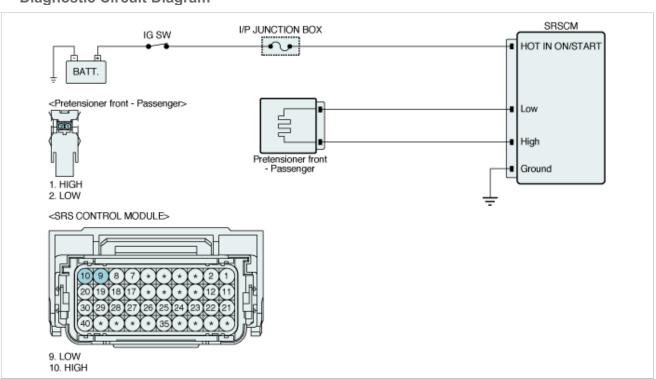
# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DT	C Strategy	Check Resistance	<ul> <li>Poor connection of connected part.</li> <li>Poor connection between shorting bar and release pin.</li> </ul>
Enab	le Conditions	• Ignition "ON"	
Thre	shold Value	• PBPT resistance ≤ 0.9Ω	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty PBPT.     Faulty SRSCM.
Time	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Passenger<  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Passenger circuit: FAIL

In a case of a short to battery in the Pretensioner front-Passenger circuit: FAIL In a case of a short to ground in the Pretensioner front-Passenger circuit: FAIL

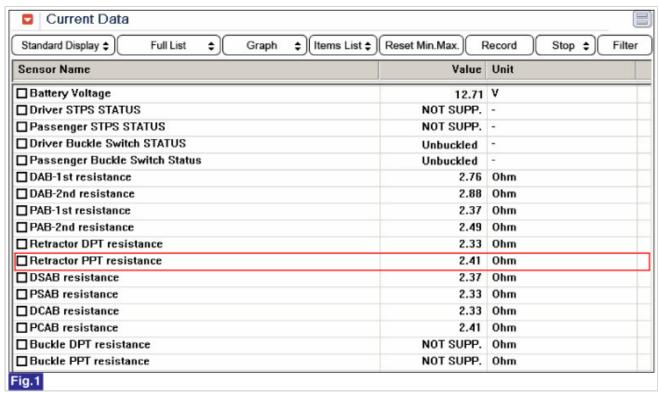


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PBPT assembly, and check for proper operation.  If the problem is corrected, replace PBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PBPT harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.		► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1369 Pretensioner Front-Passenger Resistance Circuit Short to Ground

## **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

## CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1369 if there is a short to ground in PBPT harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

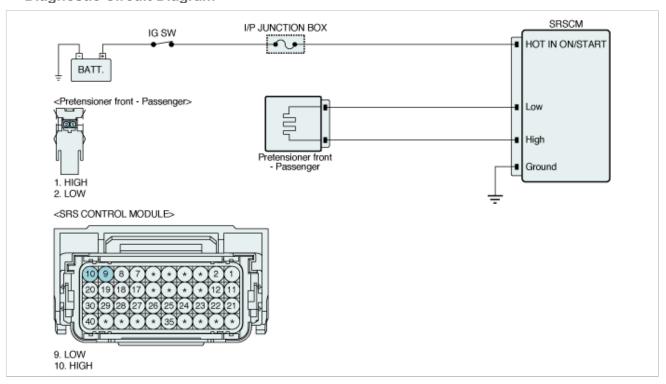
# **DTC Detecting Condition**

	ltem	Detecting Condition	Possible cause
DT	C Strategy	Check Voltage	Short to ground in PBPT
Enab	ole Conditions	• Ignition "ON"	harness.
Thre	eshold Value	PBPT Squib line Voltage is < 0.9V	<ul> <li>Poor connection of connected part.</li> </ul>
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PBPT.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Passenger<  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Passenger circuit: FAIL

In a case of a short to battery in the Pretensioner front-Passenger circuit: FAIL In a case of a short to ground in the Pretensioner front-Passenger circuit: FAIL

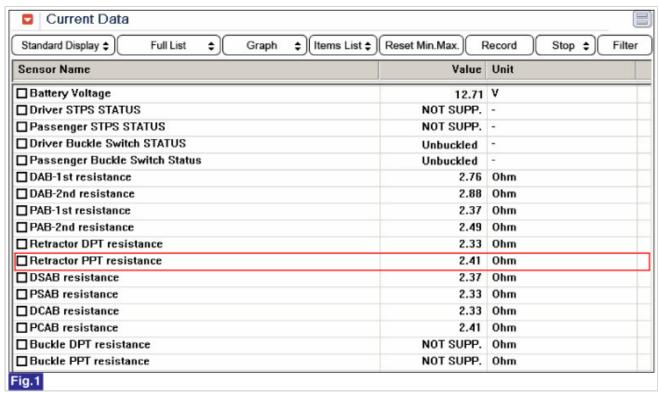


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PBPT assembly, and check for proper operation.  If the problem is corrected, replace PBPT and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PBPT connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the PBPT harness connector and chassis ground.

#### Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
ИО	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1370 Pretensioner Front-Passenger Resistance Circuit Short to Battery

## **General Description**

Seat Belt Pretensioner(hereinafter referred to BPT) is located at both side of center pillar.

BPT tightens seat belt before air bag deploys to protect passenger from bumping against crush pad, steering wheel and front window.

In BPT, there are a ignition circuit and cylinder for rewinding belt.

Cylinder has piston that can rewind seat belt in it.

Gas chamber generates expansive force of gases to push piston in cylinder.

# CAUTION

Never measure resistance of BPT directly, Current of measuring device may cause unexpected BPT depoy.

# **DTC Description**

The SRSCM sets DTC B1370 if there is a short to power in PBPT harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

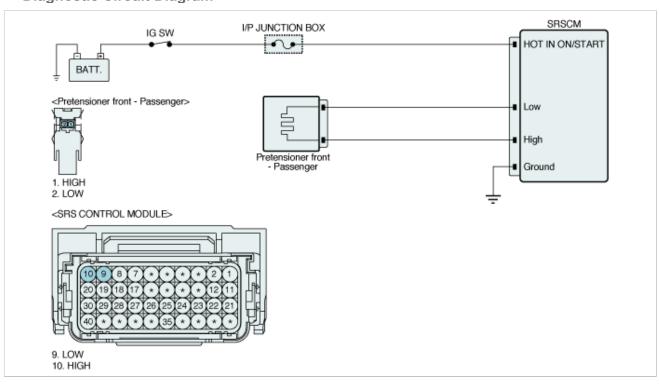
# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to ground in PBPT
Enable Conditions		• Ignition "ON"	harness.
Threshold Value		PBPT Squib line voltage is > 2.9V	Poor connection of connected part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PBPT.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Pretensioner front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Pretensioner front-Passenger<  $6.6\Omega$ 

#### Reference:

In a case of an open in the Pretensioner front-Passenger circuit: FAIL

In a case of a short to battery in the Pretensioner front-Passenger circuit: FAIL In a case of a short to ground in the Pretensioner front-Passenger circuit: FAIL

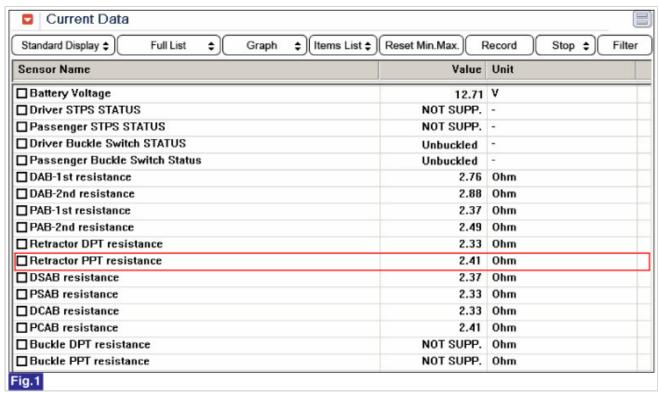


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PBPT or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good PBPT assembly, and check for proper operation.  If the problem is corrected, replace PBPT and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PBPT connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the PBPT harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1378 Side Airbag Front-Driver Resistance too High

## **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

## CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1378 if the measured resistance value of DSAB circuit is more than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

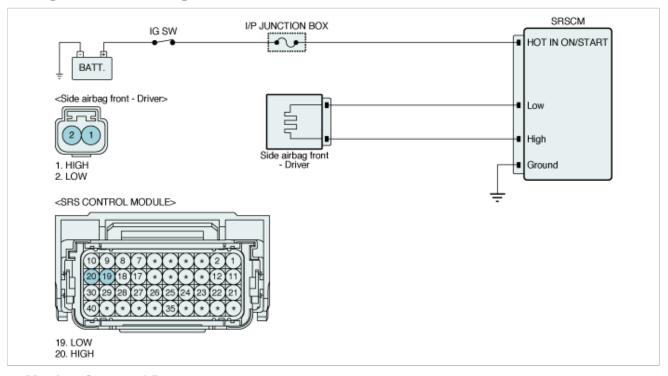
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB resistance ≥ 6.6Ω	Poor connection between shorting bar and release pin.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	• Faulty DSAB.
	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Driver circuit: FAIL
In a case of a short to battery in the Side airbag front-Driver circuit: FAIL
In a case of a short to ground in the Side airbag front-Driver circuit: FAIL

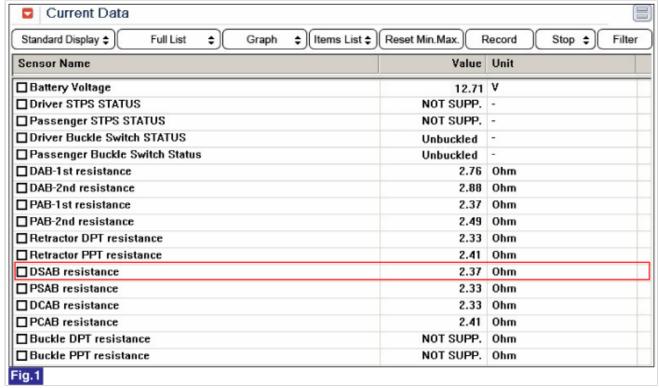


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	➤ Substitute a known-good DSAB assembly, and check for proper operation.  If the problem is corrected, replace DSAB and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DSAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation. If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1379 Side Airbag Front-Driver Resistance too Low

## **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

## CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1379 if the measured resistance value of DSAB circuit is less than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

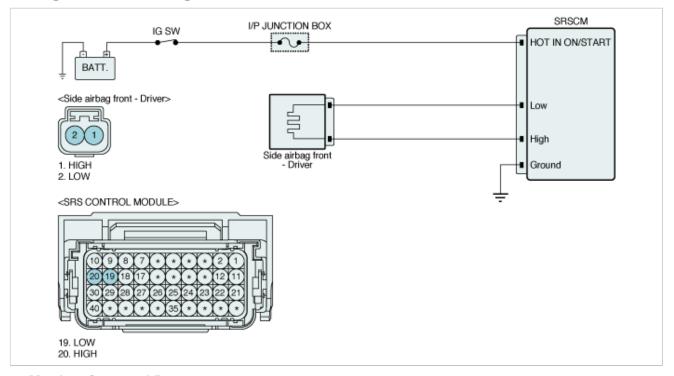
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB resistance ≤ 0.9Ω	Poor connection between shorting bar and release pin.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	• Faulty DSAB.
	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Driver circuit: FAIL
In a case of a short to battery in the Side airbag front-Driver circuit: FAIL
In a case of a short to ground in the Side airbag front-Driver circuit: FAIL

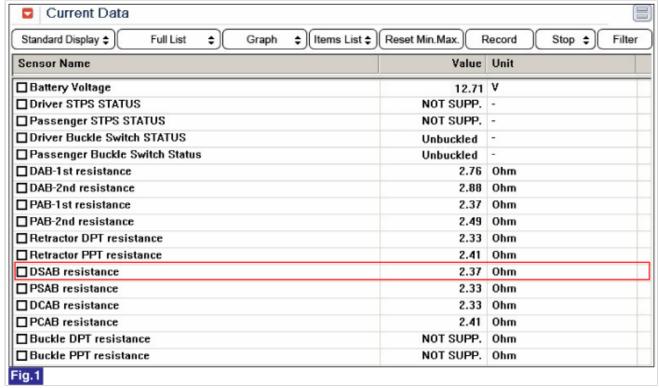


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	➤ Substitute a known-good DSAB assembly, and check for proper operation.  If the problem is corrected, replace DSAB and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DSAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation. If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

	YES ► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1380 Side Airbag Front-Driver Resistance Circuit Short to Ground

## **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

## CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1380 if there is a short to ground in DSAB harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

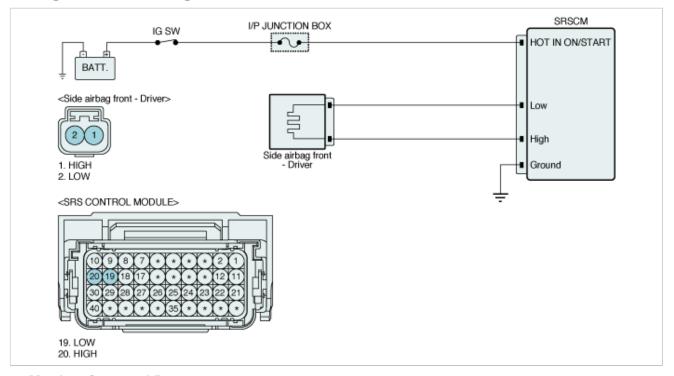
# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to ground in DSAB harness.
Enable Conditions		• Ignition "ON"	
Threshold Value		DSAB Squib line Voltage is < 0.9V	Poor connection of connected part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty DSAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Driver circuit: FAIL
In a case of a short to battery in the Side airbag front-Driver circuit: FAIL
In a case of a short to ground in the Side airbag front-Driver circuit: FAIL

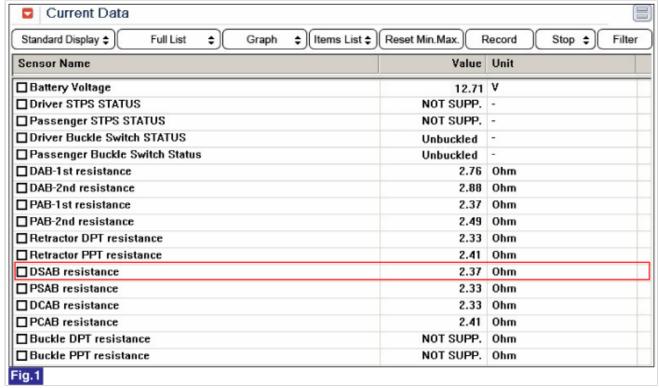


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

➤ Go to "Main harness circuit inspection" procedure.	
NO	➤ Substitute a known-good DSAB assembly, and check for proper operation.  If the problem is corrected, replace DSAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the DSAB harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation. If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

	YES ► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1381 Side Airbag Front-Driver Resistance Circuit Short to Battery

## **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

## CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1381 if there is a short to power in DSAB harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

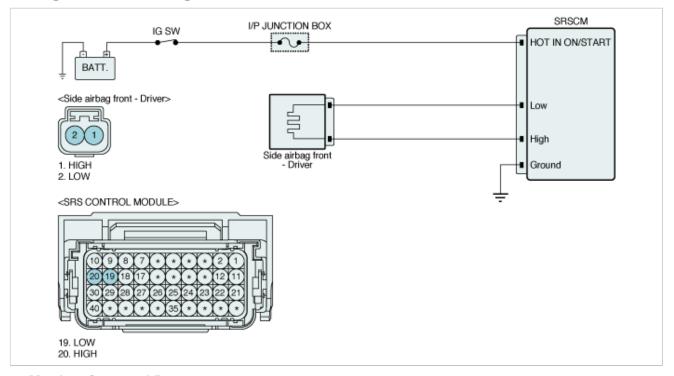
# **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Check Voltage	
Enable Conditions		• Ignition "ON"	Short to power in DSAB harness.     Poor connection of connected
Thre	shold Value	DSAB Squib line voltage is > 2.9V	part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty DSAB.     Faulty SRSCM.
Time	De-Qualification	More than 5s	

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

# **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Driver circuit: FAIL
In a case of a short to battery in the Side airbag front-Driver circuit: FAIL
In a case of a short to ground in the Side airbag front-Driver circuit: FAIL

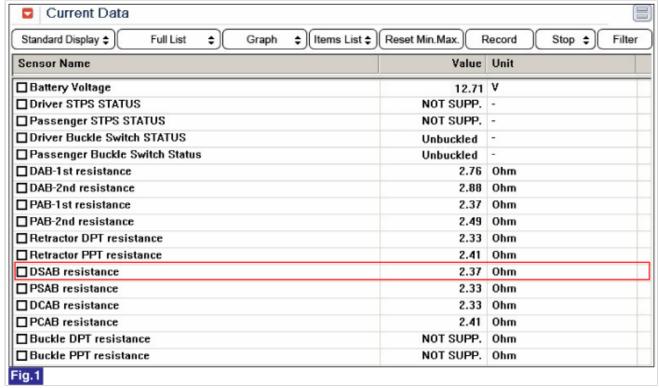


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	➤ Substitute a known-good DSAB assembly, and check for proper operation.  If the problem is corrected, replace DSAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DSAB connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the DSAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1382 Side Airbag Front-Passenger Resistance too High

## **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

# CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1382 if the measured resistance value of PSAB circuit is more than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

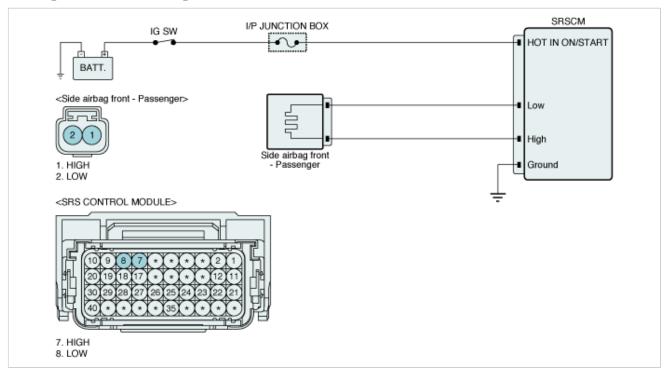
# **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	<ul> <li>Poor connection of connected part.</li> <li>Poor connection between shorting bar and release pin.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSAB resistance ≥ 6.6Ω	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PSAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

# **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Passenger <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Passenger circuit: FAIL
In a case of a short to battery in the Side airbag front-Passenger circuit: FAIL
In a case of a short to ground in the Side airbag front-Passenger circuit: FAIL

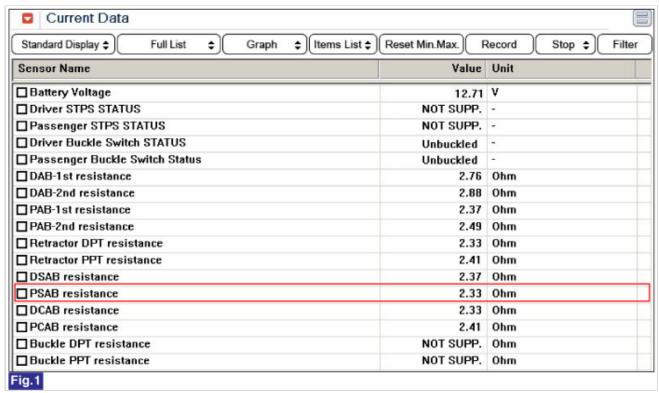


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good PSAB assembly, and check for proper operation.  If the problem is corrected, replace PSAB and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PSAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1383 Side Airbag Front-Passenger Resistance too Low

#### **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

The SRSCM sets DTC B1383 if the measured resistance value of PSAB circuit is less than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

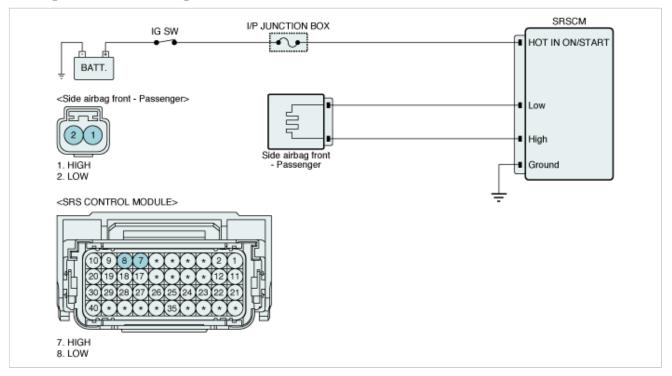
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Threshold Value		• PSAB resistance ≤ 0.9Ω	Poor connection between shorting bar and release pin.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty PSAB.     Faulty SRSCM.
	De-Qualification	More than 5s	

## **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Passenger <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Passenger circuit: FAIL
In a case of a short to battery in the Side airbag front-Passenger circuit: FAIL
In a case of a short to ground in the Side airbag front-Passenger circuit: FAIL

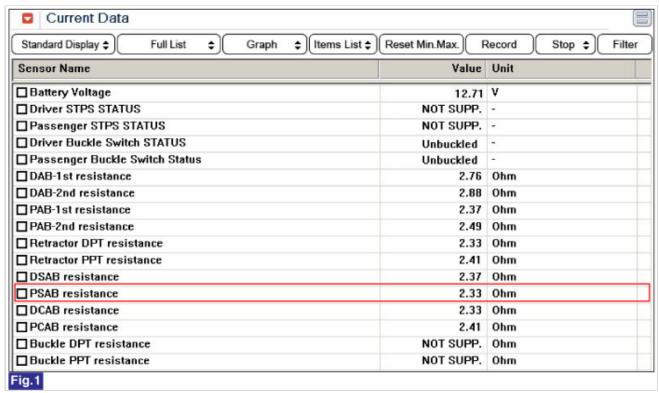


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

#### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PSAB assembly, and check for proper operation.  If the problem is corrected, replace PSAB and then go to "Verification of Vehicle Repair" procedure.	

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PSAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	▶ System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1384 Side Airbag Front-Passenger Resistance Circuit Short to Ground

#### **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

#### **DTC Description**

The SRSCM sets DTC B1384 if there is a short to ground in PSAB harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

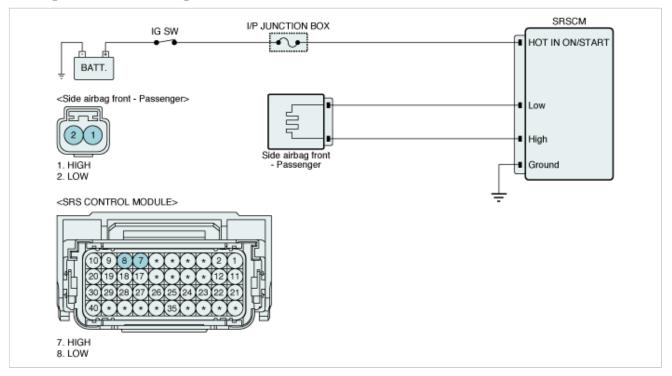
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	<ul> <li>Short to ground in PSAB harness.</li> <li>Poor connection of connected part.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		PSAB Squib line Voltage is < 0.9V	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PSAB.
Time	De-Qualification	More than 5s	• Faulty SRSCM.

## **Specification**

Test Condition	Voltage
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Passenger <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Passenger circuit: FAIL
In a case of a short to battery in the Side airbag front-Passenger circuit: FAIL
In a case of a short to ground in the Side airbag front-Passenger circuit: FAIL

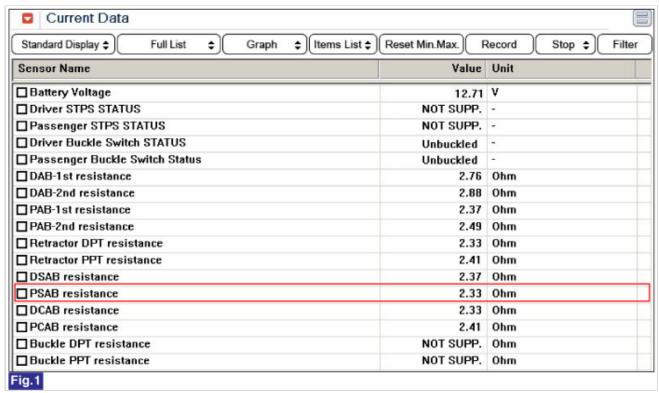


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

#### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PSAB assembly, and check for proper operation.  If the problem is corrected, replace PSAB and then go to "Verification of Vehicle Repair" procedure.	

#### **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PSAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the PSAB harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" process.	
NO	➤ Substitute the SRSCM main harness and check for proper operation. If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		
► System is performing to specification at this time.		▶ System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1385 Side Airbag Front-Passenger Resistance Circuit Short to Battery

#### **General Description**

Side Airbag (hereinafter referred to SAB) located in driver and passenger seat protects passenger's head and shoulder. SAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of SAB directly, Current of measuring device may cause unexpected air bag deploy.

#### **DTC Description**

The SRSCM sets DTC B1385 if there is a short to power in PSAB harness.

\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

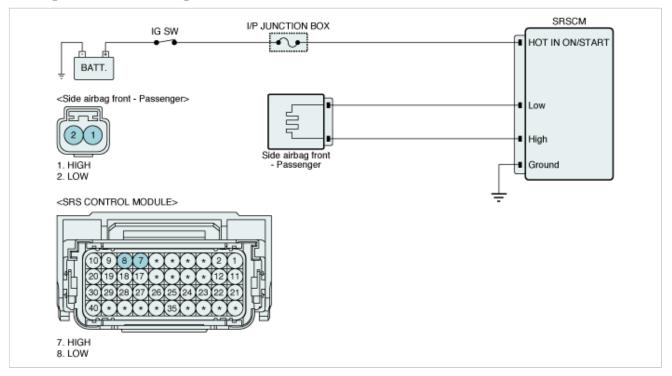
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to power in PSAB harness.     Poor connection of connected
Enable Conditions		• Ignition "ON"	
Threshold Value		PSAB Squib line voltage is > 2.9V	part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty PSAB.     Faulty SRSCM.
Time	De-Qualification	More than 5s	Tauty Ortoowi.

