General Information

General

The supplemental restraint system (SRS) is designed to supplement the seat belt to help reduce the risk or severity of injury to the driver and passenger by activating and deploying the driver, passenger, side airbag and belt pretensioner in certain frontal or side collisions.

The SRS (Airbag) consists of ; a driver side airbag module located in the center of the steering wheel, which contains the folded cushion and an inflator unit ; a passenger side airbag module located in the passenger side crash pad contains the folded cushion assembled with inflator unit ; side airbag modules located in the front seat contain the folded cushion and an inflator unit ; curtain airbag modules located inside of the headliner which contains folded cushions and inflator units. The impact sensing function of the SRSCM is carried out by electronic accelerometer that continuously measure the vehicle's acceleration and delivers a corresponding signal through amplifying and filtering circuitry to the microprocessor.

SRSCM (SRS Control Module)

SRSCM will detect front impact with front impact sensor, and side impact with side impact sensor, and determine airbag module deployment.

1. DC/DC converter: DC/DC converter in power supply unit includes up/down transformer converter, and provide ignition voltage for 2 front airbag ignition circuits and the internal operation voltage of the SRSCM. If the internal operation voltage is below critical value setting, it will perform resetting.
2. Safety sensor: Safety sensor is located in airbag ignition circuit. Safety sensor will operate airbag circuit at any deployment condition and release airbag circuit safely at normal driving condition. Safety sensor is a double contact electronic switch that will close detecting acceleration above certain criteria.
3. Back up power supply: SRSCM has separate back up power supply, that will supply deployment energy instantly in low voltage condition or upon power failure by front crash.
4. Self diagnosis: SRSCM will constantly monitor current SRS operation status and detect system failure while vehicle power supply is on, system failure may be checked with trouble codes using scan tool. (Hi- Scan)
5. Airbag warning lamp on: Upon detecting error, the module will transmit signal to SRSCM indicator lamp located at cluster. MIL lamp will indicate driver SRS error. Upon ignition key on, SRS lamp will turn on for about six seconds.
6. Trouble code registration: Upon error occurrence in system, SRSCM will store DTC corresponding to the error. DTC can be cleared only by Hi-Scan. However, if an internal fault code is logged or if a crash is recorded the fault clearing should not happen.
7. Self diagnostic connector: Data stored in SRSCM memory will be output to Hi-Scan or other external output devices through connector located below driver side crash pad.
8. Once airbag is deployed, SRSCM should not be used again but replaced.
9. SRSCM will determine whether passenger put on seat belt by the signal from built-in switch in seat belt buckle, and deploy front seat airbag at each set crash speed.
10. Side airbag deployment will be determined by SRSCM that will detect satellite sensor impact signal upon side crash, irrespective to seat belt condition.

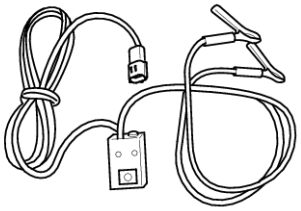
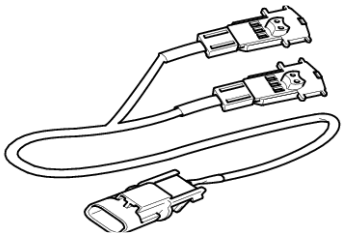
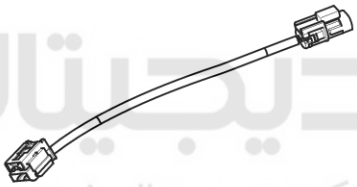
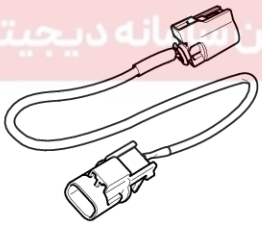
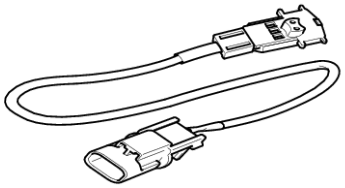
Specification

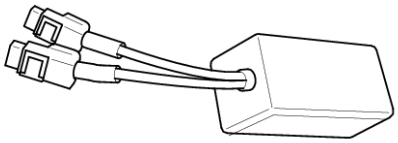
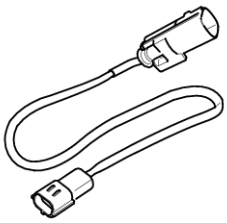
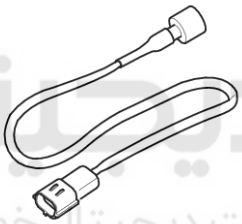
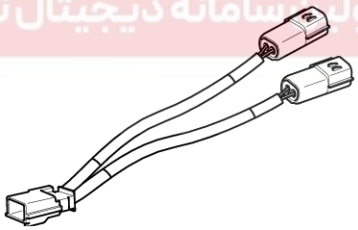
Item	Resistance (Ω)
Driver Airbag (DAB)	1.5 ~ 5.7
Passenger Airbag (PAB)	1.5 ~ 5.7
Side Airbag (SAB)	1.5 ~ 5.7
Curtain Airbag (CAB)	1.5 ~ 5.7
Seat Belt Retractor Pretensioner (BPT)	1.5 ~ 5.7

Tightening Torques

Item	kgf.m	Nm	lb-ft
Driver Airbag (DAB)	0.8 ~ 1.1	7.8 ~ 10.8	5.8 ~ 8.0
Passenger Airbag (PAB)	Bolt :0.7 ~ 1.1 Nut : 0.6 ~ 0.7	6.9 ~ 10.8 5.9 ~ 6.9	5.1 ~ 8.0 4.3 ~ 5.0
Curtain Airbag (CAB)	1.2 ~ 1.5	11.8 ~ 14.7	8.7 ~ 10.9
Side Airbag (SAB)	0.7 ~ 0.9	6.9 ~ 8.8	5.1 ~ 6.5
Seat Belt Anchor Bolt (BPT)	4.0 ~ 5.5	39.2 ~53.9	28.9 ~ 39.8
SRSCM	0.7 ~ 2.0	6.9 ~19.6	5.1 ~ 14.5
Front Impact Sensor (FIS) Mounting nut	0.7 ~ 0.9	6.9 ~ 8.8	5.1 ~ 6.5
Side Impact Sensor (SIS) Mounting Bolt	0.7 ~ 0.9	6.9 ~ 8.8	5.1 ~ 6.5

Special Service Tools

Tool(Number and Name)	Illustration	Use
Deployment tool 0957A-34100A	 ARIE500A	Airbag deployment tool
Deployment adapter 0957A-38510	 BRIF501Y	Use with deployment tool. (DAB)
Deployment adapter 0957A-2E110	 URBF001H	Use with deployment tool. (PAB)
Deployment adapter 0957A-3F100	 ERKD001F	Use with deployment tool. (SAB)
Deployment adapter 0957A-38500	 ARIE500C	Use with deployment tool. (CAB, BPT)

Tool(Number and Name)	Illustration	Use
Dummy 0957A-38200	 ARIE500D	Simulator to check the resistanceof each wiring harness
Dummy adapter 0957A-3F000	 ERKD001G	Use with dummy (SAB)
Dummy adapter 0957A-2G000	 ARIE500F	Use with dummy (DAB, CAB, BPT)
Dummy adapter 0957A-2E100	 ERKD001I	Use with dummy (PAB)

DAB : Driver Airbag

PAB : Passenger Airbag

SAB : Side Airbag

CAB : Curtain Airbag

BPT : Seat Belt Retractor Pretensioner

Precautions

General Precautions

Please read the following precautions carefully before performing the airbag system service.

Observe the instructions described in this manual, or the airbags could accidentally deploy and cause damage or injuries.

- Except when performing electrical inspections, always turn the ignition switch OFF and disconnect the negative cable from the battery, and wait at least three minutes before beginning work.

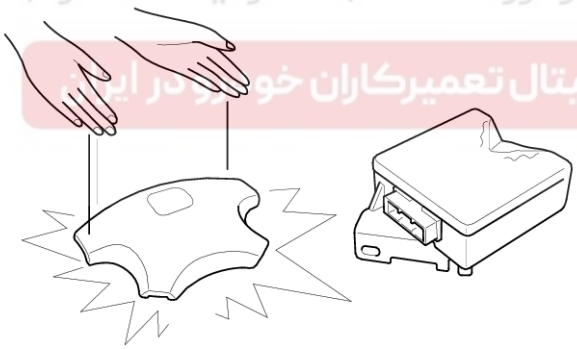
NOTICE

The contents in the memory are not erased even if the ignition switch is turned OFF or the battery cables are disconnected from the battery.

- Use the replacement parts which are manufactured to the same standards as the original parts and quality.

  Do not install used SRS parts from another vehicle. Use only new parts when making SRS repairs.

- Carefully inspect any SRS part before you install it. Do not install any part that shows signs of being dropped or improperly handled, such as dents, cracks or deformation.



ARIE500H

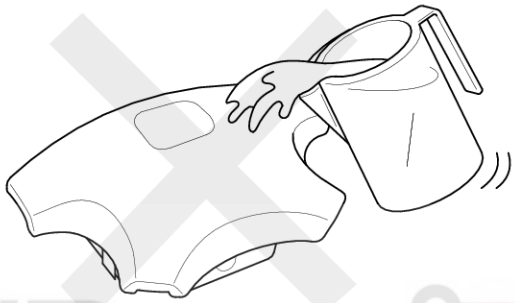
- Before removing any of the SRS parts (including the disconnection of the connectors), always disconnect the SRS connector.

Airbag Handling and Storage

Do not disassemble the airbags; it has no serviceable parts. Once an airbag has been deployed, it cannot be repaired or reused.

For temporary storage of the air bag during service, please observe the following precautions.

- Store the removed airbag with the pad surface up.
- Keep free from any oil, grease, detergent, or water to prevent damage to the airbag assembly.



SUNRT6004D

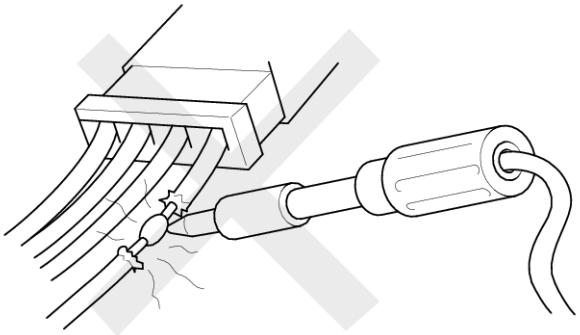
- Store the removed airbag on secure, flat surface away from any high heat source (exceeding 85 C/185 F).
- Never perform electrical inspections to the airbags, such as measuring resistance.
- Do not position yourself in front of the airbag assembly during removal, inspection, or replacement.
- Refer to the scrapping procedures for disposal of the damaged airbag.
- Be careful not to bump or impact the SRS unit or the side impact sensors or front impact sensors whenever the ignition switch is ON, wait at least three minutes after the ignition switch is turned OFF before begin work.
- During installation or replacement, be careful not to bump (by impact wrench, hammer, etc.) the area around the SRS unit and the side impact sensor and the front impact sensors. The airbags could accidentally deploy and cause damage or injury.

- Replace the front airbag module, SRSCM, FIS when deploying the front airbag. Replace the airbag wiring when the airbag wiring get damaged. Replace the side airbag module, the curtain airbag module, SRSCM, SIS when deploying the side airbag. Replace the airbag when the airbag wiring get damaged.
- After a collision in which the airbags or the side air bags did not deploy, inspect for any damage or any deformation on the SRS unit and the side impact sensors. If there is any damage, replace the SRS unit, the front impact sensor and/or the side impact sensors.
- Do not disassemble the SRS unit, the front impact sensor or the side impact sensors.
- Turn the ignition switch OFF, disconnect the battery negative cable and wait at least three minutes before beginning installation or replacement of the SRS unit.
- Be sure the SRS unit, the front impact sensor and side impact sensors are installed securely with the mounting bolts.
- Do not spill water or oil on the SRS unit, or the front impact sensor or the side impact sensors and keep them away from dust.
- Store the SRS unit, the front impact sensor and the side impact sensors in a cool (15 ~ 25 C/ 59 ~ 77 F) and dry (30 ~ 80% relative humidity, no moisture) area.

Wiring Precautions

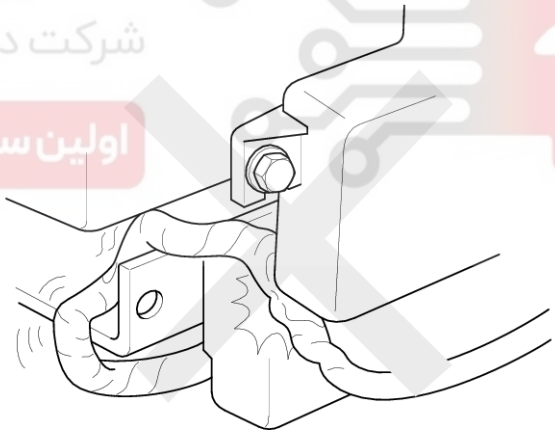
SRS wiring can be identified by special yellow outer covering Observe the instructions described in this section.

- Never attempt to modify, splice, or repair SRS wiring. If there is an open or damage in SRS wiring, replace the harness.



ARIE500I

- Be sure to install the harness wires so that they are not pinched, or interfere with other parts.



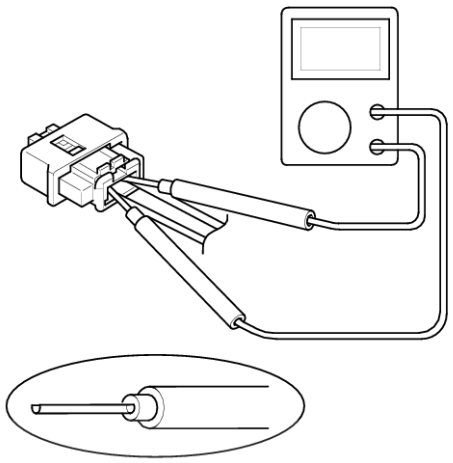
ARIE500J

- Make sure all SRS ground locations are clean, and grounds are securely fastened for optimum metal-to-metal contact. Poor grounding can cause intermittent problems that are difficult to diagnose.

Precautions for Electrical Inspections

- When using electrical test equipment, insert the probe of the tester into the wire side of the connector.

  Do not insert the probe of the tester into the terminal side of the connector, and do not tamper with the connector.



ARIE500K

- Use a u-shaped probe. Do not insert the probe forcibly.
- Use specified service connectors for troubleshooting.

  Using improper tools could cause an error in inspection due to poor metal contact.

Spring-laded Lock Connector

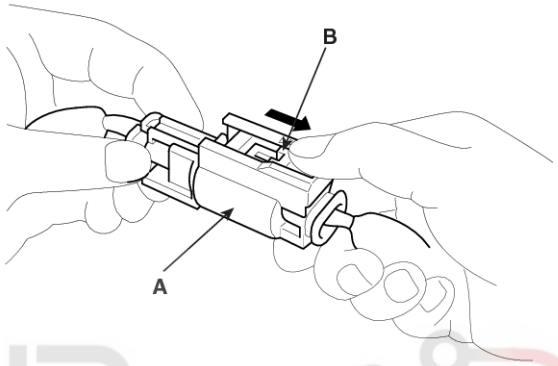
Some SRS system connectors have a spring-loaded lock.

Airbag Connector

Disconnecting

To release the lock, pull the spring-loaded sleeve (A) and he slider (B), while holding the opposite half of the connector.

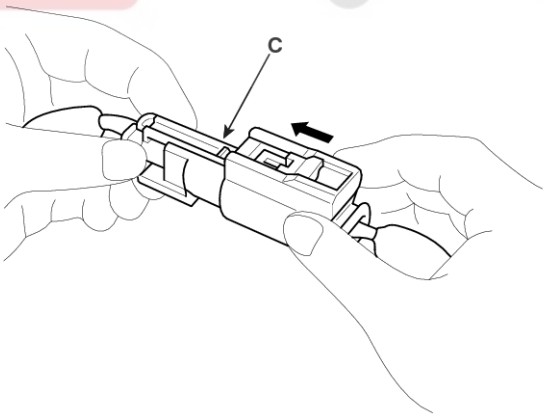
Pull the connector halves apart. Be sure to pull on the sleeve and not on the connector half.



ARIE500L

Connecting

Hold both connector halves and press firmly until the projection(C) of the sleeve-side connector clicks to lock.



ARJF500F

Warning Lamp Activation

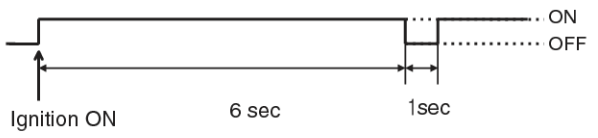
Warning Lamp Behavior after Ignition On

As soon as the operating voltage is applied to the SRSCM ignition input, the SRSCM activates the warning lamp for a bulb check.

The lamp shall turn on for 6 seconds during the initialization phase and be turned off afterward.

However, in order to indicate the driver, the warning lamp shall turn on for 6 seconds and off for one second then on continuously after the operating voltage is applied if any active fault exists.

1. Active fault or historical fault counter is greater or equal to 10



BRIF500A

2. Normal or historical fault counter is less than 10.

BRIF500B

SRSCM Independent Warning Lamp Activation

There are certain fault conditions in which the SRSCM cannot function and thus cannot control the operation of the standard warning lamp. In these cases, the standard warning lamp is directly activated by appropriate circuitry that operates independently of the SRSCM. These cases are:

1. Loss of battery supply to the SRSCM : warning lamp turned on continuously.
2. Loss of internal operating voltage : warning lamp turned on continuously.
3. Loss of Microprocessor operation : warning lamp turned on continuously.
4. SRSCM not connected : warning lamp turned on continuously through the shorting bar.

Component Replacement After Deployment

NOTICE

Before doing any SRS repairs, use the Hi-Scan Pro to check for DTCs. Refer to the Diagnostic Trouble Code list for repairing of the related DTCs.

When the front airbag(s) deployed after a collision, replace the following items.

- SRSCM
- Deployed airbag(s)
- Seat belt pretensioner(s)
- Front impact sensors
- SRS wiring harnesses
- Inspect the clock spring for heat damage.
  If any damage found, replace the clock spring.

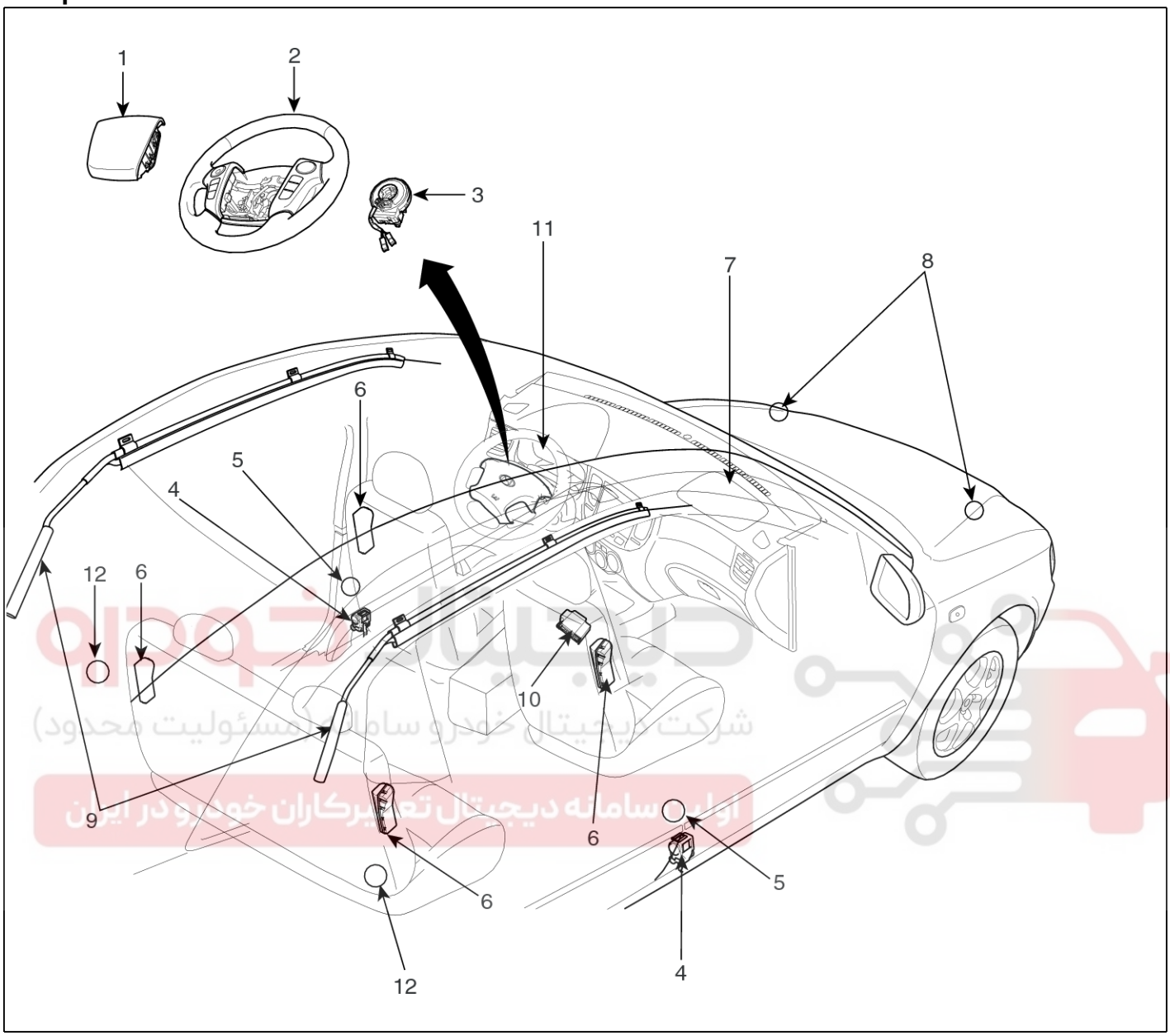
When the side/curtain airbag(s) deployed after a collision, replace the following items.

- SRSCM
- Deployed airbag(s)
- Side impact sensor(s) for the deployed side(s)
- SRS wiring harnesses

After the vehicle is completely repaired, confirm the SRS airbag system is OK.

- Turn the ignition switch ON, the SRS indicator should come on for about 6 seconds and then go off.

Components

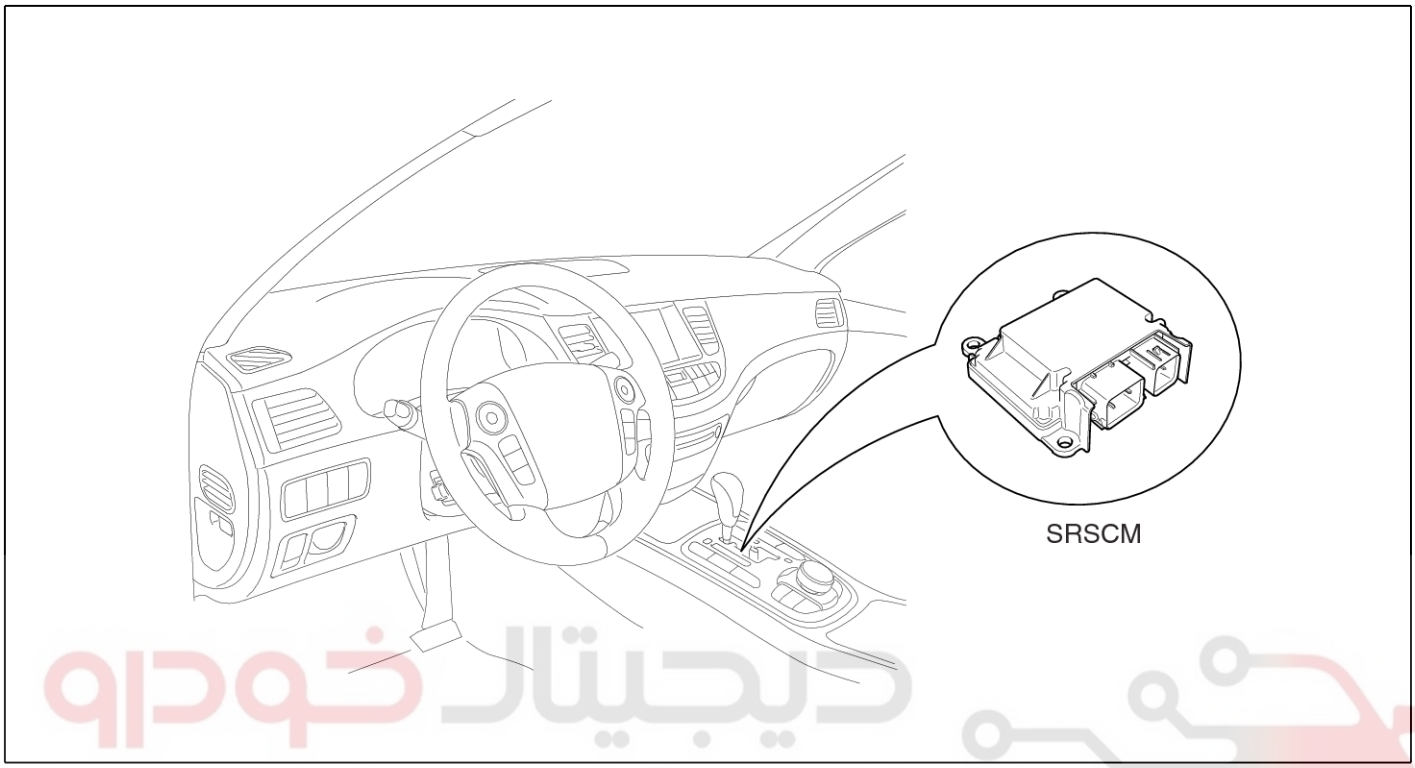


SBHRT9001L

1. Driver Airbag (DAB)
2. Steering Wheel
3. Clock Spring
4. Seat Belt Pretensioner (BPT)
5. Front Side Impact Sensor (FSIS)
6. Side Airbag (SAB)
7. Passenger Airbag (PAB)
8. Front Impact Sensor (FIS)
9. Curtain Airbag (CAB)
10. Supplemental Restraint System Control Module(SRSCM)
11. Airbag Warning Lamp
12. Rear Side Impact Sensor (RSIS)

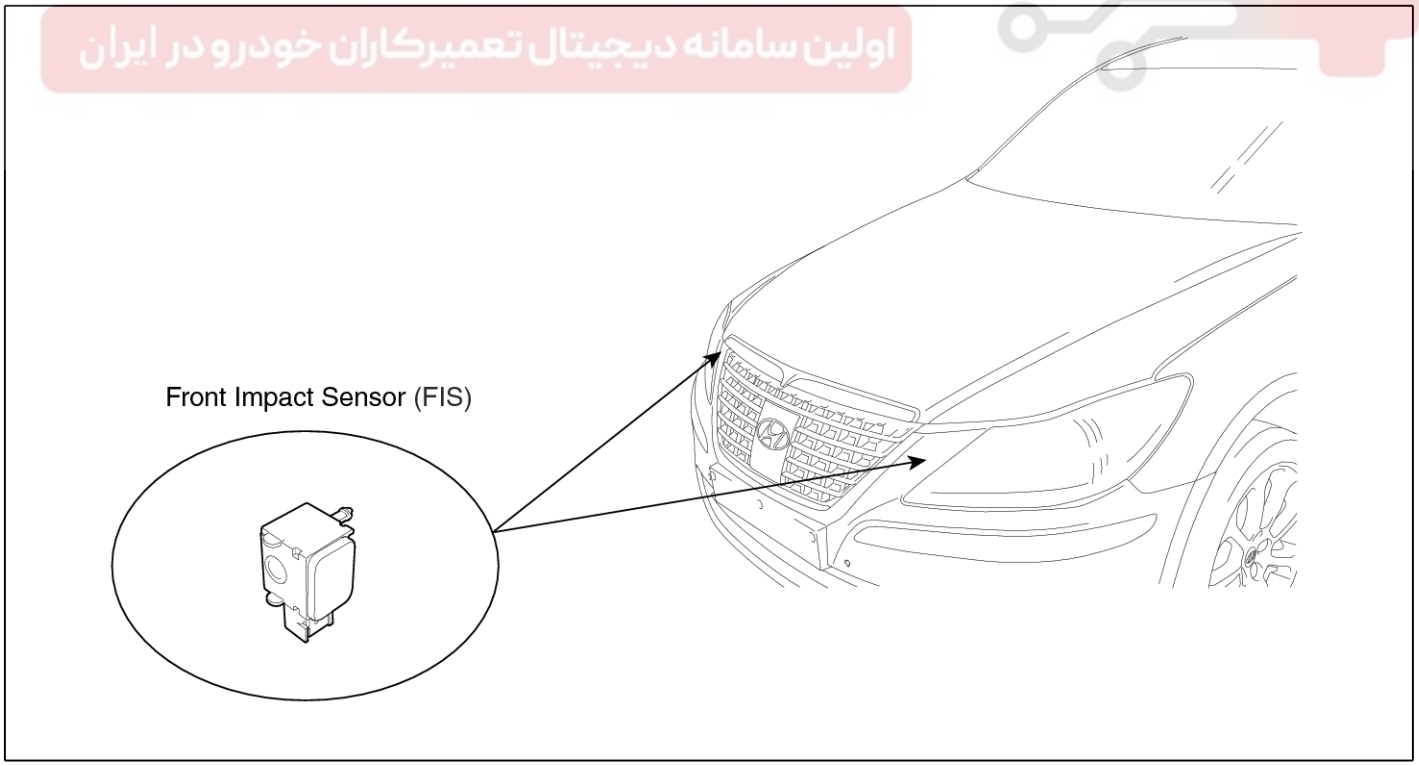
Components Location

Supplemental Restraint System Control Module (SRSCM)



SBHRT9002N

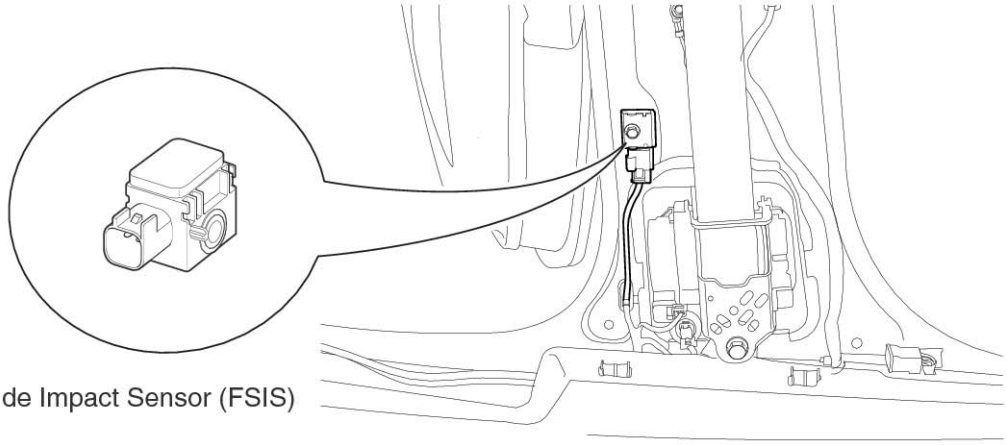
Front Impact Sensor (FIS)



SBHRT9003N

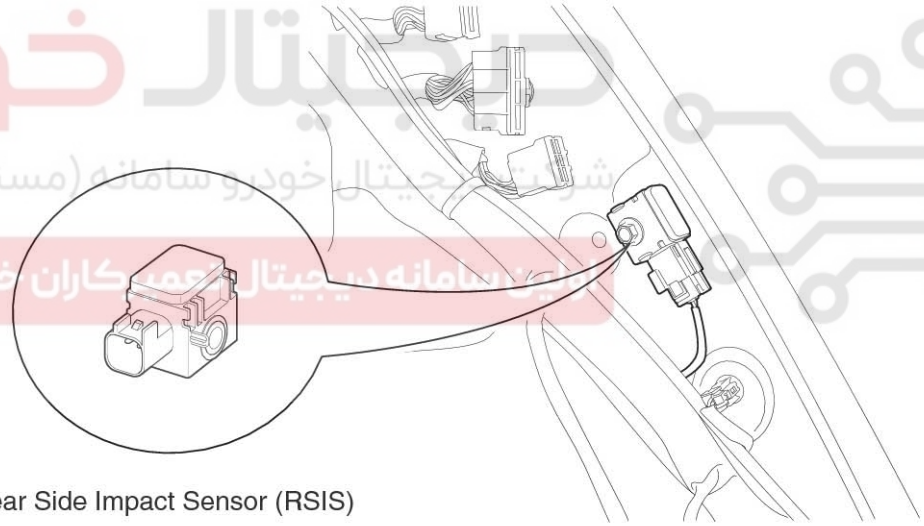
Side Impact Sensor (SIS)

[Front]



Front Side Impact Sensor (FSIS)

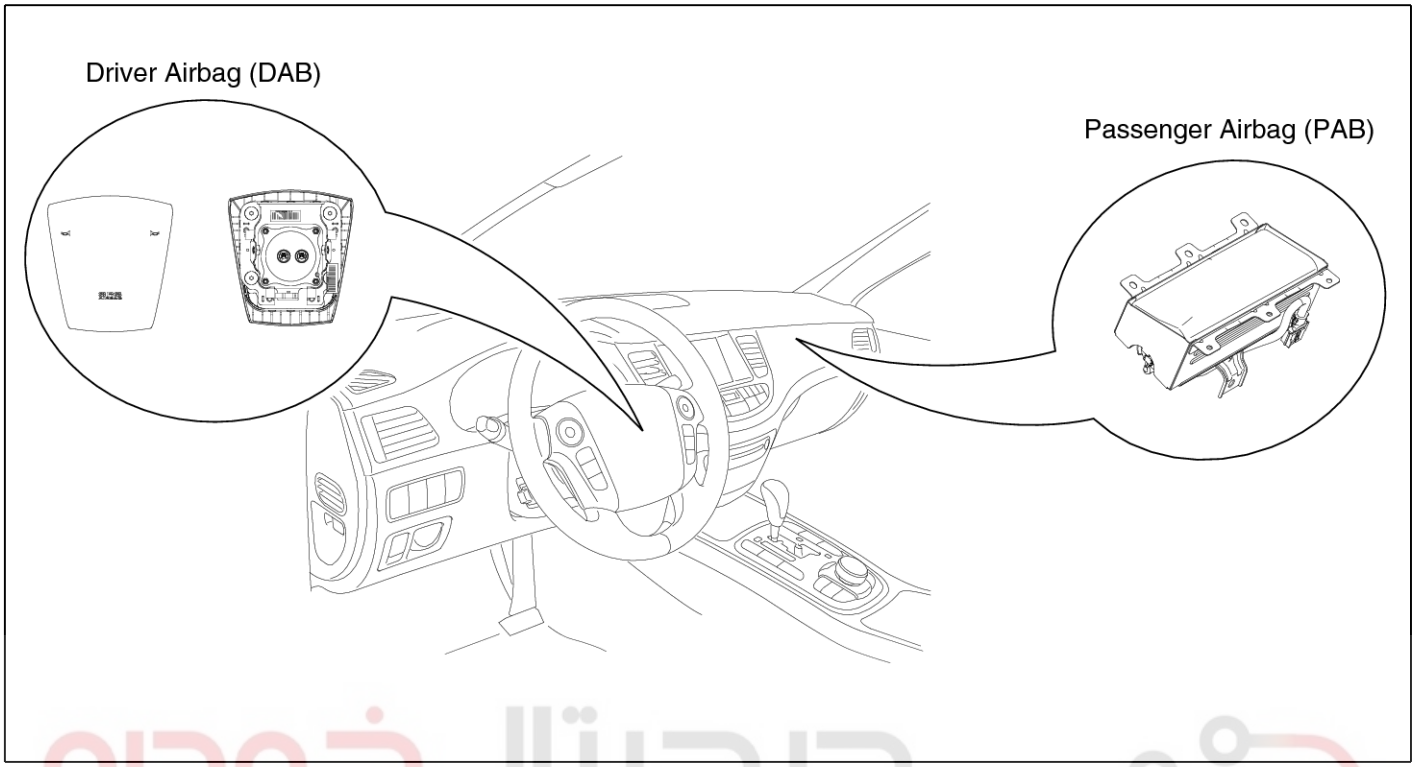
[Rear]



Rear Side Impact Sensor (RSIS)

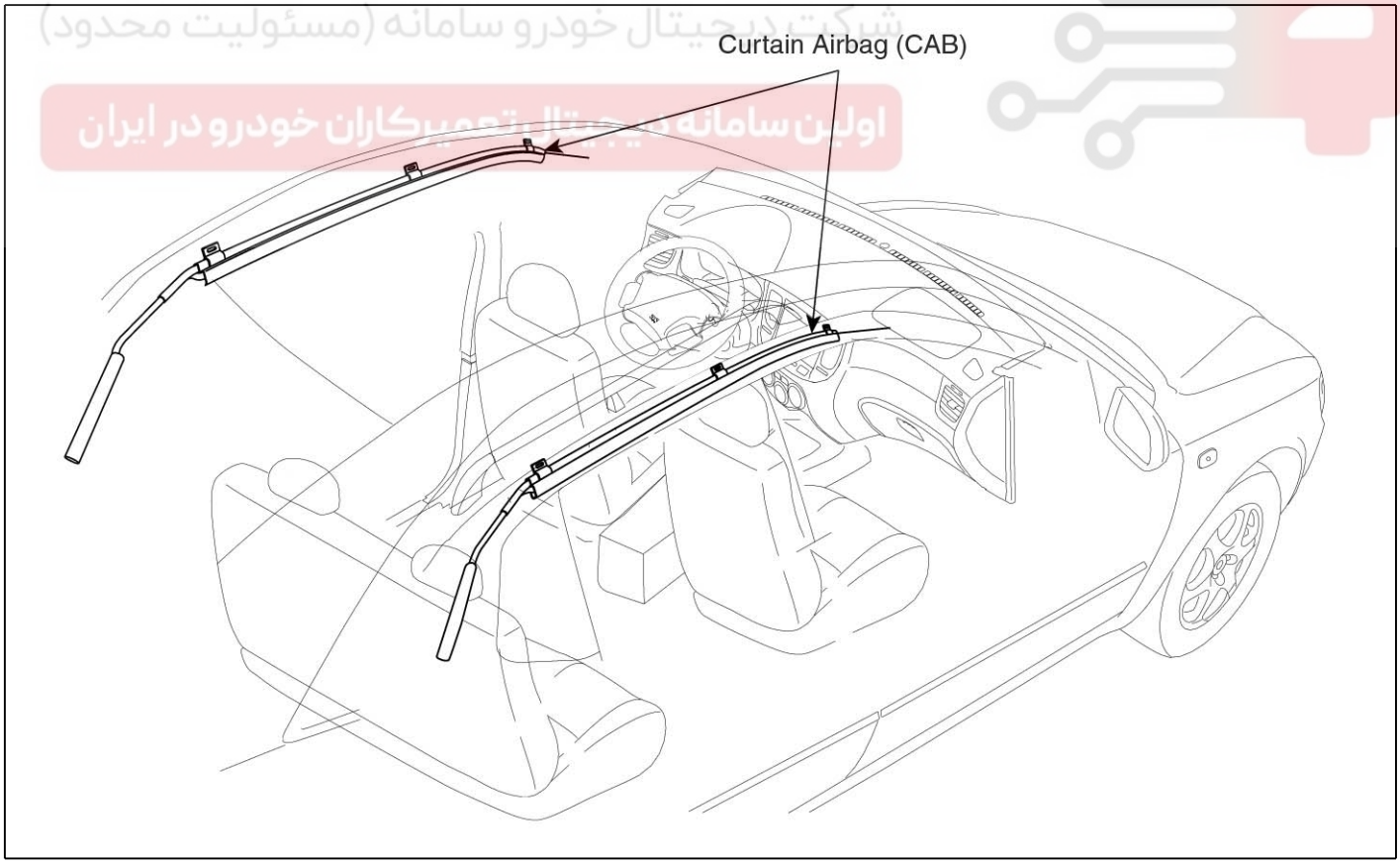
SBHRT9002L

Driver Airbag (DAB) / Passenger Airbag (PAB)



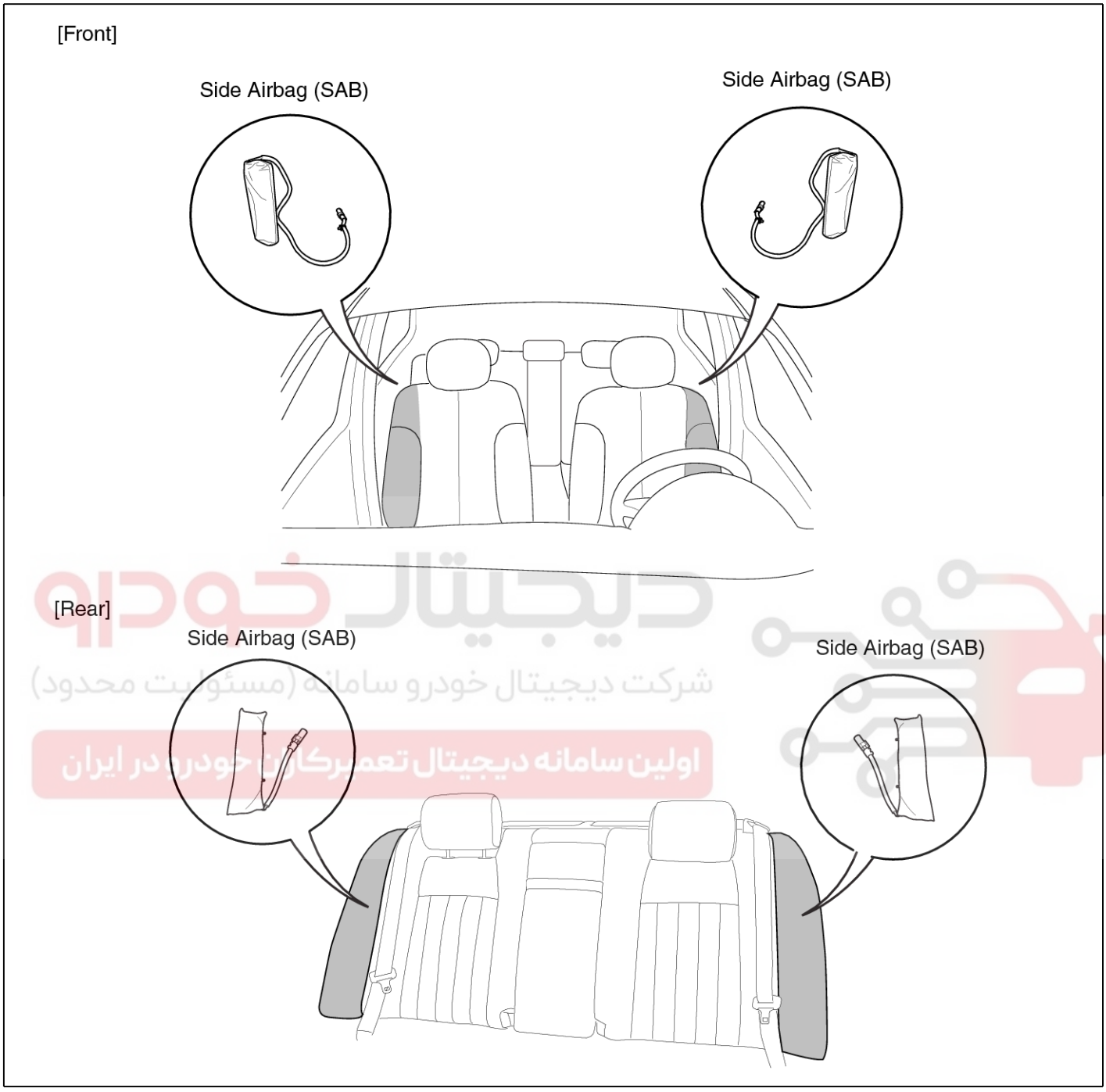
SBHRT9005N

Curtain Airbag (CAB)



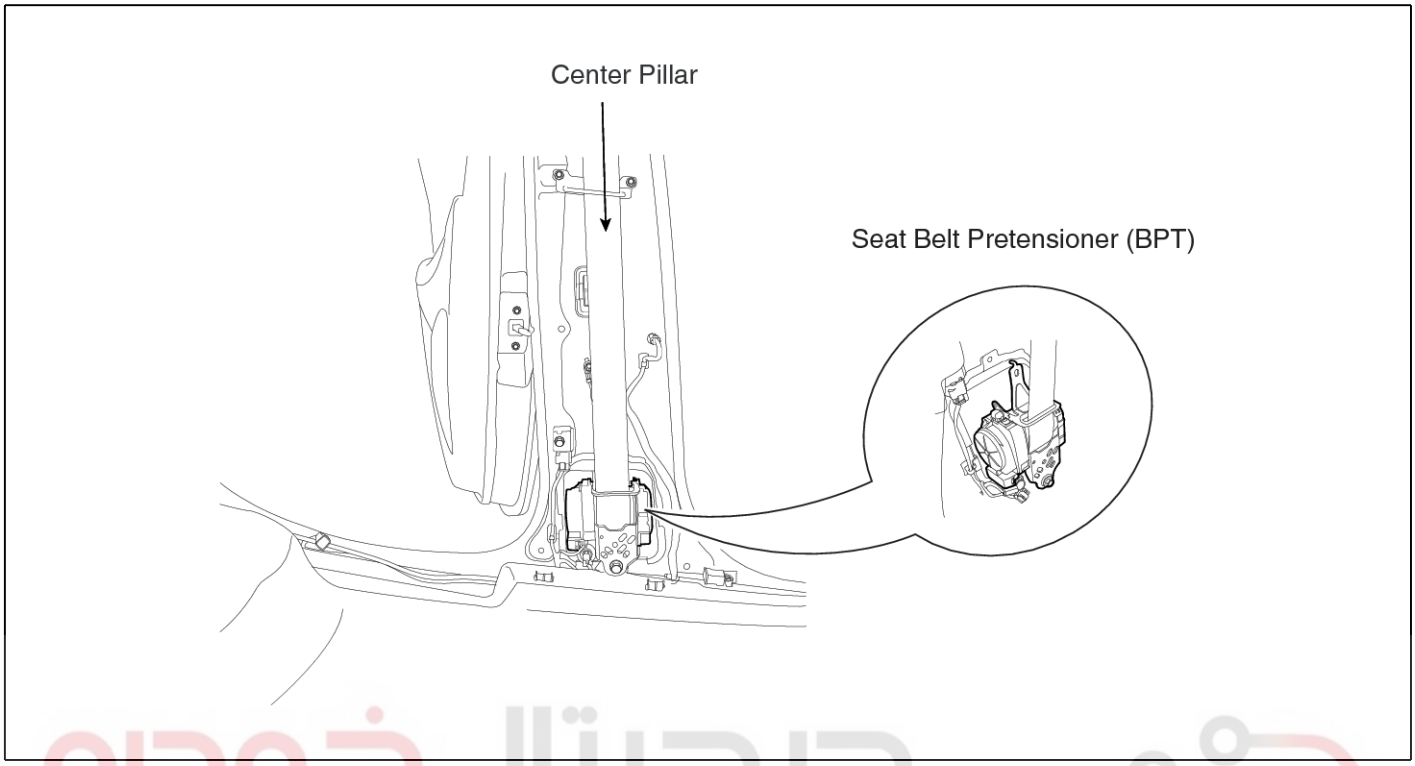
SBHRT9006N

Side Airbag (SAB)



SBHRT9007N

Seat Belt Retractor Pretensioner (BPT)



SBHRT9003L

SRSCM

SRS Control Module (SRSCM)

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.

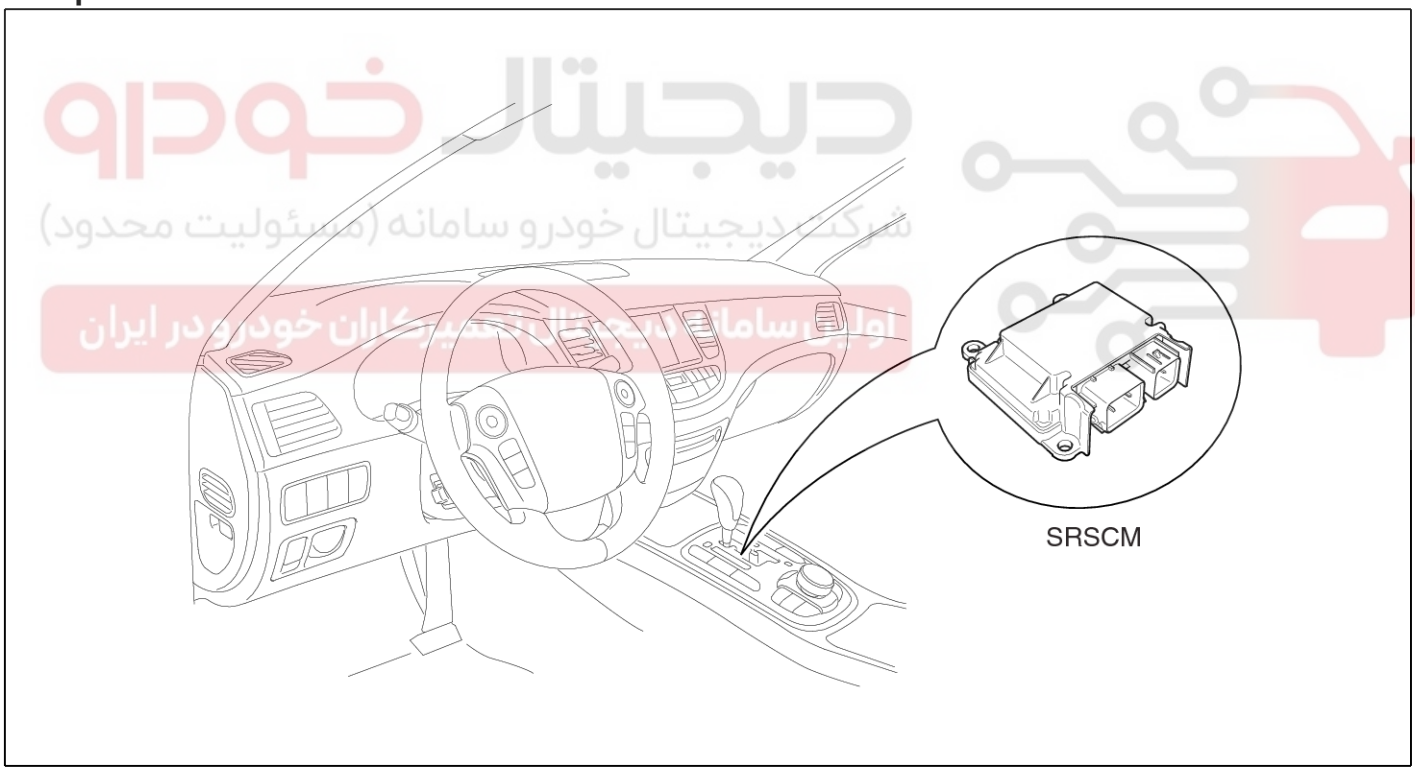
The SRSCM determines that an impact may require deployment of the pretensioners and airbags from data obtained from impact sensors and other components in conjunction with a safing function.

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.

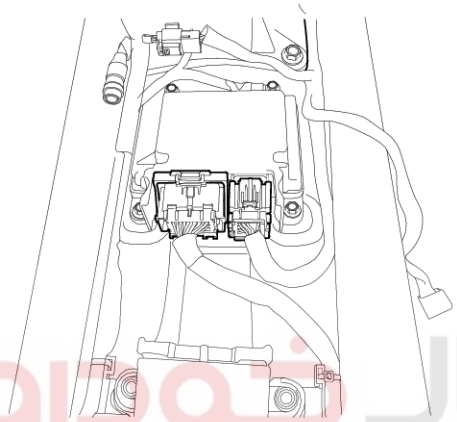
Components



SBHRT9002N

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.



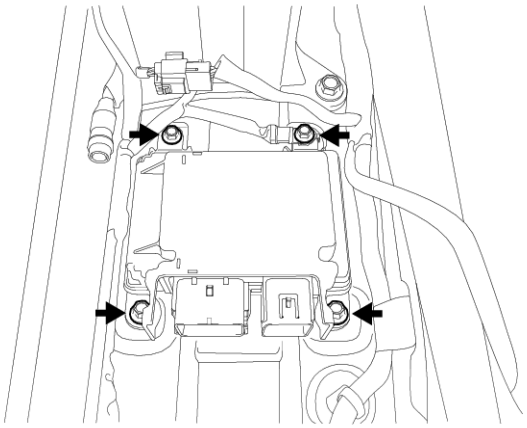
SBHRT8051D

6. Remove the SRSCM mounting bolts(4EA) 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 ~ 19.6 Nm (0.7 ~ 2.0 kgf.m, 5.1 ~ 14.5 lb.ft)



SBHRT8052D

NOTICE
Use new mounting bolts when replacing the SRSCMafter a collision.

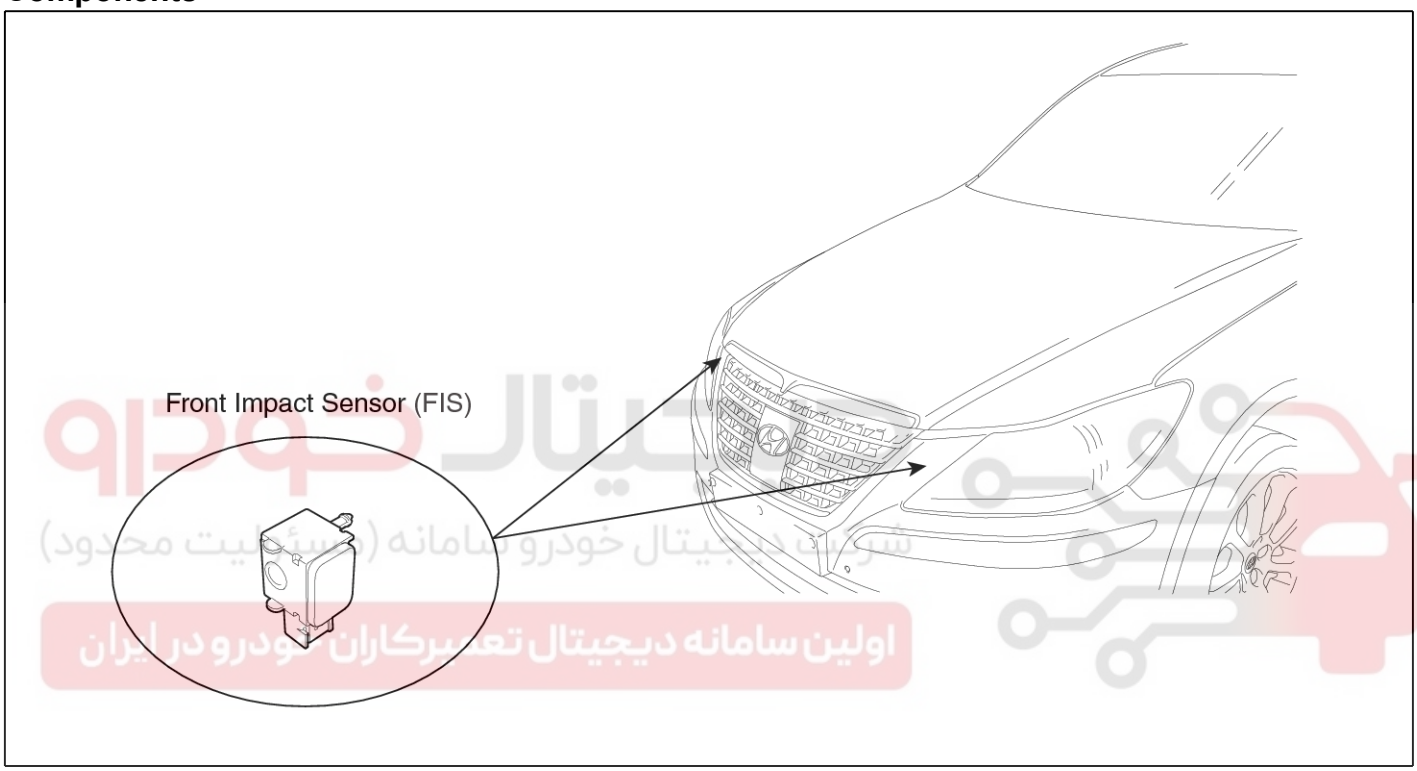
4. Connect the SRSCM harness connector.
5. Install the heater ducts and floor console. (Refer to the Body group - console)
6. Connect the DAB, PAB, SAB, CAB and BPT connectors.
7. Reconnect the battery negative cable.
8. After installing the SRSCM, confirm proper system operation:
   - Turn the ignition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

Front Impact Sensor (FIS)

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.

Components



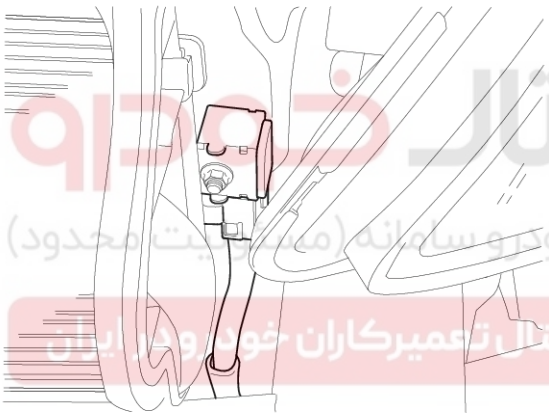
SBHRT9003N

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.



SBHRT8702D

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 ~ 8.8 Nm (0.7 ~ 0.9 kgf.m, 5.1 ~ 6.5 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:
   - Turn the ignition switch ON the SRS indicator light should be turned on for about six seconds and then go off.

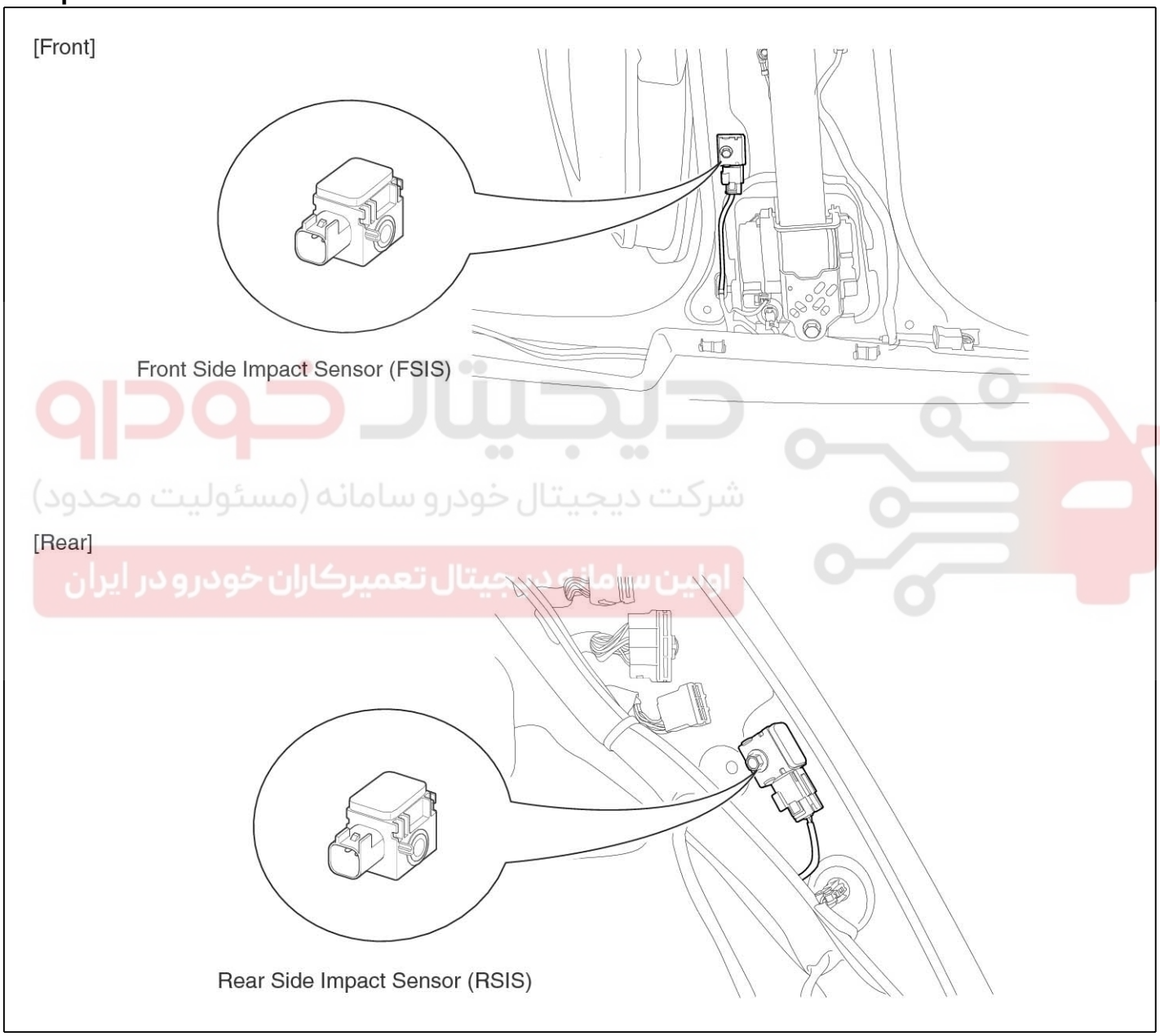
Side Impact Sensor (SIS)

Description

The Side Impact Sensor (SIS) system consists of two front SIS which are installed in the center pillar (LH and RH) and two rear SIS which are installed in the rear pillar (LH and RH).

They are remote sensors that detect acceleration due to collision at their mounting locations. The primary purpose of the Side Impact Sensor (SIS) is to provide an indication of a collision. The Side Impact Sensor (SIS) sends acceleration data to the SRSCM.