## **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Side airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of Side airbag front-Passenger <  $6.6\Omega$ 

#### Reference:

In a case of an open in the Side airbag front-Passenger circuit: FAIL
In a case of a short to battery in the Side airbag front-Passenger circuit: FAIL
In a case of a short to ground in the Side airbag front-Passenger circuit: FAIL

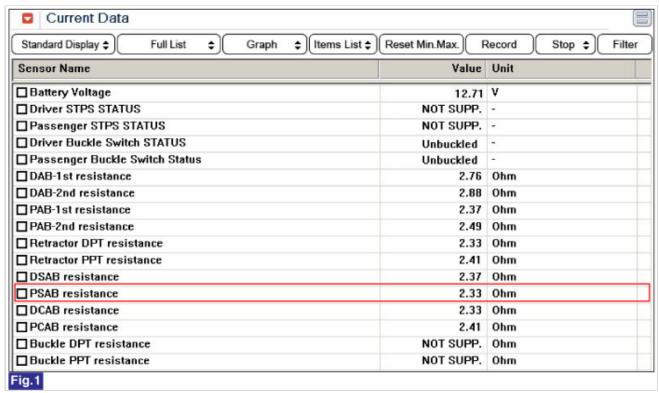


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

#### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PSAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PSAB assembly, and check for proper operation.  If the problem is corrected, replace PSAB and then go to "Verification of Vehicle Repair" procedure.

#### **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PSAB connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the PSAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" proc	
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		
	NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1395 Firing Loops Interconnection Fault

## **General Description**

Every air bag module has its firing circuit that ignits powder to deploy air bag according to signal of SRSCM. SRSCM checks every air bag module when ignition "ON". Once any fault is detected, it is erased only by scantool.

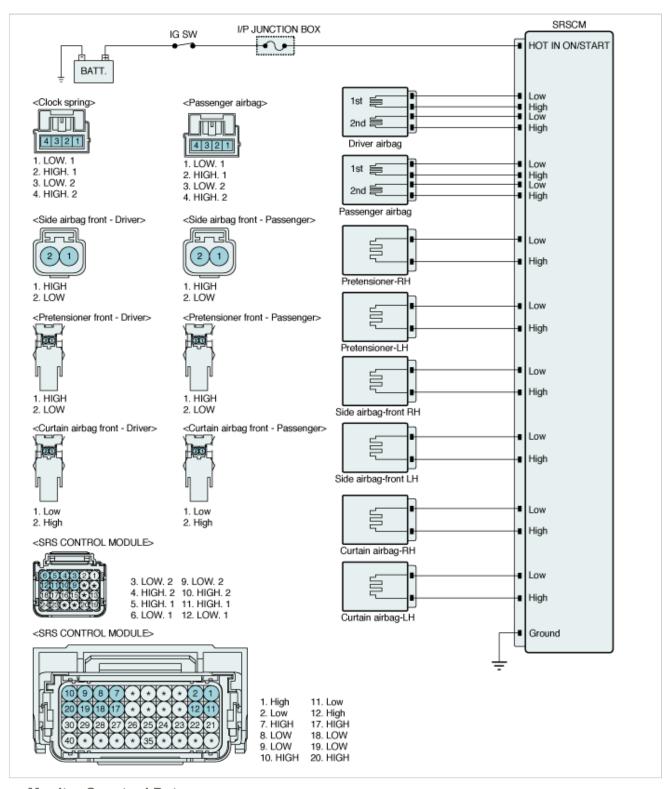
## **DTC Description**

The SRSCM sets DTC B1395 if there's any short circuit in harness of every firing circuit to one another.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check current(PWM type)	
Enable Conditions		• Ignition "ON"	
Threshold Value		<ul> <li>Squib lines are cross coupled</li> <li>Make other line sink, and one line &lt; 0.6V, then this line is crosscoupled.</li> </ul>	Short circuit in squib harness.     SRSCM.
Diagnostic Qualification		More than 2ms x 3	
Time	De-Qualification	• NA	

**Diagnostic Circuit Diagram** 



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "All airbag resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of all airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the all airbag circuit: FAIL
In a case of a short to battery in the all airbag circuit: FAIL
In a case of a short to ground in the all airbag circuit: FAIL

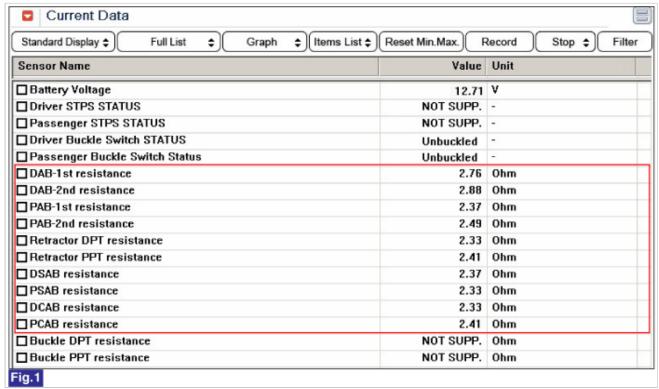


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.  Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.  ▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Check for short between ignition circuits of DAB,PAB,BPT,CAB,SAB. If the condition of harness and component is OK, this fault is caused by SRSCM internal error so replace a known-good SRSCM and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		
	NO	▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1400 SIS(Side Impact Sensor) Front-Driver defect

#### **General Description**

Side Impact Sensor(SIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag.

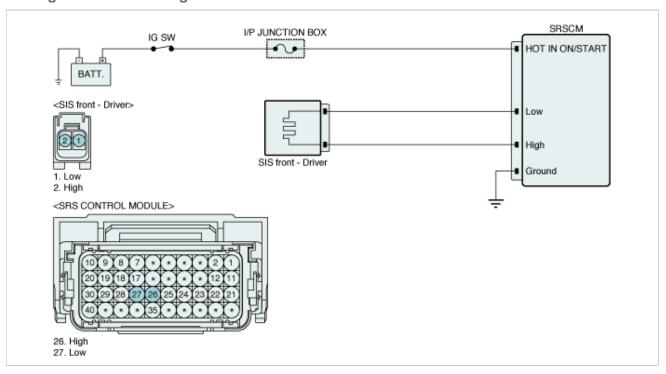
## **DTC Description**

The SRSCM sets DTC B40f there is any fault in DSIS circuit.

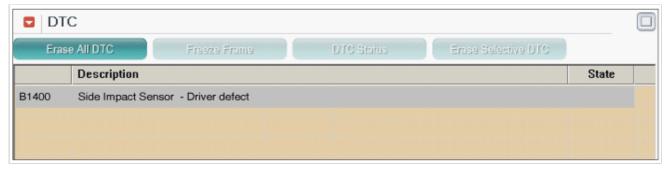
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		DSIS send defect code     DSIS output is not expected value	Faulty DSIS circuit.     Faulty DSIS.
Diagnostic Time	Qualification	• Ini(Start Up):10ms (58 x 20) • Steady:1s (16ns x 10)	• Faulty SRSCM.
	De-Qualification	Ini(Start Up)IGN off -≫n     SteadyIGN off -≫n	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DSIS connector.
- 5. Substitute the DSIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good DSIS, and check for proper operation.  If the problem is corrected, replace DSIS and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

## 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1401 SIS(Side Impact Sensor) Front-Driver Circuit Short to Ground

#### **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

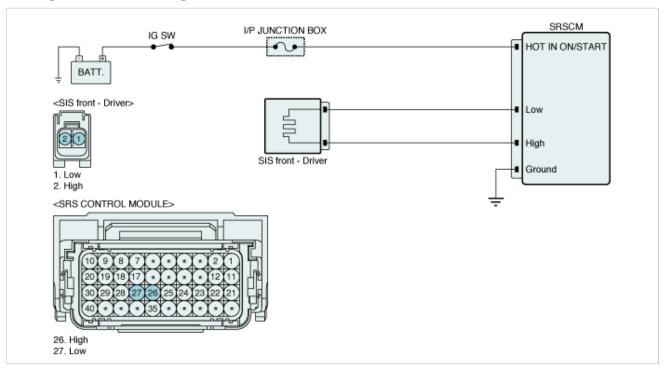
## **DTC Description**

The SRSCM sets DTC B1401 if there is a short to ground in DSIS harness.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTO	C Strategy	Check voltage	
Enable Conditions		• Ignition "ON"	Short to ground in DSIS harness.
Threshold Value		DSIS no acceleration data, and line voltage < 3V	
Diagnostic	Qualification	<ul> <li>Ini(Start Up):2.1s (2 times)</li> <li>Steady:500μs x 8 + 2.2s (2 times)</li> </ul>	<ul><li>Faulty DSIS.</li><li>Faulty SRSCM.</li></ul>
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.		
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect DSIS connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the DSIS harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

YES ► Go to "Component Inspection" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DSIS connector.

- 5. Substitute the DSIS and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good DSIS, and check for proper operation.  If the problem is corrected, replace DSIS and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
	NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1402 SIS(Side Impact Sensor) Front-Driver Circuit Short to Battery

#### **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

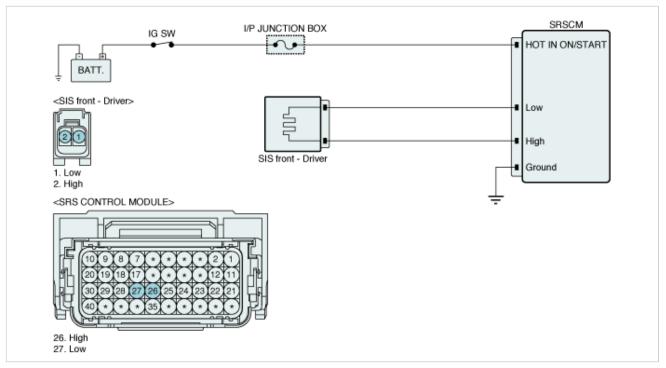
## **DTC Description**

The SRSCM sets DTC B40 if there is short to power harness in DSIS harness.

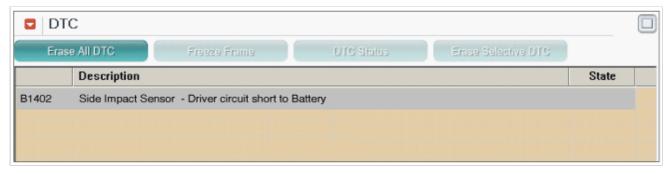
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTO	C Strategy	Check voltage	
Enabl	e Conditions	• Ignition "ON"	
Thres	shold Value	DSIS no acceleration data, and line voltage ≯1V	Short to power in DSIS     harness.
Diagnostic	Qualification	• Ini(Start Up) 12s (16ns x 2) • Steady 5ft x 8f2.2s (2 times)	Faulty DSIS.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up)1 time     Steady1 time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
► Go to "Main harness circuit inspection" procedure.		

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect DSIS connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "bw" or "High" of the DSIS harness connector and chassis ground.

#### Specification: 0

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.

- 4. Disconnect DSIS connector.
- 5. Substitute the DSIS and check for proper operation.
- 6. Is DTC present problem?

► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" pro-		
NO	► Substitute a known-good DSIS, and check for proper operation.  If the problem is corrected, replace DSIS and then go to "Verification of Vehicle Repair" procedure.	

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	S	► Go to the applicable troubleshooting procedure.
NO	)	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1403 SIS(Side Impact Sensor) Front-Passenger Defect

#### **General Description**

Side Impact Sensor(SIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag.

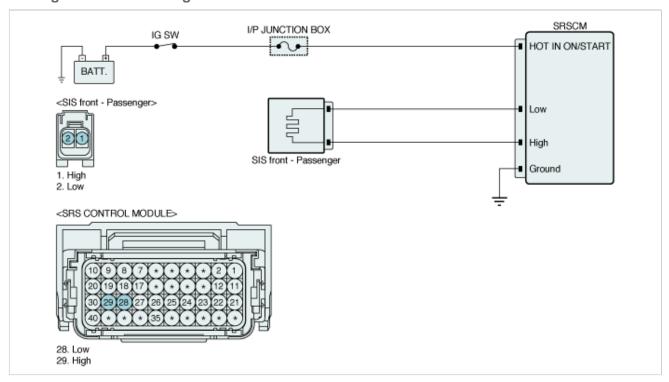
## **DTC Description**

The SRSCM sets DTC B40 if there is any fault in PSIS circuit.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause	
DTC Strategy		Check Data		
Enable Conditions		• Ignition "ON"		
Threshold Value		PSIS send defect code PSIS output is not expected value	Faulty PSIS circuit.     Faulty PSIS.	
Diagnostic	Qualification	• Ini(Start Up)10ms (5 <b>p</b> x 20) • Steady1s (10ns x 10)	• Faulty SRSCM.	
Time	De-Qualification	• Ini(Start Up)IGN off -≫n • SteadyIGN off -≫n		

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	YES ▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Component Inspection" procedure.	

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PSIS connector.
- 5. Substitute the PSIS and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good PSIS, and check for proper operation.  If the problem is corrected, replace PSIS and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

## 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	➤ System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1404 SIS(Side Impact Sensor) Front-Passenger Circuit Short to Ground

#### **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

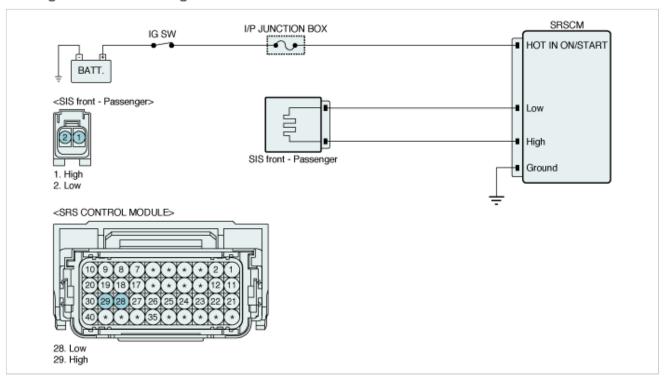
## **DTC Description**

The SRSCM sets DTC B1404 if there is a short to ground in PSIS harness.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	Short to ground in PSIS harness.
Threshold Value		PSIS no acceleration data, and line voltage < 3V	
Diagnostic	Qualification	<ul> <li>Ini(Start Up):2.1s (2 times)</li> <li>Steady:500µs x 8 + 2.2s (2 times)</li> </ul>	Faulty PSIS.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Main harness circuit inspection" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect PSIS connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the PSIS harness connector and chassis ground.

#### Specification : ∞

5. Is the measured resistance within specifications?

► Go to "Component Inspection" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PSIS connector.

- 5. Substitute the PSIS and check for proper operation.
- 6. Is DTC present problem?

➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repa	
NO	► Substitute a known-good PSIS, and check for proper operation.  If the problem is corrected, replace PSIS and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		
	NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1405 SIS(Side Impact Sensor) Front-Passenger Circuit Short to Battery

## **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

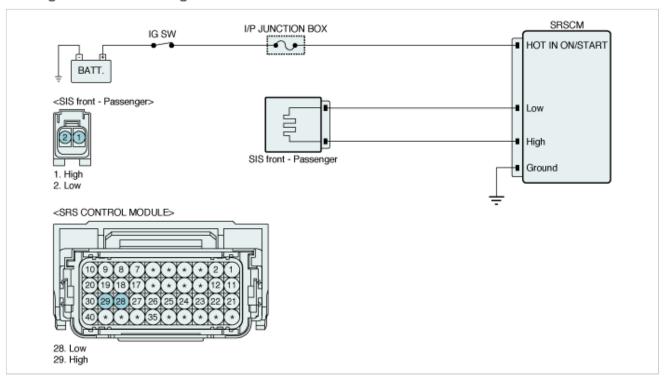
## **DTC Description**

The SRSCM sets DTC B46 if there is short to power harness in PSIS harness.

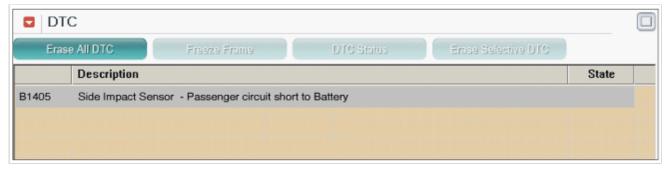
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	
Threshold Value		PSIS no acceleration data, and line voltage ≯1V	Short to power in PSIS harness.
Diagnostic	Qualification	• Ini(Start Up)@s (16ns x 2) • Steady56 x 82.2s (2 times)	Faulty PSIS.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up): time     Steady: time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	Go to "W/Harness Inspection" procedure.		
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

➤ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Main harness circuit inspection" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect PSIS connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "bw" or "High" of the PSIS harness connector and chassis ground.

#### Specification: 0

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.

- 4. Disconnect PSIS connector.
- 5. Substitute the PSIS and check for proper operation.
- 6. Is DTC present problem?

➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repa	
► Substitute a known-good PSIS, and check for proper operation.  If the problem is corrected, replace PSIS and then go to "Verification of Vehicle Repair" produced in the problem.	

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES ► Go to the applicable troubleshooting procedure.		
NO	)	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1409 SIS(Side Impact Sensor) Front-Driver Communication Error

#### **General Description**

Side Impact Sensor(SIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag.

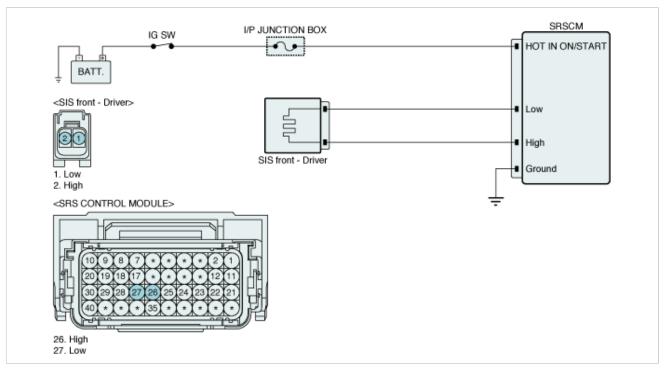
## **DTC Description**

The SRSCM sets DTC B49f there is any error in communication between DSIS and SRSCM.

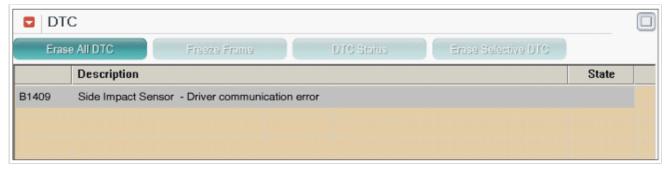
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable	e Conditions	• Ignition "ON"	
Thres	shold Value	DSIS no acceleration data, and line voltage is ok (between 3V and 11V)	Faulty DSIS circuit.     Faulty DSIS.     Faulty SRSCM.
Diagnostic	Qualification	• 1 time	r adity of toom.
Time	De-Qualification	• 1 time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	Go to "W/Harness Inspection" procedure.		
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage..
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DSIS connector.
- 5. Substitute the DSIS and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good DSIS, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

## 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1410 SIS(Side Impact Sensor) Front-Passenger Communication Error

## **General Description**

Side Impact Sensor(SIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag.

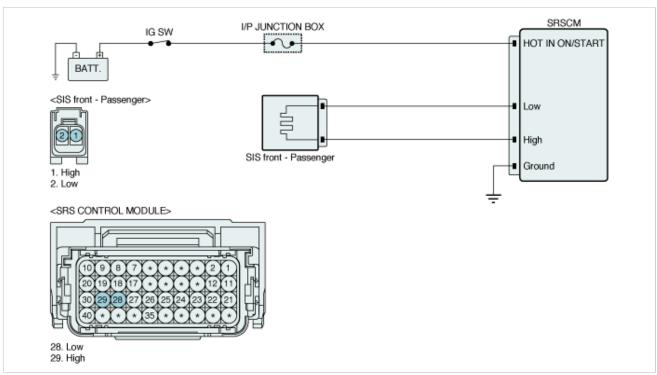
## **DTC Description**

The SRSCM sets DTC B410f there is any error in communication between PSIS and SRSCM.

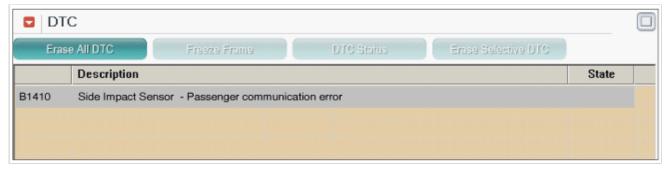
#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		PSIS no acceleration data, and line voltage is ok (between 3V and 11V)	Faulty PSIS circuit.     Faulty PSIS.
Diagnostic Time	Qualification	• Ini(Start Up)2.5 -3.1s (2 times) • Steady50s x 82.32.9 (2 times)	Faulty SRSCM.
	De-Qualification	• 1 time	

## **Diagnostic Circuit Diagram**



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage..
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PSIS connector.
- 5. Substitute the PSIS and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PSIS, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

## 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1414 SIS(Side Impact Sensor) Front-Driver Wrong ID

## **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

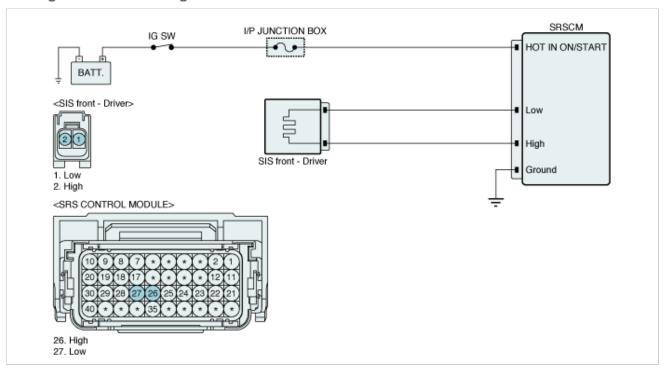
## **DTC Description**

The SRSCM sets DTC B414 if DSIS with wrong ID is detected.

### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		DSIS ID is different from programmed in ACU	<ul><li>DSIS with wrong ID.</li><li>Faulty SRSCM.</li></ul>
Diagnostic Time	Qualification	• 1 time	Tudity Crecim
	De-Qualification	• 1 time	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.		
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect DSIS connector.
- 5. Substitute the DSIS and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
► Substitute a known-good DSIS, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" proce	

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1415 SIS(Side Impact Sensor) Front-Passenger Wrong ID

## **General Description**

Front Side Impact Sensor(FSIS) is located in both side of center pillar detects broad collision.

When SIS delivers collision signal to SRSCM, SRSCM checks if safing sensor located in SRSCM detects collusion. and if both SIS and safing sensor detects collision simultaneously, SRSCM operates side air bag and curtain air bag.

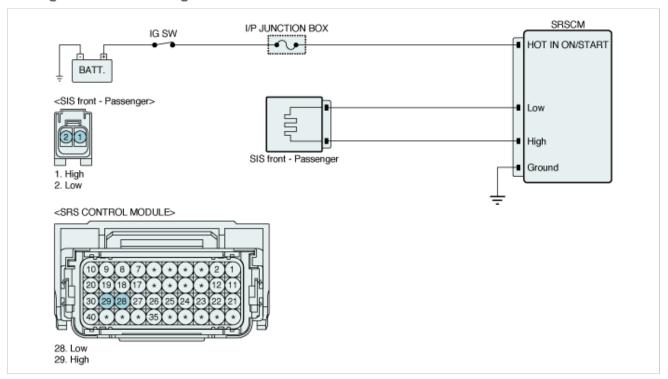
## **DTC Description**

The SRSCM sets DTC B415 if PSIS with wr ong ID is detected.

### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		PSIS ID is different from programmed in ACU	<ul><li>PSIS with wrong ID.</li><li>Faulty SRSCM.</li></ul>
Diagnostic Time	Qualification	• 1 time	. adity of toolvi.
	De-Qualification	• 1 time	

## **Diagnostic Circuit Diagram**



## **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.		
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PSIS connector.
- 5. Substitute the PSIS and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	
NO	► Substitute a known-good PSIS, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" proceed.	

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1473 Inflatable Curtain Airbag Front-Driver Resistance too High

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

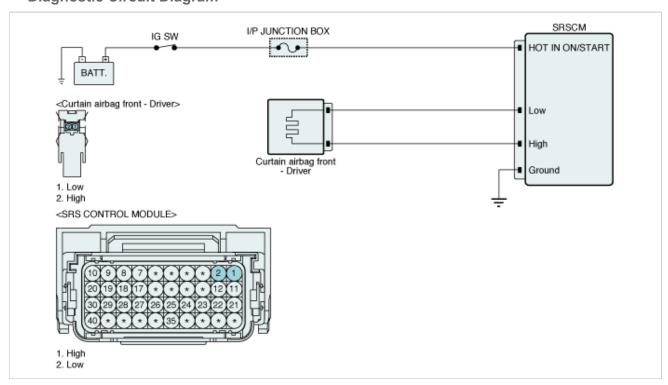
The SRSCM sets DTC B1473 if the measured resistance value of DCAB circuit is more than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected part.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DCAB resistance ≥ 6.6Ω	<ul> <li>Poor connection between shorting bar and release pin.</li> </ul>
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	• Faulty DCAB.
	De-Qualification	More than 5s	Faulty SRSCM.

## **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the curtain airbag front-Driver circuit : FAIL

In a case of a short to battery in the curtain airbag front-Driver circuit: FAIL In a case of a short to ground in the curtain airbag front-Driver circuit: FAIL

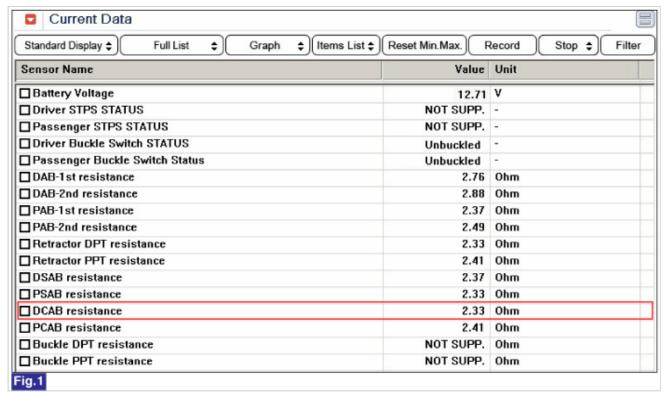


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DCAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1474 Inflatable Curtain Airbag Front-Driver Resistance too Low

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

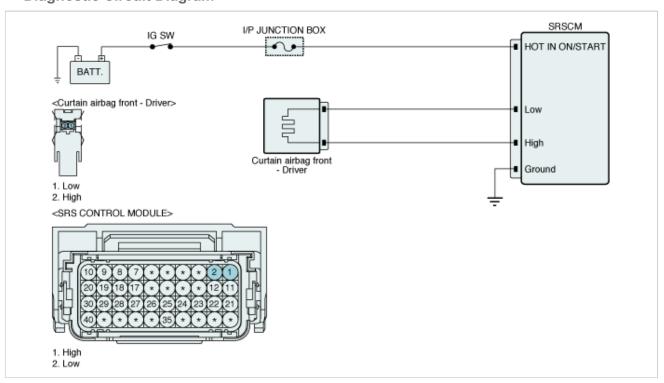
The SRSCM sets DTC B1474 if the measured resistance value of DCAB circuit is less than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Thres	shold Value	• DCAB resistance ≤ 0.9Ω	<ul> <li>Poor connection between shorting bar and release pin.</li> </ul>
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty DCAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

## **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Driver <  $6.6\Omega$ 

#### Reference:

In a case of an open in the curtain airbag front-Driver circuit : FAIL

In a case of a short to battery in the curtain airbag front-Driver circuit: FAIL In a case of a short to ground in the curtain airbag front-Driver circuit: FAIL

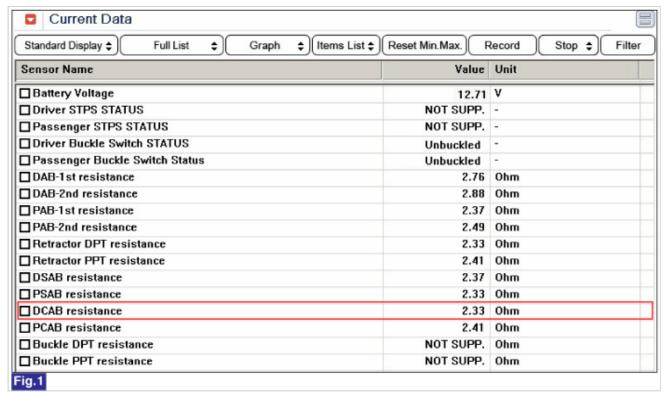


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the DCAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1475 Inflatable Curtain Airbag Front-Driver Resistance Circuit Short to Ground

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1475 if there is a short to ground in DCAB harness.