Components



SBHRT9002L

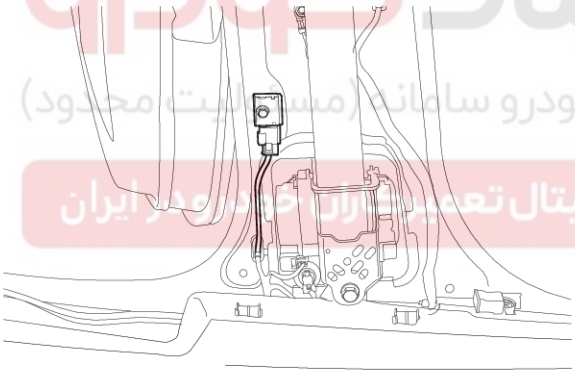
Removal

Front Side Impact 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.**

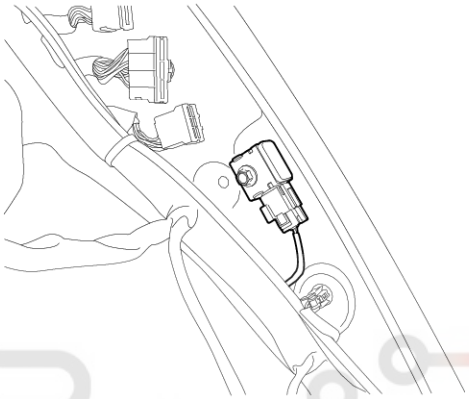
1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the door scuff trim. (Refer to the Body group- Interior trim)
3. Remove the center pillar trim. (Refer to the Body group- Interior trim)
4. Disconnect the Side Impact Sensor connector and remove the Side Impact Sensor mounting bolt.



SBHRT8751D

Rear 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 rear seat side back. (Refer to the Body group- Seat)
4. Disconnect the side impact sensor connector.
5. Loosen the side impact sensor mounting bolt and remove the side impact sensor.



SBHRT8752D

Installation

Front 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 center pillar trim. (Refer to the Body group- Interior trim)
3. Install the door scuff trim. (Refer to the Body group- Interior trim)
4. Reconnect the battery negative cable.
5. After installing the Side Impact Sensor, confirm proper system operation:
   - Turn the ignition switch ON, the SRS indicator light should be turned on for about six seconds and then go off.

Rear Side Impact Sensor

⚠CAUTION

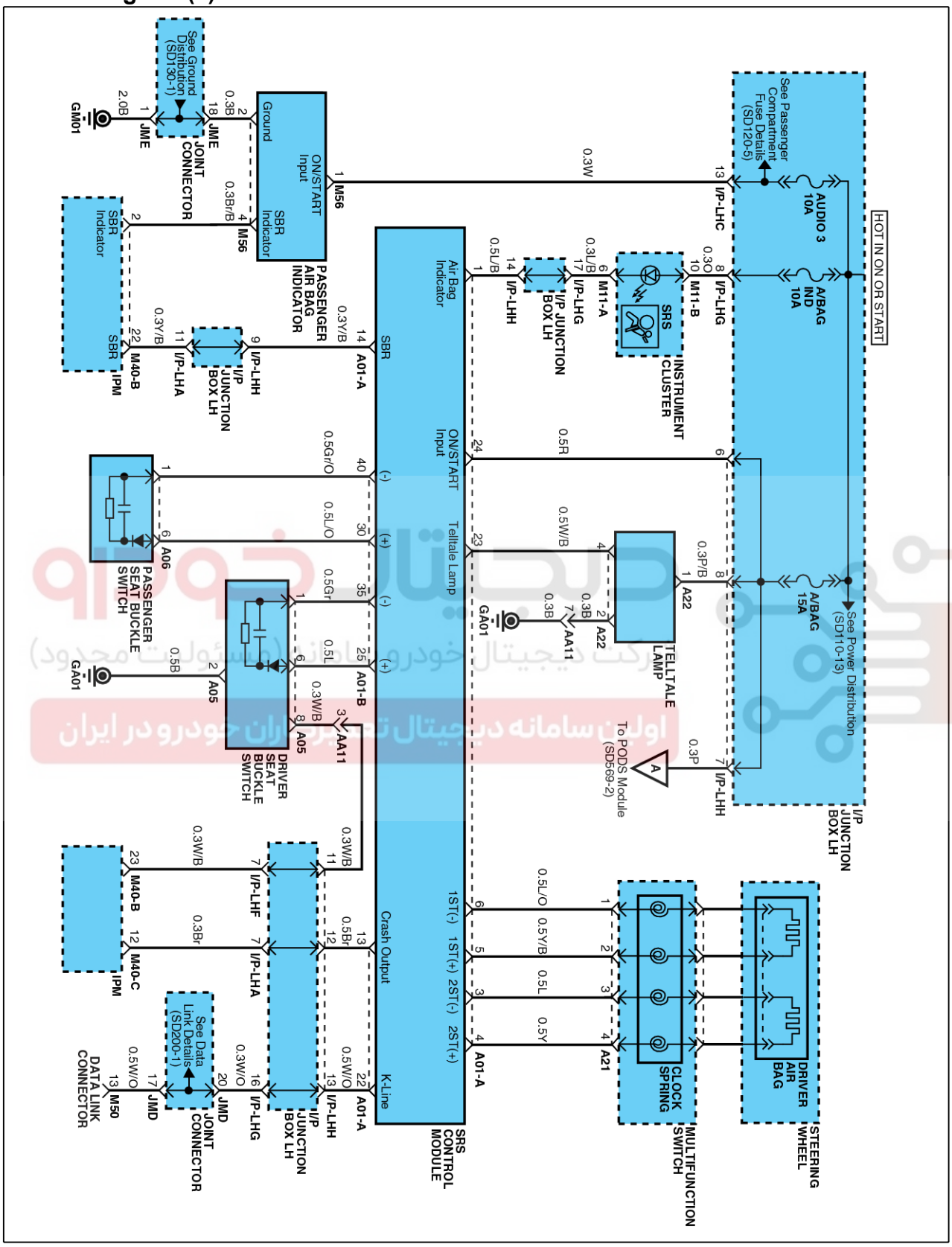
- **Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.**

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)

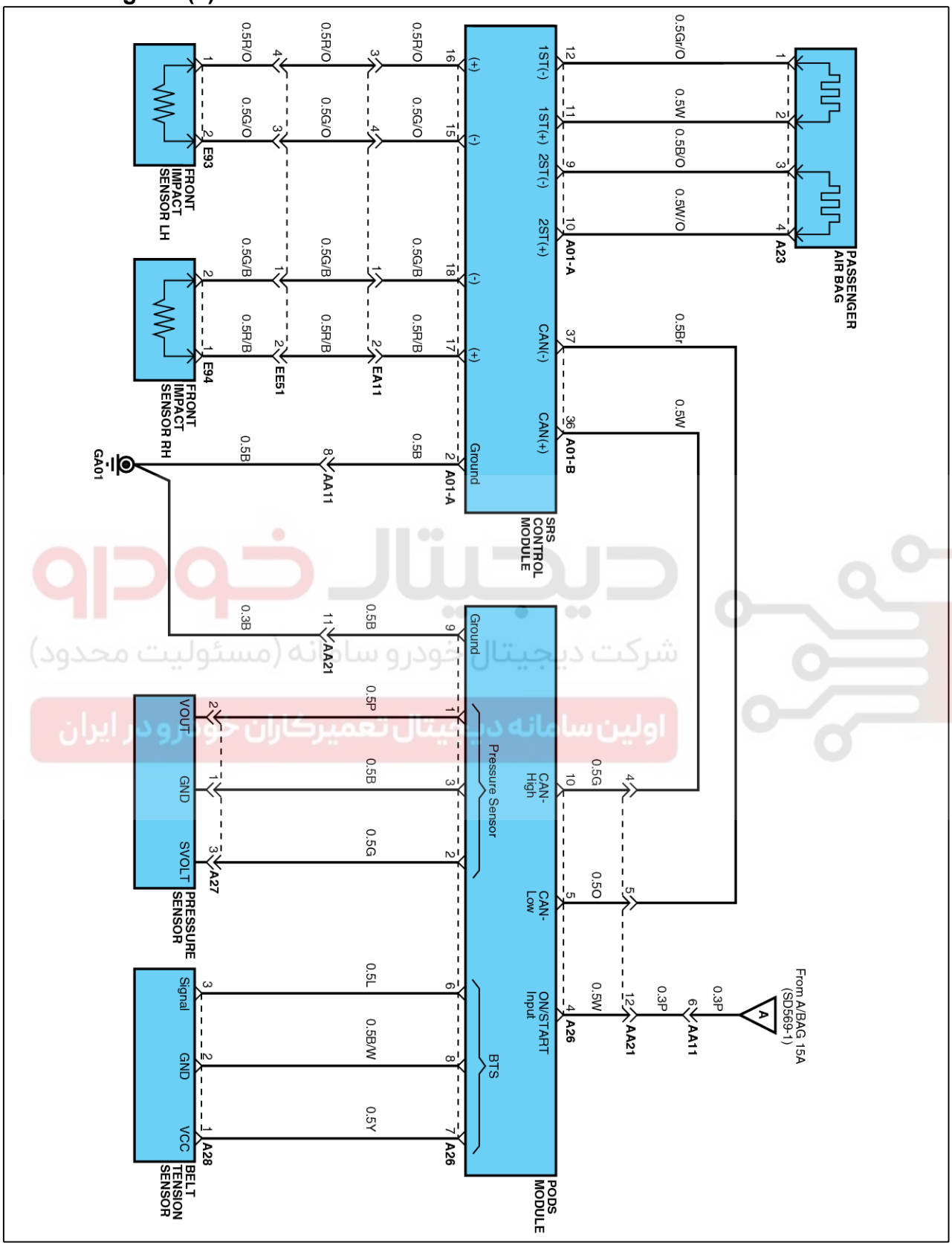
2. Install the rear seat side back. (Refer to the Body group- Seat)
3. Install the rear seat . (Refer to the Body group- Seat)
4. Reconnect the battery negative cable.
5. After installing the Side Impact Sensor, confirm proper system operation:
   - Turn the ignition switch ON, the SRS indicator light should be turned on for about six seconds and then go off.

Circuit Diagram (1)



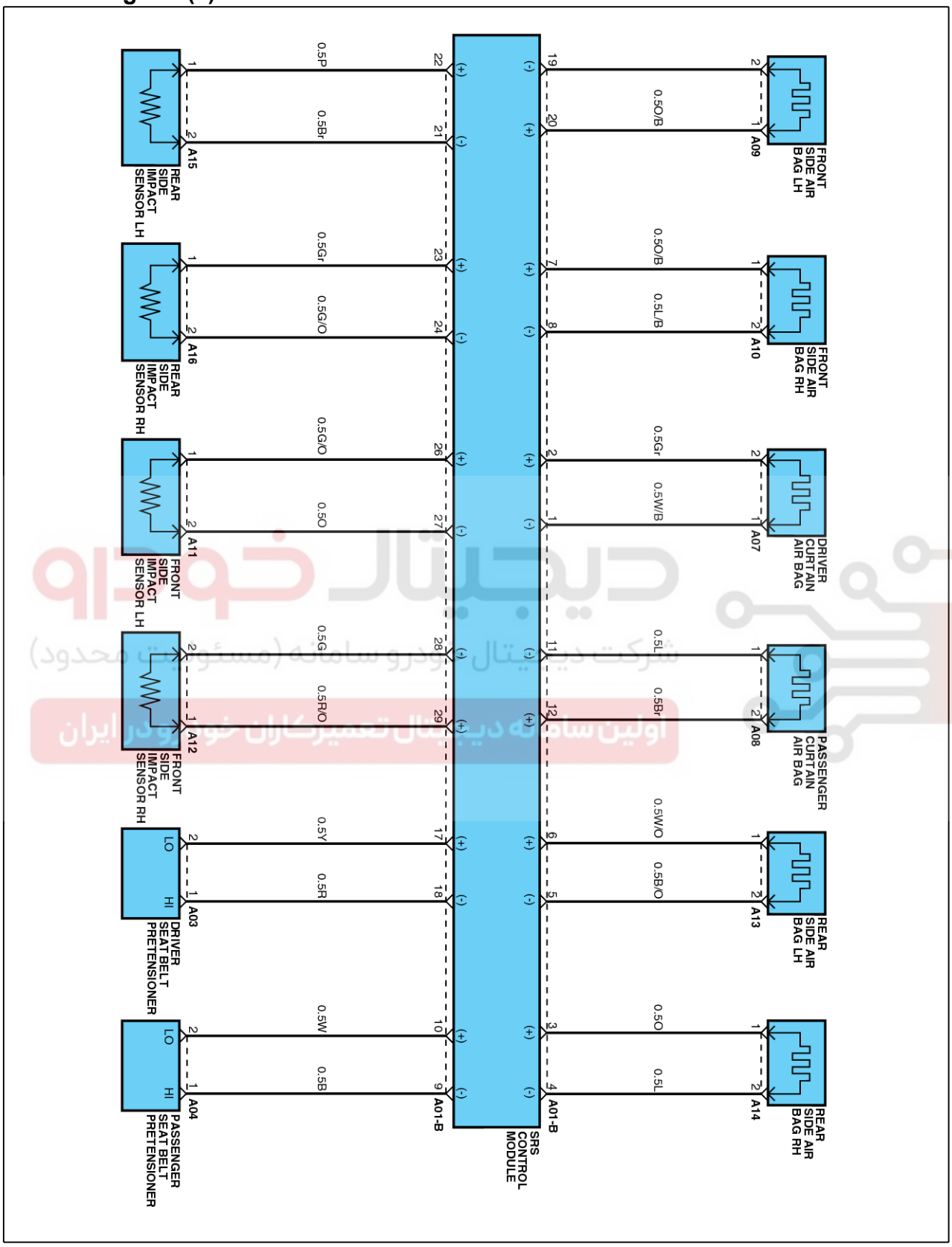
SBHRT9025N

Circuit Diagram (2)



SBHRT9026N

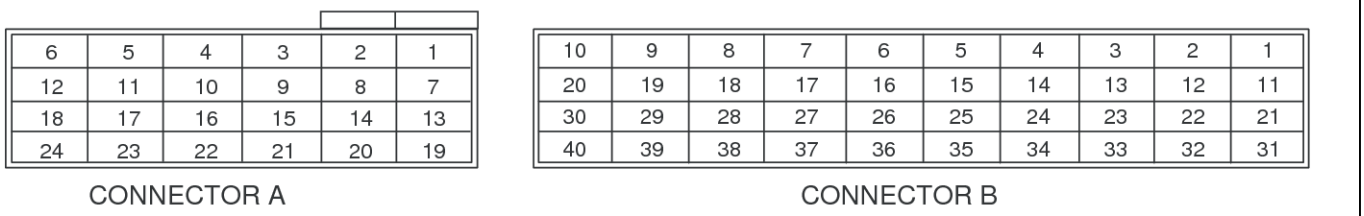
Circuit Diagram (3)



SBHRT9027N

SRSCM Connector Terminal

Harness Connector



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.

SBHRT9011N

Pin	Function (Connector A)	Pin	Function (Connector B)
1	Airbag Warning Lamp	1	Curtain Airbag [Driver] Low
2	Ground	2	Curtain Airbag [Driver] High
3	(2nd stage) Driver Airbag Low	3	Side Airbag [Rear-Passenger] High
4	(2nd stage) Driver Airbag High	4	Side Airbag [Rear-Passenger] Low
5	(1st stage) Driver Airbag High	5	Side Airbag [Rear-Driver] Low
6	(1st stage) Driver Airbag Low	6	Side Airbag [Rear-Driver] High
7	-	7	Side Airbag [Front-Passenger] High
8	-	8	Side Airbag [Front-Passenger] Low
9	(2nd stage) Passenger Airbag Low	9	Seat Belt Pretensioner [Front-Passenger] Low
10	(2nd stage) Passenger Airbag High	10	Seat Belt Pretensioner [Front-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 [Front-Driver] High
18	Front Impact Sensor [Passenger] Low	18	Seat Belt Pretensioner [Front-Driver] Low
19	-	19	Side Airbag [Front-Driver] Low
20	-	20	Side Airbag [Front-Driver] High
21	-	21	Side Impact Sensor [Rear-Driver] Low
22	K-Line Diagnostic	22	Side Impact Sensor [Rear-Driver]High
23	-	23	Side Impact Sensor [Rear-Passenger] High
24	Ignition	24	Side Impact Sensor [Rear-Passenger] Low
		25	-

Pin	Function (Connector A)	Pin	Function (Connector B)
		26	Side Impact Sensor [Front-Driver] High
		27	Side Impact Sensor [Front-Driver] Low
		28	Side Impact Sensor [Front-Passenger] Low
		29	Side Impact Sensor [Front-Passenger] High
		30	-
		31	-
		32	-
		33	-
		34	-
		35	-
		36	-
		37	-
		38	-
		39	-
		40	-

Diagnostic Trouble Code (DTC) Table

DTC	Fault Descriptions	Remark
B1101	Battery voltage high	
B1102	Battery voltage low	
B1326	Driver Side Front Impact Sensor Leakage to ground	
B1327	Driver Side Front Impact Sensor Leakage to battery	
B1328	Driver Side Front Impact Sensor Defect	
B1329	Driver Side Front Impact Sensor Communication Error	
B1330	Driver Side Front Impact Sensor Wrong ID	
B1331	Passenger Side Front Impact Sensor Leakage to ground	
B1332	Passenger Side Front Impact Sensor Leakage to battery	
B1333	Passenger Side Front Impact Sensor Defect	
B1334	Passenger Side Front Impact Sensor Communication Error	
B1335	Passenger Side Front Impact Sensor Wrong ID	
B1346	1st Stage Driver airbag Resistance too high (open)	
B1347	1st Stage Driver airbag Resistance too low (short)	
B1348	1st Stage Driver airbag Circuit leakage to ground	
B1349	1st Stage Driver airbag Circuit leakage to battery	
B1352	1st Stage Passenger airbag Resistance too high (open)	
B1353	1st Stage Passenger airbag Resistance too low (short)	
B1354	1st Stage Passenger airbag Circuit leakage to ground	
B1355	1st Stage Passenger airbag Circuit leakage to battery	
B1361	Pretensioner front-Driver Resistance too high (open)	
B1362	Pretensioner front-Driver Resistance too low (short)	
B1363	Pretensioner front-Driver Circuit leakage to ground	
B1364	Pretensioner front-Driver Circuit leakage to battery	
B1367	Pretensioner front-Passenger Resistance too high (open)	
B1368	Pretensioner front-Passenger Resistance too low (short)	
B1369	Pretensioner front-Passenger Circuit leakage to ground	
B1370	Pretensioner front-Passenger Circuit leakage to battery	
B1378	Side airbag front-driver Resistance too high (open)	
B1379	Side airbag front-driver Resistance too low (short)	
B1380	Side airbag front-driver Circuit leakage to ground	
B1381	Side airbag front-driver Circuit leakage to battery	
B1382	Side airbag front-passenger Resistance too high (open)	
B1383	Side airbag front-passenger Resistance too low (short)	

DTC	Fault Descriptions	Remark
B1384	Side airbag front-passenger Circuit leakage to ground	
B1385	Side airbag front-passenger Circuit leakage to battery	
B1395	Squib Cross coupling	
B1400	SIS front-driver defect	
B1401	SIS front-driver circuit short to ground	
B1402	SIS front-driver circuit short to battery	
B1403	SIS front-passenger defect	
B1404	SIS front-passenger circuit short to ground	
B1405	SIS front-passenger circuit short to battery	
B1409	SIS front-driver communication error	
B1410	SIS front-passenger communication error	
B1412	SIS rear-Driver communication error	
B1413	SIS rear-Passenger communication error	
B1414	SIS front-driver Wrong ID	
B1415	SIS front-passenger Wrong ID	
B1416	SIS rear-Driver Wrong ID	
B1417	SIS rear-Passenger Wrong ID	
B1418	SIS rear-Driver defect	
B1419	SIS rear-Passenger defect	
B1429	Side airbag rear-driver resistance too high	
B1430	Side airbag rear-driver resistance too low	
B1431	Side airbag rear-driver circuit short to ground	
B1432	Side airbag rear-driver circuit short to battery	
B1433	Side airbag rear-passenger resistance too high	
B1434	Side airbag rear-passenger t resistance too low	
B1435	Side airbag rear-passenger circuit short to ground	
B1436	Side airbag rear-passenger t circuit short to battery	
B1451	SIS rear-Driver circuit Short to Ground	
B1452	SIS rear-Driver circuit Short to Battery	
B1454	SIS rear-Driver circuit Short to Ground	
B1455	SIS rear-Passenger circuit Short to Battery	
B1473	Inflatable Curtain-driver Resistance too high (open)	
B1474	Inflatable Curtain-driver Resistance too low (short)	
B1475	Inflatable Curtain-driver Circuit leakage to ground	
B1476	Inflatable Curtain-driver Circuit leakage to battery	

DTC	Fault Descriptions	Remark
B1477	Inflatable Curtain-passenger Resistance too high (open)	
B1478	Inflatable Curtain-passenger Resistance too low (short)	
B1479	Inflatable Curtain-passenger Circuit leakage to ground	
B1480	Inflatable Curtain-passenger Circuit leakage to battery	
B1481	2nd Stage Driver airbag Resistance too high (open)	
B1482	2nd Stage Driver airbag Resistance too low (short)	
B1483	2nd Stage Driver airbag Circuit leakage to ground	
B1484	2nd Stage Driver airbag Circuit leakage to battery	
B1485	2nd Stage Passenger airbag Resistance too high (open)	
B1486	2nd Stage Passenger airbag Resistance too low (short)	
B1487	2nd Stage Passenger airbag Circuit leakage to ground	
B1488	2nd Stage Passenger airbag Circuit leakage to battery	
B1620	Internal fault - Replace ECU	
B1650	Crash recorded in 1st Stage only (Replace ACU)	
B1651	Crash recorded (Driver Side - Replace ACU)	
B1652	Crash recorded (Passenger Side - Replace ACU)	
B1670	Crash recorded in Full stage (Replace ACU)	
B2500	Warning lamp failure	

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).

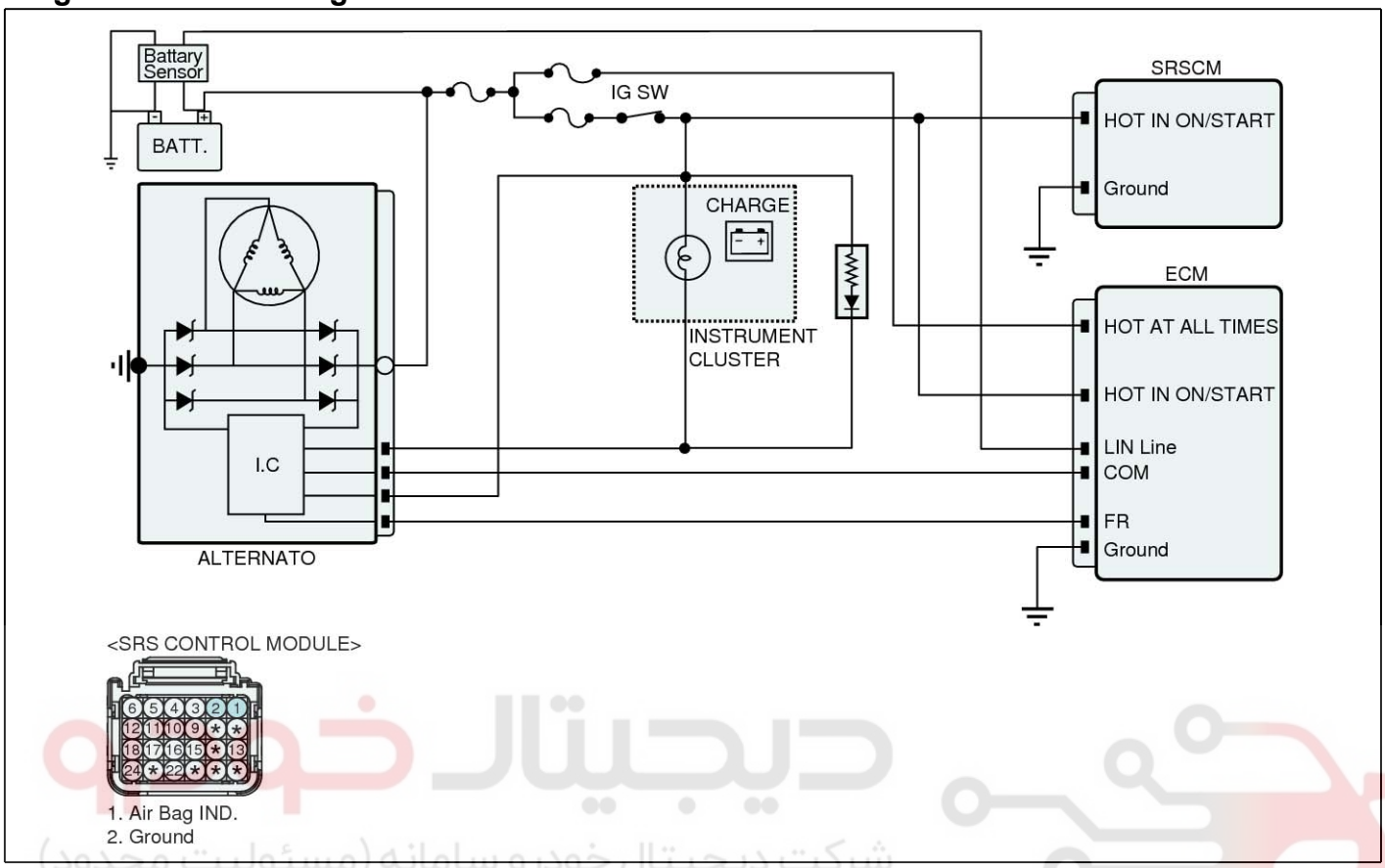
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Poor connection of connected part. • Open/Short circuit in power harness. • Open/Short circuit in ground harness. • Faulty charging system. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• Vbatt ≥ 16	
Diagnostic Time	Qualification	• More than 4 sec	
	De-Qualification	• More than 4 sec	

Specification

Test Condition	Voltage
Idle & WOT	Approx. 9 ≤ Vbatt ≤ 16

Diagnostic Circuit Diagram



SBHRT9600L

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.

SBHRT9500L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 "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. 9 ≤ Vbatt ≤ 16

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. 9 ≤ Vbatt ≤ 16

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 Ω 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.

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).

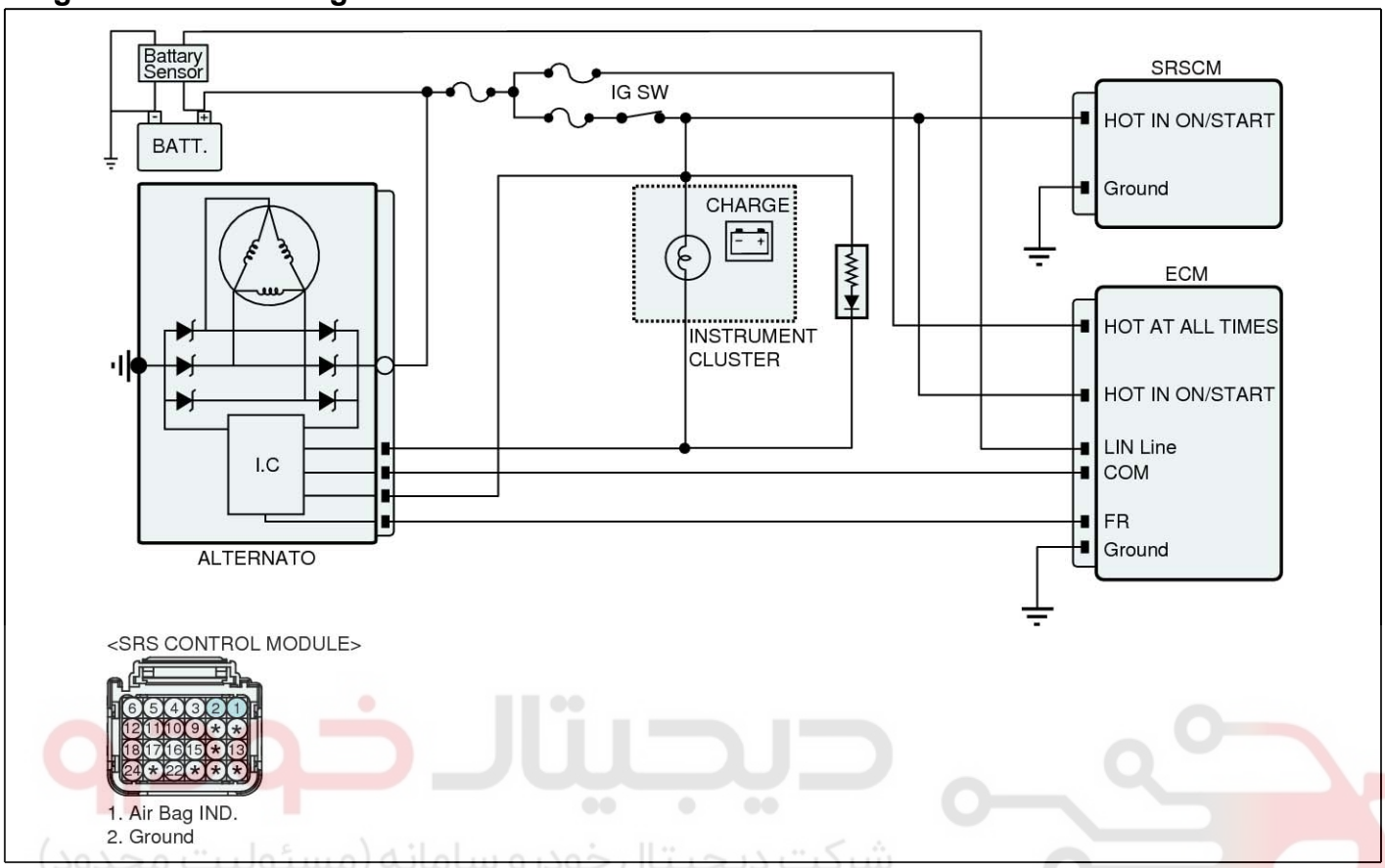
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Poor connection of connected part. • Open/Short circuit in power harness. • Open/Short circuit in ground harness. • Faulty charging system. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• Vbatt ≤ 9	
Diagnostic Time	Qualification	• More than 4 sec	
	De-Qualification	• More than 4 sec	

Specification

Test Condition	Voltage
Idle & WOT	Approx. 9 ≤ Vbatt ≤ 16

Diagnostic Circuit Diagram



SBHRT9600L

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.

SBHRT9501L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 "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. 9 ≤ Vbatt ≤ 16

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. 9 ≤ Vbatt ≤ 16

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 Ω 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.

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.

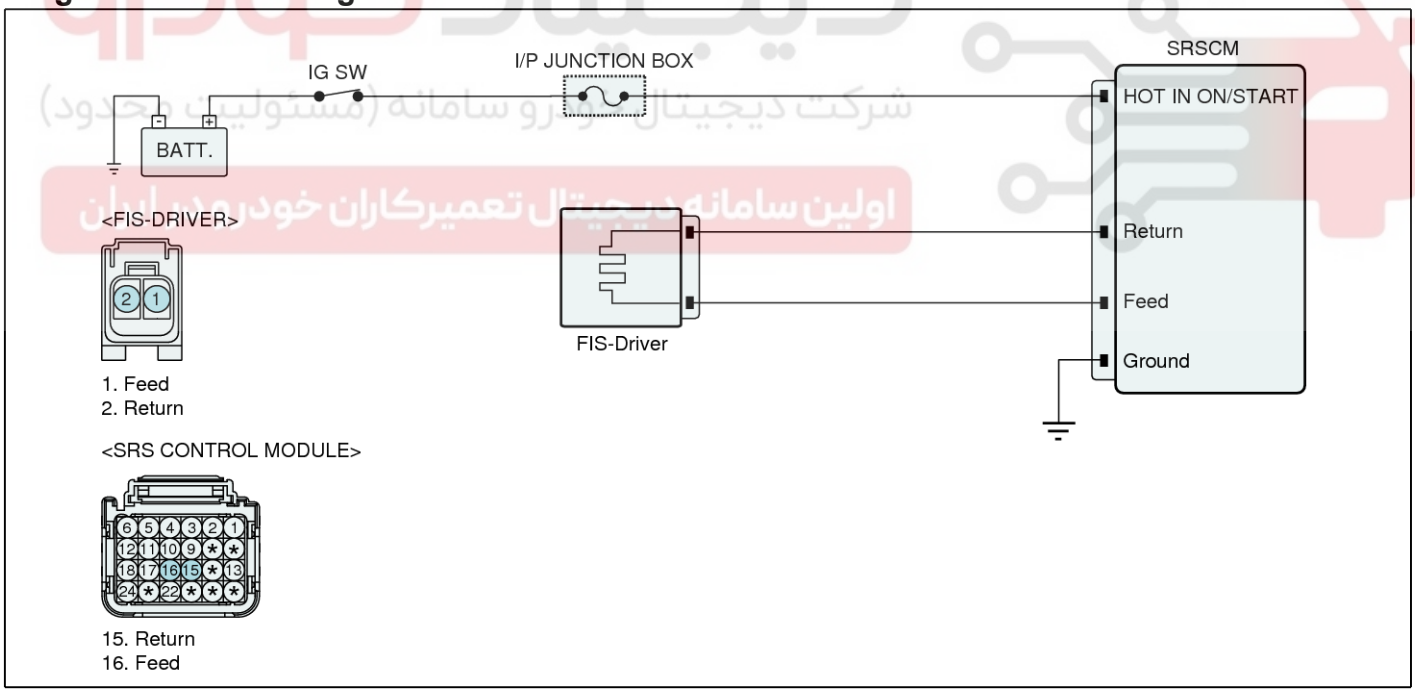
DTC Description

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

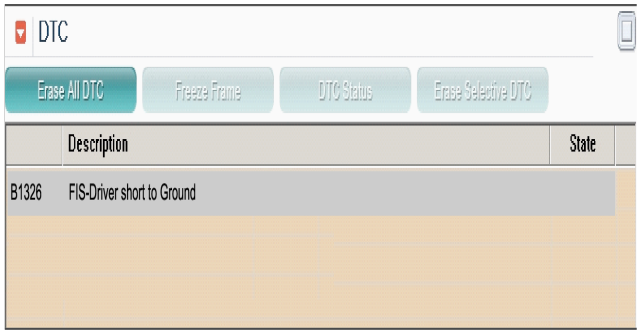
Diagnostic Circuit Diagram



SBHRT9601L

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.



SBHRT9502L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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. 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 ?

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

Refer to the DTC B1101 : Battery Voltage High.

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.

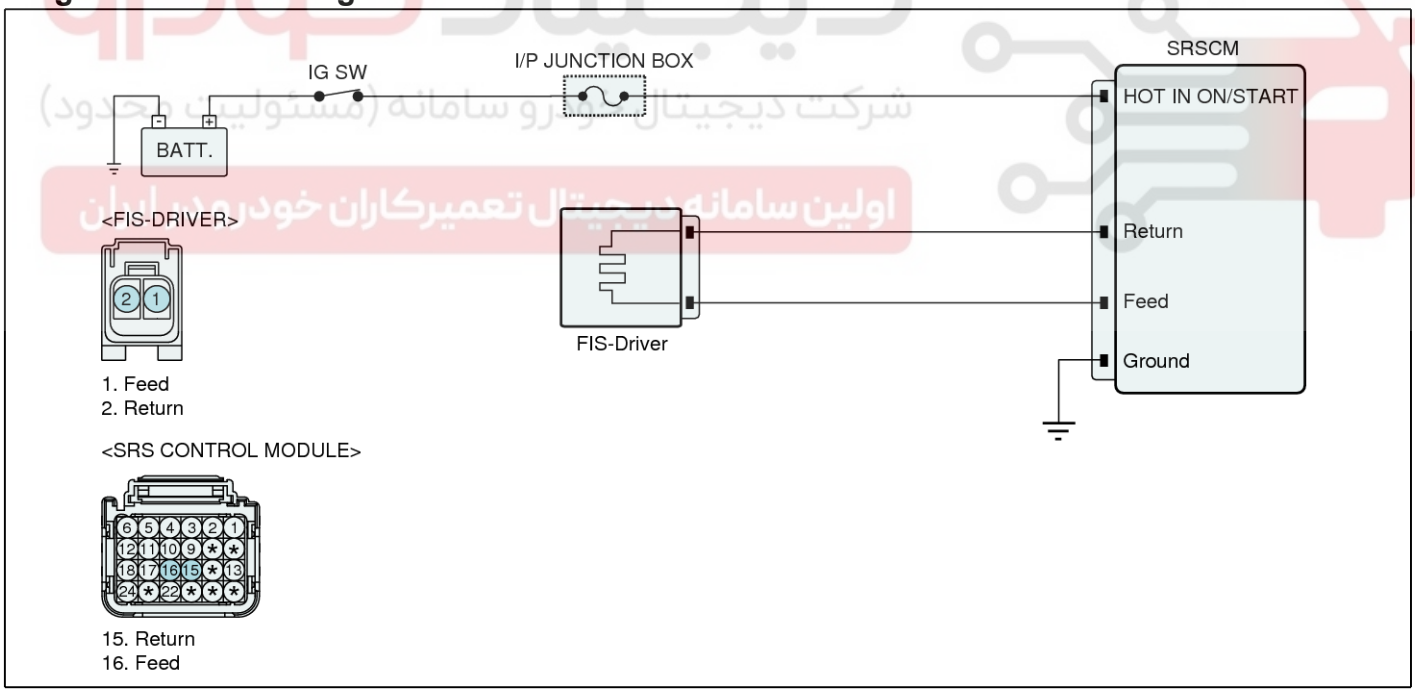
DTC Description

The SRSCM sets DTC B1327 if there is short to power harness in DFIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to power in harness. • Faulty DFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DFIS 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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

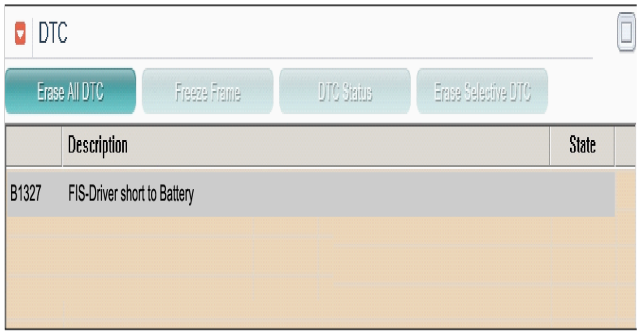
Diagnostic Circuit Diagram



SBHRT9601L

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.



SBHRT9503L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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. 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

Refer to the DTC B1101 : Battery Voltage High.

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.

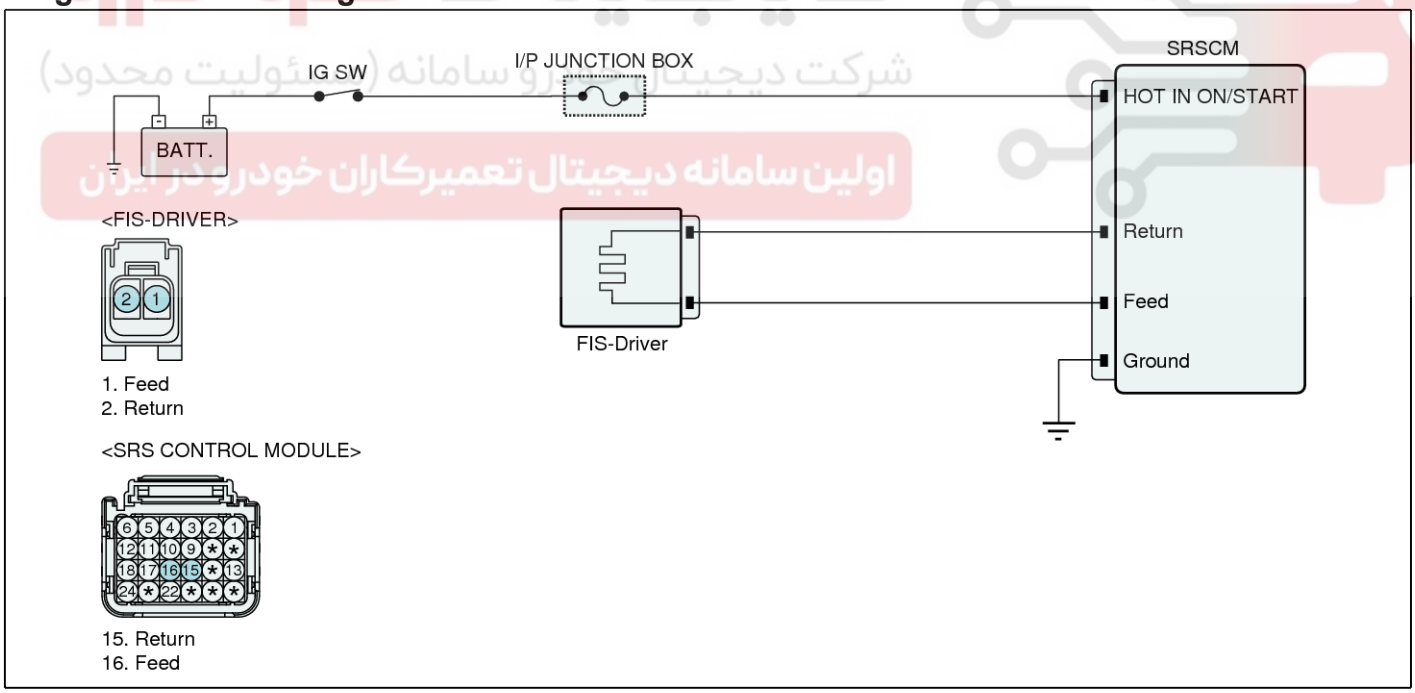
DTC Description

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	• Poor connection of connected part. • Faulty DFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DFIS send defect code • DFIS output is not expected value	
Diagnostic Time	Qualification	• Ini(Start Up):100 ms (500μs x 20) • Steady:1s (10ms x 100)	
	De-Qualification	• Ini(Start Up):IGN off -> on • Steady:IGN off -> on	

Diagnostic Circuit Diagram



SBHRT9601L

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.

SBHRT9504L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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

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.

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.

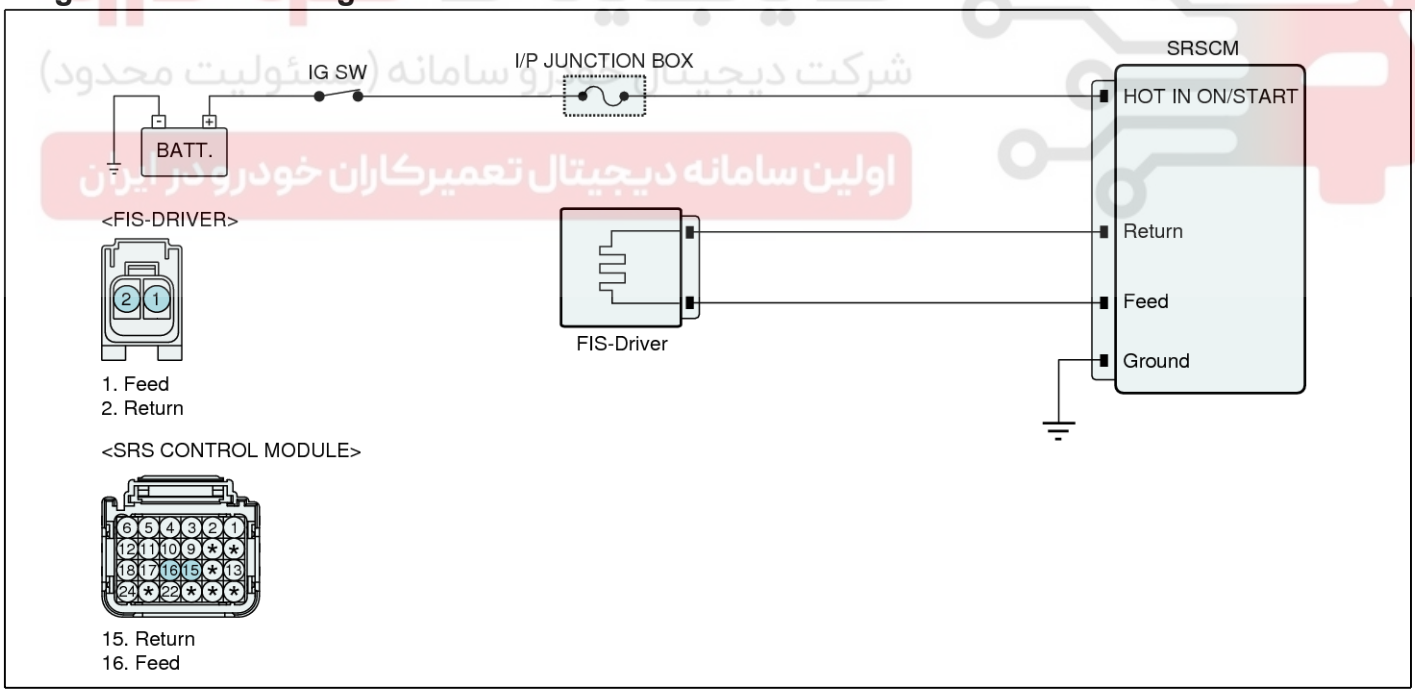
DTC Description

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	• Poor connection of connected part. • Faulty DFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DFIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

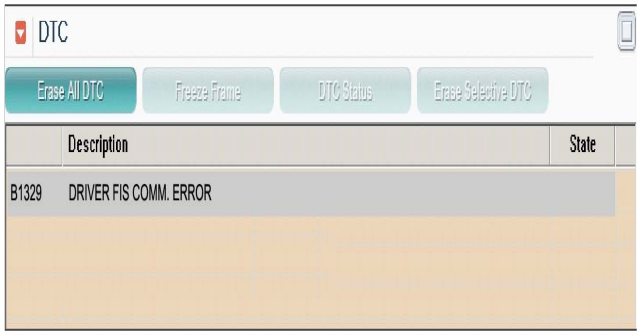
Diagnostic Circuit Diagram



SBHRT9601L

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.



SBHRT9505L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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

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.

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.

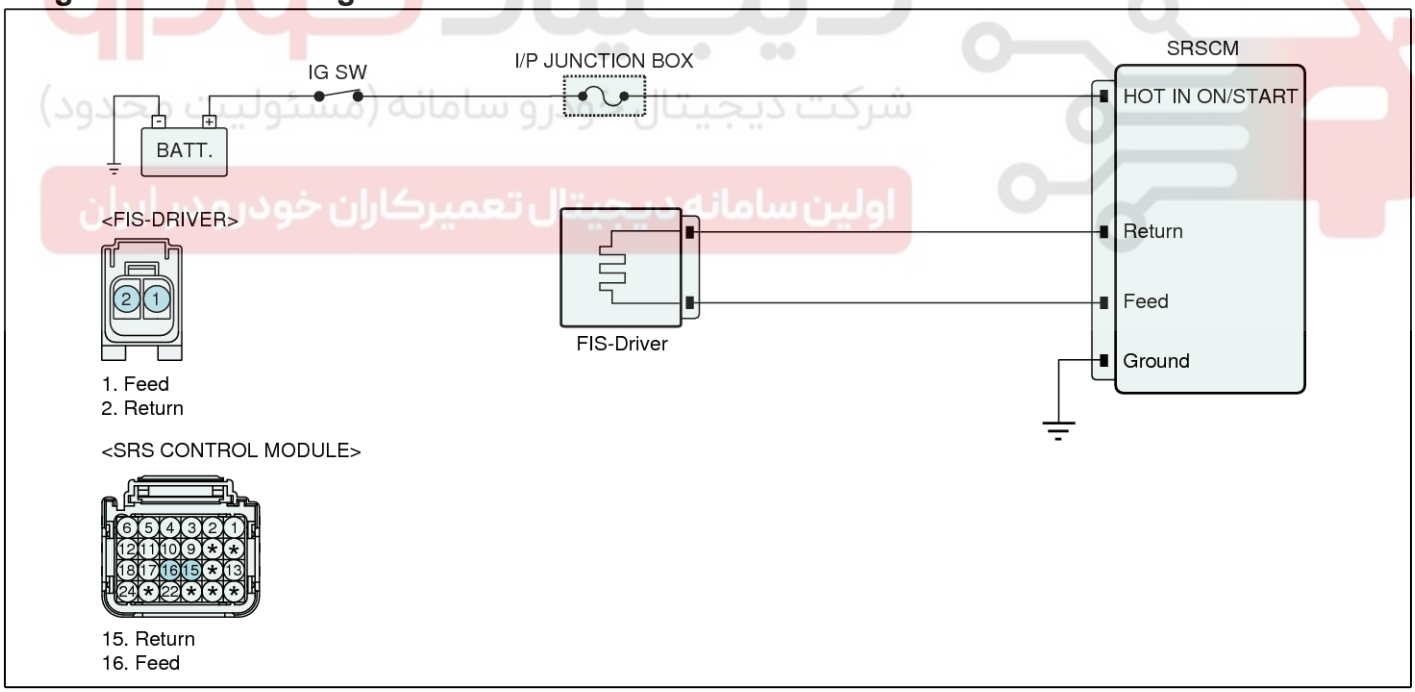
DTC Description

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

DTC Detecting Condition

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

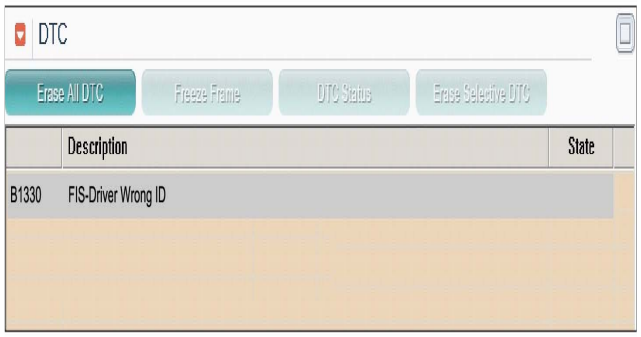
Diagnostic Circuit Diagram



SBHRT9601L

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.



SBHRT9506L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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

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.

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.

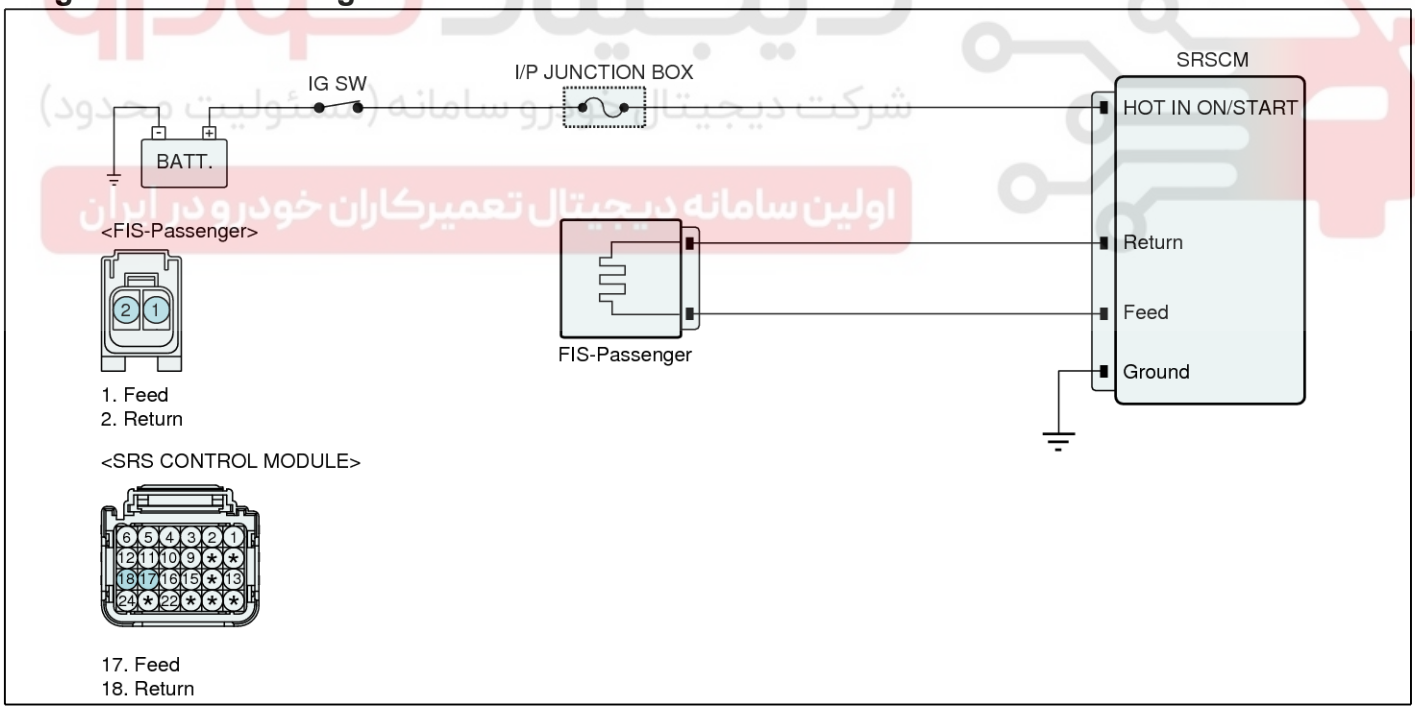
DTC Description

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

Diagnostic Circuit Diagram



SBHRT9602L

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.

SBHRT9507L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 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

Refer to the DTC B1101 : Battery Voltage High.

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	• Short to power in harness. • Faulty PFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

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.

SBHRT9508L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 PFIS connector and SRSCM main harness connector.
4. 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

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.

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.

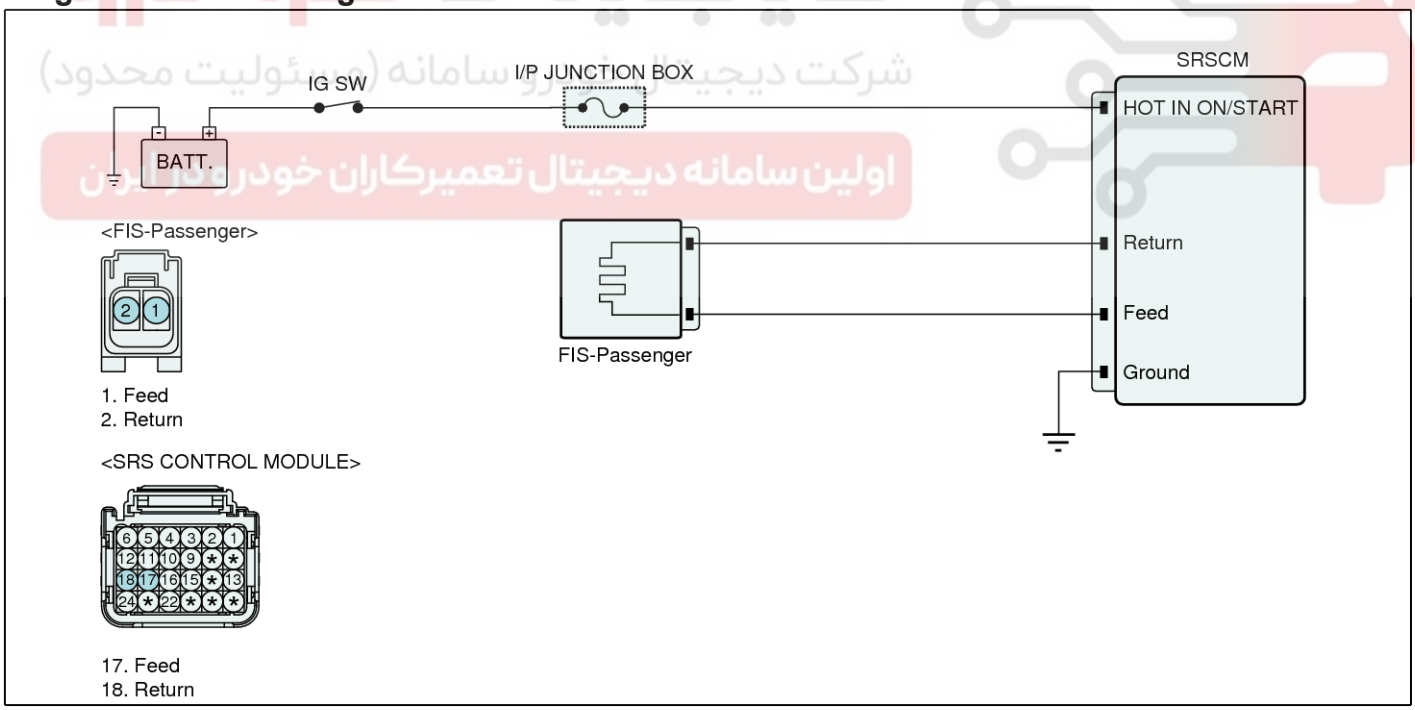
DTC Description

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	• Poor connection of connected part. • Faulty PFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PFIS send defect code • PFIS output is not expected value	
Diagnostic Time	Qualification	• Ini(Start Up):100 ms (500μs x 20) • Steady:1s (10ms x 100)	
	De-Qualification	• Ini(Start Up):IGN off -> on • Steady:IGN off -> on	

Diagnostic Circuit Diagram



SBHRT9602L

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.

SBHRT9509L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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

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.

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.

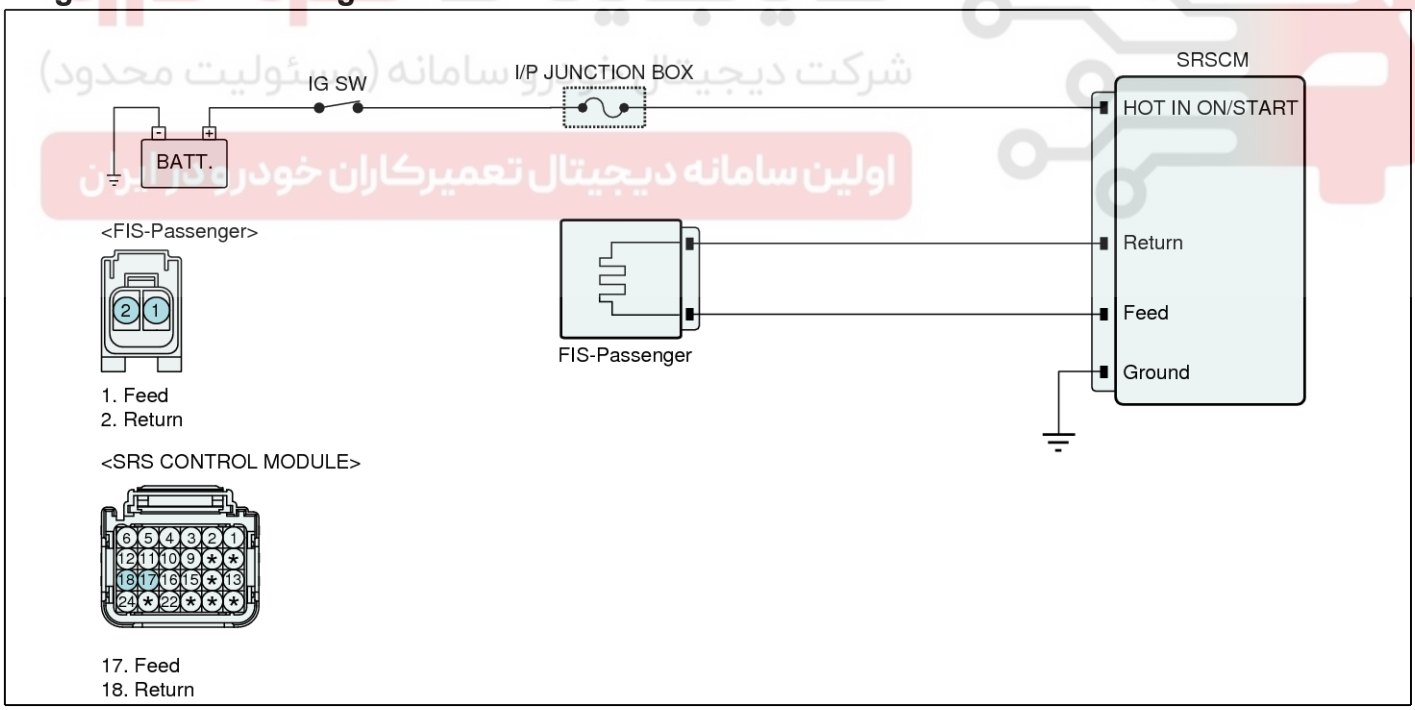
DTC Description

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	• Poor connection of connected part. • Faulty PFIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PFIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

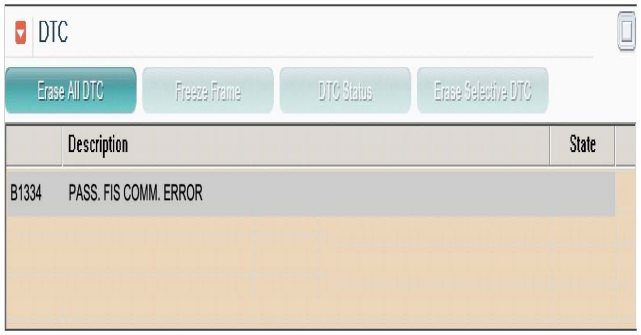
Diagnostic Circuit Diagram



SBHRT9602L

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.



SBHRT9510L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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

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.

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 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

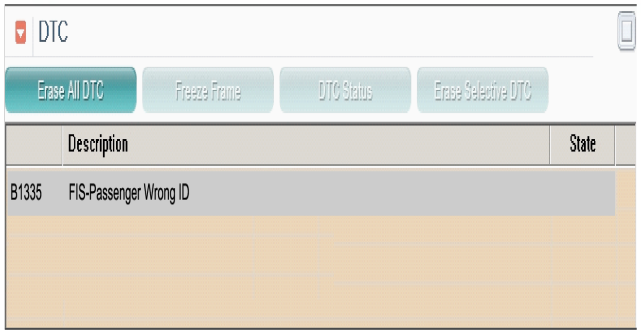
The SRSCM sets DTC B1335 if PFIS with wrong ID is detected.

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 Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

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.



SBHRT9511L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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

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.

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.