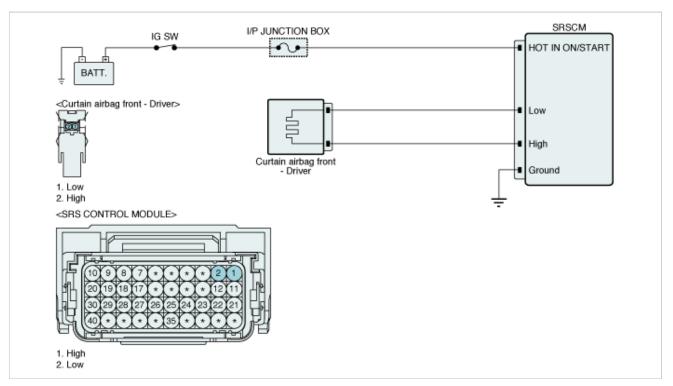
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	<ul> <li>Short to ground in DCAB harness.</li> <li>Poor connection of connected part.</li> <li>Poor connection between</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		DCAB Squib line Voltage is < 0.9V	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	shorting bar and release pin. • Faulty DCAB. • Faulty SRSCM.
	De-Qualification	More than 5s	

## **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Driver <  $6.6\Omega$ 

## Reference:

In a case of an open in the curtain airbag front-Driver circuit : FAIL In a case of a short to battery in the curtain airbag front-Driver circuit: FAIL In a case of a short to ground in the curtain airbag front-Driver circuit : FAIL

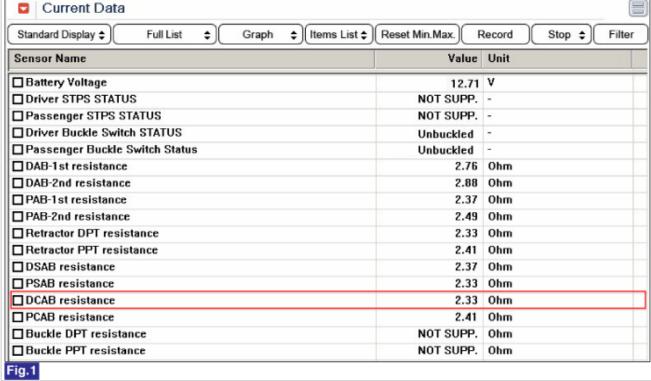


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF"
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the DCAB harness connector and chassis ground.

Specification: ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1476 Inflatable Curtain Airbag Front-Driver Resistance Circuit Short to Battery

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

The SRSCM sets DTC B1476 if there is a short to power in DCAB harness.

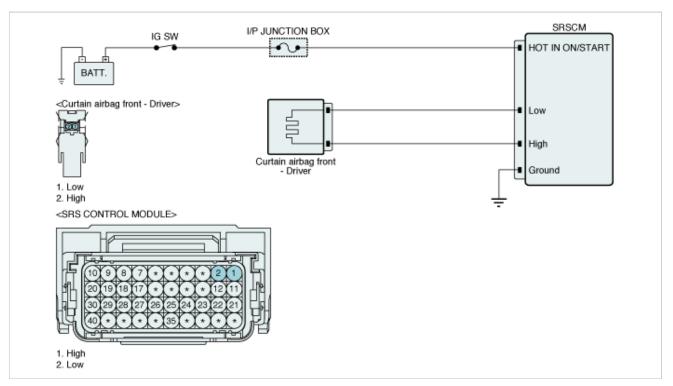
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to power in DCAB     harness.
Enable Conditions		• Ignition "ON"	Poor connection of connected
Threshold Value		DCAB Squib line voltage is > 2.9V	part.  • Poor connection between
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	shorting bar and release pin.  • Faulty DCAB.
Time	De-Qualification	More than 5s	• Faulty SRSCM.

## **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Driver resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Driver <  $6.6\Omega$ 

## Reference:

In a case of an open in the curtain airbag front-Driver circuit : FAIL In a case of a short to battery in the curtain airbag front-Driver circuit: FAIL In a case of a short to ground in the curtain airbag front-Driver circuit : FAIL

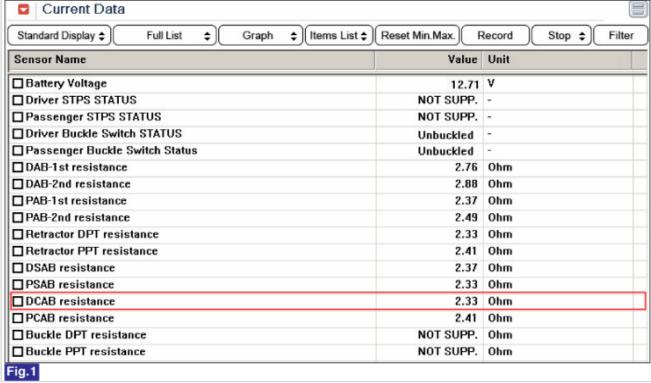


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect DCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect DCAB connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the DCAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1477 Inflatable Curtain Airbag Front-Passenger Resistance too High

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

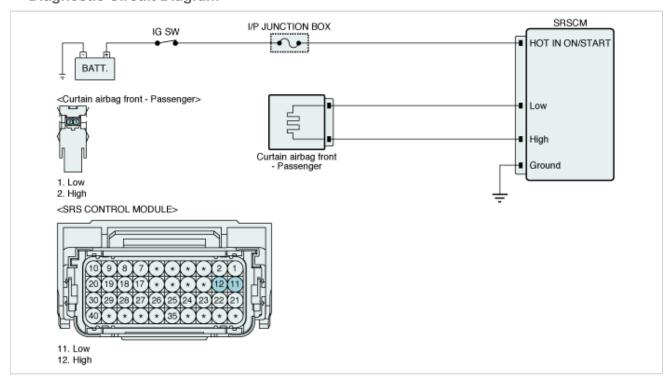
The SRSCM sets DTC B1477 if the measured resistance value of PCAB circuit is more than the threshold value. \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Threshold Value		• PCAB resistance ≥ 6.6Ω	Poor connection between shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PCAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Passenger <  $6.6\Omega$ 

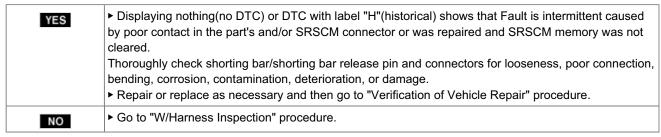
#### Reference:

In a case of an open in the curtain airbag front-Passenger circuit: FAIL In a case of a short to battery in the curtain airbag front-Passenger circuit: FAIL In a case of a short to ground in the curtain airbag front-Passenger circuit: FAIL

Current Data Standard Display \$ Reset Min.Max. Full List Graph Record Stop \$ Filter Sensor Name Value Unit ■ Battery Voltage 12.71 V □ Driver STPS STATUS NOT SUPP. ☐ Passenger STPS STATUS NOT SUPP. ☐ Driver Buckle Switch STATUS Unbuckled ☐ Passenger Buckle Switch Status Unbuckled ■ DAB-1st resistance 2.76 Ohm □ DAB-2nd resistance 2.88 Ohm □ PAB-1st resistance 2.37 Ohm □ PAB-2nd resistance 2.49 Ohm ☐ Retractor DPT resistance 2.33 Ohm ☐ Retractor PPT resistance 2.41 Ohm ☐ DSAB resistance 2.37 Ohm ☐ PSAB resistance 2.33 Ohm □ DCAB resistance 2.33 Ohm ☐ PCAB resistance 2.41 Ohm ☐ Buckle DPT resistance NOT SUPP. Ohm ■ Buckle PPT resistance NOT SUPP. Ohm Fig.1

Fig.1) Normal Data

4. Is parameter displayed within specifications?



## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	YES ▶ Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.	

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PCAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
ИО	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1478 Inflatable Curtain Airbag Front-Passenger Resistance too Low

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

# **DTC Description**

The SRSCM sets DTC B1478 if the measured resistance value of PCAB circuit is less than the threshold value.

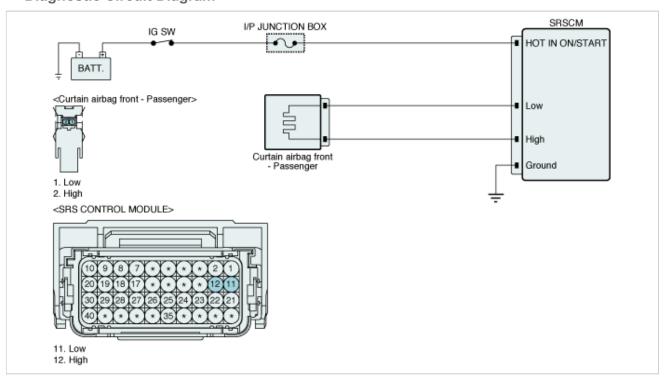
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enable Conditions		• Ignition "ON"	part.
Threshold Value		• PCAB resistance ≤ 0.9Ω	Poor connection between shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PCAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

## **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Passenger <  $6.6\Omega$ 

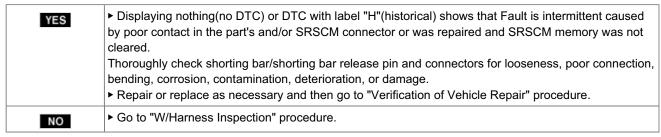
#### Reference:

In a case of an open in the curtain airbag front-Passenger circuit: FAIL In a case of a short to battery in the curtain airbag front-Passenger circuit: FAIL In a case of a short to ground in the curtain airbag front-Passenger circuit: FAIL

Current Data Standard Display \$ Reset Min.Max. Full List Graph Record Stop \$ Filter Sensor Name Value Unit ■ Battery Voltage 12.71 V □ Driver STPS STATUS NOT SUPP. ☐ Passenger STPS STATUS NOT SUPP. ☐ Driver Buckle Switch STATUS Unbuckled ☐ Passenger Buckle Switch Status Unbuckled ■ DAB-1st resistance 2.76 Ohm □ DAB-2nd resistance 2.88 Ohm □ PAB-1st resistance 2.37 Ohm □ PAB-2nd resistance 2.49 Ohm ☐ Retractor DPT resistance 2.33 Ohm ☐ Retractor PPT resistance 2.41 Ohm ☐ DSAB resistance 2.37 Ohm ☐ PSAB resistance 2.33 Ohm □ DCAB resistance 2.33 Ohm ☐ PCAB resistance 2.41 Ohm ☐ Buckle DPT resistance NOT SUPP. Ohm ■ Buckle PPT resistance NOT SUPP. Ohm Fig.1

Fig.1) Normal Data

4. Is parameter displayed within specifications?



## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

### NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	YES ▶ Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.	

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" and "High" of the PCAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
ИО	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1479 Inflatable Curtain Airbag Front-Passenger Resistance Circuit Short to Ground

#### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC** Description

The SRSCM sets DTC B1479 if there is a short to ground in PCAB harness.

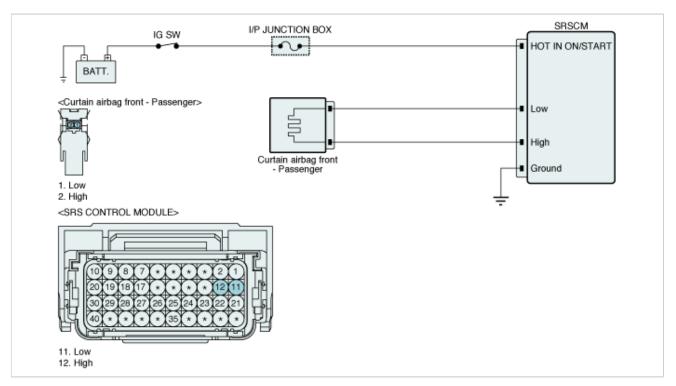
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to ground in PCAB harness.
Enable Conditions		• Ignition "ON"	Poor connection of connected
Thre	shold Value	PCAB Squib line Voltage is < 0.9V	part.  • Poor connection between
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	shorting bar and release pin.  • Faulty PCAB.
	De-Qualification	More than 5s	• Faulty SRSCM.

## **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Passenger <  $6.6\Omega$ 

#### Reference:

In a case of an open in the curtain airbag front-Passenger circuit : FAIL In a case of a short to battery in the curtain airbag front-Passenger circuit: FAIL

In a case of a short to ground in the curtain airbag front-Passenger circuit : FAIL

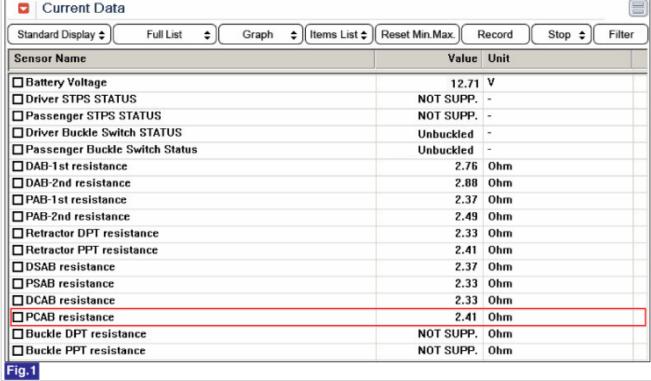


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Squib Circuit Inspection" procedure.	

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- Disconnect PCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PCAB connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the PCAB harness connector and chassis ground.

Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1480 Inflatable Curtain Airbag Front-Passenger Resistance Circuit Short to Battery

### **General Description**

Curtain Airbag (hereinafter referred to CAB)is located at driver and passenger side of headliner

It protects passenger's head and shoulder from fragments of glass or something sharpen caused by overturn.

CAB is consist of air bag and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of CAB directly, Current of measuring device may cause unexpected air bag deploy.

## **DTC Description**

The SRSCM sets DTC B1480 if there is a short to power in PCAB harness.

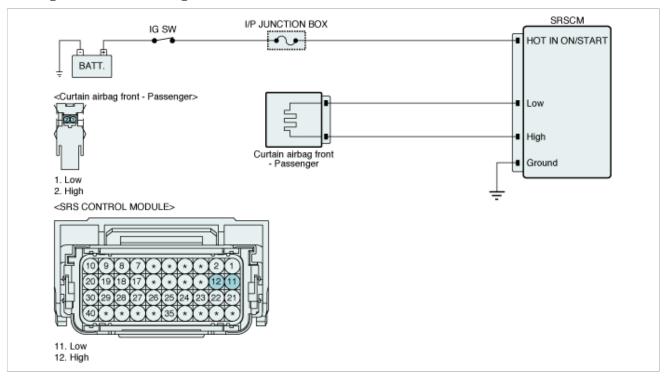
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Voltage	Short to power in PCAB harness.
Enable Conditions		• Ignition "ON"	Poor connection of connected part.
Threshold Value		• PCAB Squib line voltage is > 2.9V	Poor connection between
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	shorting bar and release pin. • Faulty PCAB.
	De-Qualification	More than 5s	• Faulty SRSCM.

## **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Curtain airbag front-Passenger resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of curtain airbag front-Passenger <  $6.6\Omega$ 

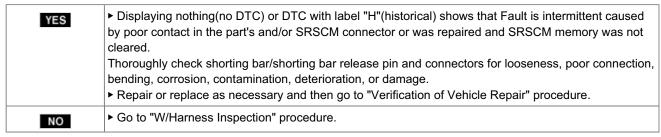
#### Reference:

In a case of an open in the curtain airbag front-Passenger circuit: FAIL In a case of a short to battery in the curtain airbag front-Passenger circuit: FAIL In a case of a short to ground in the curtain airbag front-Passenger circuit: FAIL

Current Data Standard Display \$ Reset Min.Max. Full List Graph Record Stop \$ Filter Sensor Name Value Unit ■ Battery Voltage 12.71 V □ Driver STPS STATUS NOT SUPP. ☐ Passenger STPS STATUS NOT SUPP. ☐ Driver Buckle Switch STATUS Unbuckled ☐ Passenger Buckle Switch Status Unbuckled ■ DAB-1st resistance 2.76 Ohm □ DAB-2nd resistance 2.88 Ohm □ PAB-1st resistance 2.37 Ohm □ PAB-2nd resistance 2.49 Ohm ☐ Retractor DPT resistance 2.33 Ohm ☐ Retractor PPT resistance 2.41 Ohm ☐ DSAB resistance 2.37 Ohm ☐ PSAB resistance 2.33 Ohm □ DCAB resistance 2.33 Ohm ☐ PCAB resistance 2.41 Ohm ☐ Buckle DPT resistance NOT SUPP. Ohm ■ Buckle PPT resistance NOT SUPP. Ohm Fig.1

Fig.1) Normal Data

4. Is parameter displayed within specifications?



## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Disconnect PCAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or  $2\Omega$  resistor.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
► Substitute a known-good DCAB assembly, and check for proper operation.  If the problem is corrected, replace DCAB and then go to "Verification of Vehicle Repair" proce		

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PCAB connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the PCAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO ► System is performing to specification at this time.		

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1481 Driver Airbag Resistance too High(2nd stage)

#### **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision

DAB is consist of air bag, pat cover and inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

#### CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

## **DTC Description**

The SRSCM sets DTC B1481 if the measured resistance value of DAB circuit is more than the threshold value.

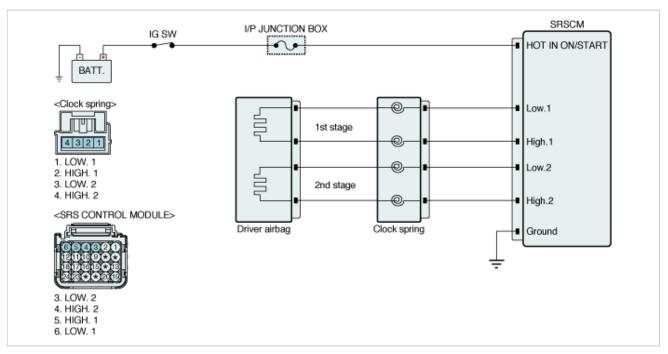
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	<ul> <li>Poor connection of connected part.</li> <li>Poor connection between shorting bar and release pin.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 2nd stage resistance ≥ 6.6Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty DAB.     Faulty Clock spring.     Faulty SRSCM.
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Driver airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Driver airbag circuit: FAIL In a case of a short to battery in the 2nd stage Driver airbag circuit: FAIL In a case of a short to ground in the 2nd stage Driver airbag circuit: FAIL

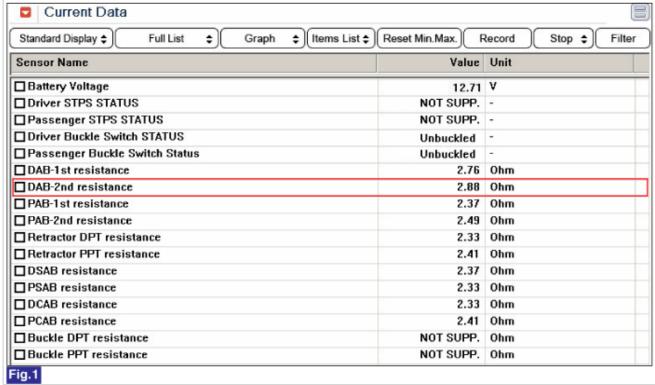


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO ► Go to "Squib Circuit Inspection" procedure.		

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

#### WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	➤ Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" and "High.2" of the Clock Spring harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
110	▶ Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

## WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.2" and "High.2" of the DAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
МО	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1482 Driver Airbag Resistance too Low(2nd stage)

#### **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision

DAB is consist of air bag, pat cover and inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

#### CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

# **DTC Description**

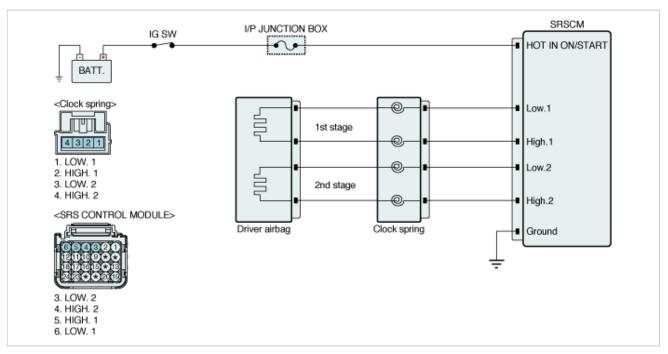
The SRSCM sets DTC B1482 if the measured resistance value of DAB circuit is less than the threshold value  $(1.0\Omega)$  \*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enabl	e Conditions	• Ignition "ON"	part.  • Poor connection between
Thres	shold Value	<ul> <li>DAB 2nd stage resistance ≤ 0.9Ω</li> </ul>	shorting bar and release pin.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	Faulty DAB.     Faulty Clock spring.
Time	De-Qualification	More than 5s	• Faulty SRSCM.

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Driver airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Driver airbag circuit: FAIL In a case of a short to battery in the 2nd stage Driver airbag circuit: FAIL In a case of a short to ground in the 2nd stage Driver airbag circuit: FAIL

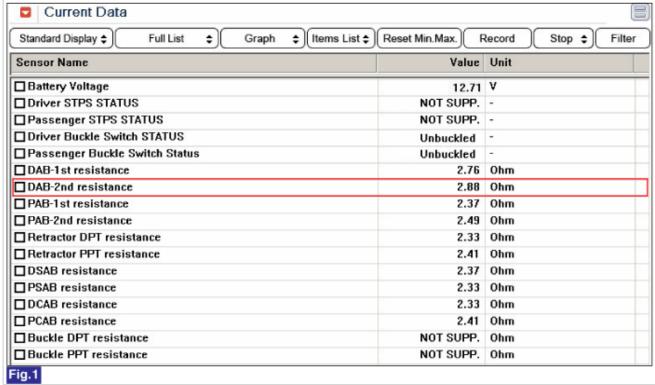


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

#### WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	➤ Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" and "High.2" of the Clock Spring harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

## WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.2" and "High.2" of the DAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
МО	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1483 Driver Airbag Resistance Circuit Short to Ground(2nd stage)

#### **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

#### CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference. It can protect driver with less impact of gas expention force, that can reduce driver's injury Constituent is the same as single output type airbag.

# **DTC** Description

The SRSCM sets DTC B1483 if there is a short to ground in DAB harness

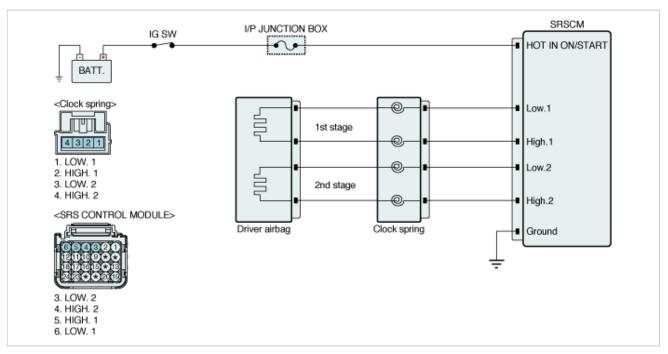
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Short to ground in DAB harness.
Enab	le Conditions	• Ignition "ON"	Poor connection of connected
Thre	shold Value	DAB 2nd stage Squib line voltage is < 0.9V	part. • Faulty DAB.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty Clock spring.     Faulty SRSCM.
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Driver airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Driver airbag circuit: FAIL In a case of a short to battery in the 2nd stage Driver airbag circuit: FAIL In a case of a short to ground in the 2nd stage Driver airbag circuit: FAIL

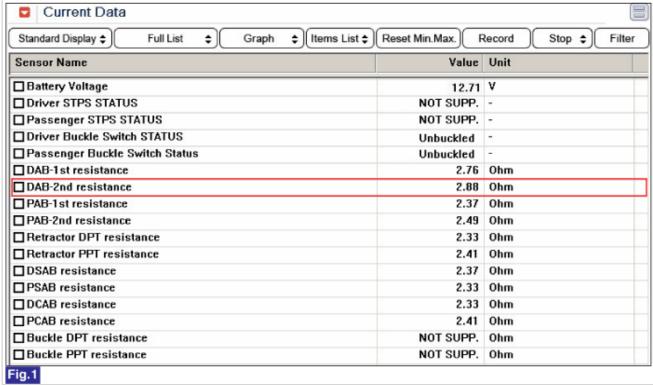


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF"
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

#### WARNING

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Clock Spring Circuit Inspection" procedure.
NO	► Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" or "High.2" of the clock spring harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

## WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure resistance between terminal "Low.2" or "High.2" of the DAB harness connector and chassis ground.

#### Specification : ∞

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1484 Driver Airbag Resistance Circuit Short to Battery(2nd stage)

#### **General Description**

Driver Air bag module (hereinafter referred to DAB) located at center of steering wheel protects driver by reducing impact of collision.

DAB is consist of air bag, pat cover and inflator.

There are power, circuit for ignition, gas generator and diffuser screen in inflator.

Air bag reduces impact of collision by fillied up gas.