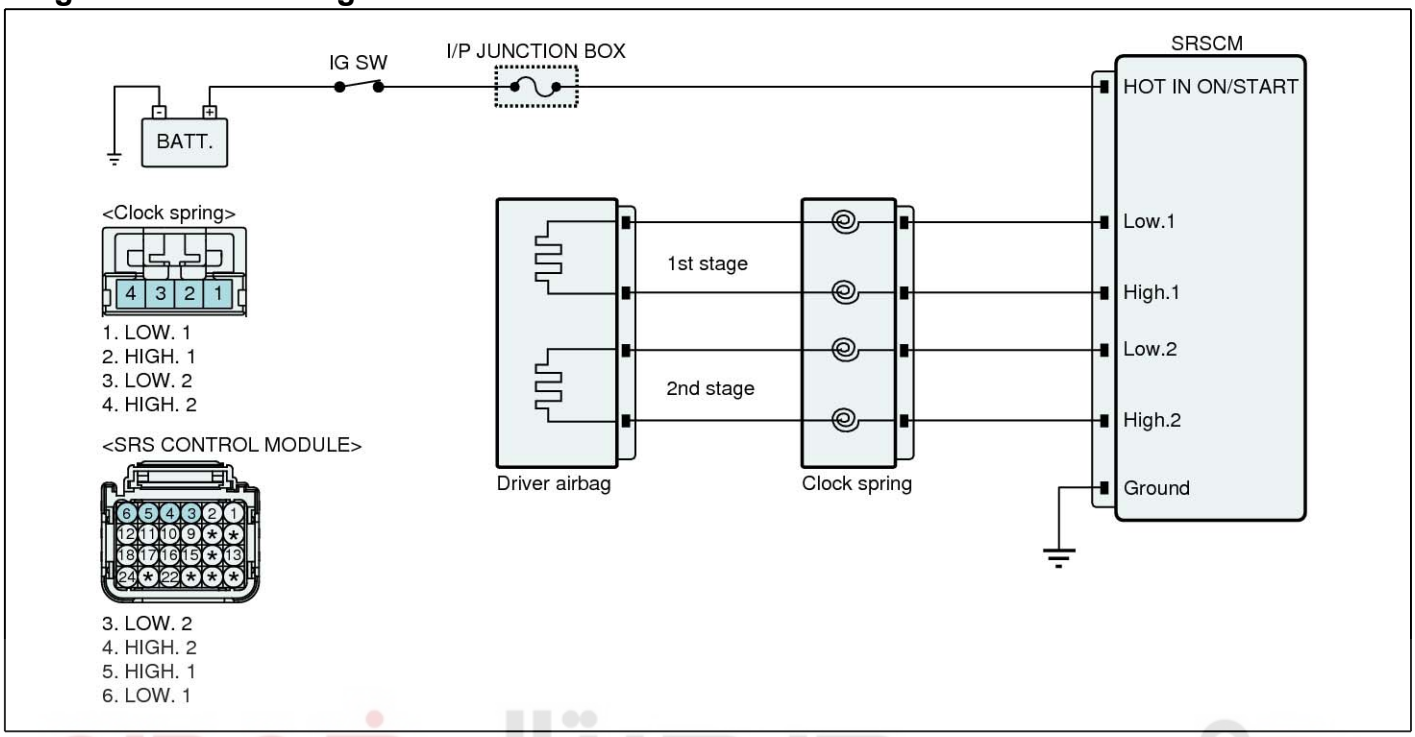
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 1st stage Squib resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

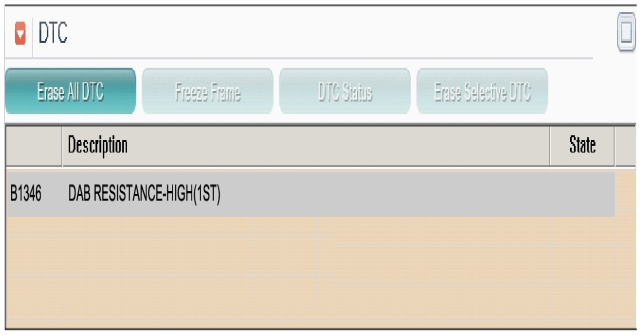
Diagnostic Circuit Diagram



SBHRT9603L

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.



SBHRT9512L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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. Measure resistance between terminal "Low.1" and "High.1" of the Clock Spring 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 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 Ω 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

Refer to the DTC B1101 : Battery Voltage High.

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(1.0Ω)*In this case, SRSCM checks if there's any fault in circuit by sending current for a while.

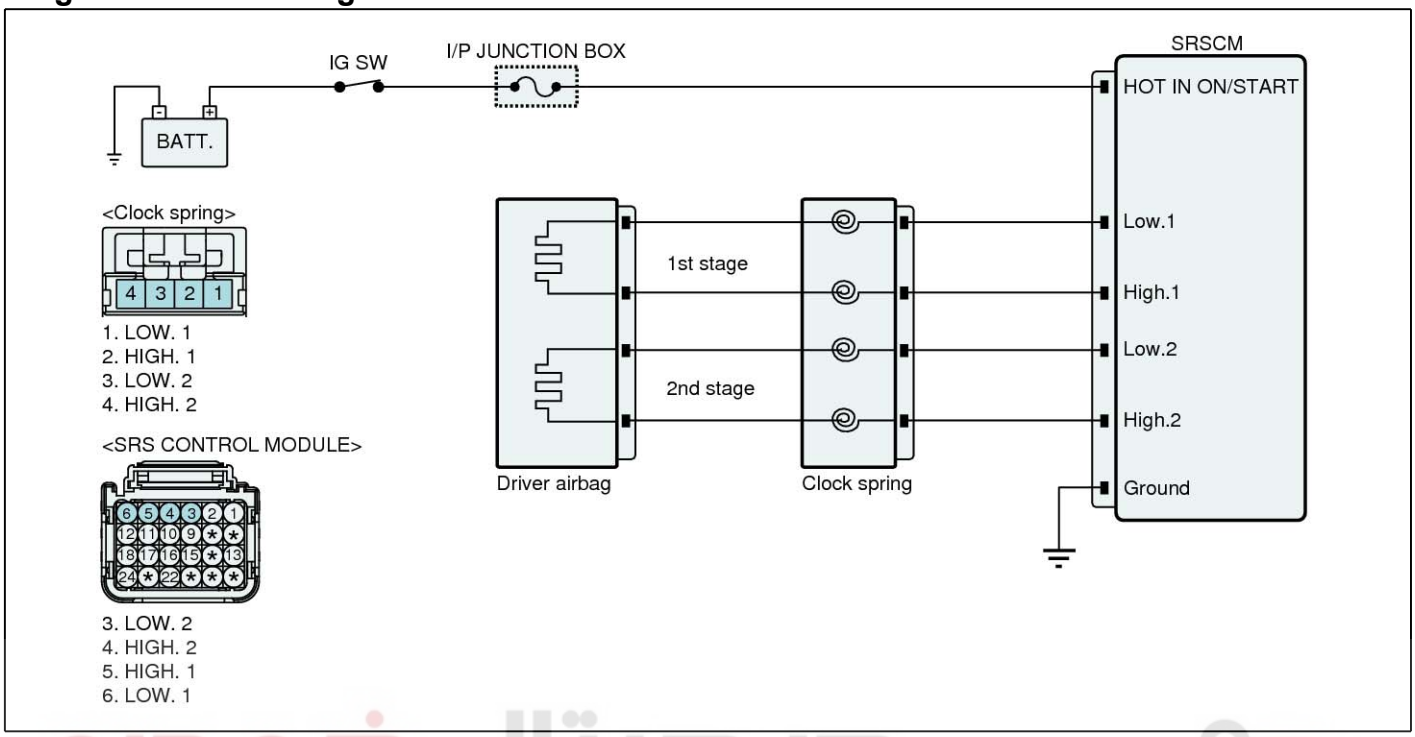
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 1st stage Squib resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

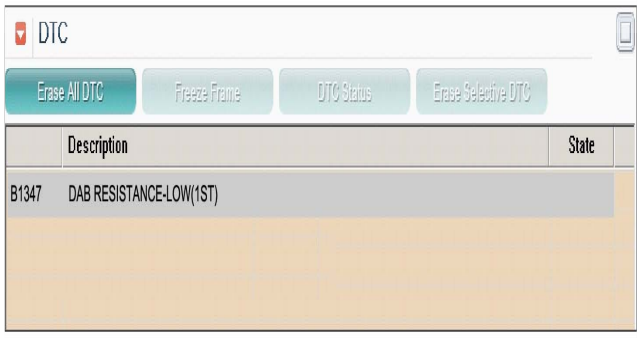
Diagnostic Circuit Diagram



SBHRT9603L

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.



SBHRT9513L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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. Measure resistance between terminal "Low.1" and "High.1" of the Clock Spring 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 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 Ω 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

Refer to the DTC B1101 : Battery Voltage High.

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

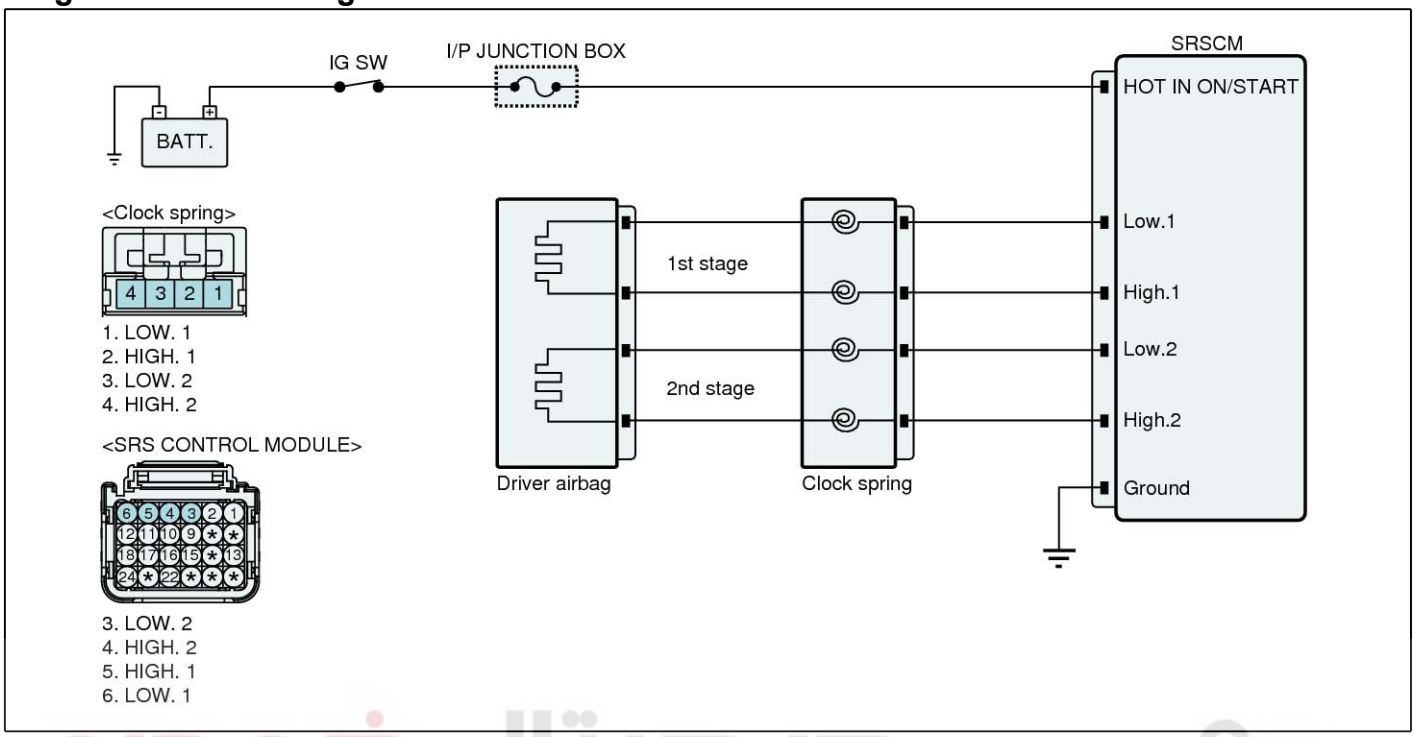
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Voltage	• Short to ground in DAB harness. • Poor connection of connected part. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 1st 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

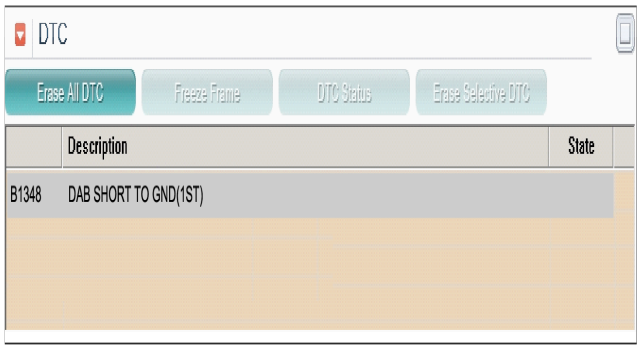
Diagnostic Circuit Diagram



SBHRT9603L

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.



SBHRT9514L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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. 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.

WARNING
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

Refer to the DTC B1101 : Battery Voltage High.

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.

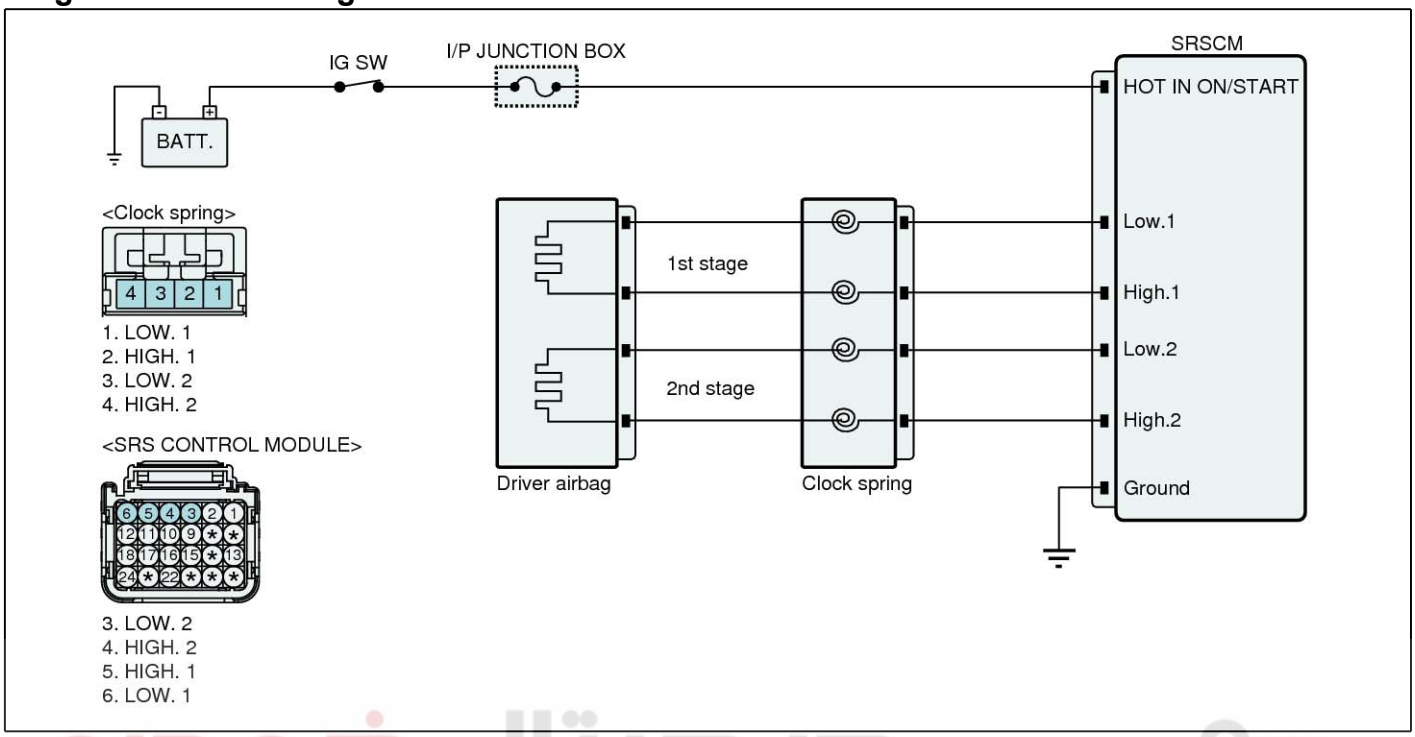
DTC Detecting Condition

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

Specification

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

Diagnostic Circuit Diagram



SBHRT9603L

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.

SBHRT9515L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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.

WARNING
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

Refer to the DTC B1101 : Battery Voltage High.

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

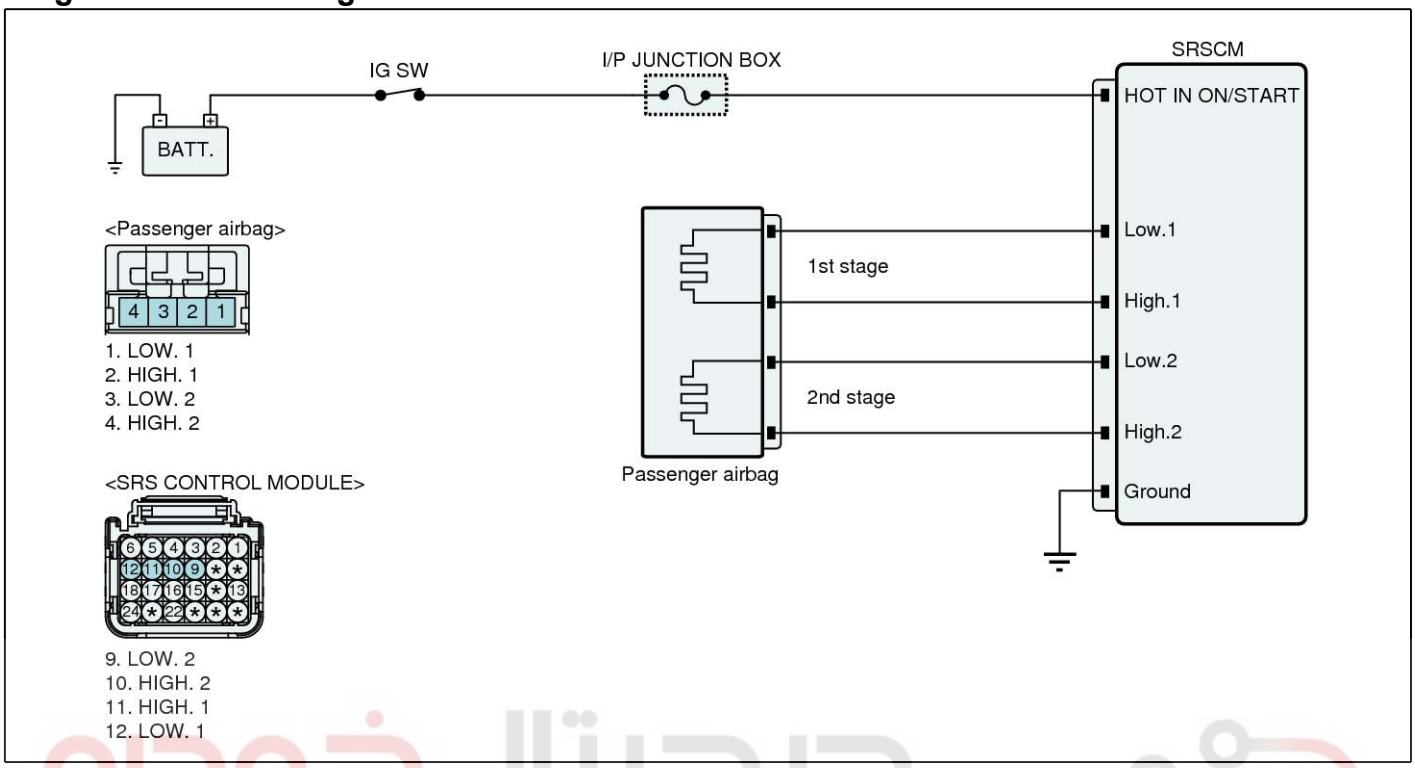
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 1st stage Squib resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9604L

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.

SBHRT9516L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

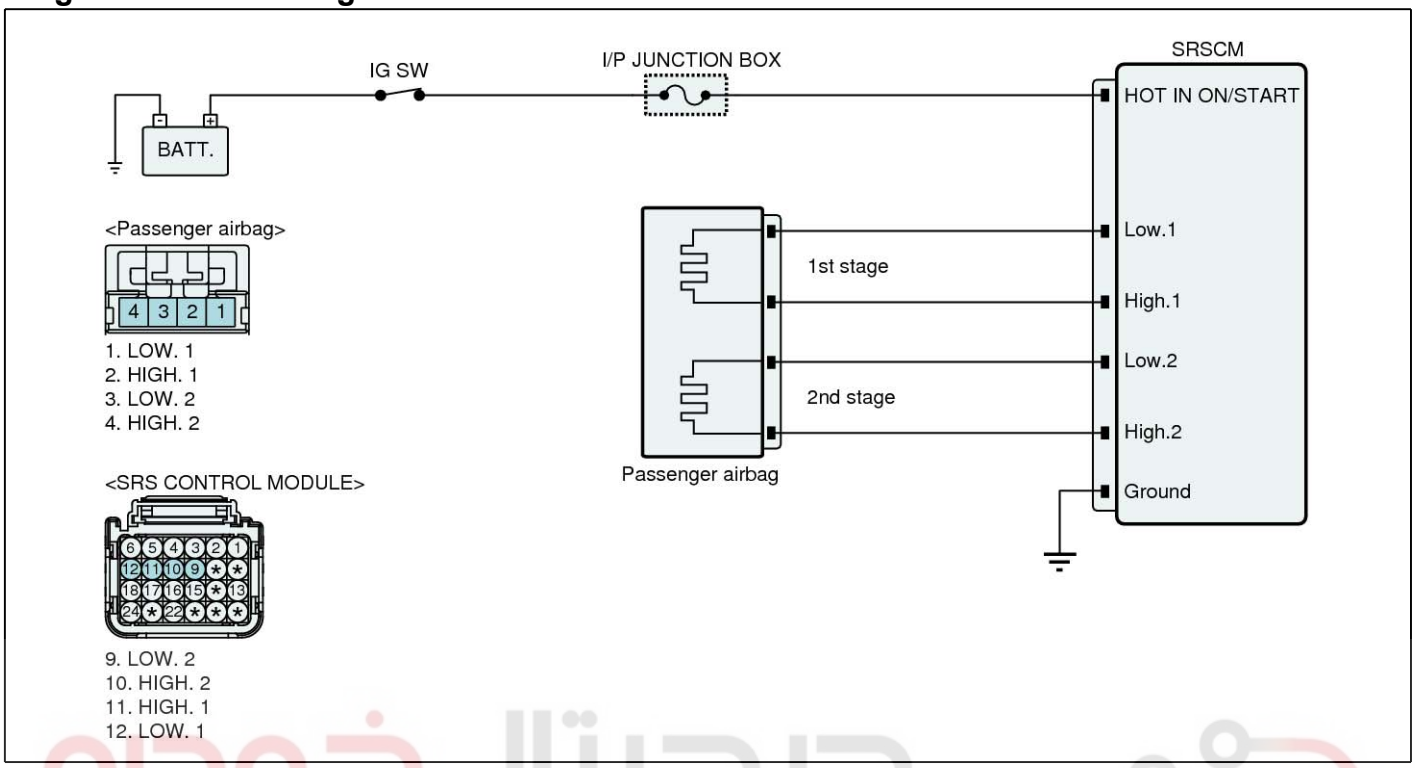
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 1st stage Squib resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9604L

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.

SBHRT9517L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

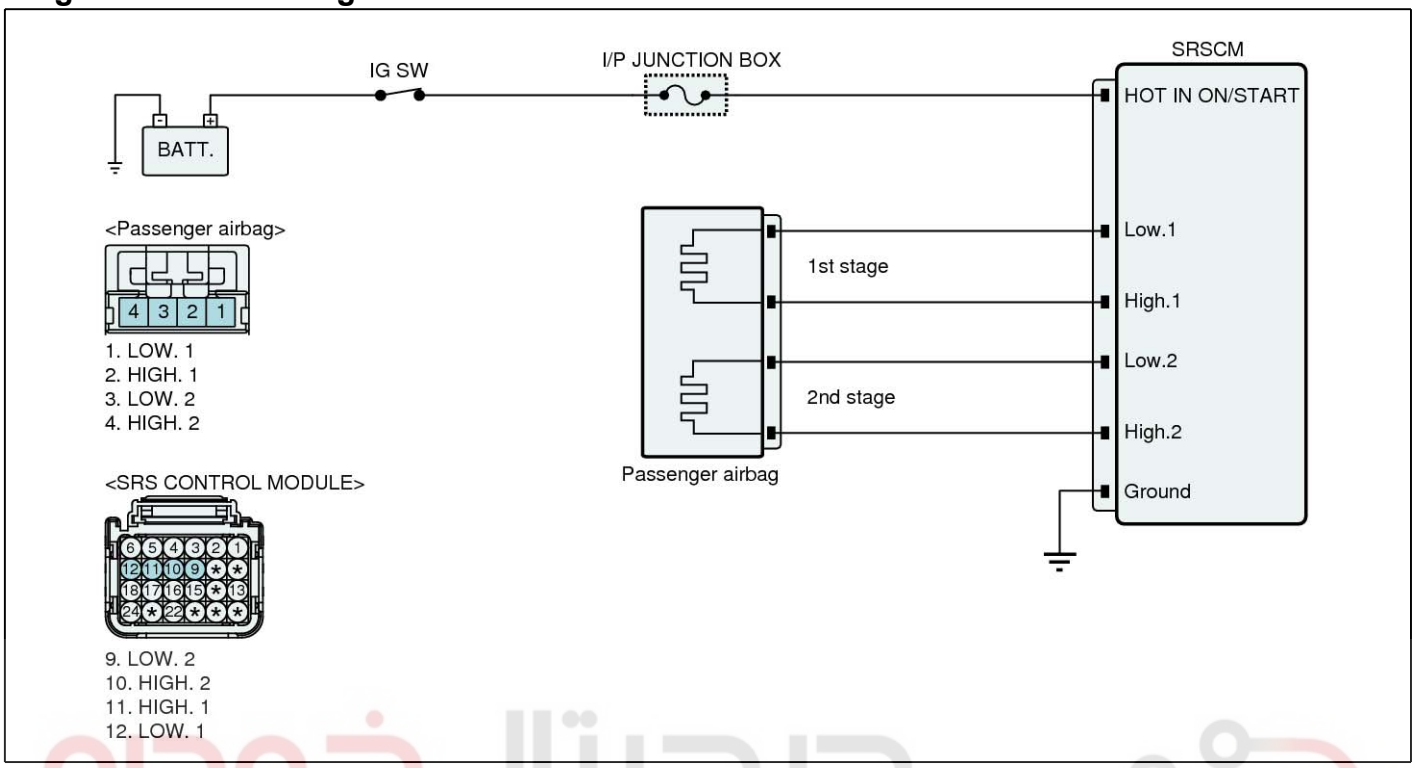
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PAB harness. • Poor connection of connected part. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 1st 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

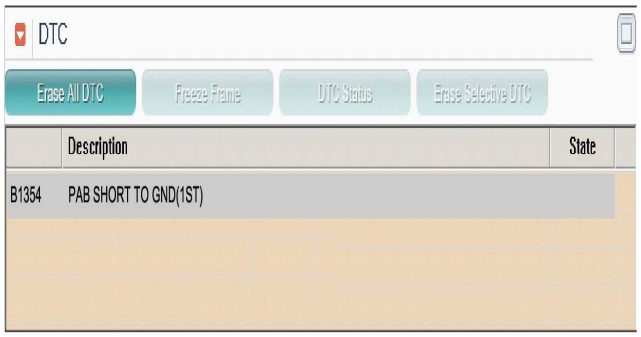
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9518L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

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.

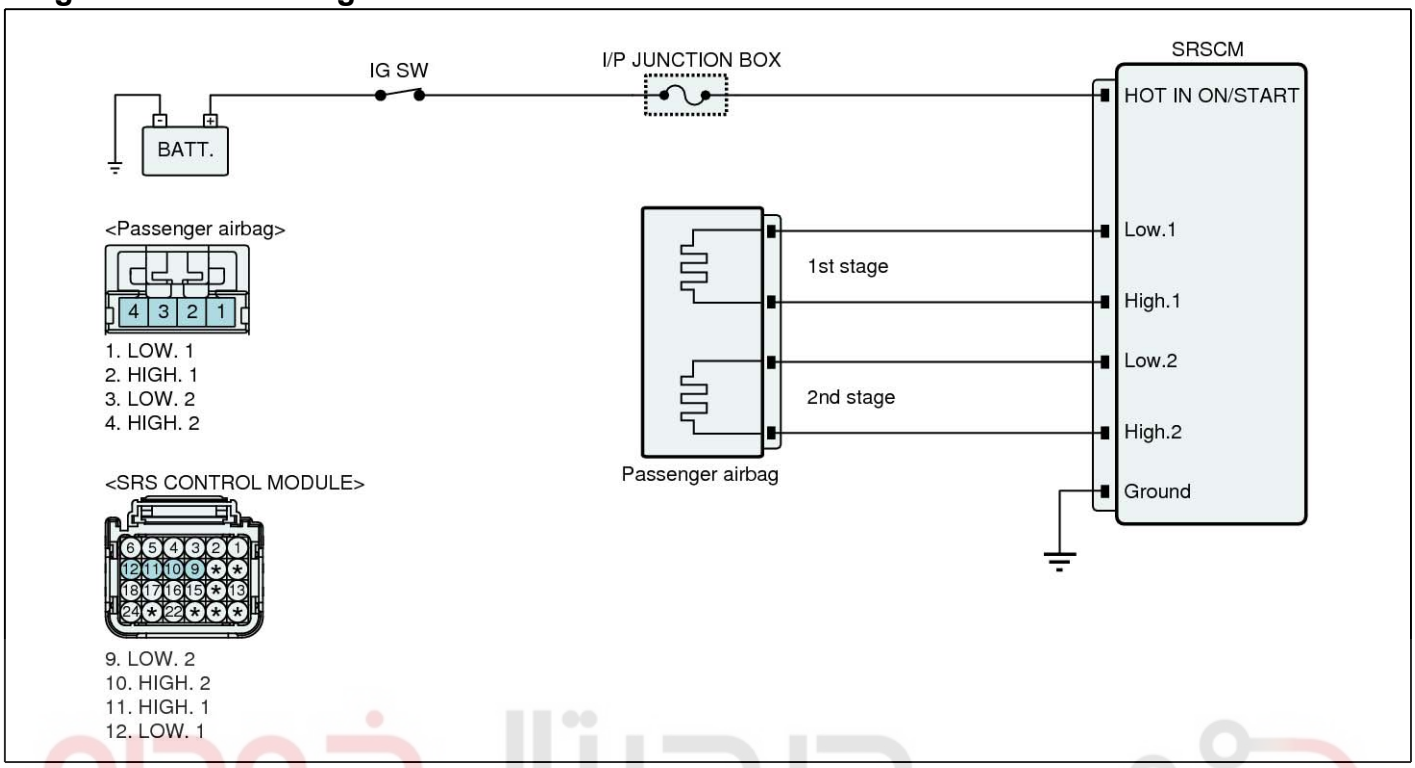
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PAB harness. • Poor connection of connected part. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 1st stage Squib line voltage is > 2.9V	
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

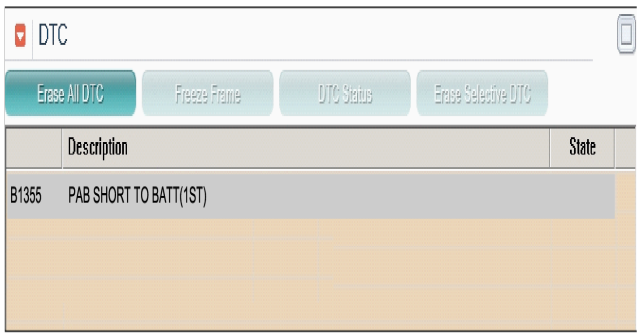
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9519L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or 2Ω 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 ch

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

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.

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.

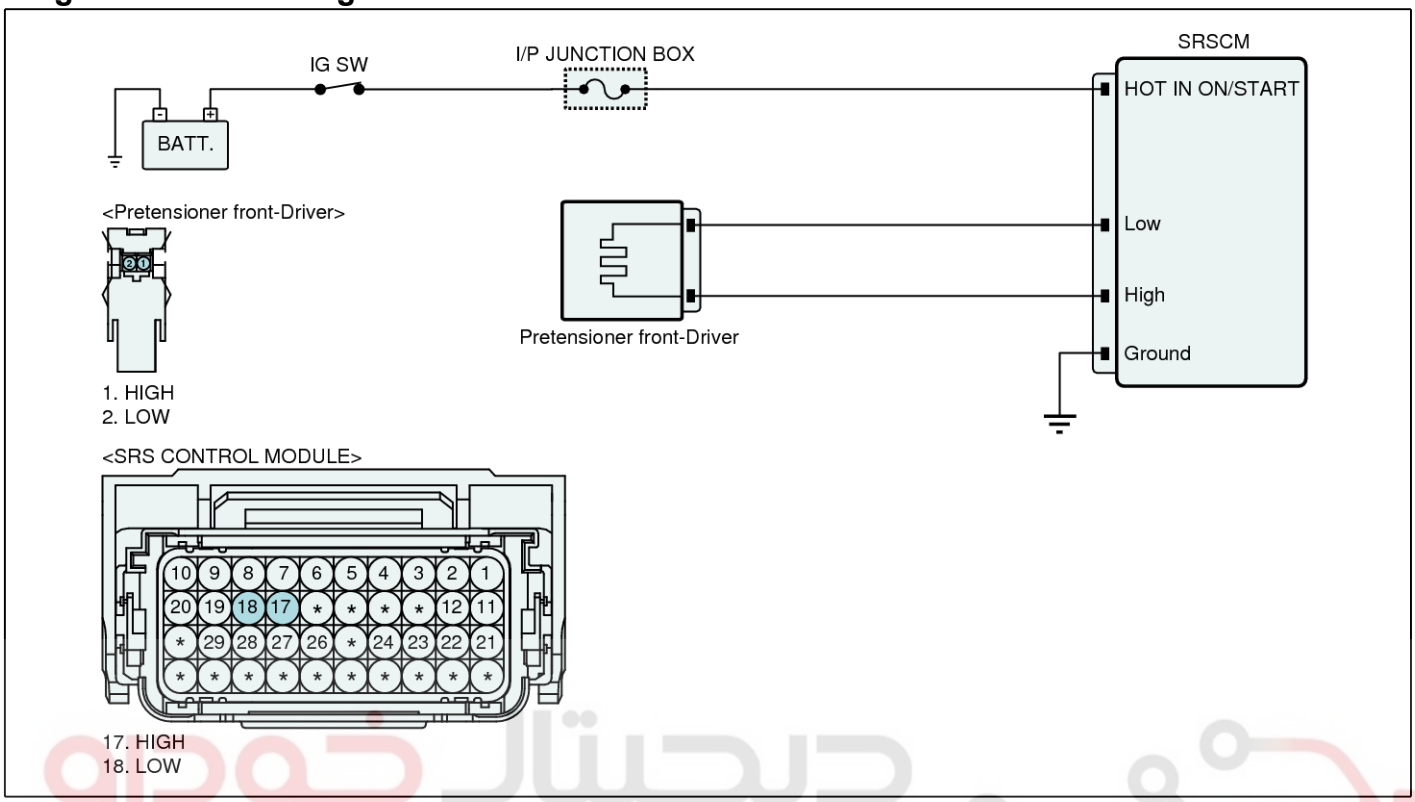
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DBPT resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9605L

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.

SBHRT9520L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

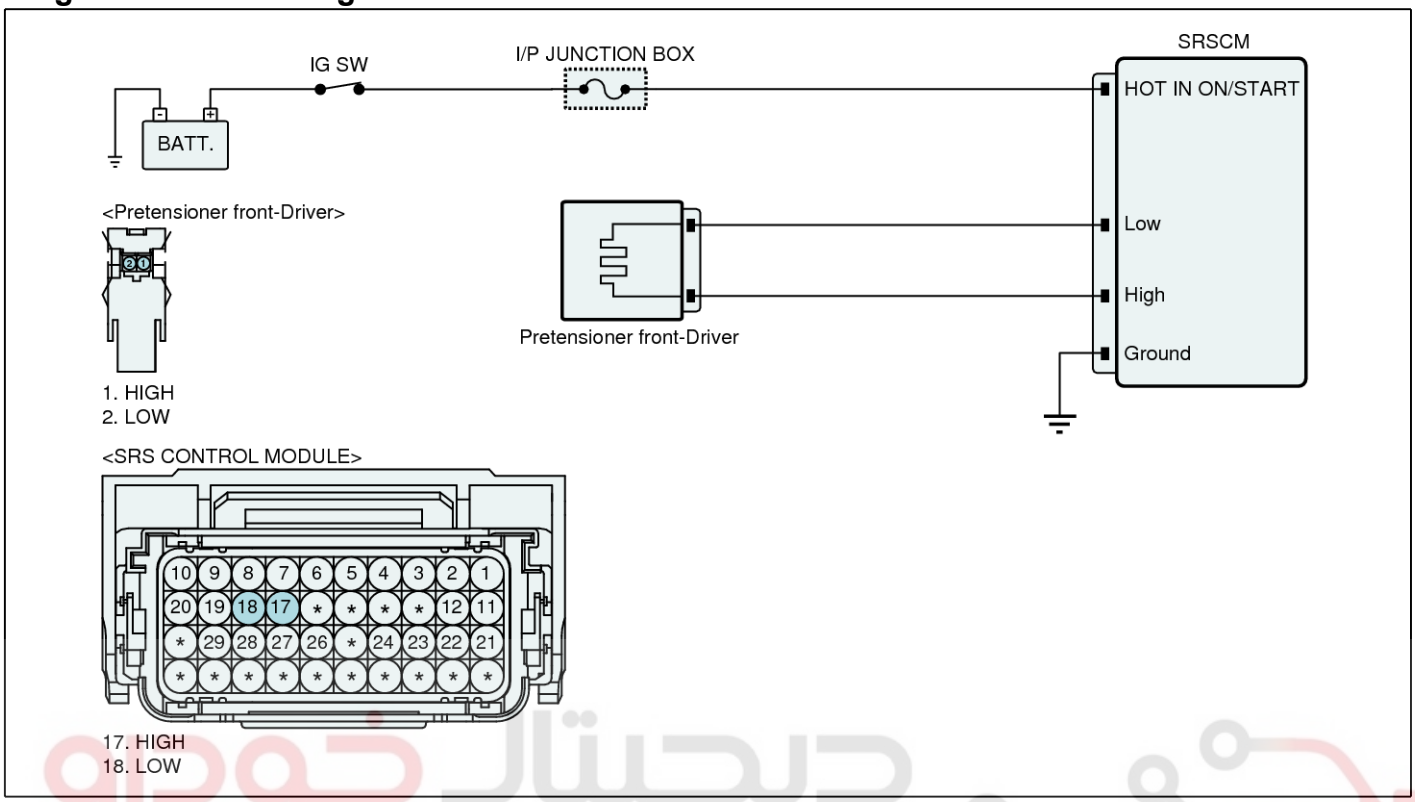
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DBPT resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

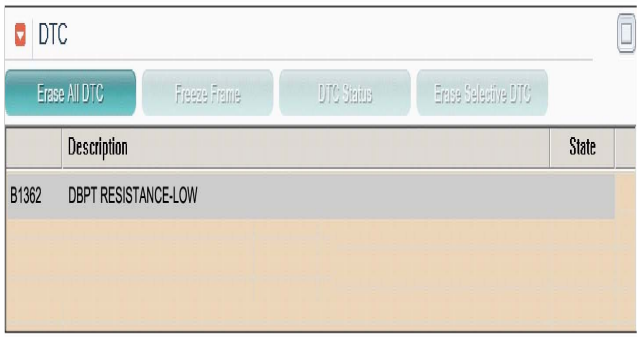
Diagnostic Circuit Diagram



SBHRT9605L

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.



SBHRT9521L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

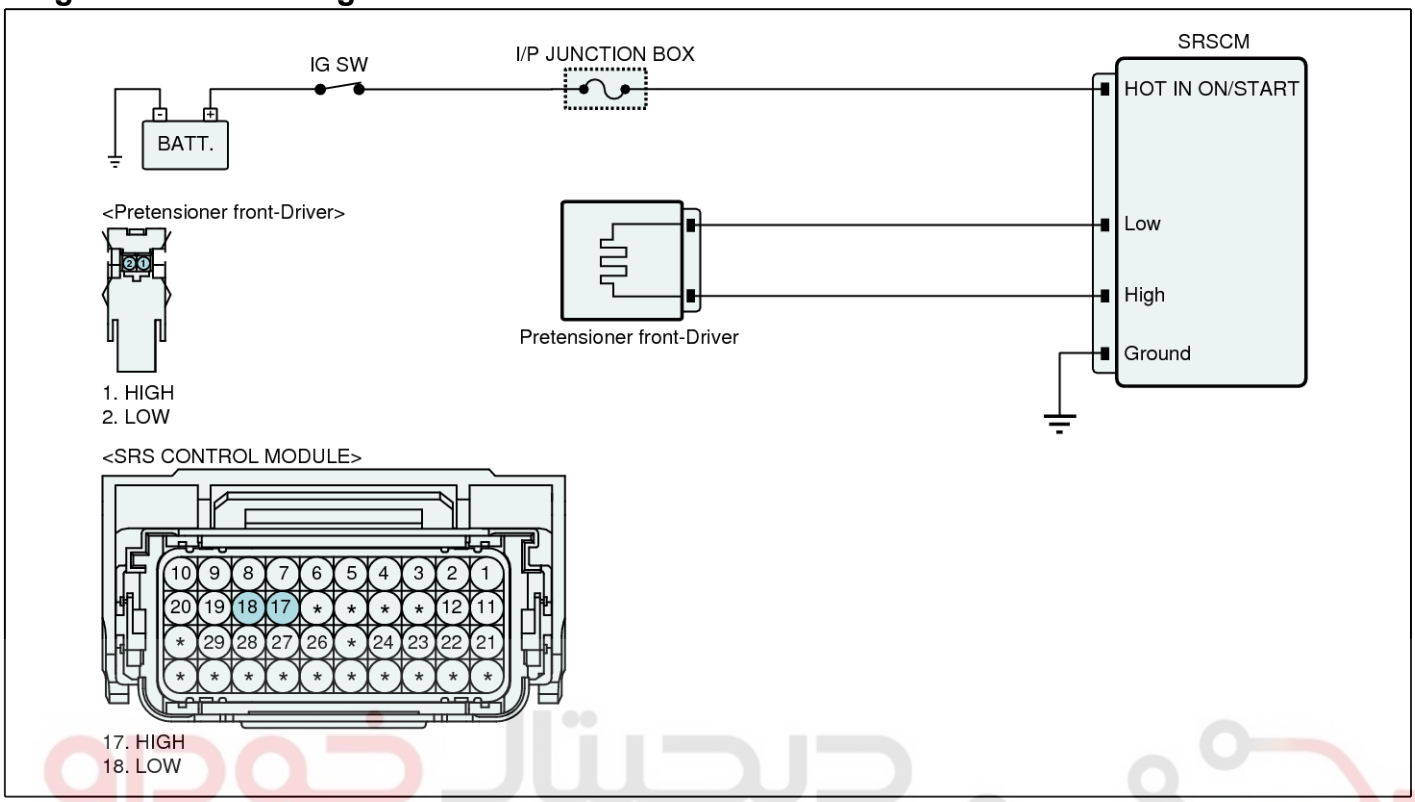
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in DBPT harness. • Poor connection of connected part. • Faulty DBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DBPT 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

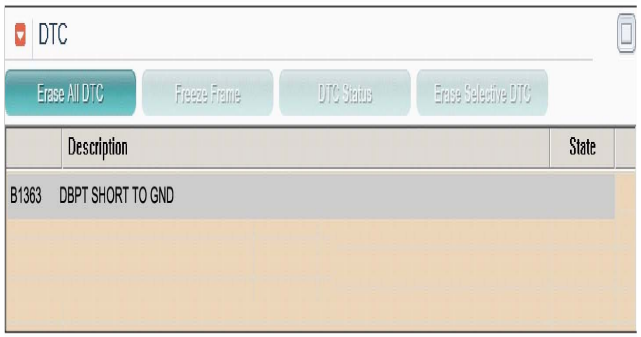
Diagnostic Circuit Diagram



SBHRT9605L

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.



SBHRT9522L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good DBPT or 2Ω 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 ▶ RGo 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

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.

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.

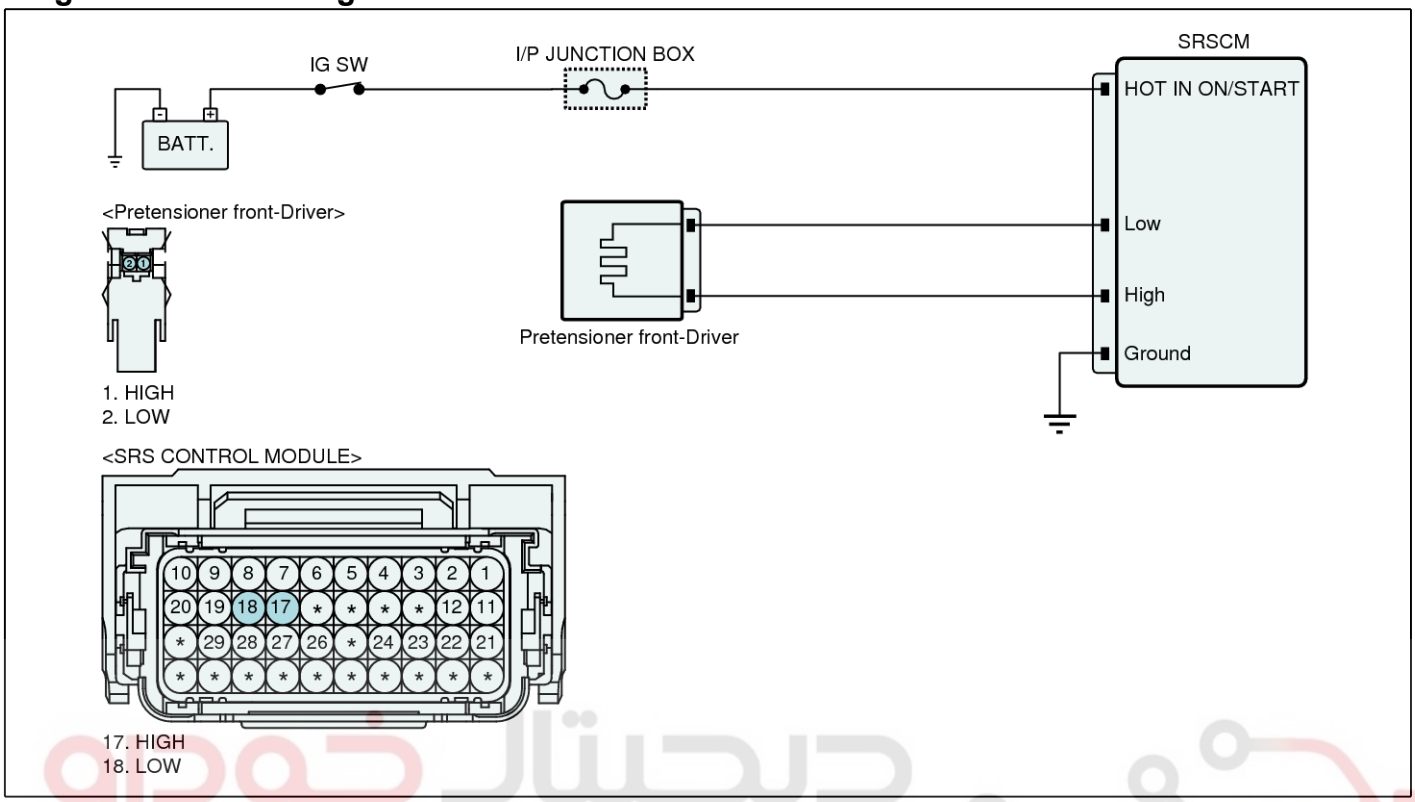
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in DBPT harness. • Poor connection of connected part. • Faulty DBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DBPT Squib line voltage is > 2.9V	
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

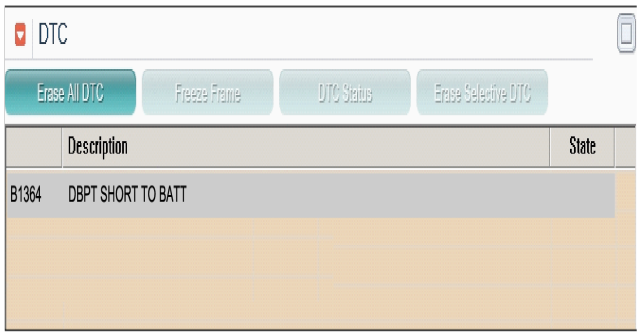
Diagnostic Circuit Diagram



SBHRT9605L

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.



SBHRT9523L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

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.

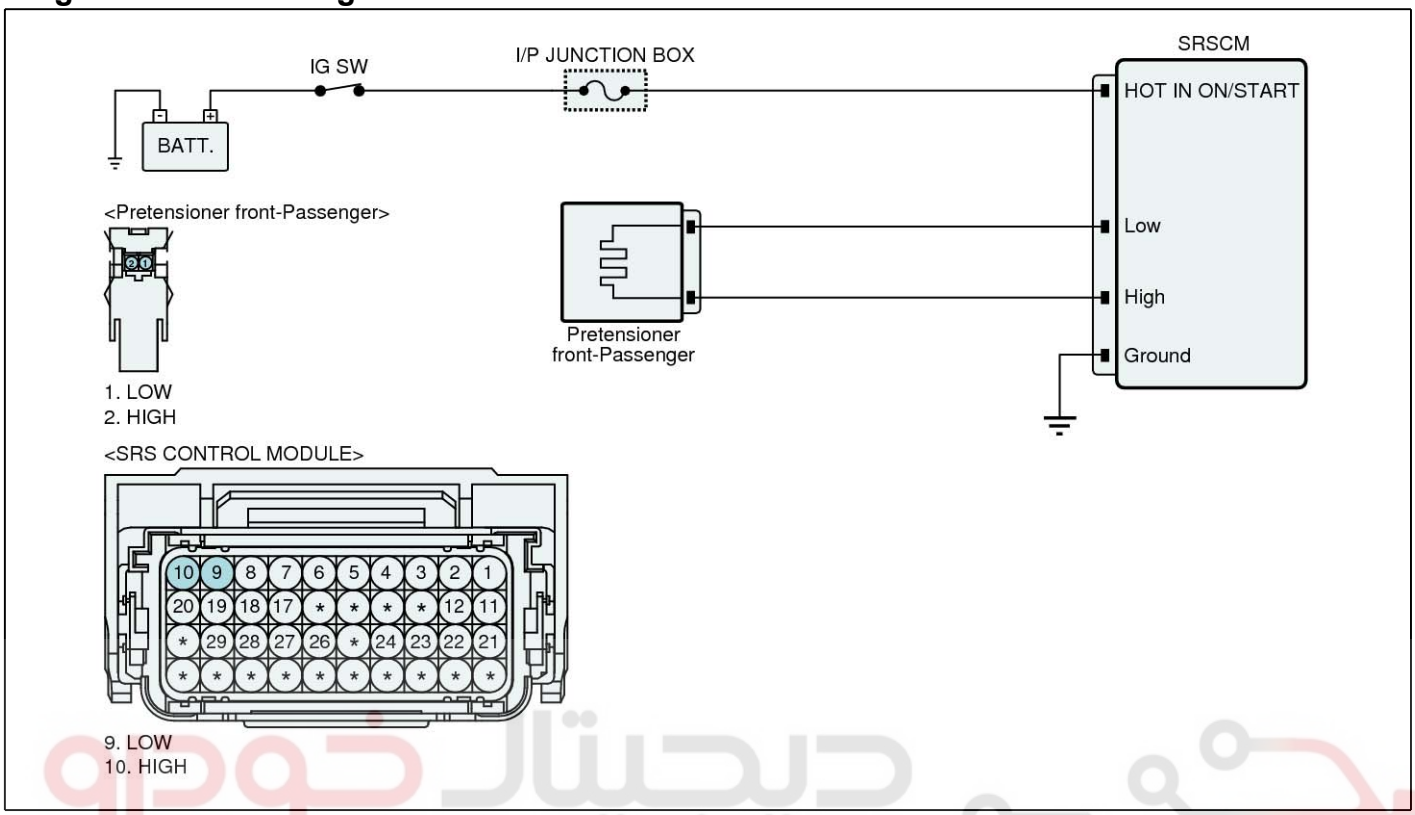
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PBPT resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

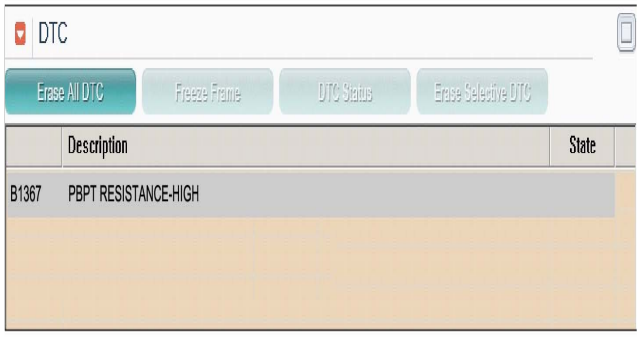
Diagnostic Circuit Diagram



SBHRT9606L

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.



SBHRT9524L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good PBPT or 2Ω 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. Measure resistance between terminal "Low" and "High" of the PBPT harness connector.

Specification : approx. 1 Ω 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.

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.

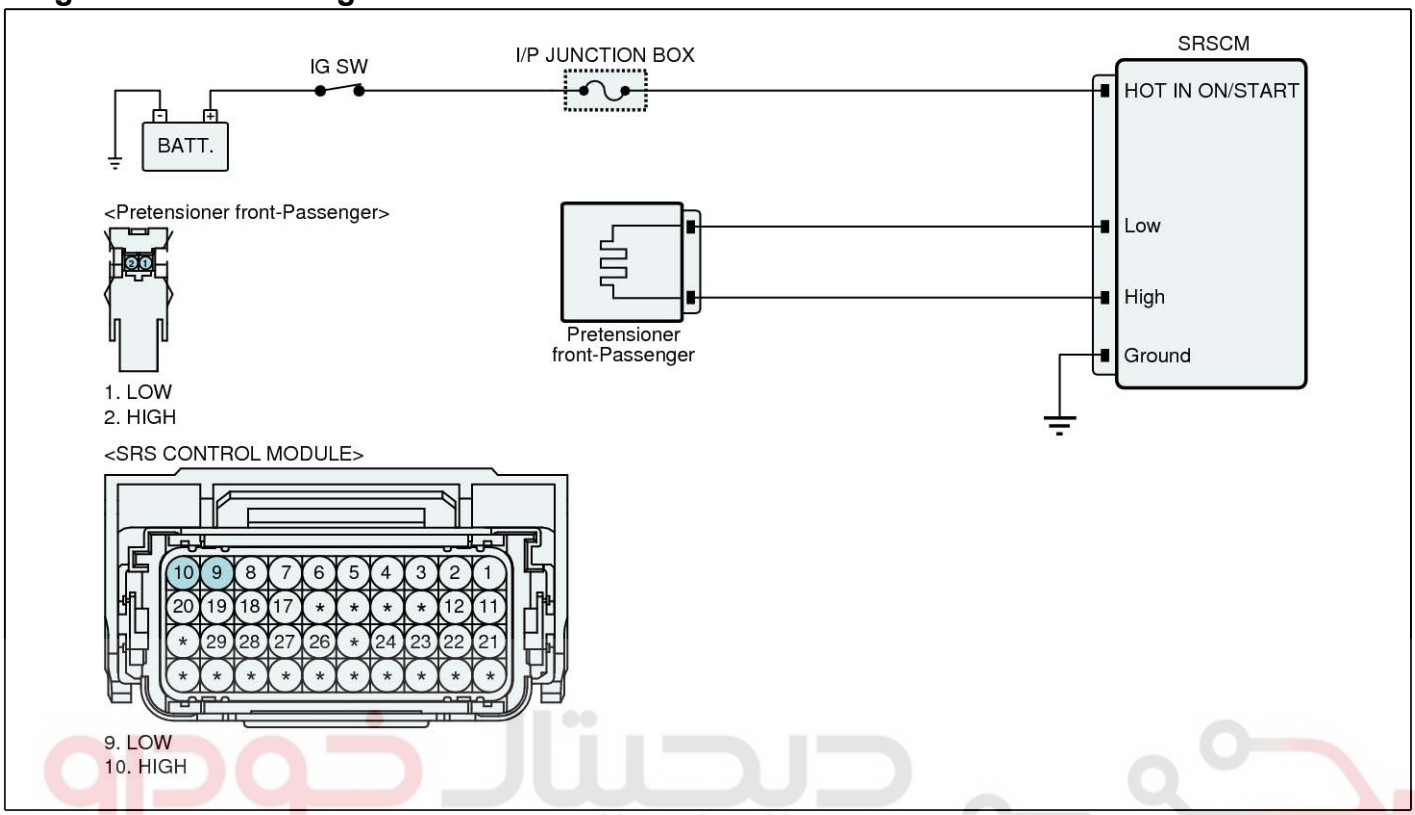
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PBPT resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9606L

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.

SBHRT9525L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

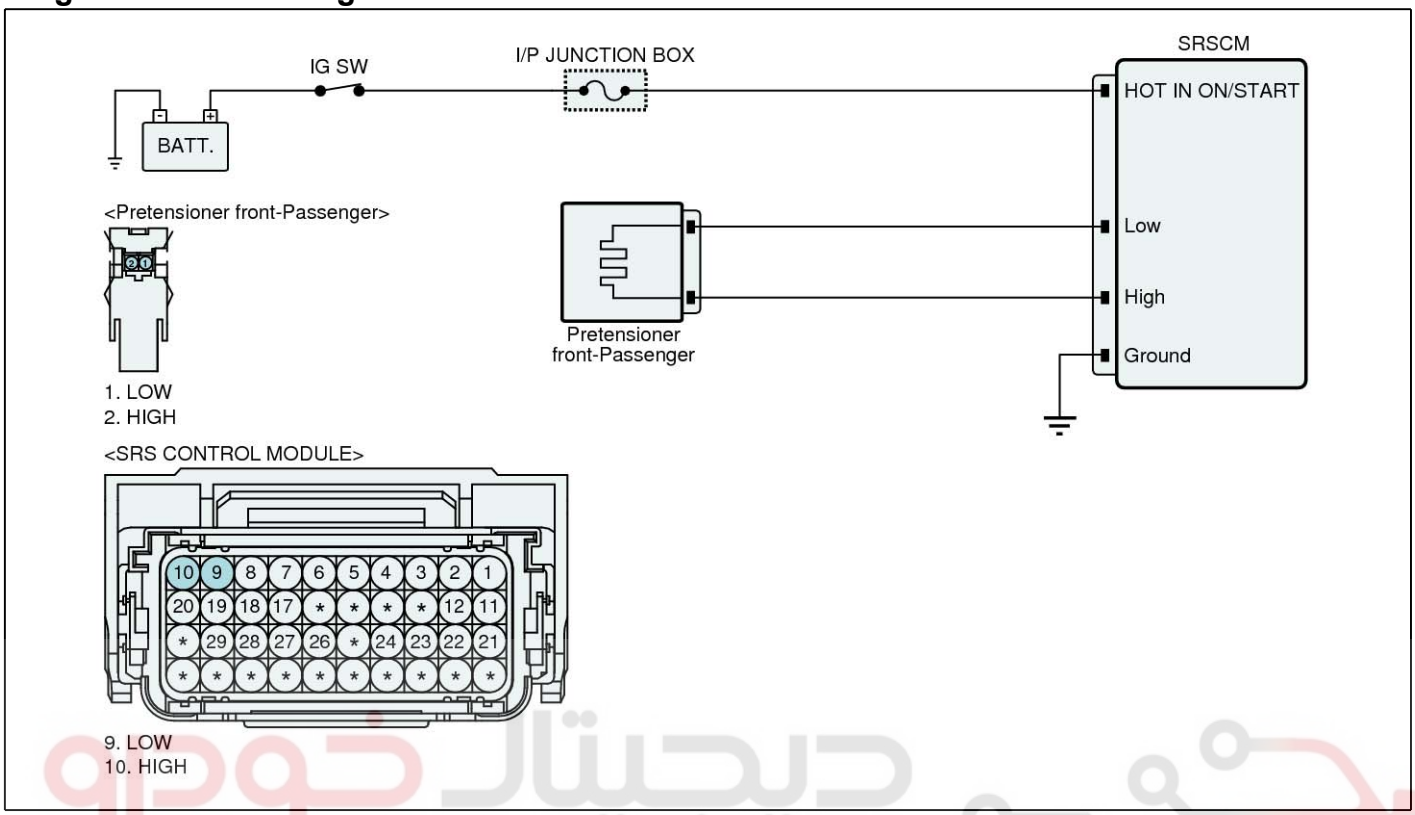
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PBPT harness. • Poor connection of connected part. • Faulty PBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PBPT 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

Diagnostic Circuit Diagram



SBHRT9606L

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.

SBHRT9526L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

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.