In collision, pat cover splits and through this crack, air bag emerges and deploys.

Inflator generates gas that expands air bag.

Clock spring is located between steering wheel and column. It connects SCSRM to DAB.

#### CAUTION

Never measure resistance of DAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

# **DTC Description**

The SRSCM sets DTC B1484 if there is a short to power in DAB harness

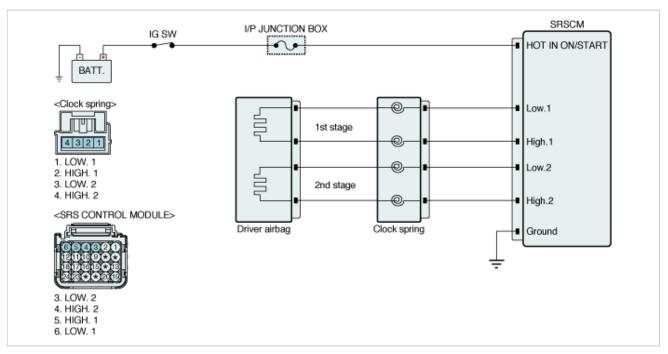
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Short to power in DAB harness.
Enab	le Conditions	• Ignition "ON"	<ul> <li>Poor connection of connected</li> </ul>
Thre	shold Value	DAB 2nd stage Squib line voltage is > 2.9V	part. • Faulty DAB.
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty Clock spring.
	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Driver airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Driver airbag circuit: FAIL In a case of a short to battery in the 2nd stage Driver airbag circuit: FAIL In a case of a short to ground in the 2nd stage Driver airbag circuit: FAIL

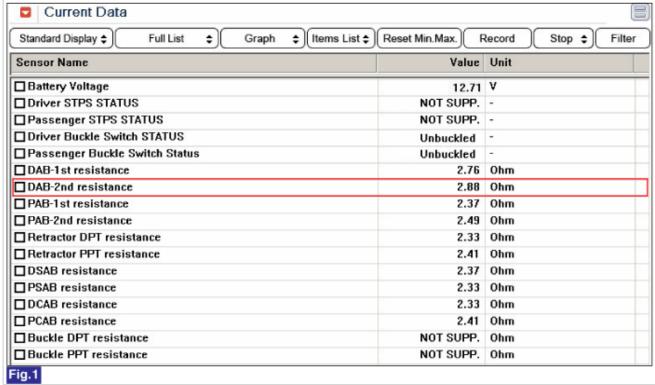


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
	► Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "W/Harness Inspection" procedure.

### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

#### **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the DAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to DAB connector of the clock spring harness connector.



If dummy and dummy adaptor are not able to be prepared, use a known-good DAB or  $2\Omega$  resistor.

## WARNING)

Lay Removed DAB facing upward for unexpected air bag deploy.

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Clock Spring Circuit Inspection" procedure.	
NO	► Substitute a known-good DAB assembly, and check for proper operation.  If the problem is corrected, replace DAB and then go to "Verification of Vehicle Repair" procedure.

# **Clock Spring Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Remove DAB module and disconnect SRSCM connector of the clock spring harness.

# [WARNING]

Lay Removed DAB facing upward for unexpected air bag deploy .

- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure Voltage between terminal "Low.2" or "High.2" of the clock spring harness connector and chassis ground.

Specification: 0V

6. Is the measured resistance within specifications?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute the Clock spring and check for proper operation.  If the problem is corrected, replace Clock spring and then go to "Verification of Vehicle Repair" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF" and wait at least one minutes.
- 2. Remove DAB module and disconnect SRSCM connector of the main harness.
- 3. Ignition "ON" & Engine "OFF".

### WARNING

Lay Removed DAB facing upward for unexpected air bag deploy .

4. Measure voltage between terminal "Low.2" or "High.2" of the DAB harness connector and chassis ground.

Specification: approx. 0V

5. Is the measured voltage within specifications?

150		► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
	NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- ${\it 3. \ Operate the vehicle within \ DTC \ Enable \ conditions \ in \ General \ information.}$
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1485 Passenger Airbag Resistance too High(2nd stage)

#### **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

## **DTC** Description

The SRSCM sets DTC B1485 if the measured resistance value of PAB circuit is more than the threshold value.

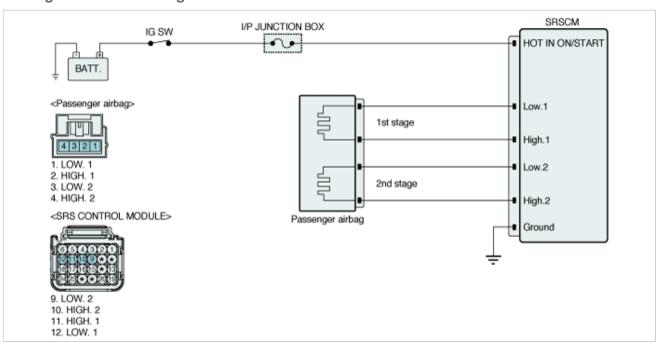
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Poor connection of connected
Enabl	e Conditions	• Ignition "ON"	part.  • Poor connection between shorting bar and release pin.
Thres	shold Value	• PAB 2nd stage resistance ≥ 6.6Ω	
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	• Faulty PAB.
Time	De-Qualification	More than 5s	Faulty SRSCM.

# **Specification**

Test Condition	Resistance	
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω	



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Passenger airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Passenger airbag circuit : FAIL

In a case of a short to battery in the 2nd stage Passenger airbag circuit: FAIL In a case of a short to ground in the 2nd stage Passenger airbag circuit: FAIL

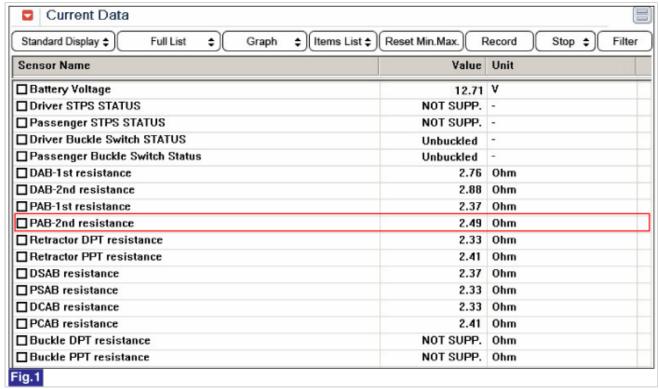


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

## **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

#### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" and "High.2" of the PAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
МО	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1486 Passenger Airbag Resistance too Low(2nd stage)

## **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

## **DTC** Description

The SRSCM sets DTC B1353 if the measured resistance value of PAB circuit is less than the threshold value.

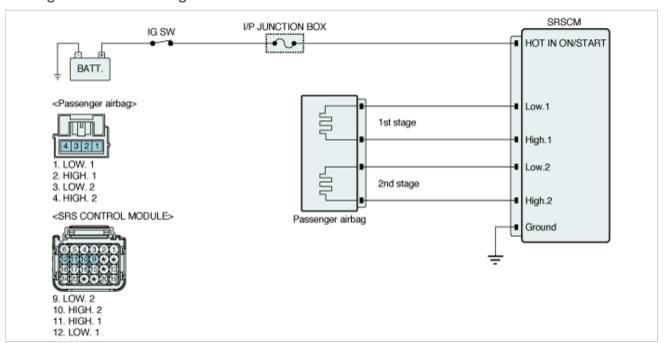
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	<ul> <li>Poor connection of connected part.</li> <li>Poor connection between shorting bar and release pin.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 2nd stage resistance ≤ 0.9Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	Faulty PAB.     Faulty SRSCM.
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Resistance
Ignition ON	0.9Ω ≤ Squib resistance ≤ 6.6Ω



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Passenger airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Passenger airbag circuit : FAIL

In a case of a short to battery in the 2nd stage Passenger airbag circuit: FAIL In a case of a short to ground in the 2nd stage Passenger airbag circuit: FAIL

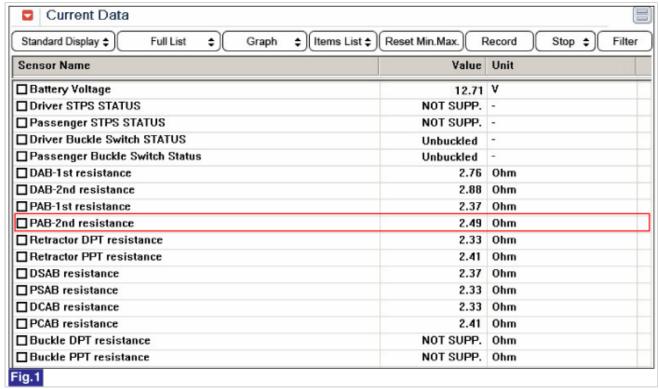


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

## **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

## NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.	

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

#### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" and "High.2" of the PAB harness connector.

**Specification**: approx. 1  $\Omega$  below

5. Is the measured resistance within specifications?

► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" produced in the problem.	
МО	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1487 Passenger Airbag Resistance Circuit Short to Ground(2nd stage)

#### **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury Constituent is the same as single output type airbag.

# **DTC Description**

The SRSCM sets DTC B1354 if there is a short to ground in PAB harness

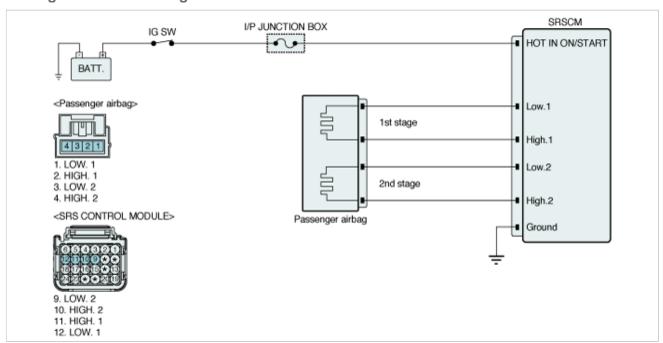
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	
Enab	le Conditions	• Ignition "ON"	Short to ground in PAB harness. Poor connection of connected part. Faulty PAB. Faulty SRSCM.
Thre	shold Value	PAB 2nd stage Squib line voltage is < 0.9V	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	More than 5s	

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Passenger airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Passenger airbag circuit : FAIL

In a case of a short to battery in the 2nd stage Passenger airbag circuit: FAIL In a case of a short to ground in the 2nd stage Passenger airbag circuit: FAIL

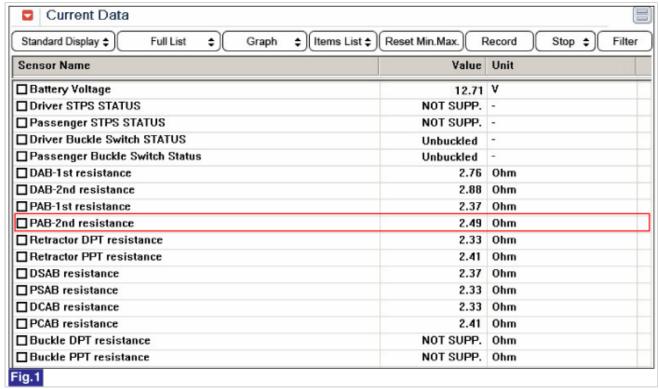


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

## **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	YES ► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

#### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

4. Measure resistance between terminal "Low.2" or "High.2" of the PAB harness connector and chassis ground.

#### Specification: ∞

5. Is the measured resistance within specifications?

➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" proceed	
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1488 Passenger Airbag Resistance Circuit Short to Battery(2nd stage)

## **General Description**

Passenger Air bag module (hereinafter referred to PAB) located at passenger side crush pad protects passenger by reducing impact of collision.

PAB is consist of air bag, pat cover and inflator.

Air bag reduces impact of collision by fillied up gas.

Inflator keeps gas and uses it to deploy air bag on collision.

#### CAUTION

Never measure resistance of PAB directly, Current of measuring device may cause unexpected air bag deploy.

Dual output type airbag deploys two bags in sequence within specified time difference.

It can protect driver with less impact of gas expention force, that can reduce driver's injury

Constituent is the same as single output type airbag.

## **DTC** Description

The SRSCM sets DTC B1488 if there is a short to power in PAB harness.

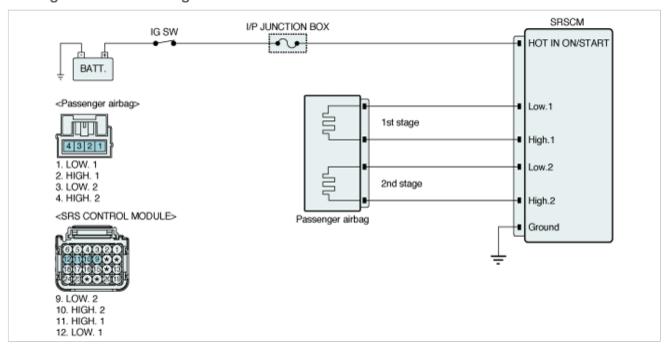
\*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Resistance	Short to power in PAB harness.     Poor connection of connected
Enable Conditions		• Ignition "ON"	
Threshold Value		PAB 2nd stage Squib line voltage is > 2.9V	part.
Diagnostic	Qualification	• More than 2.5s (250ms x 10)	<ul><li>Faulty PAB.</li><li>Faulty SRSCM.</li></ul>
Time	De-Qualification	More than 5s	1 duity Ortoowi.

# **Specification**

Test Condition	Voltage
Ignition ON	0.9V ≤ Squib line Voltage ≤ 2.9V



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger airbag(2nd stage) resistance" parameter on the Scantool.

#### Specification:

 $0.9\Omega$ < Resistance of 2nd stage Passenger airbag <  $6.6\Omega$ 

#### Reference:

In a case of an open in the 2nd stage Passenger airbag circuit : FAIL

In a case of a short to battery in the 2nd stage Passenger airbag circuit: FAIL In a caseof a short to ground in the 2nd stage Passenger airbag circuit: FAIL

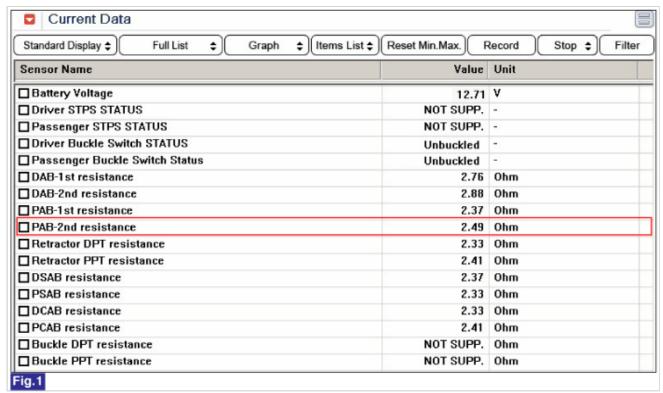


Fig.1) Normal Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

# **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Squib Circuit Inspection" procedure.

## **Squib Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect (-) terminal cable from battery and wait for 1 minutes or more.
- 3. Remove the PAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2E100) to PAB harness connector.

# NOTE

If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or  $2\Omega$  resistor.

# WARNING

Lay Removed PAB facing upward for unexpected air bag deploy .

- 4. Connect (-) terminal cable to battery and Ignition "ON" & Engine "OFF" and wait for 30 seconds or more.
- 5. Connect scantool to Data Link Connector(DLC) and clear DTC with scantool and diagnose again.
- 6. Is DTC present problem?

YES	► Go to "Main harness circuit inspection" procedure.	
NO	► Substitute a known-good PAB assembly, and check for proper operation.  If the problem is corrected, replace PAB and then go to "Verification of Vehicle Repair" procedure.	

# **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect PAB connector and SRSCM main harness connector.

#### WARNING

Lay Removed PAB facing upward for unexpected air bag deploy.

- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low.2" or "High.2" of the PAB harness connector and chassis ground.

Specification: approx. 0V

6. Is the measured voltage within specifications?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

# 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1489 PODS(Passenger Occupant Detecting System) ECU Defect

#### **General Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbagsand/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant.

This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximitysensor.

The Passenger Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushionand suspension to measure the occupant's loading force on the vehicle seat.

The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU),both of which are mounted under the seat pan.

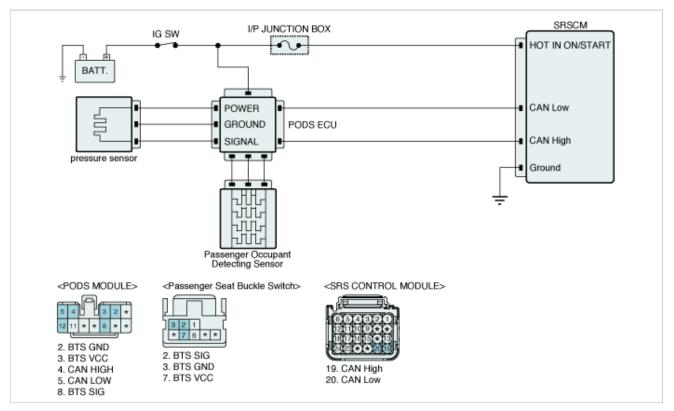
The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

# **DTC Description**

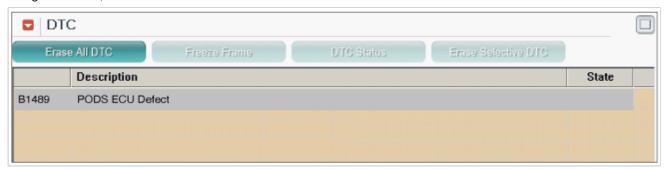
The SRSCM sets above Diagnosis trouble code if it detects that the Passanger OC system ECU unit is defectied.

# **DTC Detecting Condition**

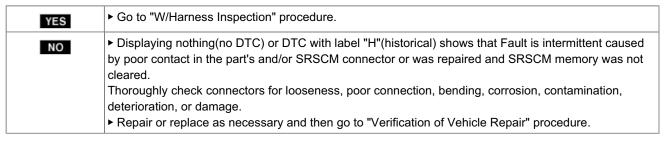
Item		Detecting Condition	Possible cause
DTC Strategy		CAN communication	
Enable Conditions		• Ignition "ON"	Poor connection of connected
Threshold Value		ACU get PODS ECU Failuer message via CAN communication	part. • Faulty OC ECU.
Diagnostic	Qualification	More than 2.2 sec	Faulty SRSCM.
Time	De-Qualification	More than 4.4sec	



- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

# **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PODS ECU connector.
- 5. Substitute the PODS ECU and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PODS ECU, and check for proper operation.  If the problem is corrected, replace Pressure Sensor and then go to "Verification of Vehicle Repair" procedure.

# **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1490 PODS(Passenger Occupant Detecting System) Sensor(Bladder) Defect

#### **General Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbagsand/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant.

This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximitysensor.

The Passenger Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushionand suspension to measure the occupant's loading force on the vehicle seat.

The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU),both of which are mounted under the seat pan.

The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

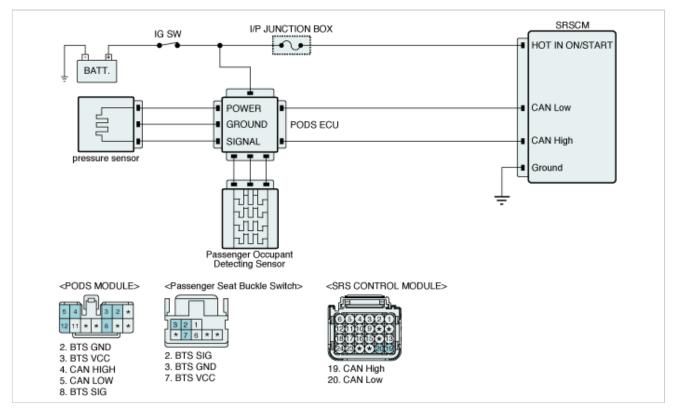
## **DTC** Description

The SRSCM sets DTC B1490 if there is any fault in OC circuit.

## **DTC Detecting Condition**

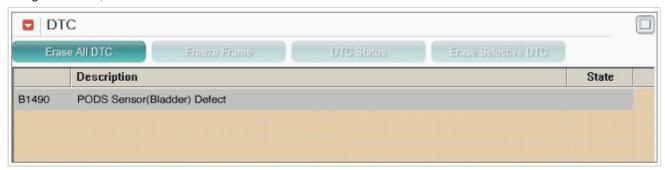
Item		Detecting Condition	Possible cause
DTC Strategy		CAN communication	
Enable Conditions		• Ignition "ON"	• Poor connection of connected
Threshold Value		ACU get PODS Sensor Failuer message via CAN communication	part. • Faulty OC Passenger Sensor Mat.
Diagnostic	Qualification	More than 2.2 sec	• Faulty SRSCM.
Time	De-Qualification	More than 4.4sec	

**Diagnostic Circuit Diagram** 

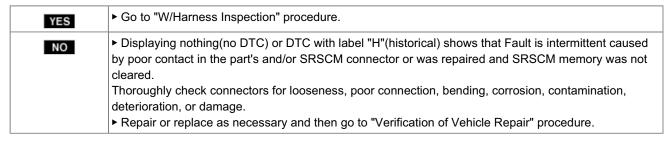


#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PODS ECU connector.
- 5. Substitute the PODS ECU and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PODS ECU, and check for proper operation.  If the problem is corrected, replace Pressure Sensor and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1493 PODS(Passenger Occupant Detecting System) Communication error

#### **General Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbagsand/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant.

This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximitysensor.

The Passenger Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushionand suspension to measure the occupant's loading force on the vehicle seat.

The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU),both of which are mounted under the seat pan.

The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

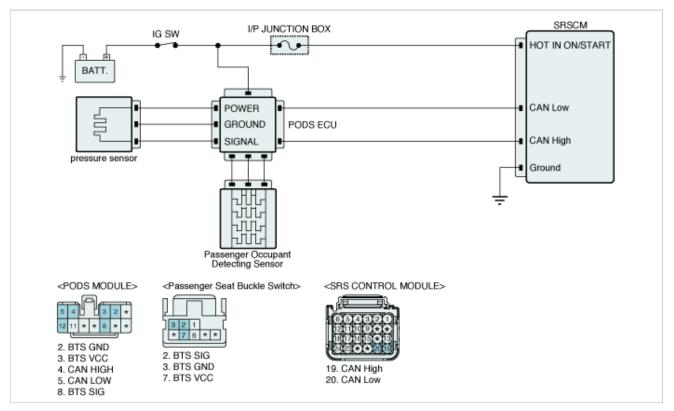
## **DTC Description**

The SRSCM sets DTC B1493 if there is any error in communication between OC Passenger Sensor and SRSCM.

## **DTC Detecting Condition**

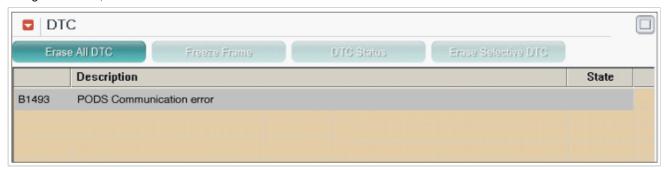
Item		Detecting Condition	Possible cause
DTC Strategy		CAN communication	
Enab	le Conditions	• Ignition "ON"	Poor connection of connected
Thre	shold Value	No Communication with PODS	part. • Faulty OC ECU.
Diagnostic	Qualification	More than 5.5 sec	• Faulty SRSCM.
Time	De-Qualification	More than 5.5 sec	

## **Diagnostic Circuit Diagram**

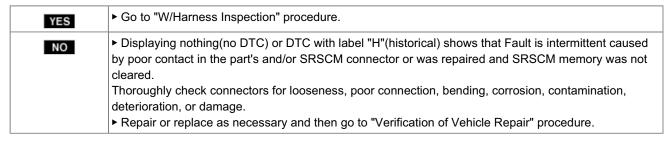


#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PODS ECU connector.
- 5. Substitute the PODS ECU and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PODS ECU, and check for proper operation.  If the problem is corrected, replace Pressure Sensor and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1494 PODS(Passenger Occupant Detecting System) Wrong ID

#### **General Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbagsand/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant.

This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximitysensor.

The Passenger Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushionand suspension to measure the occupant's loading force on the vehicle seat.

The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU),both of which are mounted under the seat pan.

The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

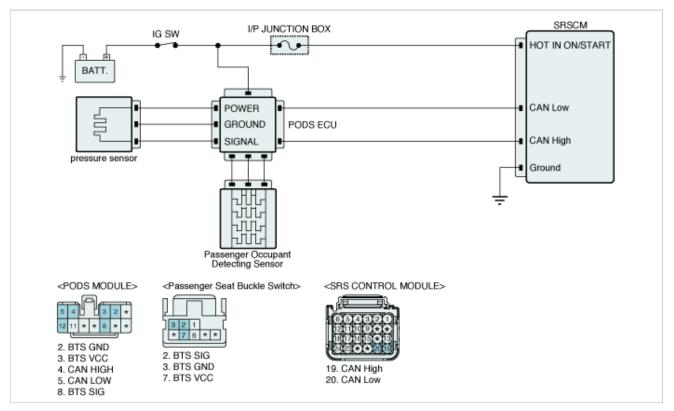
## **DTC** Description

The SRSCM sets DTC B1494 if OC Passenger Sensor with wrong ID is detected

## **DTC Detecting Condition**

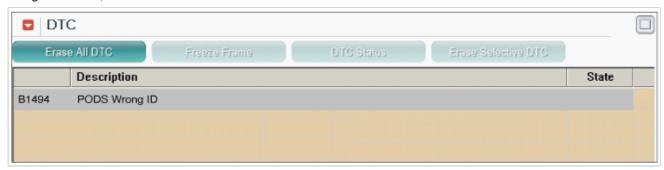
Item		Detecting Condition	Possible cause
DTC Strategy		CAN communication	PODS Sensor(Bladder) wrong ID. Faulty OC ECU.
Enable Conditions		• Ignition "ON"	
Threshold Value		SRSCM get ODS Wrong ID message via CAN communication	
Diagnostic	Qualification	More than 2.2 sec	Faulty SRSCM.
Time	De-Qualification	No in same IGN Cycle	

**Diagnostic Circuit Diagram** 

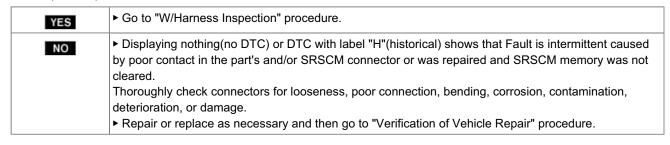


#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PODS ECU connector.
- 5. Substitute the PODS ECU and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	▶ Substitute a known-good PODS ECU, and check for proper operation. If the problem is corrected, replace Pressure Sensor and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1495 BTS(Belt-Tension Sensor) Defect

## **General Description**

Sensing seat belt tension, belt tension sensor sends signals to PODS ECU.

Sensing the intensity of pressure from pressure sensor and tension from belt tensioner, PODS ECU decide a passenger as an adult or a child.

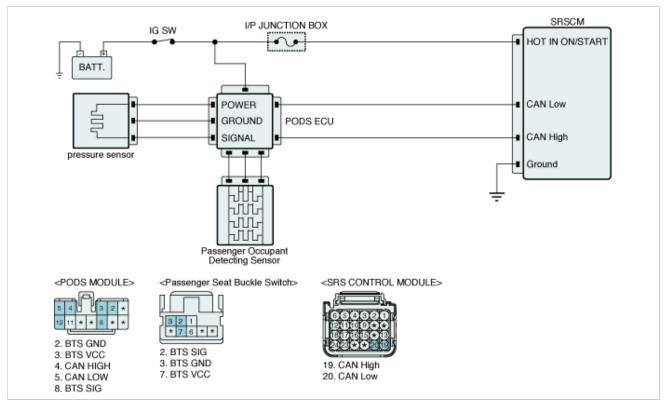
## **DTC Description**

DTC B1495 is recorded when a malfunction is detected in the Belt-Tension Sensor.

## **DTC Detecting Condition**

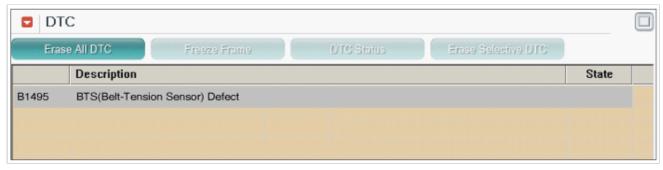
Item		Detecting Condition	Possible cause
DTC Strategy		Belt-Tension Sensor failure.	<ul> <li>Belt-Tension Sensor failure.</li> <li>PODS ECU failure.</li> <li>SRSCM Faulty.</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		SRSCM get ODS BTS Failuer message via CAN communication	
Diagnostic Time	Qualification	More than 2.2 sec	Ortoom rudity.
	De-Qualification	More than 4.4 sec	

#### **Diagnostic Circuit Diagram**



## **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Intermittent failure, system is OK at this moment.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Fault is intermittent caused by poor contact in the connector/wiring harness or was repaired and SRSCM memory was not cleared. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, ordamage. Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

➤ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Power Circuit Inspection" procedure.

## **Power Circuit Inspection**

- 1. Engine "OFF"
- 2. Disconnect Belt tension sensor connector.
- 3. Ignition "ON" & Engine "OFF".
- 4. Measure voltage between terminal 1 of the Belt tension sensor connector and chassis ground.

Specification: Approx. 5.02V

5. Is the measured voltage within specification?

YES	► Go to "Ground Circuit Inspection" procedure.
NO	<ul> <li>▶ After reparing open in power circuit or short circuit of belt tension sensor, go to "Verification vehicle Repair" procedure</li> <li>▶ Substitute a known-good Belt tension sensor, and check for proper operation.</li> <li>If the problem is corrected, replace the Belt tension sensor and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Ground Circuit Inspection**

- 1. Engine "OFF"
- 2. Disconnect Belt tension sensor connector.

3. Measure resistance between terminal 2 of the Belt tension sensor connector and chassis ground.

Specification:  $0 \Omega$ 

4. Is the measured resistance within specification?

YES	► Go to "Signal Circuit Inspection" procedure.
NO	<ul> <li>▶ After reparing open in ground circuit or short circuit of belt tension sensor, go to "Verification vehicle Repair" procedure .</li> <li>▶ Substitute a known-good Belt tension sensor, and check for proper operation.</li> <li>If the problem is corrected, replace the Belt tension sensor and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Signal Circuit Inspection**

- 1. Connect Belt tension sensor connector & PODS ECU.
- 2. Ignition "ON" & Engine "OFF".
- 3. When mounting seat belt, check belt tension signals for change for various belt tension.
- 4. Measure voltage between terminal 3 of the Belt tension sensor connector and chassis ground.

Specification: approx. 0.98V (Min) ~ 3.963V (Max)

5. Is the measured voltage within specification?

YES	▶ Check Belt tension sensor for contamination, deterioration, or damage. Substitute with a known-good Belt tension sensor and check for proper operation. If the problem is corrected, replace Belt tension sensor and then go to "Verification of Vehicle Repair" procedure.
NO	<ul> <li>▶ Substitute a known-good Belt tension sensor, and check for proper operation.</li> <li>If the problem is corrected, replace the Belt tension sensor and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute a known-good PODS ECU, and check for proper operation.</li> <li>If the problem is corrected, replace the PODS ECU and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1496 PODS(Passenger Occupant Detecting System) Not calibrated

#### **General Description**

The system is intended to classify the occupancy status of the front passenger seat in a motor vehicle based upon the measured force on the bottom seat cushion.

The system also communicates to the SRSCM whether to allow or inhibit the deployment of the passenger airbagsand/or pretensioner based upon this status.

The System also measured dynamic responses of the occupant.

This information is used to identify when a child seat is cinched down tightly with the seat belt, and to also determine if the seat is unoccupied.

However, the dynamic measurements are not intended, nor capable of monitoring the seating position of the occupant, nor can they determine the proximity of the occupant to the inflator modules.

The system should not be confused with an occupant position recognition system, or any other occupant proximitysensor.

The Passenger Occupant Detecting System (PODS) utilizes bladder placed between the passenger seat cushionand suspension to measure the occupant's loading force on the vehicle seat.

The bladder is connected to pressure sensor and ultimately to an electronic control unit (ECU),both of which are mounted under the seat pan.

The quantitative force determined by the system is compared to a given threshold for determination of passenger airbag suppression.

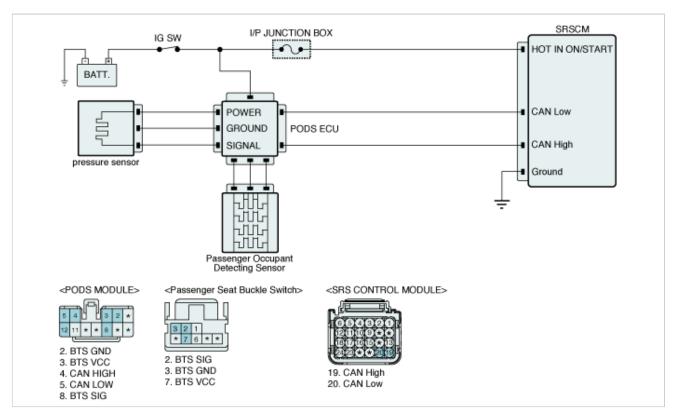
## **DTC** Description

The SRSCM sets above Diagnosis trouble code in case of PODS not calibrated.

#### **DTC Detecting Condition**

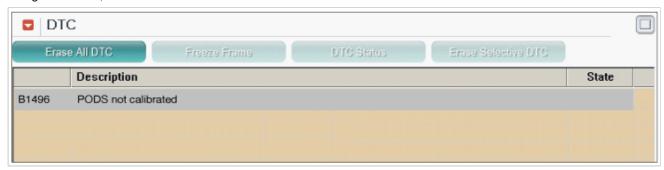
Item		Detecting Condition	Possible cause
DTC Strategy		CAN communication	
Enable Conditions		• Ignition "ON"	
Threshold Value		SRSCM get ODS not calibrated message via CAN communication	PODS Sensor(Bladder).  Faulty OC ECU.  Faulty SRSCM.
Diagnostic Time	Qualification	More than 1.1 sec	r duity of toolwi.
	De-Qualification	No in same IGN Cycle	

## **Diagnostic Circuit Diagram**

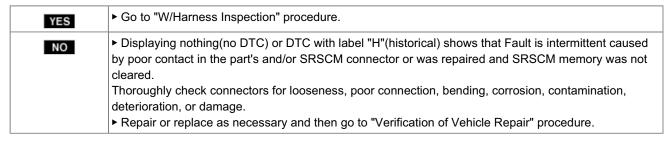


#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Component Inspection" procedure.	

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect PODS ECU connector.
- 5. Substitute the PODS ECU and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Substitute a known-good PODS ECU, and check for proper operation.  If the problem is corrected, replace Pressure Sensor and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Initialize PODS using scantool when replacing PODS ECU.
- 2. Connect scan tool and select "Diagnostic Trouble Codes(DTCs)" mode
- 3. Using a scan tool, clear the DTCs
- 4. Operate the vehicle within DTC Enable conditions in General information.
- 5. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1511 Buckle Switch Driver open or short to Battery

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

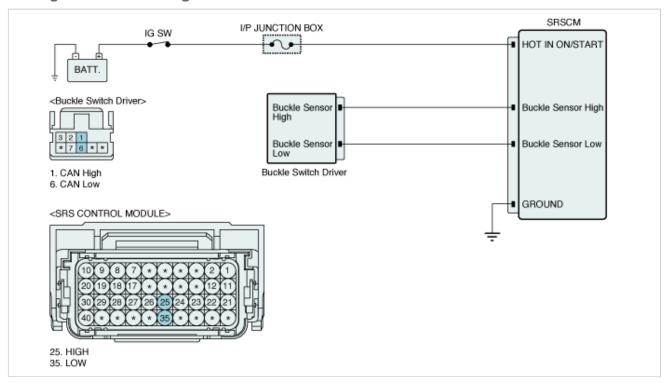
#### **DTC** Description

The SRSCM sets DTC B1511 if there is a open circuit or short to power in DSBBS harness.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check current	Short to power in DSBBS harness.     Open circuit in DSBBS harness.
Enable Conditions		• Ignition "ON"	
Threshold Value		• I< 3.9mA	
Diagnostic Time	Qualification	<ul><li>Ini(Start Up):2s (200ms x 10)</li><li>Steady:1 time</li></ul>	<ul> <li>Poor connection of connected part.</li> <li>Faulty DSBBS.</li> <li>Faulty SRSCM.</li> </ul>
	De-Qualification	Ini(Start Up):4s     Steady:IGN off -> on	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver Buckle Switch status" parameter on the Scantool.

Specification: Driver Buckle Switch on: Buckled, Driver Buckle Switch off: Unbuckled

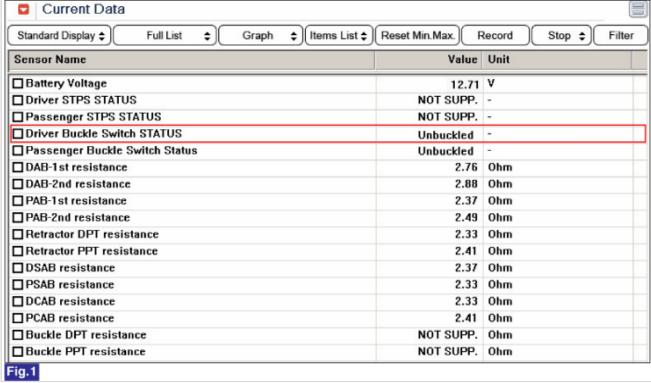


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### Main harness Circuit Inspection(1)

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Measure resistance between of the Buckle Switch Driver wiring connector and SRSCM harness connector.

**Specification**: approx. 1 Ω below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Main harness Circuit Inspection(2)**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "High" of the Seat-belt Buckle Switch harness connector and chassis ground.

Specification: 0V

6. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.		► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1512 Buckle Switch Driver short or short to Ground

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

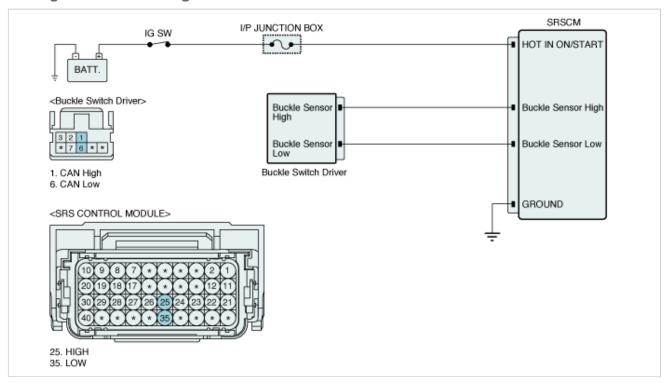
#### **DTC** Description

The SRSCM sets DTC B1512 if there is a short or short to ground in DSBBS harness.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check current	
Enable Conditions		• Ignition "ON"	Short to ground in DSBBS harness.
Thre	shold Value	• I > 18.4mA	Short circuit in DSBBS harness.
Diagnostic	Qualification	<ul><li>Ini(Start Up):2s (200ms x 10)</li><li>Steady:1 time</li></ul>	<ul> <li>Poor connection of connected part.</li> <li>Faulty DSBBS.</li> </ul>
Time	De-Qualification	<ul><li>Ini(Start Up):4s</li><li>Steady:IGN off -&gt; on</li></ul>	• Faulty SRSCM.

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver Buckle Switch status" parameter on the Scantool.

Specification: Driver Buckle Switch on: Buckled, Driver Buckle Switch off: Unbuckled

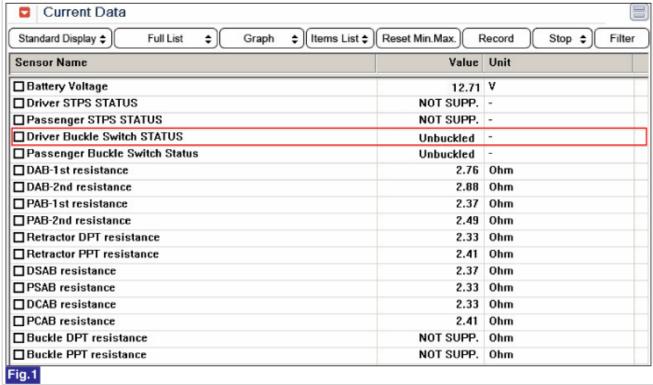


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.		► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Main harness circuit inspection" procedure		► Go to "Main harness circuit inspection" procedure.

#### Main harness Circuit Inspection

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "High" of the Seat-belt Buckle Switch harness connector and chassis ground.

Specification : ∞

5. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1513 Buckle Switch Passenger open or short to Battery

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

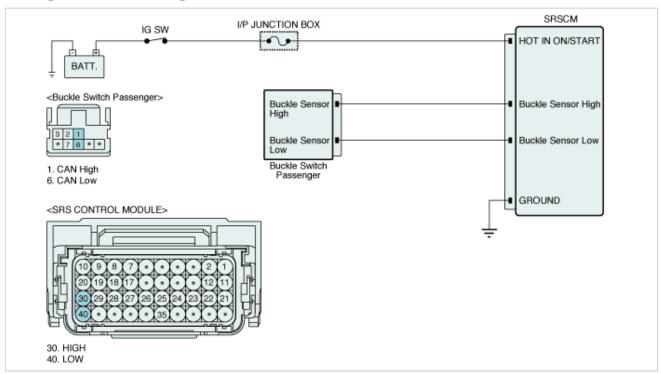
#### **DTC** Description

The SRSCM sets DTC B1513 if there is a open circuit or short to power in PSBBS harness.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTO	C Strategy	Check current	
Enable Conditions		• Ignition "ON"	Short to power in PSBBS harness.
Thres	shold Value	• I< 3.9 mA	Open circuit in PSBBS harness.
Diagnostic	Qualification	<ul><li>Ini(Start Up):2s (200ms x 10)</li><li>Steady:1 time</li></ul>	Poor connection of connected part.      Faulty PSBBS.
Time	De-Qualification	Ini(Start Up):4s     Steady:IGN off -> on	• Faulty SRSCM.

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger Buckle Switch status" parameter on the Scantool.

Specification: Passenger Buckle Switch on: Buckled, Passenger Buckle Switch off: Unbuckled

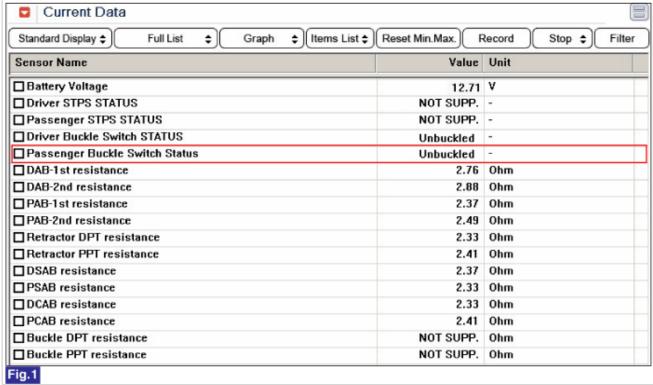


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### Main harness Circuit Inspection

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Measure resistance between of the Buckle Switch Passenger wiring connector and SRSCM harness connector.

Specification : approx. 1 Ω below

5. Is the measured resistance within specifications?

YES	► Go to "Main harness circuit inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "High" of the Seat-belt Buckle Switch harness connector and chassis ground.

Specification: 0V

6. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1514 Buckle Switch Passenger short or short to Ground

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

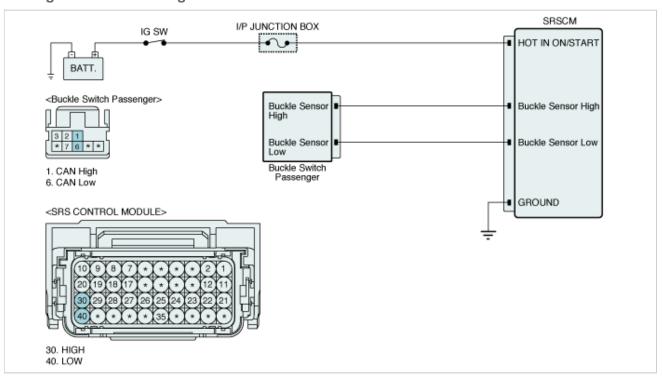
#### **DTC** Description

The SRSCM sets DTC B1514 if there is a short or short to ground in PSBBS harness.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
TD	C Strategy	Check current	
Enak	ole Conditions	• Ignition "ON"	Short to ground in PSBBS harness.     Short circuit in PSBBS harness.     Poor connection of connected part.     Faulty PSBBS.     Faulty SRSCM.
Thre	eshold Value	• I > 18.4mA	
Diagnostic	Qualification	Ini(Start Up):2s (200ms x 10)     Steady:1 time	
Time	De-Qualification	Ini(Start Up):4s     Steady:IGN off -> on	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger Buckle Switch status" parameter on the Scantool.

Specification: Passenger Buckle Switch on: Buckled, Passenger Buckle Switch off: Unbuckled

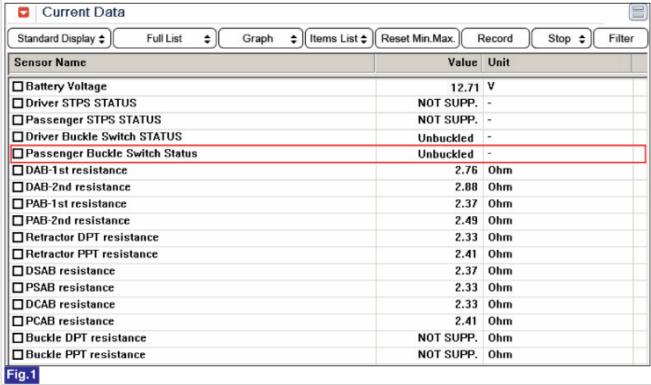


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### Main harness Circuit Inspection

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect Seat-belt Buckle Switch connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "High" of the Seat-belt Buckle Switch harness connector and chassis ground.

Specification : ∞

5. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.	

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1515 Buckle Switch Driver Defect

## **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

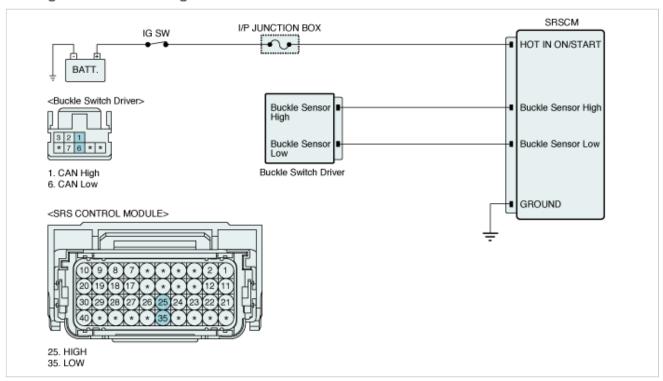
## **DTC Description**

The SRSCM sets DTC B1515 if there is any fault in DSBBS circuit.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy Enable Conditions		Check current	
		• Ignition "ON"	
Threshold Value		<ul> <li>Sensor lines are cross coupled. (Dbuckle, Pbuckle)</li> <li>Input test signal to other switch, but this line voltage &gt; 0.8V</li> <li>7.9mA &lt; Sensor line current &lt; 10.7mA</li> </ul>	Faulty DSBBS circuit.     Faulty DSBBS.     Faulty SRSCM.
Diagnostic	Qualification	<ul><li>Ini(Start Up):2s (200ms x 10)</li><li>Steady:1 time</li></ul>	
Time	De-Qualification	Ini(Start Up):4s     Steady:IGN off -> on	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver Buckle Switch status" parameter on the Scantool.

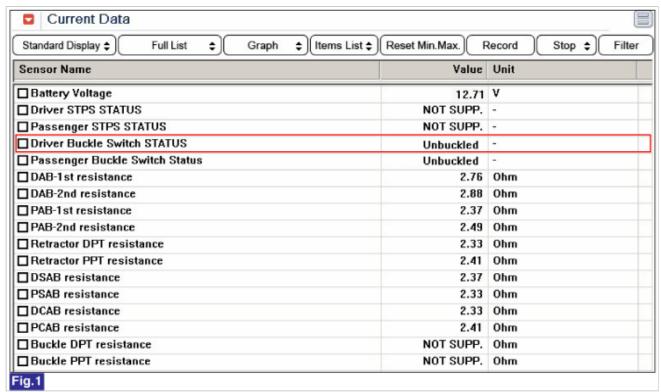


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

## Verification of Vehicle Repair

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- ${\it 3. \ Operate the vehicle within \ DTC \ Enable \ conditions \ in \ General \ information.}$
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.  ► System is performing to specification at this time.	
--	--

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1516 Buckle Switch Passenger Defect

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

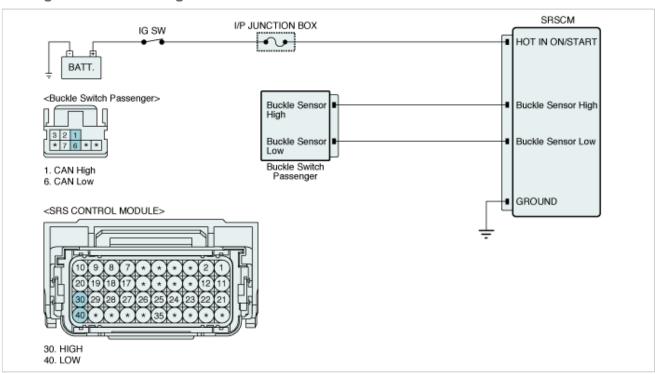
#### **DTC** Description

The SRSCM sets DTC B1516 if there is any fault in PSBBS circuit.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTO	C Strategy	Check current	
Enable Conditions		• Ignition "ON"	
		Sensor lines are cross coupled. (Dbuckle, Pbuckle)	
Threshold Value		<ul> <li>Input test signal to other switch, but this line voltage &gt; 0.8V</li> </ul>	Faulty PSBBS circuit.     Faulty PSBBS.
		• 7.9mA < Sensor line current < 10.7mA	• Faulty SRSCM.
Diagnostic Time	Qualification	<ul><li>Ini(Start Up):2s (200ms x 10)</li><li>Steady:1 time</li></ul>	
	De-Qualification	Ini(Start Up):4s     Steady:IGN off -> on	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger Buckle Switch status" parameter on the Scantool.

Specification: Passenger Buckle Switch on: Buckled, Passenger Buckle Switch off: Unbuckled

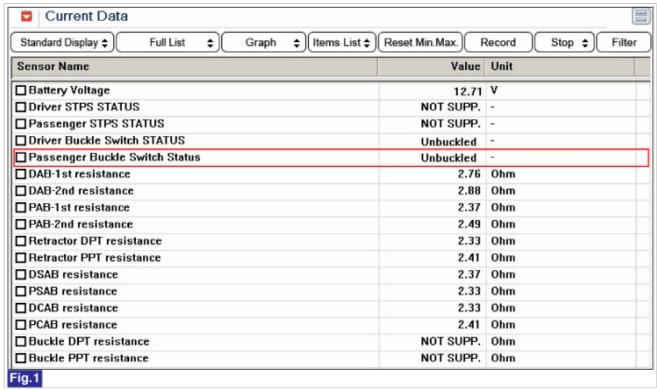


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.         Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.         ▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.     </li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.

## 6. Is DTC present problem?

lf ► If		➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
	NO	▶ Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- ${\it 3. \ Operate the vehicle within \ DTC \ Enable \ conditions \ in \ General \ information.}$
- 4. Are any DTC present?

YES ► Go to the applicable troubleshooting procedure.		
► System is performing to specification at this time.		► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1517 Buckle Switch Driver Instability

## **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

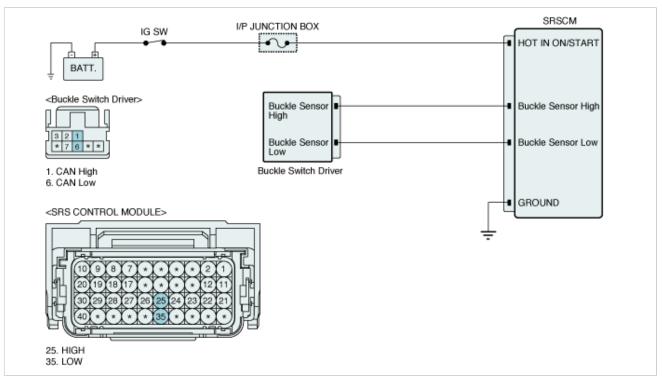
## **DTC** Description

The SRSCM sets DTC B1517 if the value of Seat-belt Buckle Switch changes frequently.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check current	
Enab	le Conditions	• Ignition "ON"	<ul><li>Faulty DSBBS circuit.</li><li>Faulty DSBBS.</li></ul>
Thre	shold Value	Instability Unstable input within 20 samples	
Diagnostic	Qualification	More than 15 sec	Faulty SRSCM.
Time	De-Qualification	• N/A	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Driver Buckle Switch status" parameter on the Scantool.