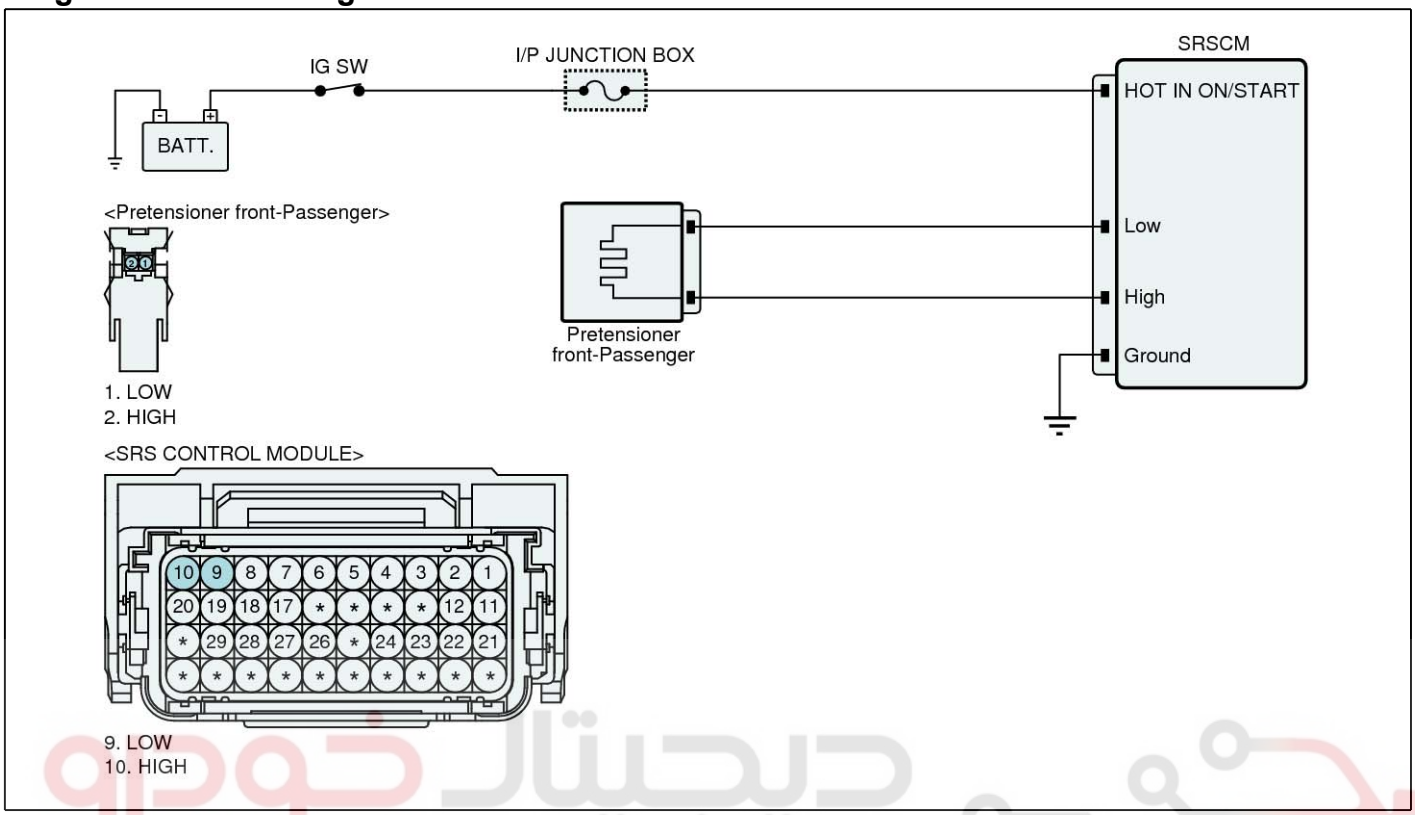
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PBPT harness. • Poor connection of connected part. • Faulty PBPT. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PBPT 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

Diagnostic Circuit Diagram



SBHRT9606L

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.

SBHRT9527L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 PBPT module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE

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

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.

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.

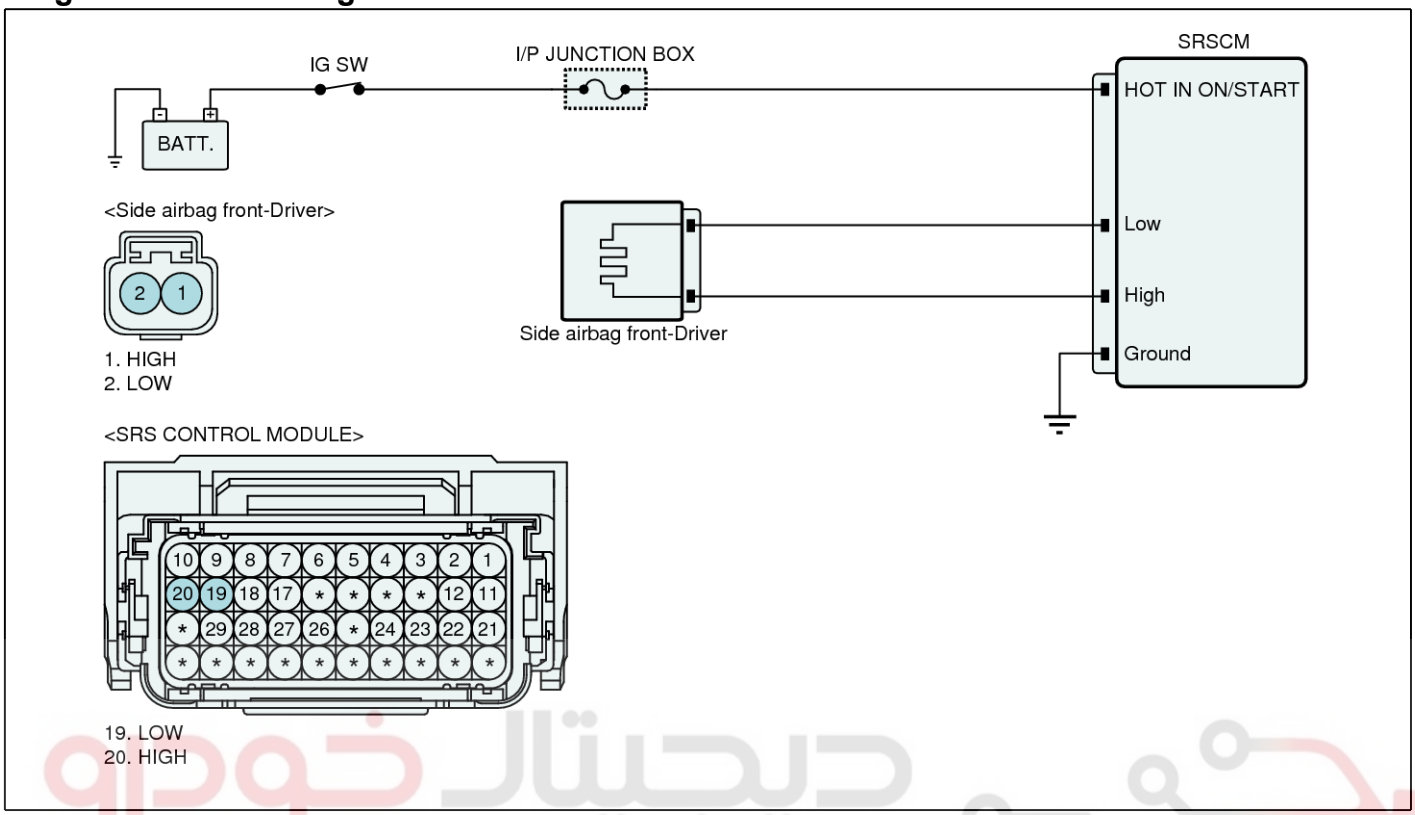
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

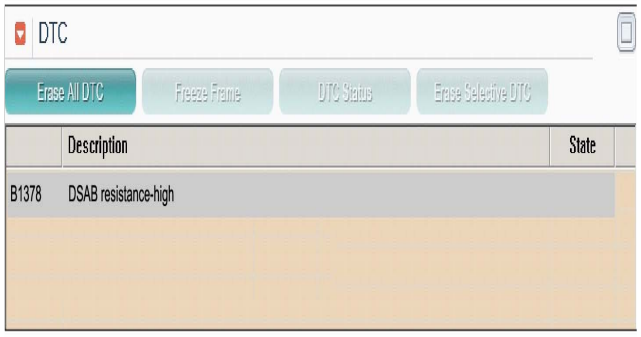
Diagnostic Circuit Diagram



SBHRT9607L

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.



SBHRT9528L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or 2Ω 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. Measure resistance between terminal "Low" and "High" of the DSAB harness connector.

Specification : approx. 1 Ω 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.

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 DAB 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.

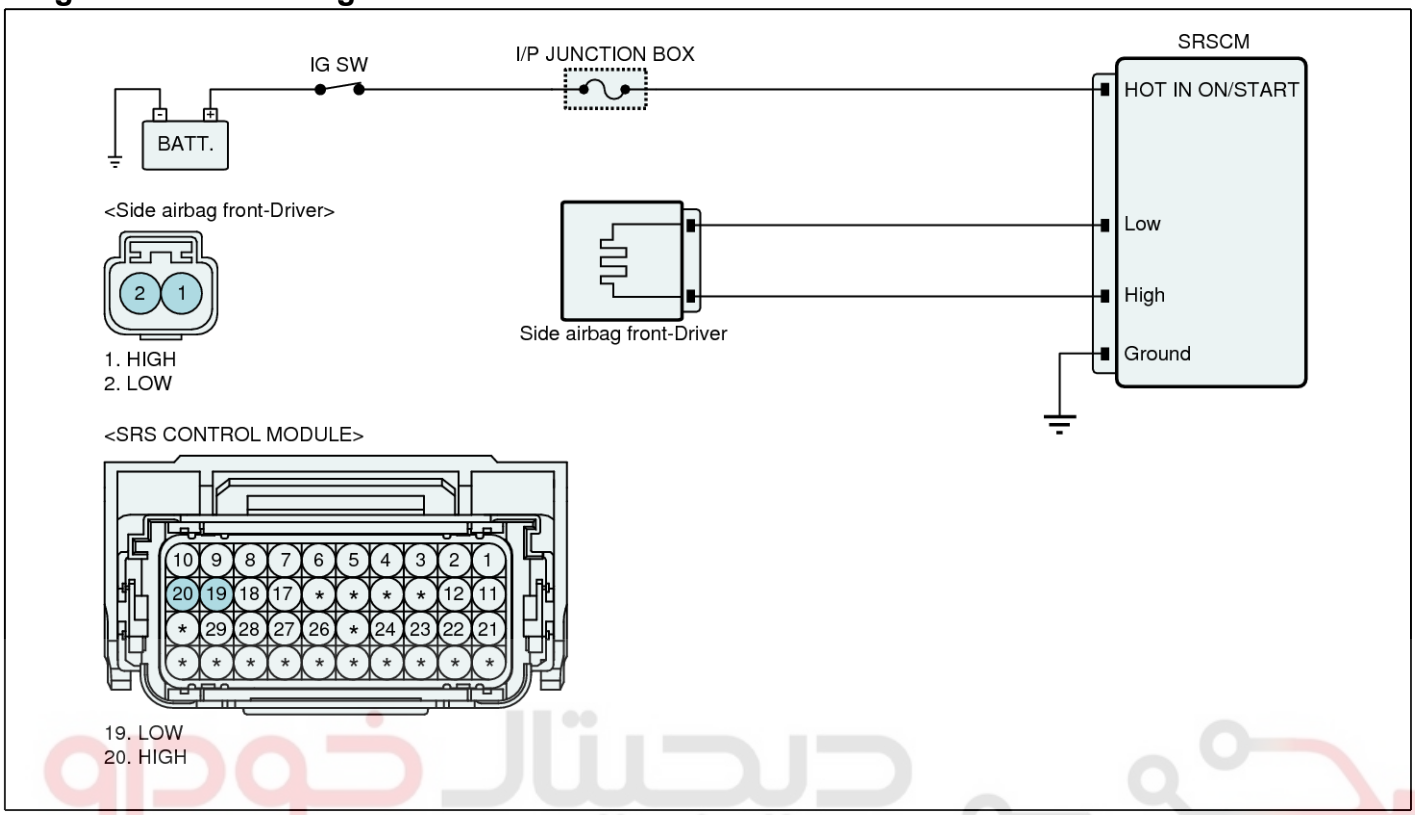
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9607L

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.

SBHRT9529L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or 2Ω 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. Measure resistance between terminal "Low" and "High" of the DSAB harness connector.

Specification : approx. 1 Ω 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.

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.

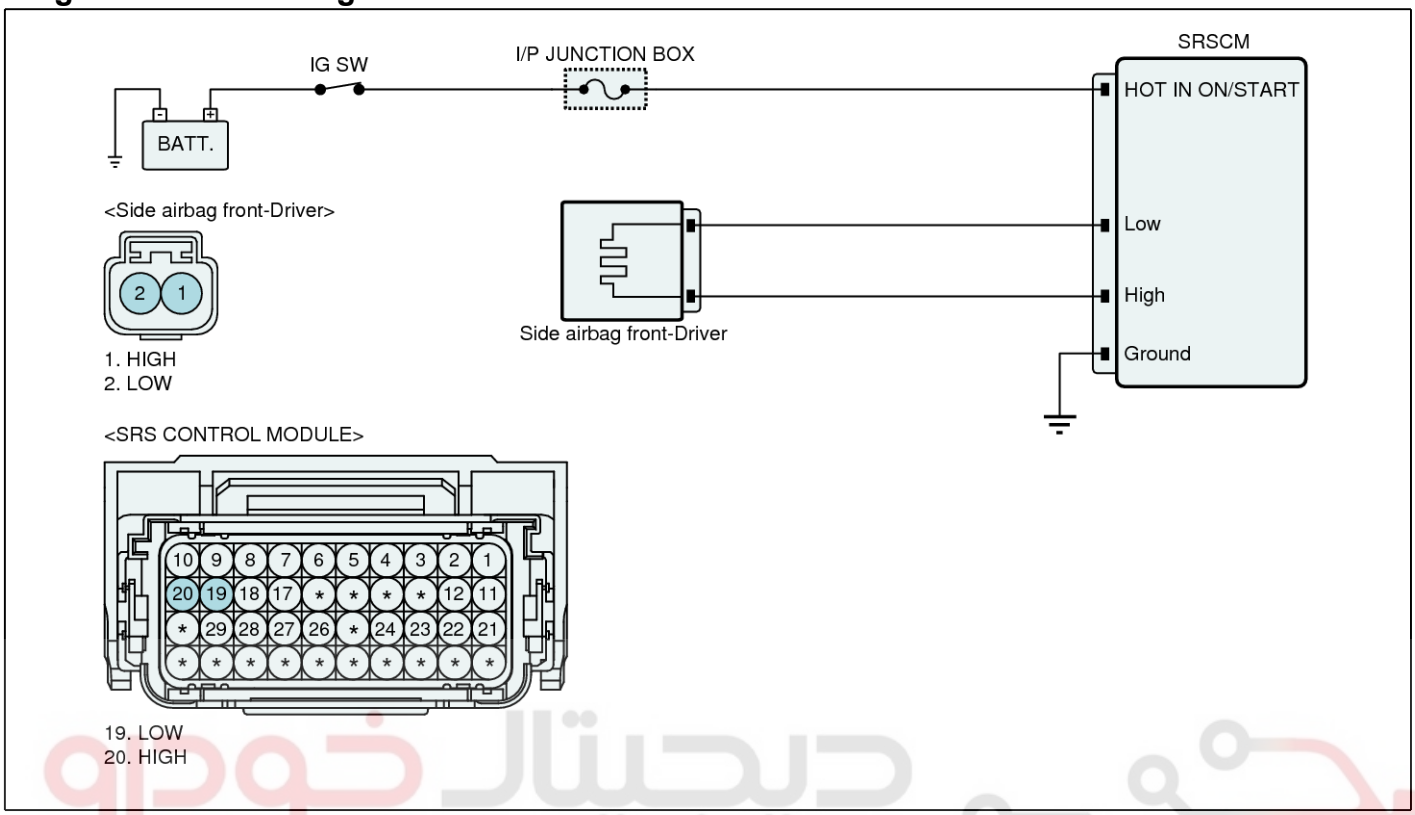
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in DSAB harness. • Poor connection of connected part. • Faulty DSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB 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

Diagnostic Circuit Diagram



SBHRT9607L

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.

SBHRT9530L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-2G000) to main harness connector.

   NOTICE
   If dummy and dummy adaptor are not able to be prepared, use a known-good DSAB or 2Ω 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 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

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.

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.

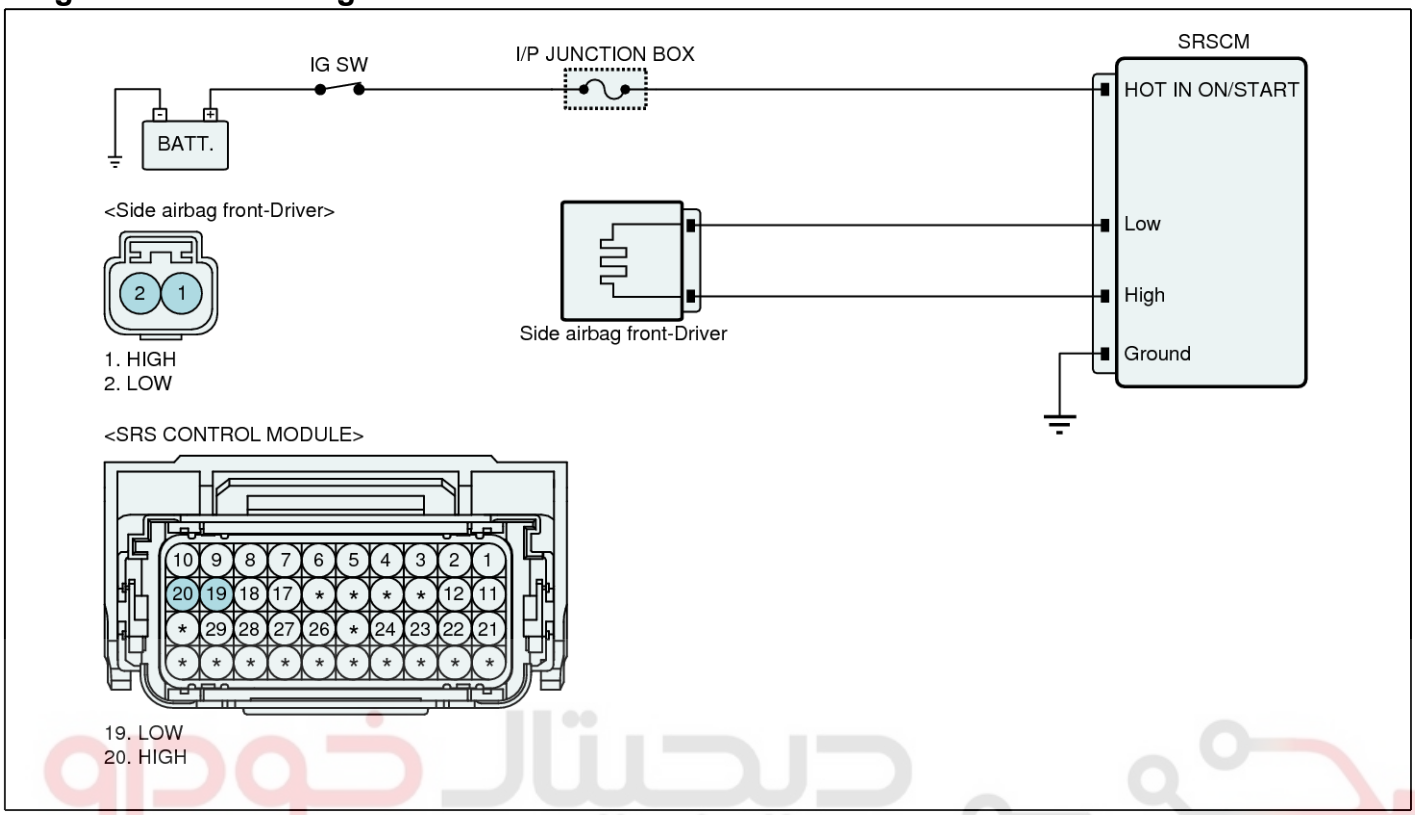
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in DSAB harness. • Poor connection of connected part. • Faulty DSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSAB Squib line voltage is > 2.9V	
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

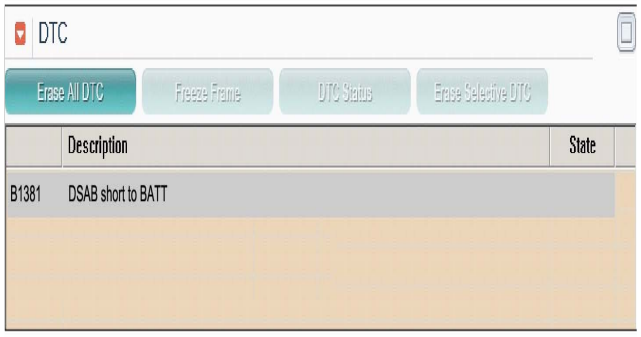
Diagnostic Circuit Diagram



SBHRT9607L

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.



SBHRT9531L

NOTICE

- H : Historical fault

- P : Present fault

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 shorting bar/horting 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.

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 DSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

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

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.

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.

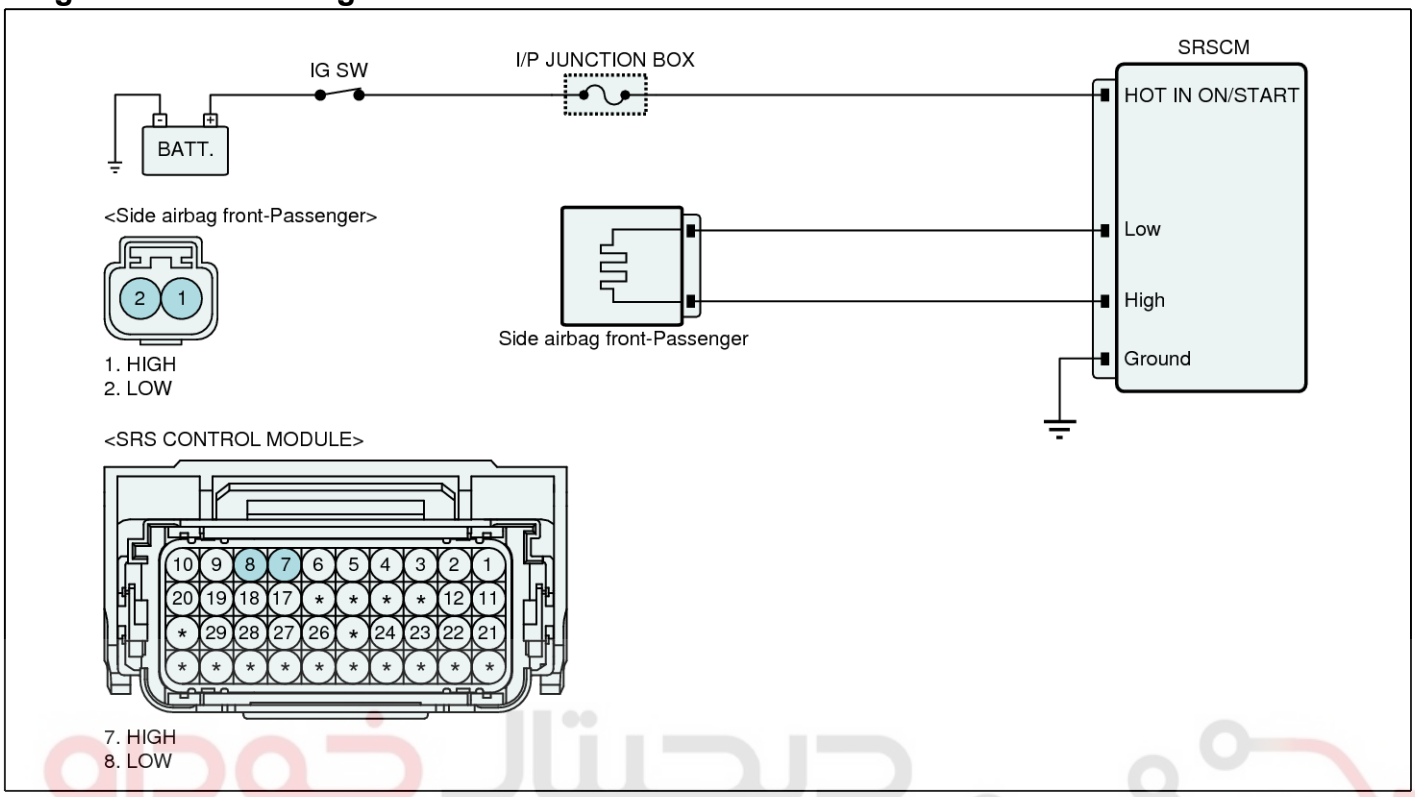
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

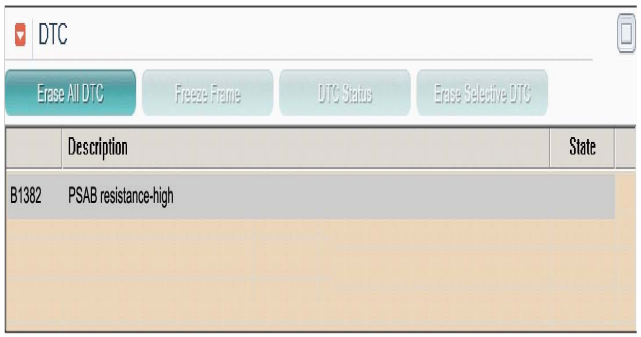
Diagnostic Circuit Diagram



SBHRT9608L

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.



SBHRT9532L

NOTICE

- H : Historical fault

- P : Present fault

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 shorting bar/horting 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.

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 PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

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

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.

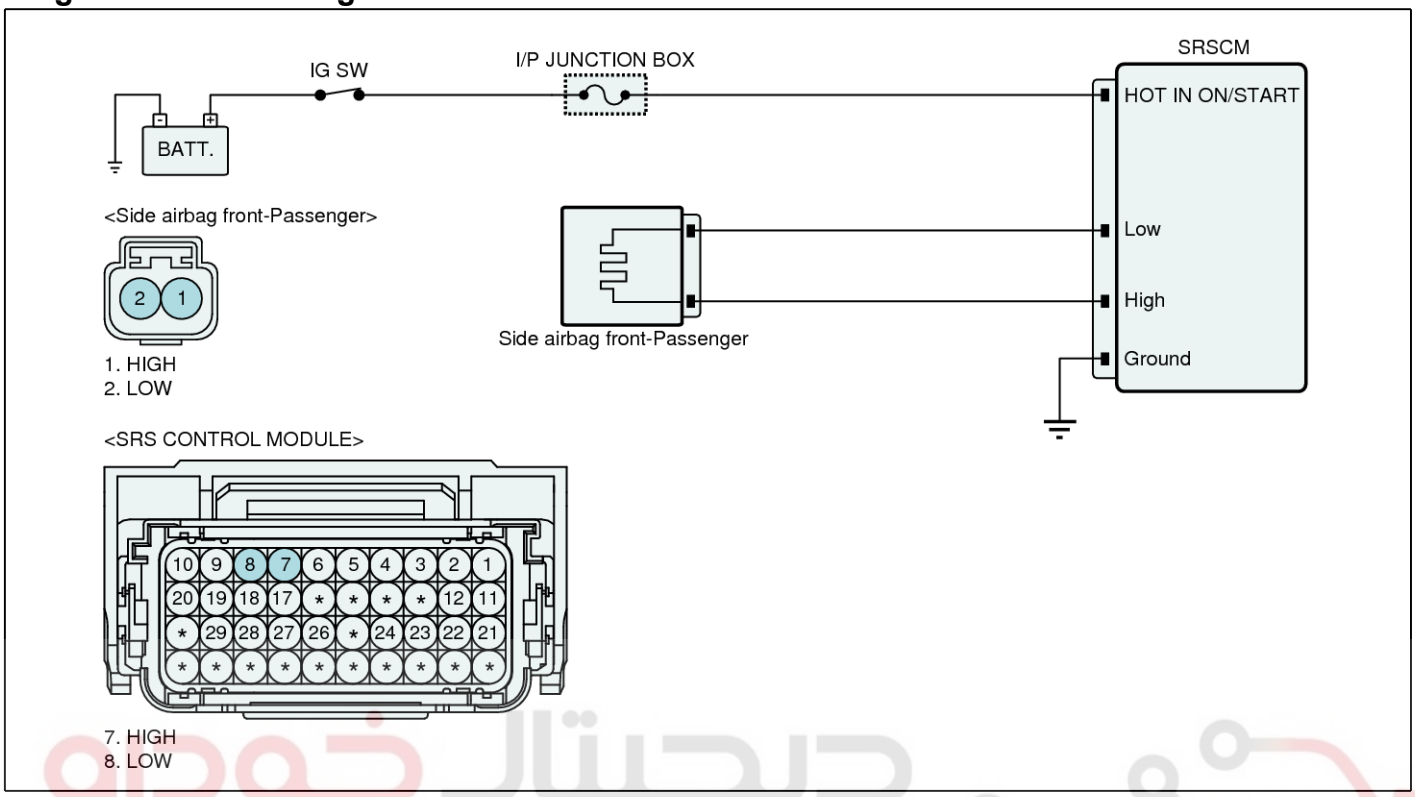
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSAB resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

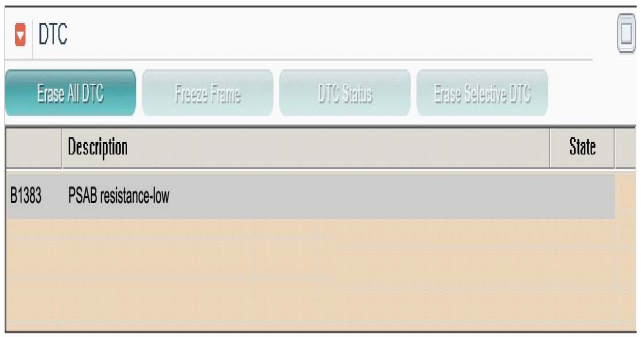
Diagnostic Circuit Diagram



SBHRT9608L

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.



SBHRT9533L

NOTICE

- H : Historical fault

- P : Present fault

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 shorting bar/horting 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.

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 PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

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

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.