Specification: Driver Buckle Switch on: Buckled, Driver Buckle Switch off: Unbuckled

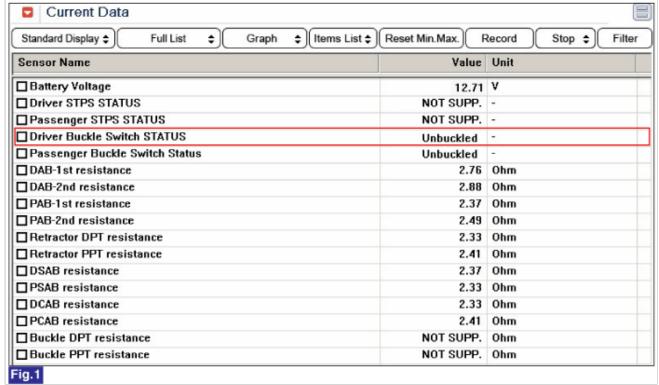


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

➤ Substitute a known-good SRSCM, and check for proper operation.

	If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- After a repair, it is essential to verify that the fault has been corrected.

  1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1518 Buckle Switch Passenger instability

#### **General Description**

Seat-belt Buckle Switch(SBBS) is located in driver and passenger side seat.

SRSCM checks if seatbelt is buckled by signal of SBBS.

SRSCM controls air bag module and BPT differently in accordance with vehicle speed at the moment of collision and signal from SBBS.

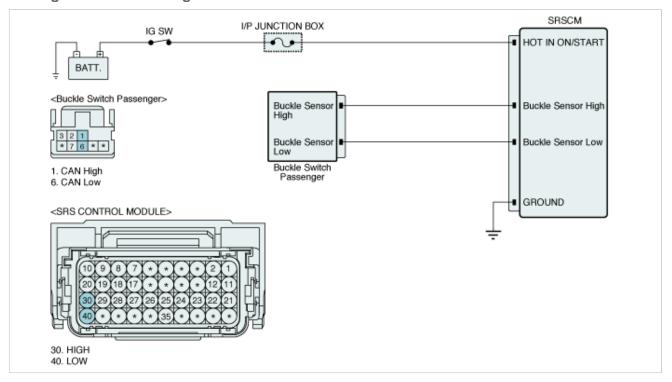
#### **DTC** Description

The SRSCM sets DTC B1518 if the value of Seat-belt Buckle Switch changes frequently.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check current	Faulty PSBBS circuit.
Enable Conditions		• Ignition "ON"	
Thre	shold Value	Instability Unstable input within 20 samples	Faulty PSBBS.     Faulty SRSCM.
Diagnostic Time	Qualification	More than 15 sec	
	De-Qualification	• N/A	

#### **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Current Data" mode.
- 3. Monitor the "Passenger Buckle Switch status" parameter on the Scantool.

Specification: Passenger Buckle Switch on: Buckled, Passenger Buckle Switch off: Unbuckled

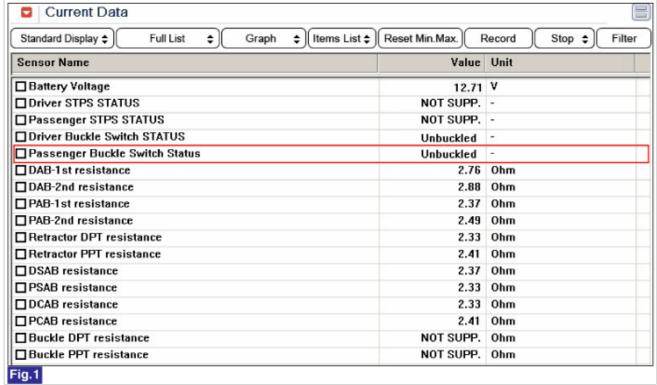


Fig.1) Unbuckled Data

4. Is parameter displayed within specifications?

YES	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
NO	► Go to "W/Harness Inspection" procedure.

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Seat-belt Buckle Switch connector .
- 5. Substitute the Seat-belt Buckle Switch and check for proper operation.
- 6. Is DTC present problem?

➤ Substitute a known-good SRSCM, and check for proper operation.

	If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	
NO	► Substitute a known-good Seat-belt Buckle Switch, and check for proper operation.  If the problem is corrected, replace Seat-belt Buckle Switch and then go to "Verification of Vehicle Repair" procedure.	

## **Verification of Vehicle Repair**

- After a repair, it is essential to verify that the fault has been corrected.

  1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
	NO	► System is performing to specification at this time.

#### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1620 Internal fault-Replace SRSCM

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC** Description

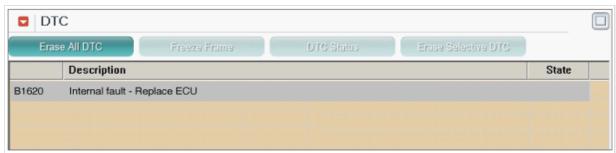
The SRSCM sets DTC B1620 if there is any fault in SRSCM.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check SRSCM	CDCCM
Enable Conditions		• Ignition "ON"	
Diagnostic Time	Qualification	• N/A	• SRSCM.
	De-Qualification	• ∞(infinite-DTC cannot be erased)	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO ► System is performing to specification at this time.		

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1650 Crash Recorded in 1st Stage Only (Frontal-Replace SRSCM)

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC Description**

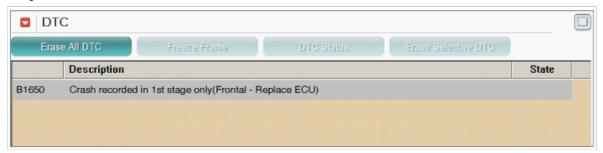
The SRSCM sets DTC B1650 if DAB or PAB deploys.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check DAB or PAB deployment	
Enable Conditions		• Ignition "ON"	• SRSCM.
Diagnostic	Qualification	• N/A	DAB or PAB deployment
Time	De-Qualification	• ∞(infinite-DTC cannot be erased)	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

► DTC caused by deployment of front(1ST)air bag. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### Verification of Vehicle Repair

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1651 Crash Recorded in Front-Driver Side Airbag(Replace SRSCM)

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC Description**

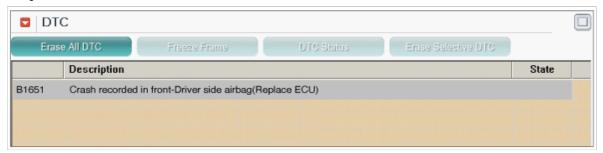
The SRSCM sets DTC B1651 if DSAB and DCAB deploys.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check DSAB and DCAB deployment	• SRSCM.
Enable Conditions		• Ignition "ON"	
Diagnostic	Qualification	• N/A	DSAB and DCAB deployment
Time	De-Qualification	• ∞(infinite-DTC cannot be erased)	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

▶ DTC caused by deployment of front driver SAB and driver CAB. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### Verification of Vehicle Repair

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1652 Crash Recorded in Front-Passenger Side Airbag(Replace SRSCM)

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC Description**

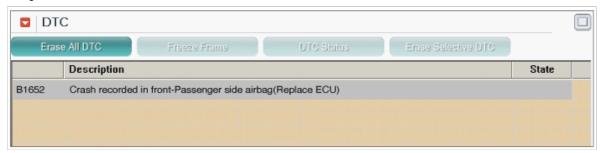
The SRSCM sets DTC B1652 if PSAB and PCAB deploys.

#### **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Check PSAB and PCAB deployment	
Enable Conditions		• Ignition "ON"	• SRSCM.
Diagnostic	Qualification	• N/A	PSAB and PCAB deployment
Time	De-Qualification	• ∞(infinite-DTC cannot be erased)	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

► DTC caused by deployment of front passenger SAB and passenger CAB. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### Verification of Vehicle Repair

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	▶ System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1657 Crash Recorded in Belt Pretensioner only

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC Description**

The SRSCM sets DTC B1657 if any BPT deploys.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check BPT deployment	
Enab	le Conditions	• Ignition "ON"	BPT deployment
Diagnostic	Qualification	• NA	• SRSCM.
Time	De-Qualification	• NA	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?

► DTC caused by deployment of BPT. Substitute with a SRSCM and check for proper operation.

If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1658 Belt Pretensioner 6 times Deployment

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it.

Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC Description**

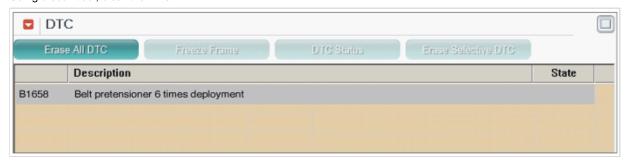
When the Crash (Belt pretensioner 6 times deployment) recorded in the SRSCM.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check BPT deployment	• SRSCM.
Enable Conditions		• Ignition "ON"	
Diagnostic	Qualification	• NA	<ul> <li>Crash recorded(Belt pretensioner 6 times deployment).</li> </ul>
Time	De-Qualification	• ∞(infinite-DTC cannot be erased)	·

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?

► DTC caused by 6th deployment of BPT. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1670 Crash recorded in full stage (Frontal-Replace SRSCM)

#### **General Description**

In collision, SRSCM sends current to pertinent air bag for deployment.

Besides SRSCM performs diagnosis of overall air bag system and light warning lamp if there's any fault in it. Main functions of SRSCM are as follows.

- 1. Collision and Passenger presence Detection.
- 2. Determination of BPT and air bag deployment in accordane with given condition.
- 3. Internal and external diagnosis of air bag system.
- 4. Warning by warning lamp if there's any fault in airbag system.
- 5. Proffering data for scantool diagnosis.

#### **DTC** Description

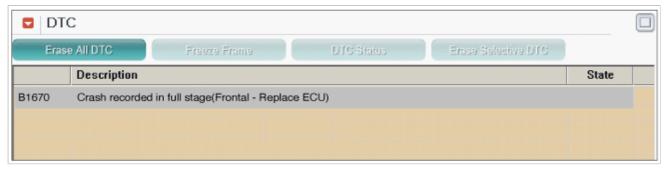
When the Crash recorded in full stage in the SRS Control module.

#### **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		Crash recorded in full stage in the SRSCM	Unable to control SRS system due to internal fault.
Enable Conditions		• Ignition "ON"	
Threshold Value		Crash recorded in the SRSCM	
Diagnostic	Qualification	• N/A	Crash recorded in full stage
Time	De-Qualification	• ∞(infinite-DTC cannot be erased)	

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



▶ DTC caused by deployment of front full stage(1ST,2ND)air bag. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM and then go to " Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.

## 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	➤ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1683 Exceed Maximum Coding Number

#### **General Description**

When the new SRSCM is set up on a vehicle by SRSCM's failure, SRSCM(ACU) Variant coding must be performed.

Since a new SRSCM is normally supplied with unsetting state, the ACU has to be set up based on the vehicle specificaions by operating ACU Variant Coding procedure.

The SRSCM checks its specifications in it in order to run its airbag system normally.

If the warning light of airbag is flickering continuously, that is because SRSCM(ACU) Variant Coding is not completed.

#### NOTE

SRSCM Variant Coding is available only one time. And when it is already finished, it is impossible to retry SRSCM Variant Coding.

Warning lamp's operation during SRSCM(ACU) Variant Coding Mode : It will be flicking on every 1 seond before the Variant Coding is normally done.

#### **DTC** Description

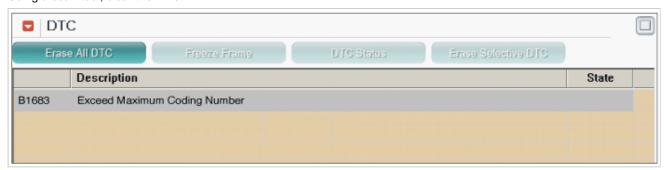
In order to run the airbag system normally, check if there is an incorrect vehicle specifications at performing SRSCM(ACU) Variant Coding. This DTC is set up when SRSCM(ACU) Variant Coding is not done over 255 times.

#### **DTC Detecting Condition**

	Item	Detecting Condition	Possible cause
DTC Strategy		SRSCM Coding	Connection for DAB, PAB, BPT, CAB and SAB
Enable Conditions		SRSCM(ACU) Variant Coding	
Threshold Value		Failure of SRSCM(ACU) Variant Coding is over 255 times.	SRSCM(ACU) Variant Coding's failure     Incorrect vehicle specifications
Diagnostic	Qualification	More than one time	SRSCM's connector and circuit
Time	De-Qualification	• N/A	• SRSCM

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	▶ Replace it with a new one and then check if the vehicle specifications are correct. After that, perform SRSCM(ACU) Variant Coding and then, go to "Verification of Vehicle Repair" procedure.
ИО	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>▶ Thoroughly check release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> </ul>

## **ACU Variant Coding**

#### ■ ACU Variant Coding (On-line type on GDS)

Fig.1) Initial ACU Variant Coding screen

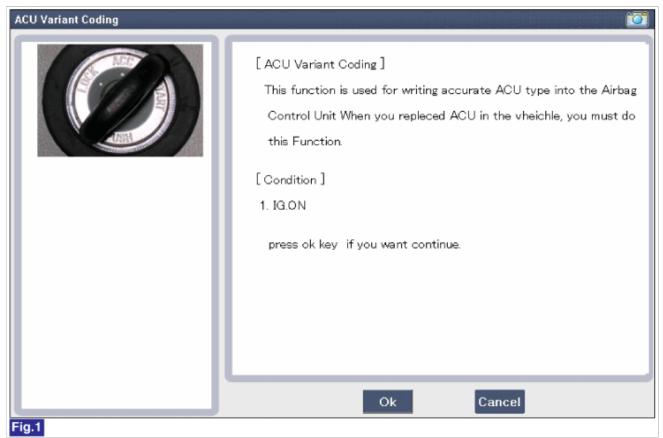


Fig.2) VIN Code entering screen

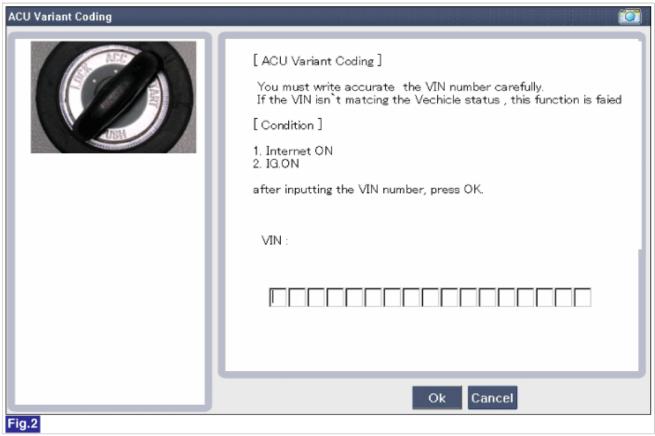


Fig.3) Variant coding's proceeding screen-1

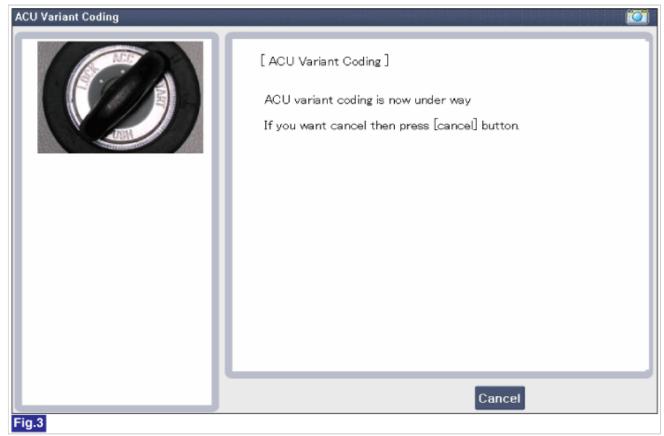


Fig.4) Variant coding's proceeding screen-2

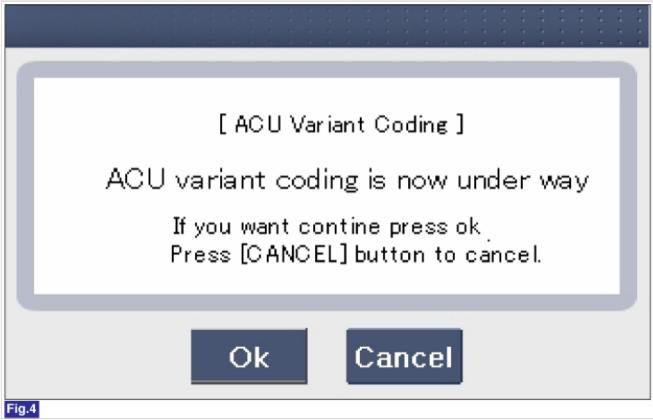


Fig.5) Variant coding is completed

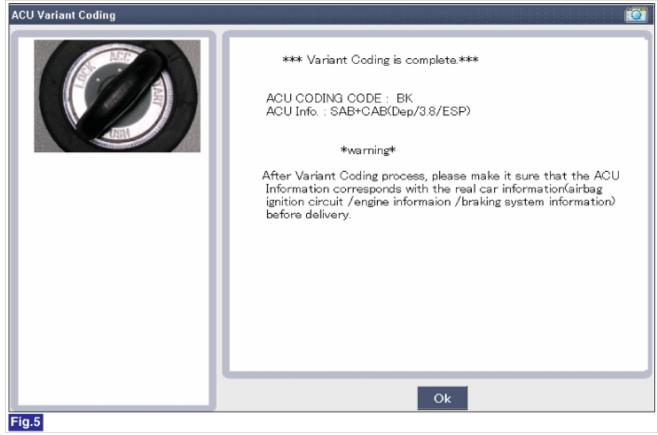


Fig.6) Screen of Retrying the Variant coding after finishing variant coding



Fig.7) Screen of communication failure



■ ACU Variant Coding (Off-line type on GDS-this can be used when not connecting to internet)

Fig.1) Initial ACU Variant Coding screen

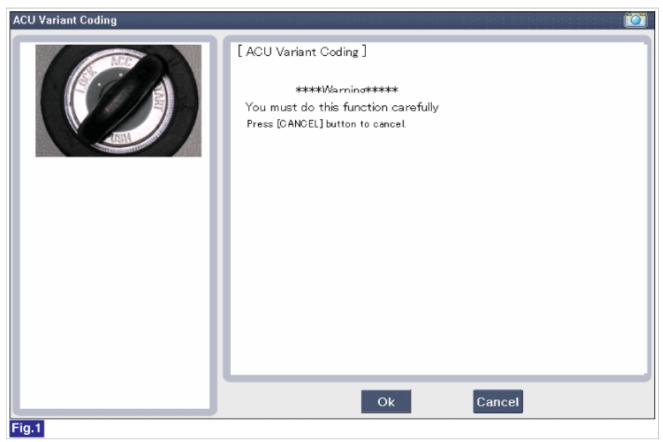


Fig.2) ACU CODING Code entering screen

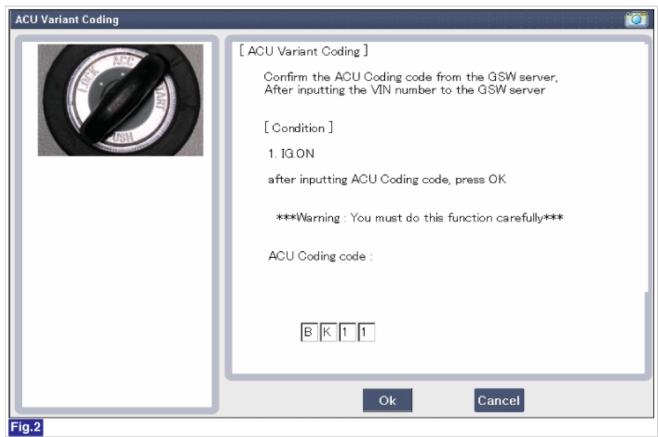


Fig.3) Screen of rechecking ACU CODING code's entering

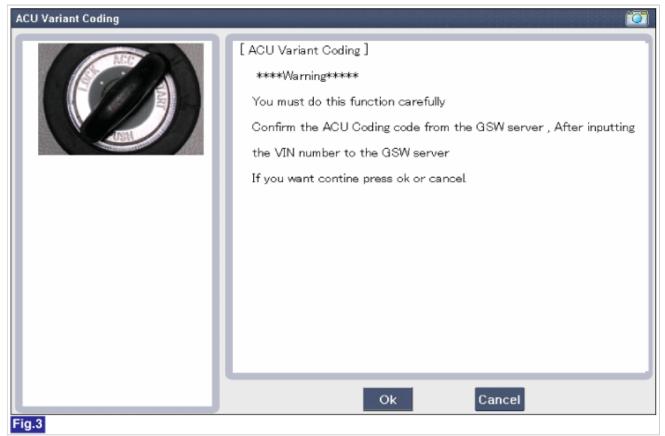


Fig.4) Variant coding's proceeding screen-1

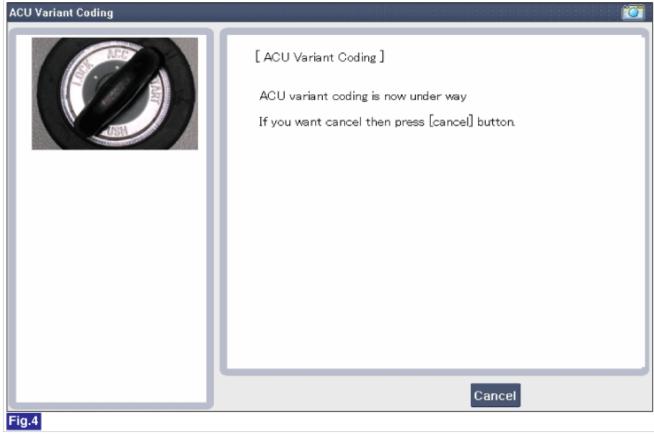


Fig.5) Variant coding's proceeding screen-2

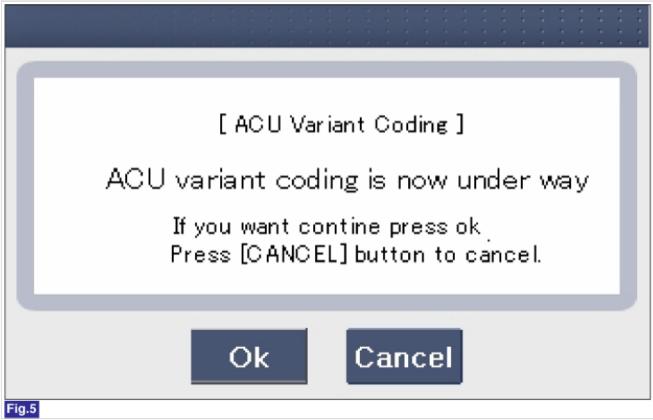


Fig.6) Variant coding is completed

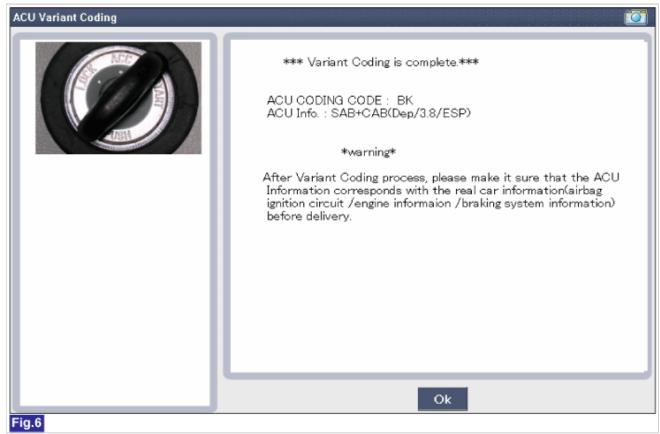


Fig.7) Screen of Retrying the Variant coding after finishing variant coding



### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1684 ACU Configuration is different

#### **General Description**

When the new SRSCM is set up on a vehicle by SRSCM's failure, SRSCM(ACU) Variant coding must be performed.

Since a new SRSCM is normally supplied with unsetting state, the ACU has to be set up based on the vehicle specificaions by operating ACU Variant Coding procedure.

The SRSCM checks its specifications in it in order to run its airbag system normally.

If the warning light of airbag is flickering continuously, that is because SRSCM(ACU) Variant Coding is not completed.

#### NOTE

SRSCM Variant Coding is available only one time. And when it is already finished, it is impossible to retry SRSCM Variant Coding.

Warning lamp's operation during SRSCM(ACU) Variant Coding Mode: It will be flicking on every 1 seond before the Variant Coding is normally done.

#### **DTC** Description

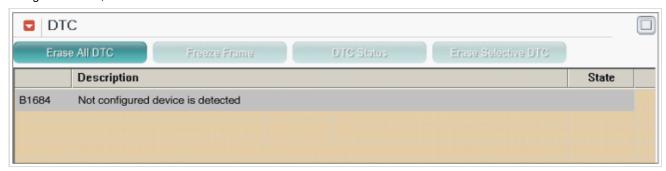
In order to run the airbag system normally, check if there is an incorrect vehicle specifications at performing SRSCM(ACU) Variant Coding. This DTC is set up if there is a difference between actual vehicle specifications and stored vehicle specifications on SRSCM(ACU).

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		SRSCM Coding	<ul> <li>Connection for DAB, PAB, BPT,CAB and SAB</li> <li>SRSCM(ACU) Variant Coding's failure</li> <li>Incorrect vehicle specifications</li> </ul>
Enable Conditions		For 6 seconds after Start-Up	
Threshold Value		SRSCM has an unmatching specifications with actual vehicle specifications	
Diagnostic	Qualification	More than one time	SRSCM's connector and circuit
Time	De-Qualification	More than one time	• SRSCM

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	▶ Replace it with a new one and then check if the vehicle specifications are correct. After that, perform SRSCM(ACU) Variant Coding and then, go to "Verification of Vehicle Repair" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>▶ Thoroughly check release pin and connectors for looseness, poor connection, bending, corrosion,</li> </ul>

contamination, deterioration, or damage.

▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.

## **ACU Variant Coding**

## ■ ACU Variant Coding (On-line type on GDS)

Fig.1) Initial ACU Variant Coding screen

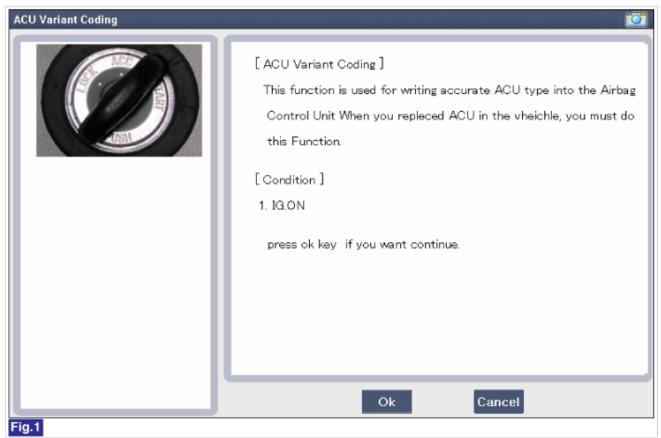


Fig.2) VIN Code entering screen

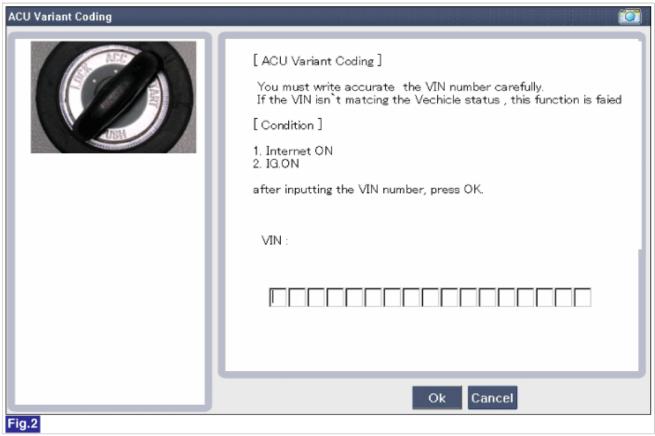


Fig.3) Variant coding's proceeding screen-1

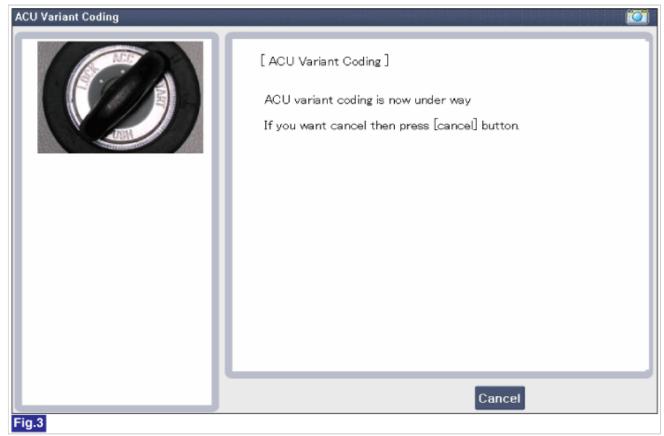


Fig.4) Variant coding's proceeding screen-2

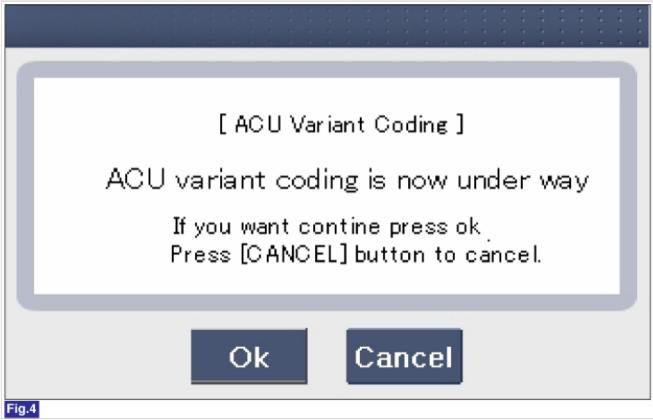


Fig.5) Variant coding is completed

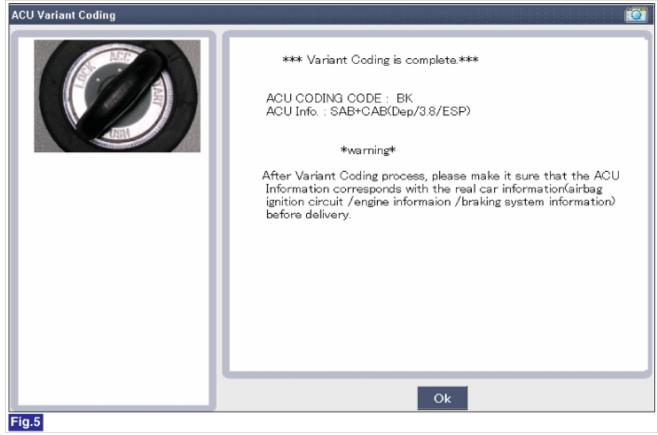


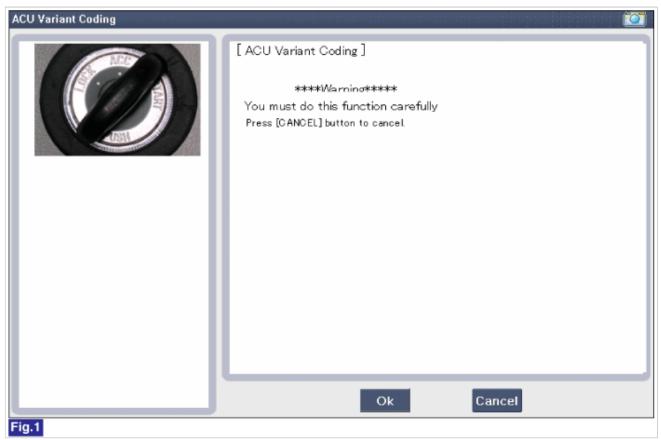
Fig.6) Screen of Retrying the Variant coding after finishing variant coding



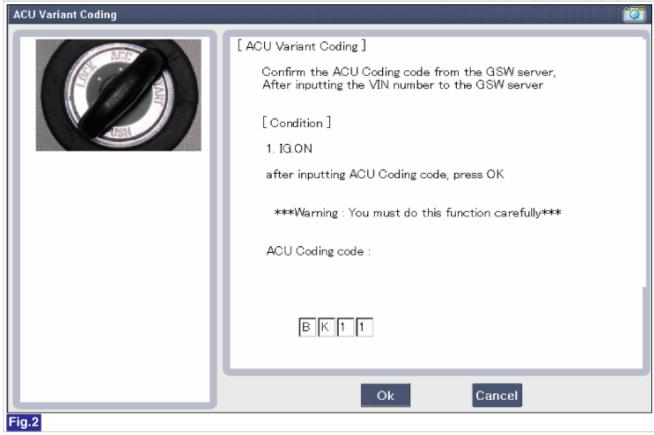
Fig.7) Screen of communication failure



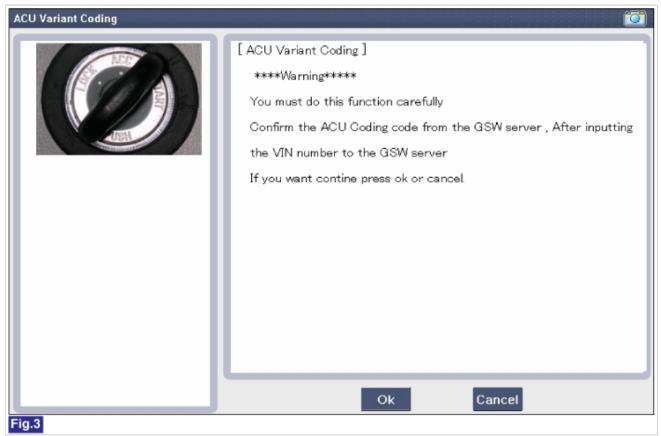
- ACU Variant Coding (Off-line type on GDS-this can be used when not connecting to internet)
- 1) Initial ACU Variant Coding screen



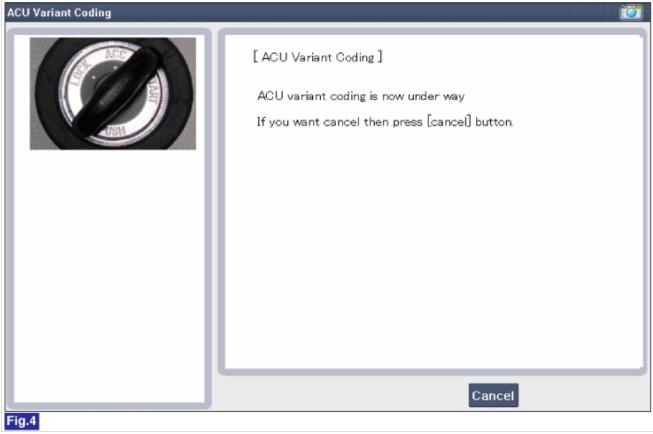
2) ACU CODING Code entering screen



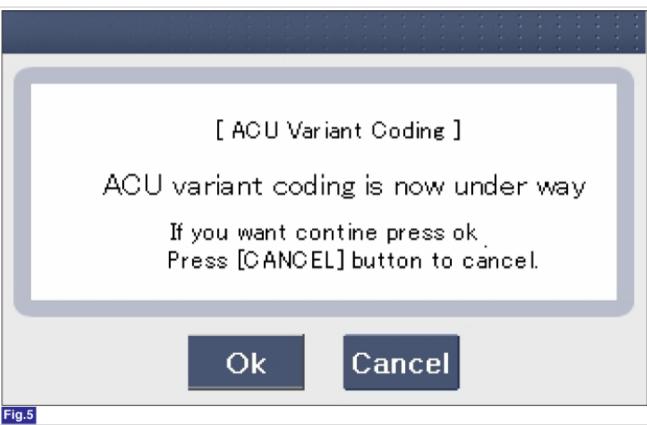
3) Screen of rechecking ACU CODING code's entering



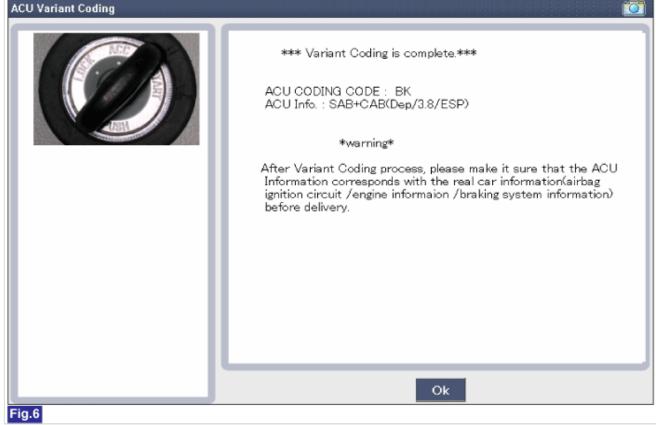
4) Variant coding's proceeding screen-1



5) Variant coding's proceeding screen-2



6) Variant coding is completed



7) Screen of Retrying the Variant coding after finishing variant coding



### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1738 P-SIS front – Driver Wrong

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

#### NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

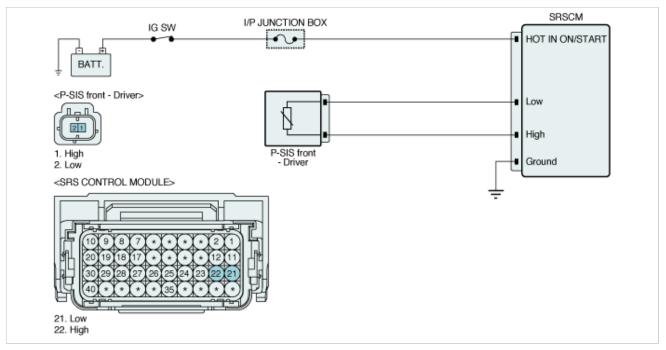
#### **DTC** Description

The SRSCM sets DTC B1738 if Pressure-Side Impact(Driver) with wrong ID is detected.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause	
DTC Strategy		Check Data		
Enable Conditions		• Ignition "ON"		
Thre	eshold Value	Pressure-Side Impact ID is different from programmed in ACU	<ul> <li>Pressure-Side Impact(Driver) with wrong ID.</li> <li>Faulty SRSCM.</li> </ul>	
Diagnostic Qualification		• 1 time	Taulty Of Colvi.	
Time	De-Qualification	• 1 time		

### **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON" & Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.

4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.		
ОО	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>		

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. TThoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES ▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
ОИ	▶ Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.

- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

➤ Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.		► System is performing to specification at this time.

#### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1739 P-SIS Front-Driver Defect

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact.

#### NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

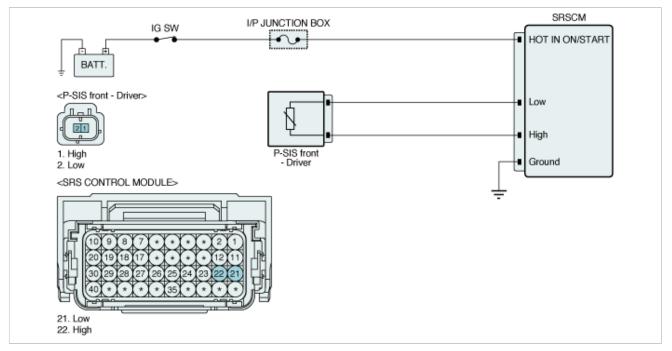
#### **DTC Description**

The SRSCM sets DTC B1739 if there is any fault in Pressure-Side Impact(Driver) circuit.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		<ul> <li>Pressure-Side Impact send defect code</li> <li>Pressure-Side Impact output is not expected value</li> </ul>	Faulty Pressure -Side Impact (Driver) circuit.     Faulty Pressure - Side Impact
Diagnostic Time	Qualification	• Ini(Start Up):10 ms (500µs x 20) • Steady:1s (10ms x 100)	(Driver). • Faulty SRSCM.
	De-Qualification	Ini(Start Up):IGN off -> on     Steady:IGN off -> on	

### **Diagnostic Circuit Diagram**



### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

➤ Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.		► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1740 P-SIS Front-Driver Short to Ground

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact.

#### NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

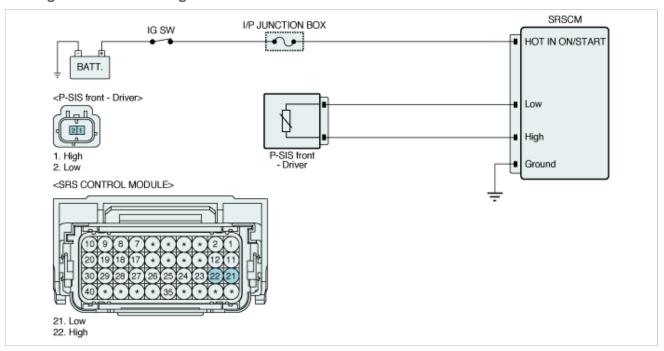
#### **DTC** Description

The SRSCM sets DTC B1740 if there is a short to ground in Pressure-Side Impact(Driver) harness.

### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enab	le Conditions	• Ignition "ON"	
Threshold Value		Pressure-Side Impact no acceleration data, and line voltage < 3V	<ul> <li>Short to ground in Pressure-Side Impact(Driver) harness.</li> <li>Faulty Pressure - Side Impact</li> </ul>
Diagnostic	Qualification	<ul><li>Ini(Start Up):2.1s (2 times)</li><li>Steady:500μs x 8 + 2.2s (2 times)</li></ul>	(Driver). • Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

#### **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle R		▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Main harness circuit inspection" procedure.		► Go to "Main harness circuit inspection" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Pressure-Side Impact connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the Pressure-Side Impact harness connector and chassis ground.

Specification : ∞

5. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".

- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

► Go to the applicable troubleshooting procedure.		► Go to the applicable troubleshooting procedure.
	NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1741 P-SIS Front-Driver Short to Battery

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

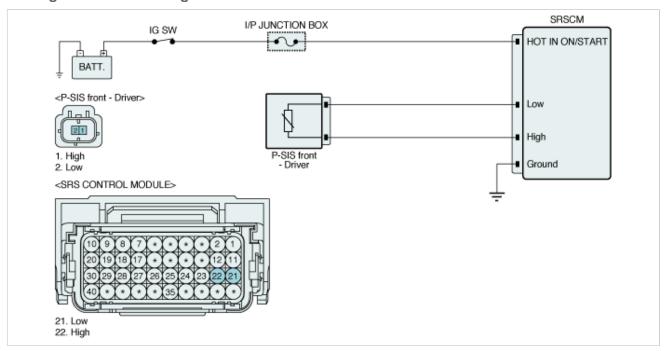
## **DTC** Description

The SRSCM sets DTC B1741 if there is short to power harness in Pressure-Side Impact(Driver) harness.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DT	C Strategy	Check voltage	
Enabl	e Conditions	• Ignition "ON"	Short to power in Pressure-Side Impact(Driver) harness. Faulty Pressure - Side Impact (Driver). Faulty SRSCM.
Thre	shold Value	Pressure-Side Impact no acceleration data, and line voltage >11V	
Diagnostic	Qualification	<ul> <li>Ini(Start Up):0.2s (100ms x 2)</li> <li>Steady:500µs x 8 + 2.2s (2 times)</li> </ul>	
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle R		▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Main harness circuit inspection" procedure.		► Go to "Main harness circuit inspection" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Pressure-Side Impact connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the Pressure-Side Impact harness connector and chassis ground.

Specification: 0V

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.	
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.	

#### **Component Inspection**

1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.

- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- ${\it 3. \ Operate the vehicle within DTC \ Enable \ conditions \ in \ General \ information.}$
- 4. Are any DTC present?

➤ Go to the applicable troubleshooting procedure.	
► System is performing to specification at this time.	

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1742 P-SIS Front-Driver Communication Error

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

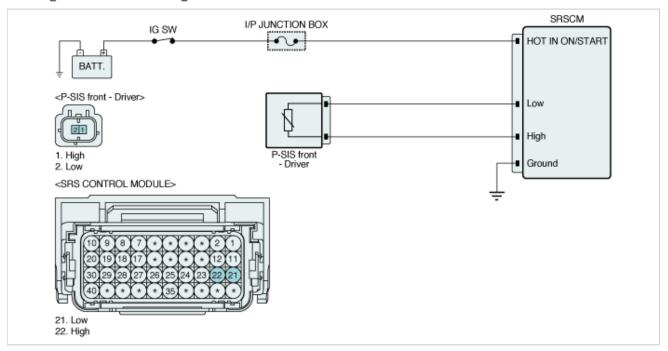
## **DTC** Description

The SRSCM sets DTC B1742 if there is any error in communication between Pressure-Side Impact(Driver) and SRSCM.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	<ul> <li>Faulty Pressure - Side Impact (Driver) circuit.</li> <li>Faulty Pressure - Side Impact</li> </ul>
Enable Conditions		• Ignition "ON"	
Threshold Value		<ul> <li>Pressure-Side Impact no acceleration data, and line voltage is ok (between 3V and 11V)</li> </ul>	
Diagnostic Time	Qualification	<ul> <li>Ini(Start Up):2.5 ~ 3.1s (2 times)</li> <li>Steady:500 μs x 8 + 2.3~2.9s (2 times)</li> </ul>	(Driver). • Faulty SRSCM.
Tille	De-Qualification	• 1 time	

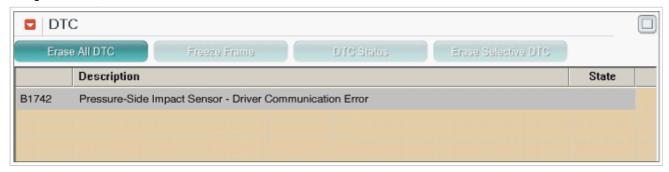
#### **Diagnostic Circuit Diagram**



## **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.

- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES ► Go to "W/Harness Inspection" procedure.	
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1744 P-SIS front - Passenger Wrong ID

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

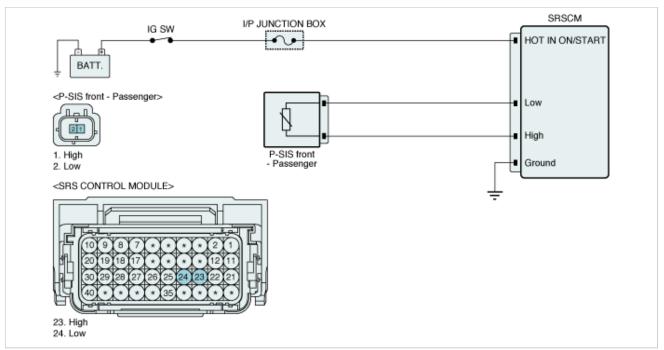
## **DTC** Description

The SRSCM sets DTC B1744 if Pressure-Side Impact(Passenger) with wrong ID is detected.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		Pressure-Side Impact ID is different from programmed in ACU	Pressure-Side Impact     (Passenger) with wrong ID.     Faulty SRSCM.
Diagnostic	Qualification	• 1 time	
Time	De-Qualification	• 1 time	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.

4. Using a scan tool, clear the DTC.



#### 5. Is DTC present problem?

YES	► Go to "W/Harness Inspection" procedure.	
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>	

#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Component Inspection" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	<ul> <li>▶ Substitute a known-good SRSCM, and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.</li> <li>▶ Substitute the SRSCM main harness and check for proper operation.</li> <li>If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.</li> </ul>
ОИ	▶ Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.

- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

## GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1745 P-SIS Front-Passenger Defect

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

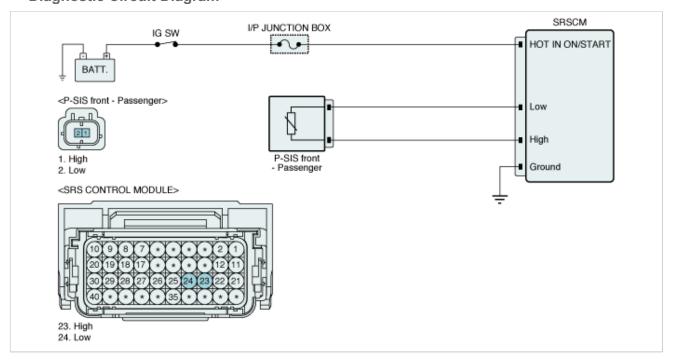
## **DTC** Description

The SRSCM sets DTC B1745 if there is any fault in Pressure-Side Impact(Passenger) circuit.

## **DTC Detecting Condition**

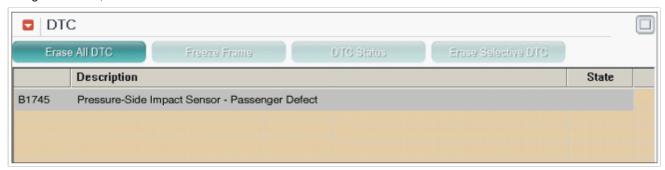
	Item	Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	
Threshold Value		Pressure-Side Impact send defect code Pressure-Side Impact output is not expected value  value	Faulty Pressure - Side Impact (Passenger) circuit.     Faulty Pressure - Side Impact
Diagnostic	Qualification	• Ini(Start Up):10 ms (500µs x 20) • Steady:1s (10ms x 100)	(Passenger). • Faulty SRSCM.
Time	De-Qualification	<ul><li>Ini(Start Up):IGN off -&gt; on</li><li>Steady:IGN off -&gt; on</li></ul>	

## **Diagnostic Circuit Diagram**



## **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
► Go to "Component Inspection" procedure.	

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- ${\it 3. \ Operate the vehicle within \ DTC \ Enable \ conditions \ in \ General \ information.}$
- 4. Are any DTC present?

YES ► Go to the applicable troubleshooting procedure.	
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1746 P-SIS Front-Passenger Short to Ground

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

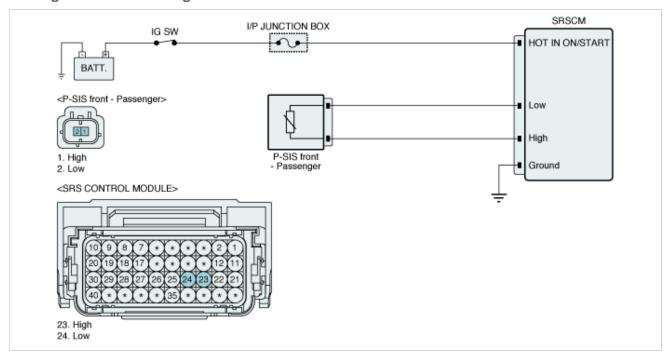
## **DTC Description**

The SRSCM sets DTC B1746 if there is a short to ground in Pressure-Side Impact(Passenger) harness.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	
Threshold Value		Pressure-Side Impact no acceleration data, and line voltage < 3V	Short to ground in Pressure-Side Impact(Passenger) harness.
Diagnostic	Qualification	<ul><li>Ini(Start Up):2.1s (2 times)</li><li>Steady:500μs x 8 + 2.2s (2 times)</li></ul>	Faulty Pressure-Side Impact.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

## **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

1. Ignition "OFF", connect scantool.

- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

#### **Terminal and Connector Inspection**

- Many malfunctions in the electrical system are caused by poor harness and terminals.
   Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	► Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Main harness circuit inspection" procedure.	

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Pressure-Side Impact connector and SRSCM main harness connector.
- 4. Measure resistance between terminal "Low" or "High" of the Pressure-Side Impact harness connector and chassis ground.

Specification : ∞

5. Is the measured resistance within specifications?

YES	► Go to "Component Inspection" procedure.
NO	▶ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

#### **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".

- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

	YES	► Go to the applicable troubleshooting procedure.
► System is performing to specification at this time.		▶ System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1747 P-SIS Front Passenger Short to Battery

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

## **DTC Description**

The SRSCM sets DTC B1747 if there is short to power harness in Pressure-Side Impact(Passenger) harness.

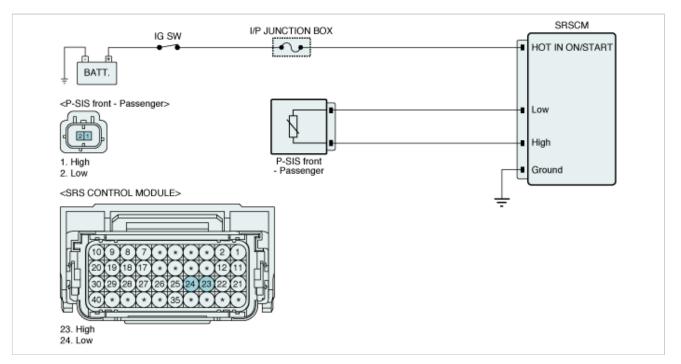
## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable Conditions		• Ignition "ON"	
Threshold Value		Pressure-Side Impact no acceleration data, and line voltage >11V	<ul> <li>Short to power in Pressure-Side Impact(Passenger) harness.</li> </ul>
Diagnostic	Qualification	<ul><li>Ini(Start Up):0.2s (100ms x 2)</li><li>Steady:500μs x 8 + 2.2s (2 times)</li></ul>	Faulty Pressure-Side Impact.     Faulty SRSCM.
Time	De-Qualification	Ini(Start Up):1 time     Steady:1 time	

## **Specification**

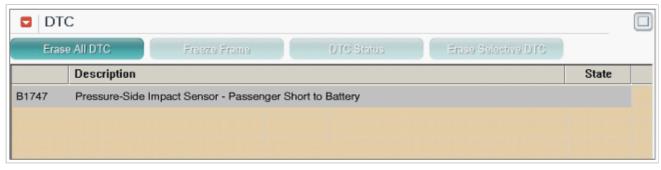
Test Condition	Resistance
Ignition ON (Closed circuit)	Rs >1.3kΩ

## **Diagnostic Circuit Diagram**

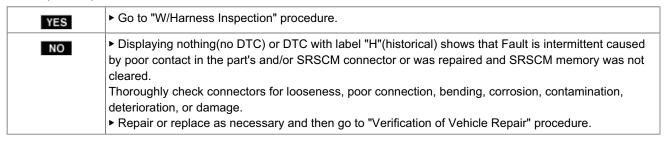


#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



5. Is DTC present problem?



#### **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.

## **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 3. Disconnect Pressure-Side Impact connector and SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between terminal "Low" or "High" of the Pressure-Side Impact harness connector and chassis ground.

Specification: 0V

6. Is the measured Voltage within specifications?

YES	► Go to "Component Inspection" procedure.
МО	► Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	► Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.
NO	► Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace Pressure- Side Impact and then go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1748 P-SIS Front-Passenger Communication Error

#### **Component Location**

Pressure-Side Impact Sensor and Side Impact Sensor are installed in the left and the right side of front door and in the lower of B-pillar respectively.

The Pressure-Side Impact Sensor senses an impact based on an acceleration at crashing. Unlike the conventional acceleration sensor, the Pressure Sensor senses an air pressure by a distorted door at crashing and measures an impact. The SCM detects the impact signals of the Pressure-Side Impact Sensor and Rear Side Impact Sensor and compares with signals of the safe sensor inside. If the signals of all sensors are judged as a collision, the side-airbag and the curtain-airbag would be unfolded.

## NOTE

At inspecting the pressure sensor, keep the door airtight for an exact measuring.

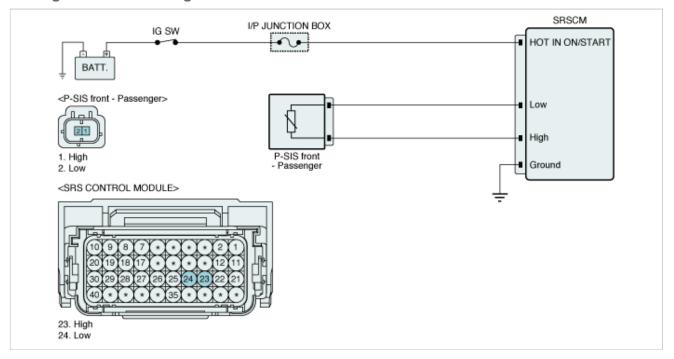
## **DTC Description**

The SRSCM sets DTC B1748 if there is any error in communication between Pressure-Side Impact(Passenger) and SRSCM.

## **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		Check Data	
Enable Conditions		• Ignition "ON"	<ul> <li>Faulty Pressure - Side Impact (Passenger) circuit.</li> <li>Faulty Pressure - Side Impact</li> </ul>
Threshold Value		Pressure-Side Impact no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	<ul> <li>Ini(Start Up):2.5 ~ 3.1s (2 times)</li> <li>Steady:500 μs x 8 + 2.3~2.9s (2 times)</li> </ul>	(Passenger). • Faulty SRSCM.
Time	De-Qualification	• 1 time	

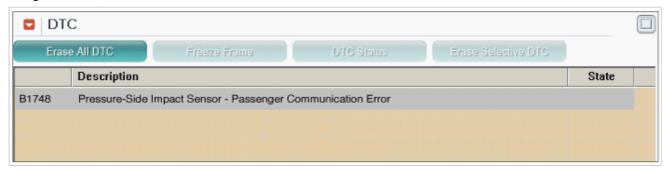
#### **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.

- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.	
NO	► Go to "Component Inspection" procedure.

## **Component Inspection**

- 1. Ignition "ON" & Engine "OFF" and Using a scan tool, clear the DTC.
- 2. Ignition "OFF".
- 3. Disconnect the battery (-) terminal cable from the battery, and wait at least one minutes.
- 4. Disconnect Pressure-Side Impact connector .
- 5. Substitute the Pressure-Side Impact and check for proper operation.
- 6. Is DTC present problem?

YES	➤ Substitute a known-good SRSCM, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedure.  ➤ Substitute the SRSCM main harness and check for proper operation.  If the problem is corrected, replace SRSCM main harness and then go to "Verification of Vehicle Repair" procedure.
NO  ► Substitute a known-good Pressure-Side Impact, and check for proper operation.  If the problem is corrected, replace SRSCM and then go to "Verification of Vehicle Repair" procedu	

## **Verification of Vehicle Repair**

After a repair, it is essential to verify that the fault has been corrected.

1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.

- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

#### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B1762 ACU Coding Error

#### **General Description**

When the new SRSCM is set up on a vehicle by SRSCM's failure, SRSCM(ACU) Variant coding must be performed. Since a new SRSCM is normally supplied with unsetting state, the ACU has to be set up based on the vehicle specificaions by operating ACU Variant Coding procedure.

The SRSCM checks its specifications in it in order to run its airbag system normally.

If the warning light of airbag is flickering continuously, that is because SRSCM(ACU) Variant Coding is not completed.

#### NOTE

SRSCM Variant Coding is available only one time. And when it is already finished, it is impossible to retry SRSCM Variant Coding.

Warning lamp's operation during SRSCM(ACU) Variant Coding Mode: It will be flicking on every 1 seond before the Variant Coding is normally done.

## **DTC Description**

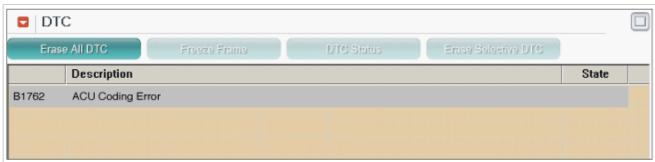
In order to run the airbag system normally, check if there is an incorrect vehicle specifications at performing SRSCM(ACU) Variant Coding. This DTC is set up if SRSCM's variant code doesn't match with the entering variant code at performing SRSCM(ACU) Variant Coding procedure.

#### **DTC Detecting Condition**

Item		Detecting Condition	Possible cause
DTC Strategy		SRSCM Coding	Connection for DAB, PAB, BPT,
Enable Conditions		SRSCM(ACU) Variant Coding Mode	CAB and SAB  • SRSCM(ACU) Variant Coding's failure  • Incorrect vehicle specifications
Threshold Value		Incorrect variant code entering at SRSCM(ACU)     Variant Coding mode	
Diagnostic	Qualification	More than one time	SRSCM's connector and circuit
Time	De-Qualification	More than one time	• SRSCM

#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



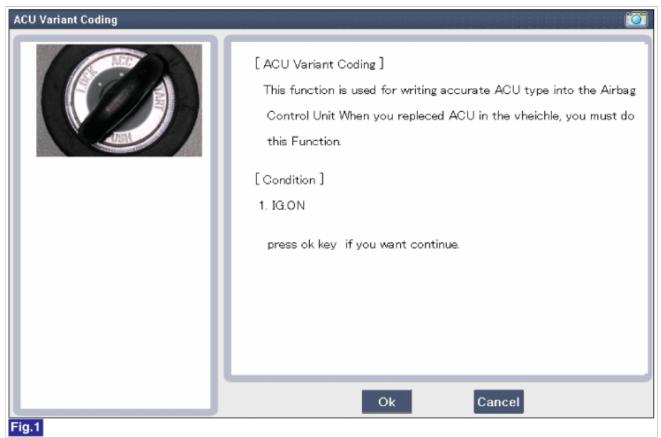
#### 5. Is DTC present problem?

YES	▶ Check if the vehicle specifications are correct. After that, perform SRSCM(ACU) Variant Coding and then, go to "Verification of Vehicle Repair" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>▶ Thoroughly check release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> </ul>

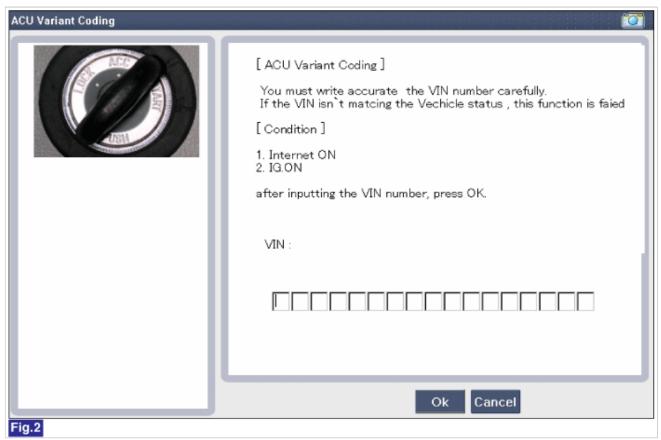
## **ACU Variant Coding**

#### ■ ACU Variant Coding (On-line type on GDS)

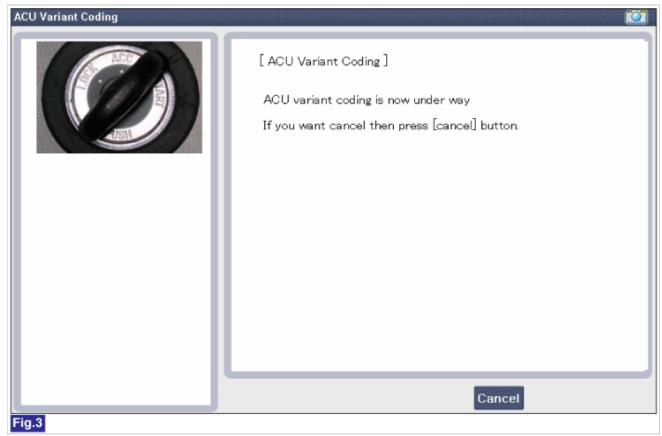
1) Initial ACU Variant Coding screen



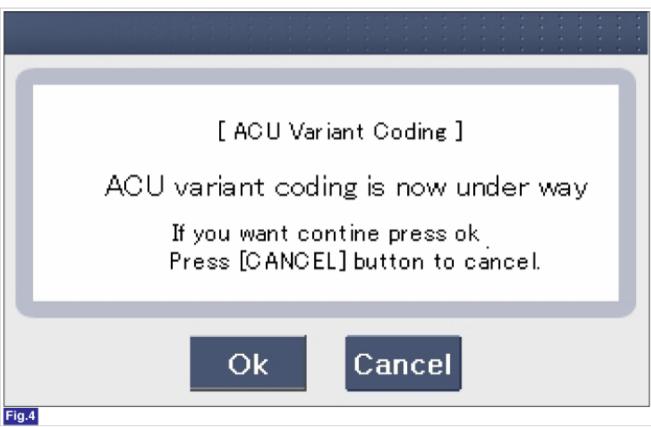
2) VIN Code entering screen



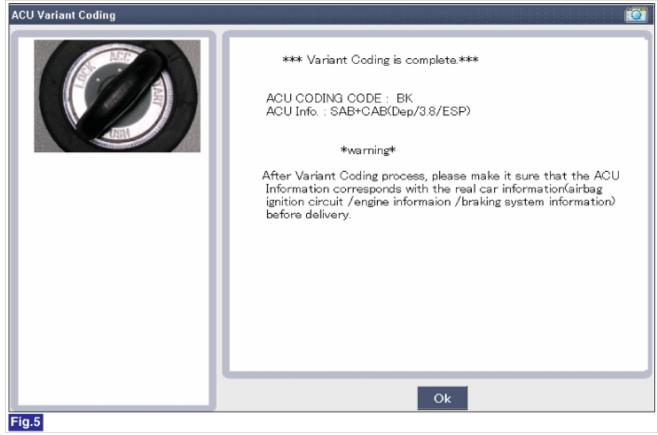
3) Variant coding's proceeding screen-1



4) Variant coding's proceeding screen-2



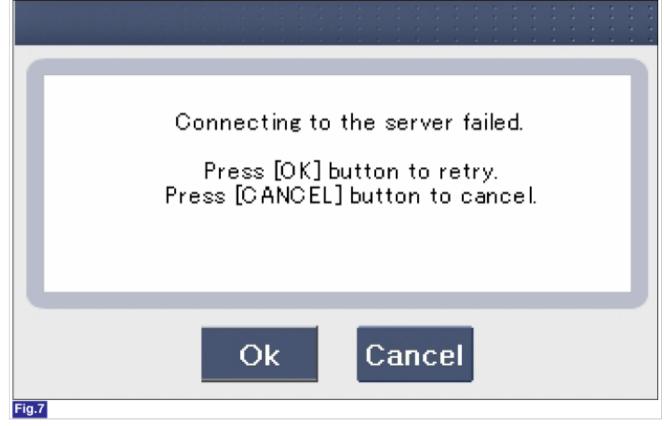
5) Variant coding is completed



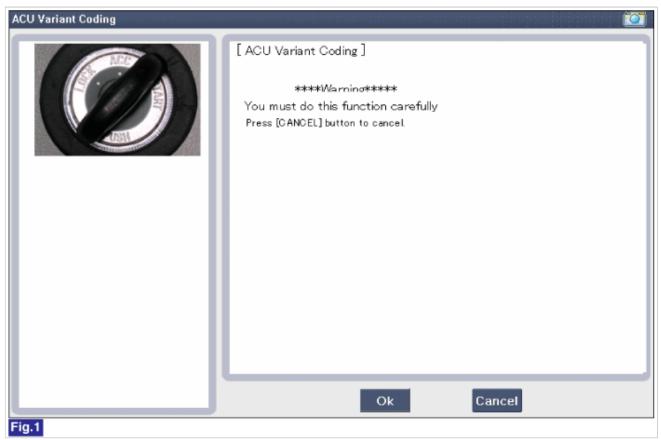
6) Screen of Retrying the Variant coding after finishing variant coding



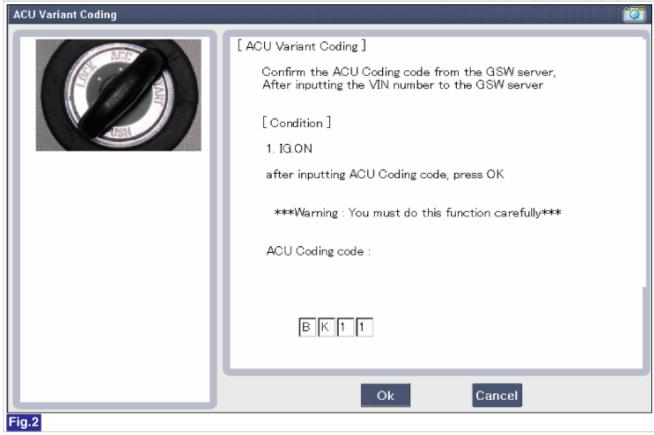
7) Screen of communication failure



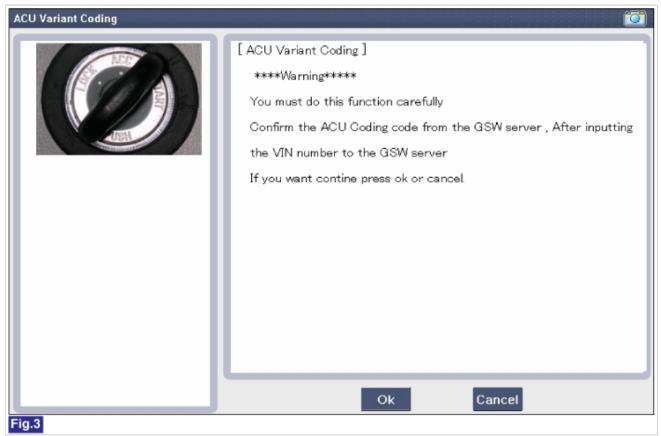
- ACU Variant Coding (Off-line type on GDS-this can be used when not connecting to internet)
- 1) Initial ACU Variant Coding screen



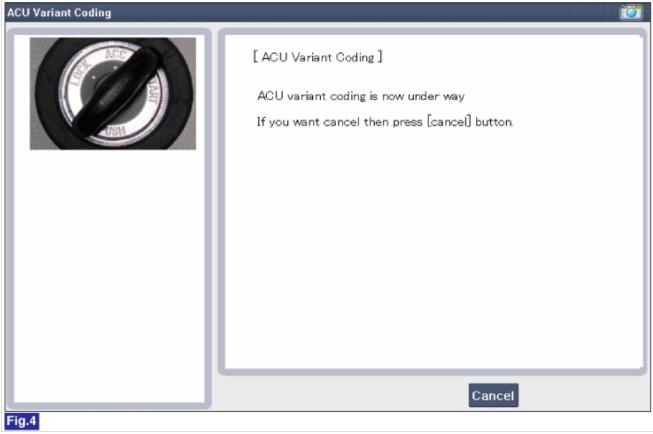
2) ACU CODING Code entering screen



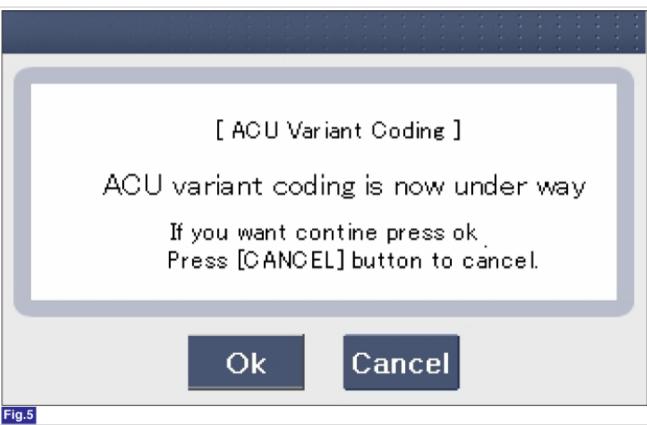
3) Screen of rechecking ACU CODING code's entering



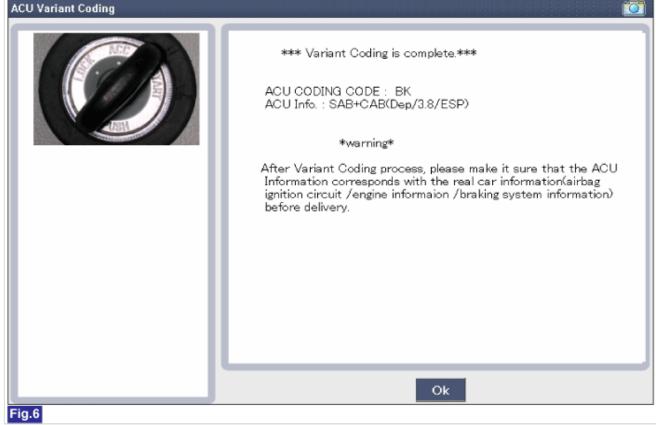
4) Variant coding's proceeding screen-1



5) Variant coding's proceeding screen-2



6) Variant coding is completed



7) Screen of Retrying the Variant coding after finishing variant coding



## **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.
- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

#### GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B2500 Warning lamp Failure

#### **General Description**

Air bag warning lamp is located at cluster

When key is in 'ignition on' position, SRSCM performs diagnosis of overall air bag system. If there's no fault, air bag. Warning lamp in cluster flickers for a while and then goes out.

SRSCM measures voltage of out terminal of warning lamp to check if warning lamp is operated in accordance with signal SRSCM sends.

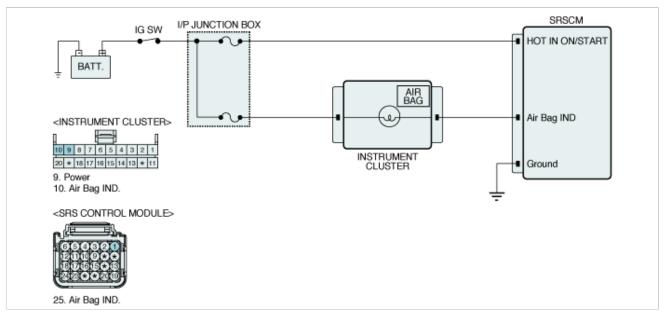
#### **DTC** Description

The SRSCM sets DTC B2500 if there is an open circuit or short to ground in air bag circuit harness.

#### **DTC Detecting Condition**

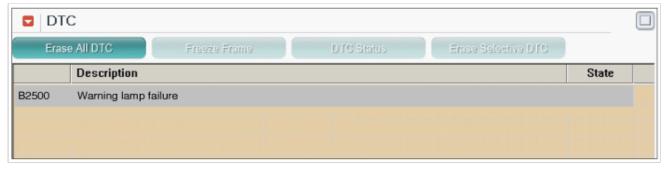
Item		Detecting Condition	Possible cause
DTC Strategy		Check voltage	
Enable conditions		• Ignition "ON"	Burnt-out fuse.      Burnt-out warning lamp.
Threshold Value	Lamp "OFF"	• Line voltage < 0.3V -> ground short	Burnt-out warning lamp.     Open circuit in warning lamp harness.     Short circuit in warning lamp harness.     Faulty SRSCM.
	Lamp "ON"	<ul> <li>Line voltage &lt; 0.3V -&gt; ground short</li> <li>Line voltage &gt; 6.1V -&gt; battery short</li> </ul>	
Diagnostic Time	Qualification	More than 2 sec	
	De-Qualification	More than 4 sec	

#### **Diagnostic Circuit Diagram**



#### **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Main harness circuit inspection" procedure.

#### **Main harness Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between Air bag warning lamp terminal of the SRSCM harness connector and chassis ground.

Specification : Approx. Batt Voltage

6. Is the measured resistance within specifications?

120	▶ Check warning lamp and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage. Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
110	► Check airbag fuse, junction block, Warning Lamp, harness between junction block and SRSCM . Repair as necessary and go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.

- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.

# GENESIS COUPE(BK) >2010 > G 2.0 DOHC > Restraint > SRSCM > B2502 Passenger Airbag Telltale Lamp Failure

## **General Description**

The SRS Telltale Lamp is located on the center of crash pad consists with the Digital Clock.

When the passenger sest are unoccupied, the Telltale Lamp lights up for the notice, and if passenger are occupied under seat, Telltale Lamp are goes off automatically.

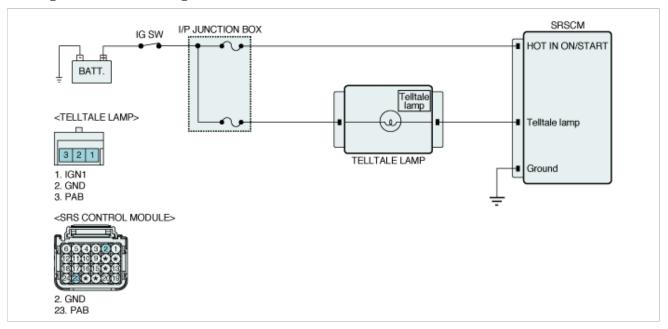
## **DTC Description**

DTC B2502 is recorded when occurrence of a malfunction in the Telltale indicator Lamp system.

#### **DTC Detecting Condition**

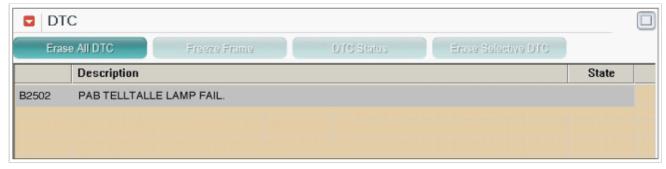
Item		Detecting Condition	Possible cause
DTC Strategy		Passenger Telltale Lamp failure Ground short or Battery short	Burnt-out fuse.     Burnt-out warning lamp.
Enable conditions		• Ignition "ON"	
Throchold	Lamp "OFF"	Line voltage < 2.0V -> ground short	Open circuit in Telltale lamp
Threshold Value	Lamp "ON"	<ul><li>Line voltage &lt; 0.1V -&gt; ground short</li><li>Line voltage &gt; 6.1V -&gt; battery short</li></ul>	<ul><li>harness.</li><li>Short circuit in Telltale lamp harness.</li></ul>
Diagnostic Time	Qualification	More than 2 sec	• Faulty SRSCM.
	De-Qualification	More than 4 sec	

## **Diagnostic Circuit Diagram**



## **Monitor Scantool Data**

- 1. Ignition "OFF", connect scantool.
- 2. Ignition "ON"& Engine "OFF", select "Diagnostic Trouble Codes(DTC)" mode.
- 3. Monitor diagnostic trouble code and present of trouble code.
- 4. Using a scan tool, clear the DTC.



YES	► Go to "W/Harness Inspection" procedure.
NO	<ul> <li>▶ Displaying nothing(no DTC) or DTC with label "H"(historical) shows that Fault is intermittent caused by poor contact in the part's and/or SRSCM connector or was repaired and SRSCM memory was not cleared.</li> <li>Thoroughly check shorting bar/shorting bar release pin and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.</li> <li>▶ Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.</li> </ul>

## **Terminal and Connector Inspection**

- 1. Many malfunctions in the electrical system are caused by poor harness and terminals.

  Faults can also be caused by interference from other electrical systems, and mechanical or chemical damage.
- 2. Thoroughly check shorting connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage.
- 3. Has a problem been found?

YES	▶ Repair as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	► Go to "Telltale lamp Circuit Inspection" procedure.

## **Telltale lamp Circuit Inspection**

- 1. Ignition "OFF".
- 2. Disconnect the battery (-) terminal cable from the battery and wait at least one minutes.
- 3. Disconnect SRSCM main harness connector.
- 4. Connect the battery (-) terminal cable to the battery and Ignition "ON" & Engine "OFF".
- 5. Measure voltage between Telltale lamp terminal of the SRSCM harness connector and chassis ground.

Specification : Batt Voltage

6. Is the measured voltage within specifications?

120	▶ Check telltale lamp and connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage. Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.
NO	▶ Check airbag fuse, passenger compartment junction block, harness between junction block and SRSCM. Repair as necessary and go to "Verification of Vehicle Repair" procedure.

#### **Verification of Vehicle Repair**

- 1. Connect scan tool and select "Diagnostic Trouble Codes(DTC)" mode.
- 2. Using a scan tool, clear the DTC.

- 3. Operate the vehicle within DTC Enable conditions in General information.
- 4. Are any DTC present?

YES	► Go to the applicable troubleshooting procedure.
NO	► System is performing to specification at this time.