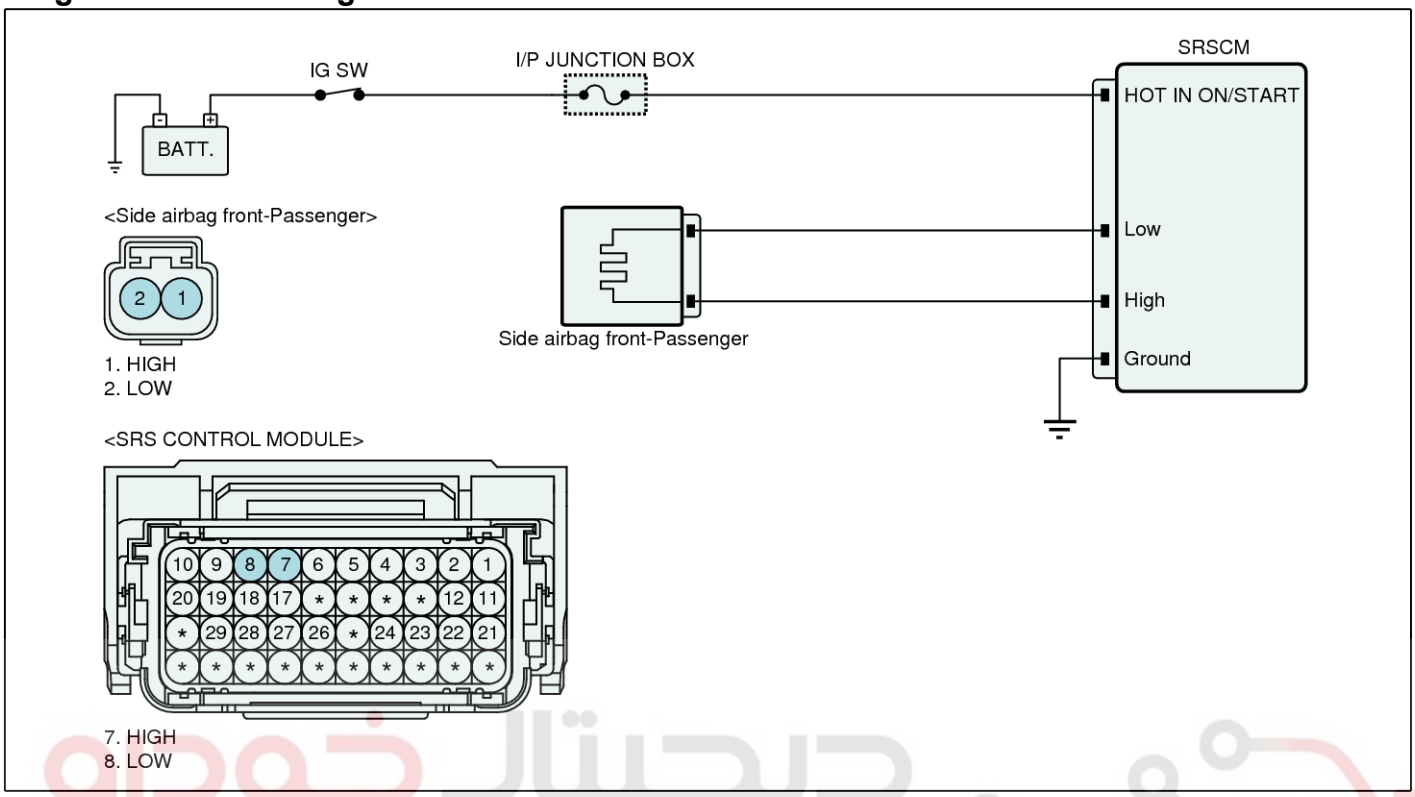
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PSAB harness. • Poor connection of connected part. • Faulty PSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSAB 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

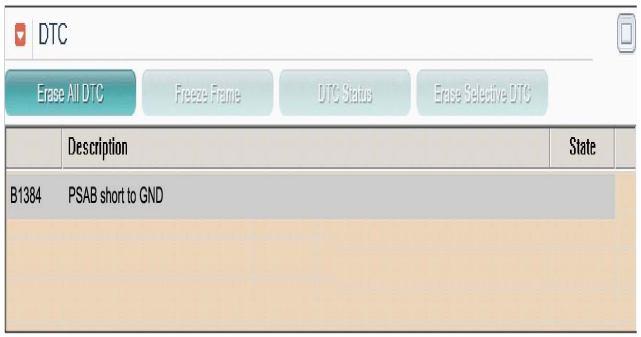
Diagnostic Circuit Diagram



SBHRT9608L

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.



SBHRT9534L

NOTICE

- H : Historical fault

- P : Present fault

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 shorting bar/horting 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.

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 PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

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

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.

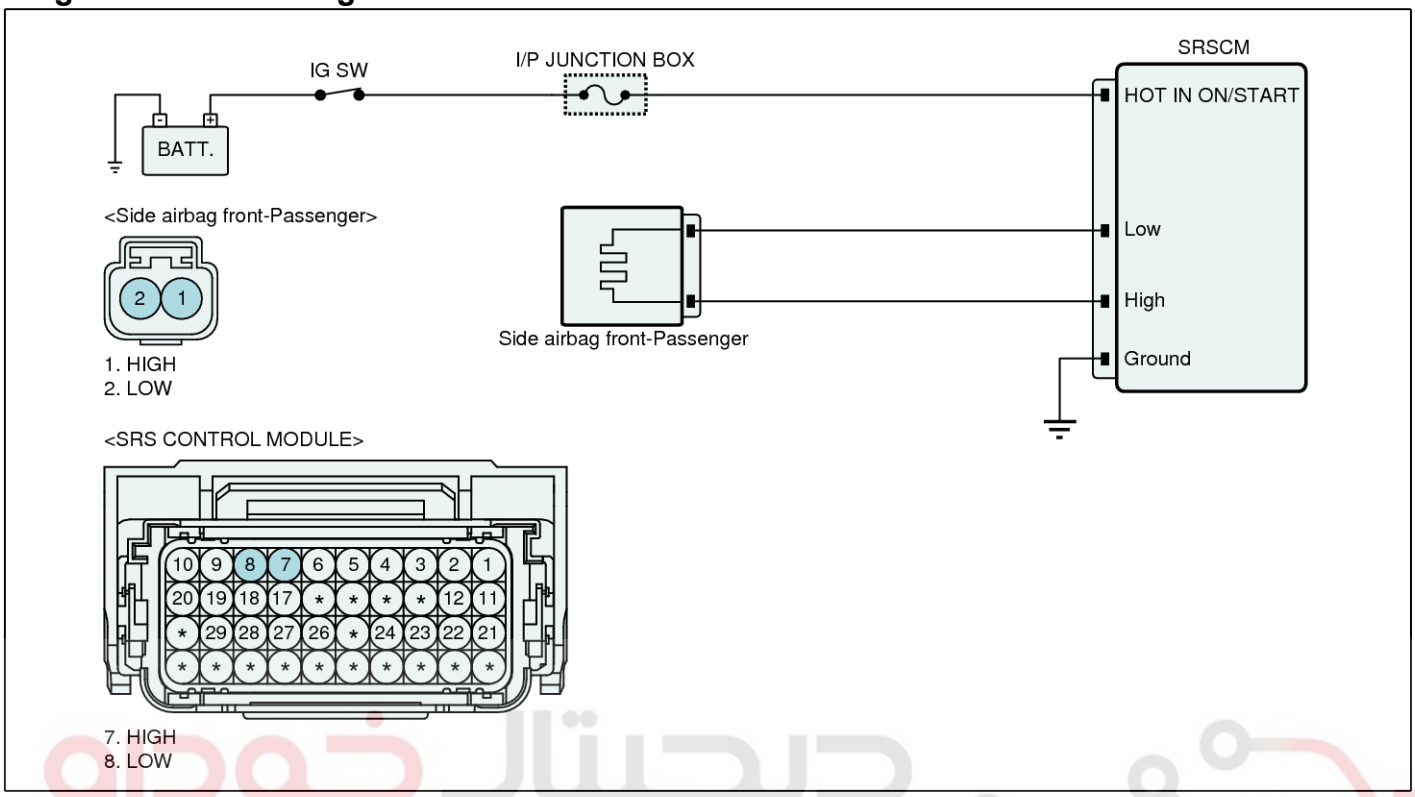
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PSAB harness. • Poor connection of connected part. • Faulty PSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSAB Squib line voltage is > 2.9V	
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

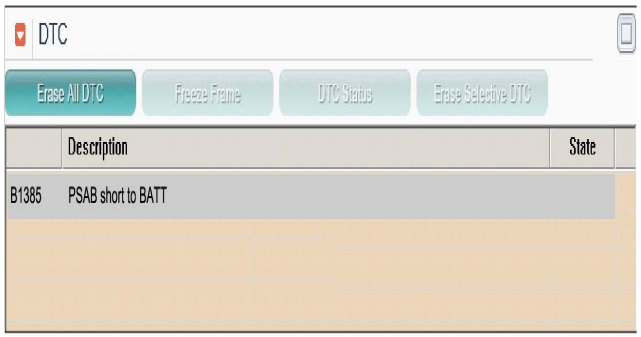
Diagnostic Circuit Diagram



SBHRT9608L

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.



SBHRT9535L

NOTICE

- H : Historical fault

- P : Present fault

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 shorting bar/horting 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.

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 PSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

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

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.

B1395 Firing Loops Interconnection Fault

General Description

very 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.

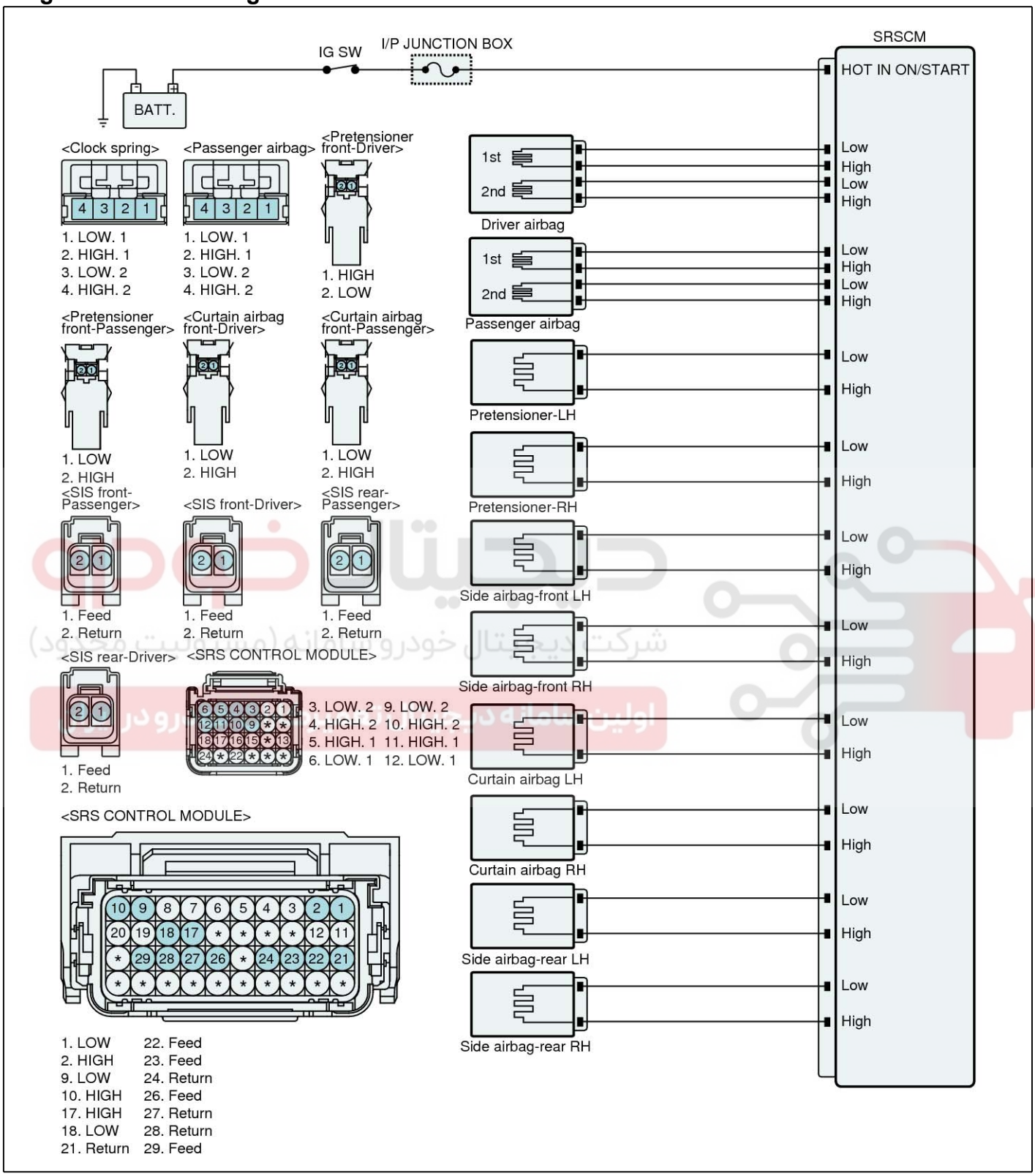
DTC Description

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)	• short circuit in squib harness. • SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• Squib lines are cross coupled • Make other line sink, and one line < 0.6V, then this line is crosscoupled.	
Diagnostic Time	Qualification	• More than 2ms x 3	
	De-Qualification	• NA	

Diagnostic Circuit Diagram



SBHRT9609L

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.

SBHRT9536L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ 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.

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 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.

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.

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.

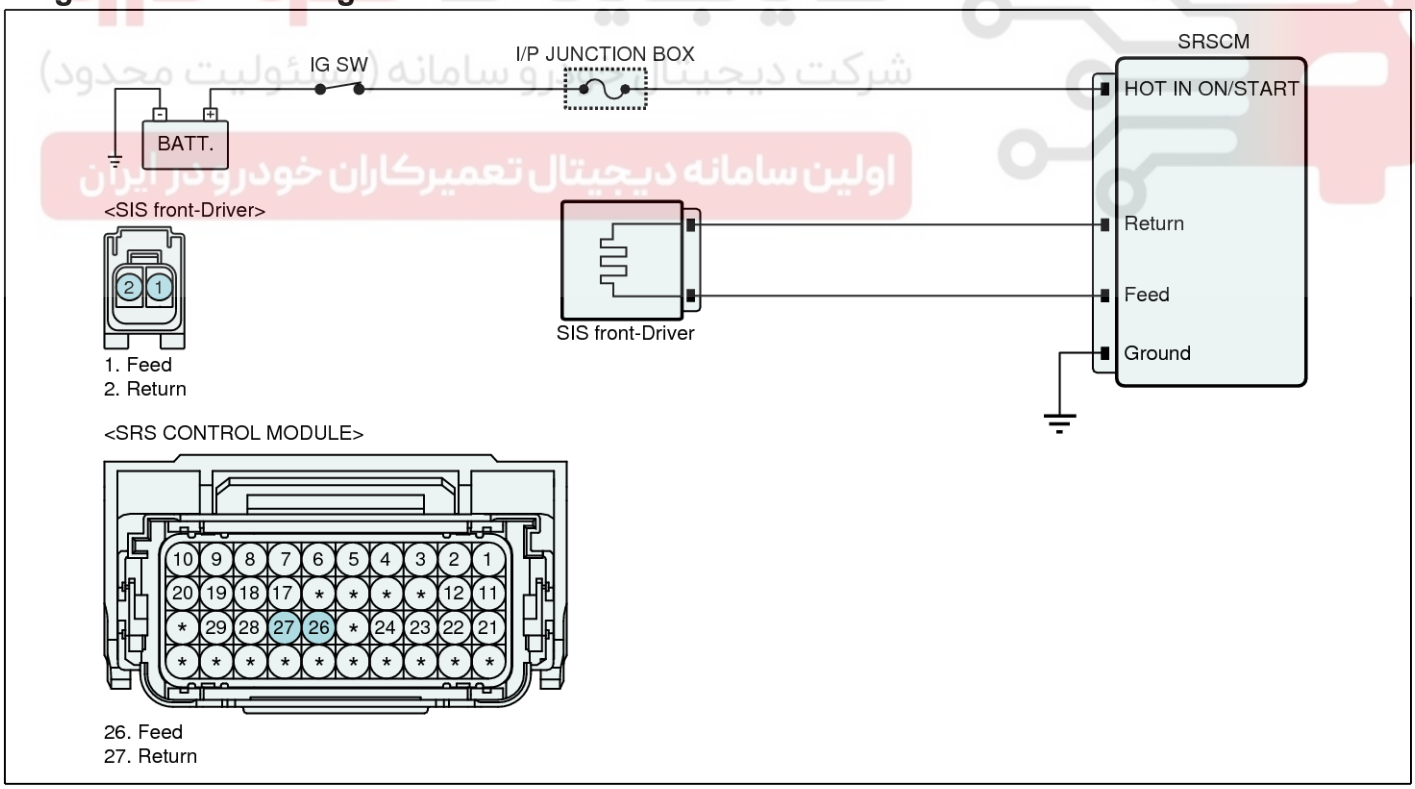
DTC Description

The SRSCM sets DTC B1400 if there is any fault in DSIS circuit.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9610L

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.

SBHRT9537L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 DSIS 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.

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.

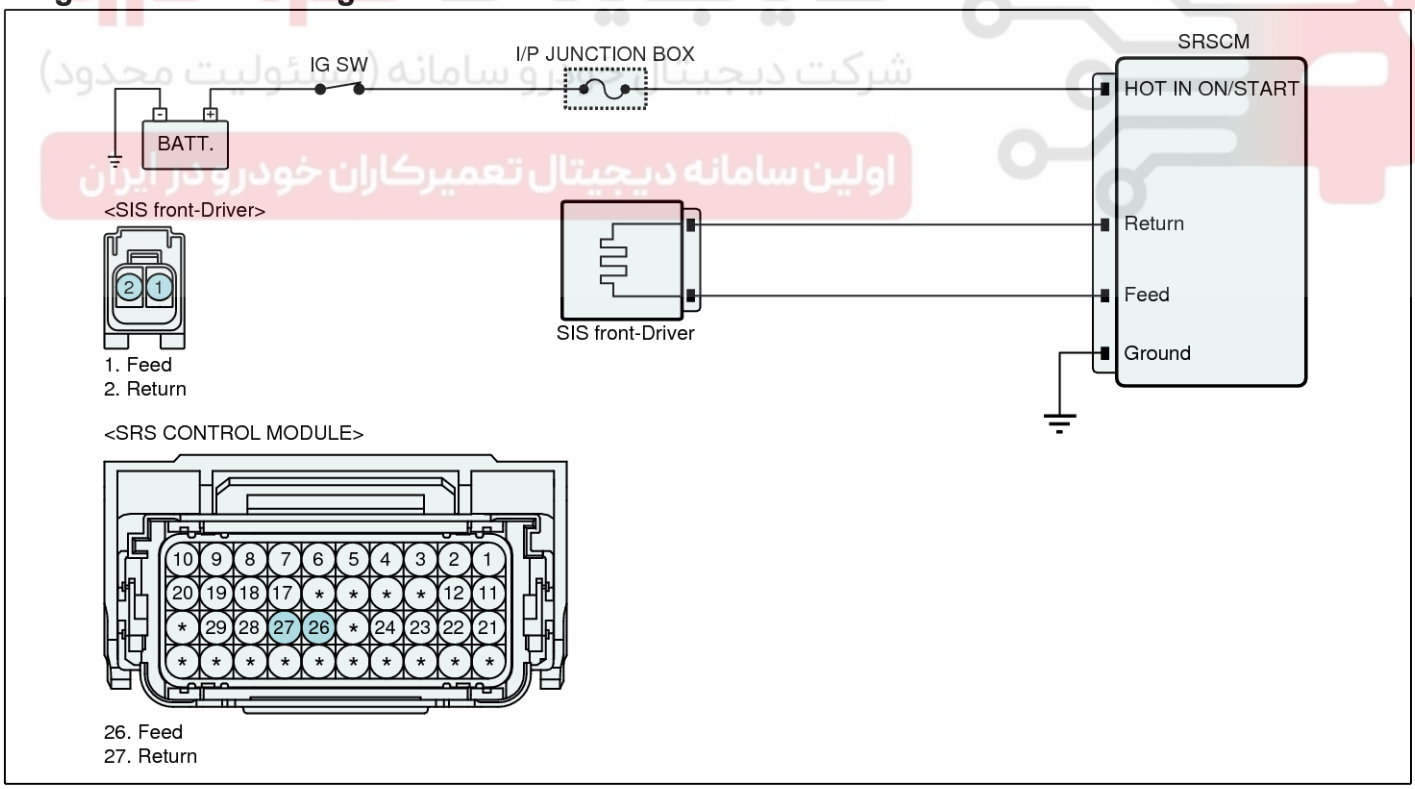
DTC Description

The SRSCM sets DTC B1401 if there is a short to ground in DSIS harness.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9610L

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.

SBHRT9538L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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

Refer to the DTC B1101 : Battery Voltage High.

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.

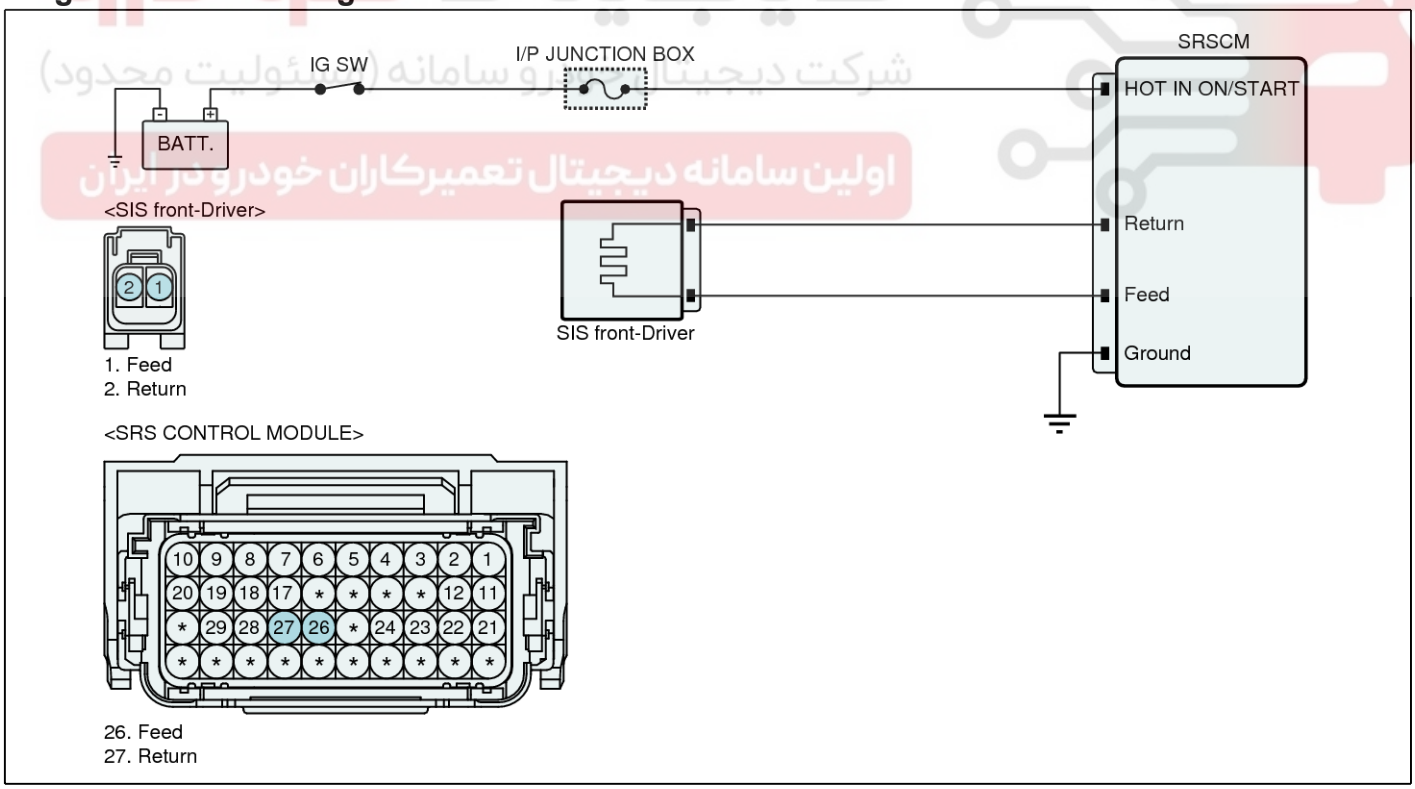
DTC Description

The SRSCM sets DTC B1402 if there is short to power harness in DSIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to power in DSIS harness. • Faulty DSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSIS 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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

Diagnostic Circuit Diagram



SBHRT9610L

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.

SBHRT9539L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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. Ignition "ON" & Engine "OFF"
5. Measure voltage between terminal "Low" or "High" of the DSIS 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 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

Refer to the DTC B1101 : Battery Voltage High.

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.

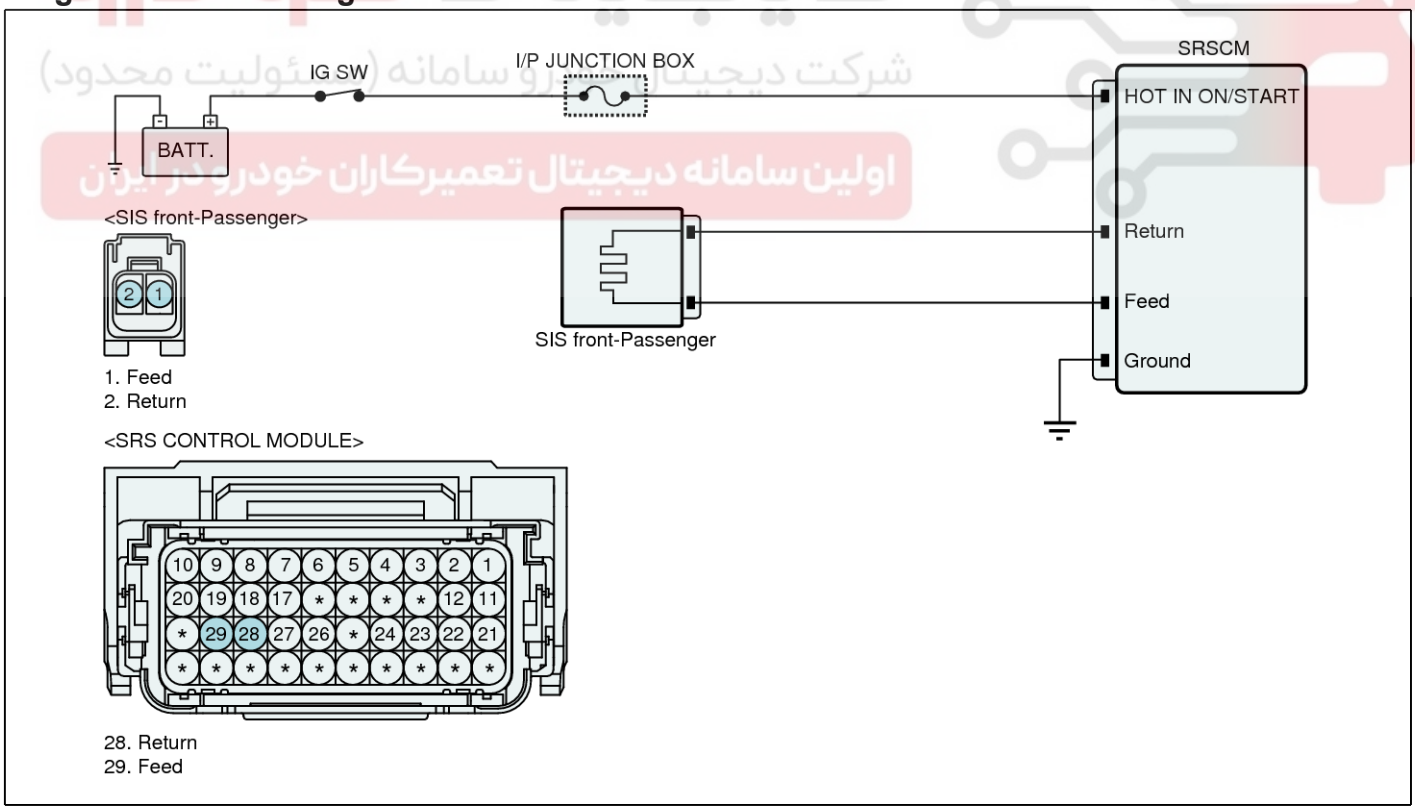
DTC Description

The SRSCM sets DTC B1403 if there is any fault in PSIS circuit.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9611L

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.

SBHRT9540L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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

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.

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.

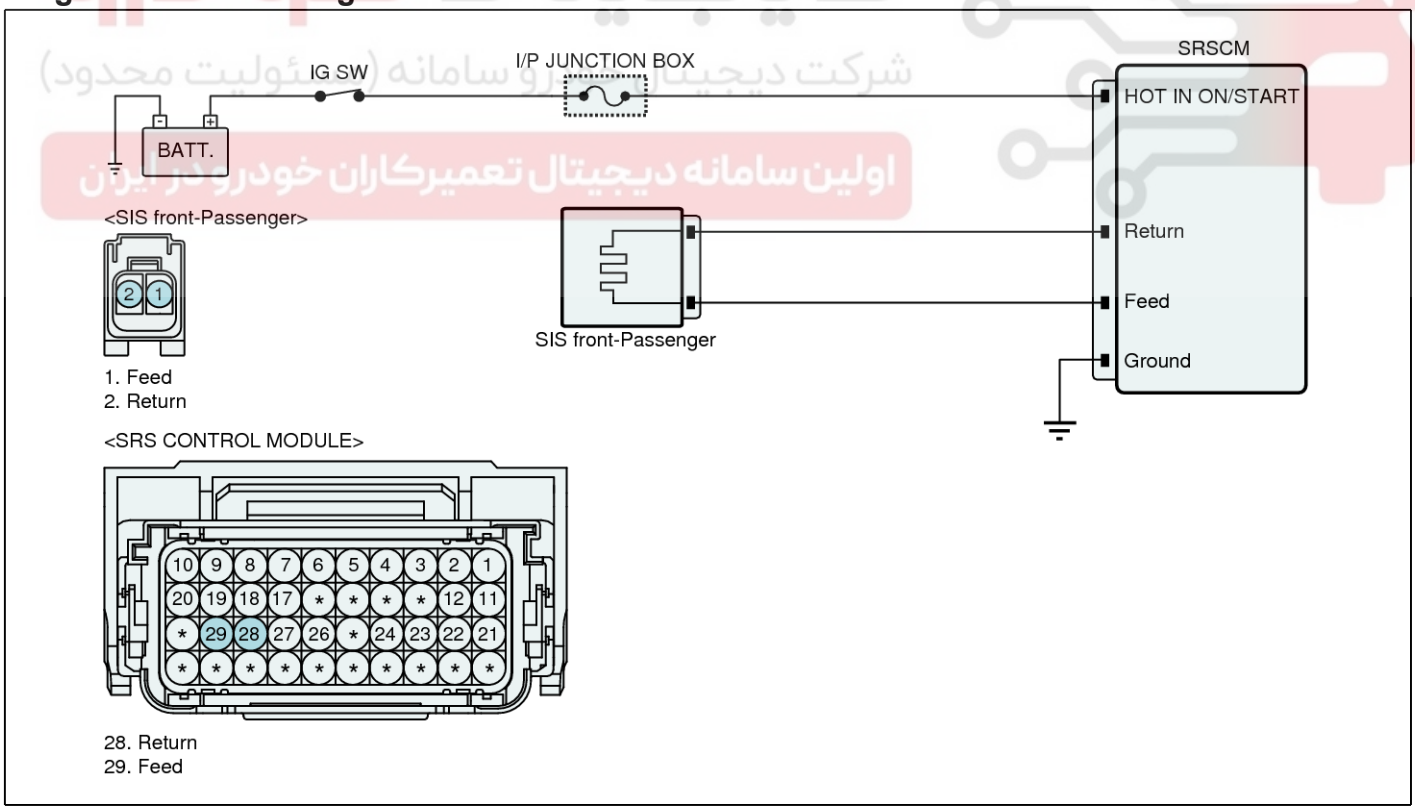
DTC Description

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

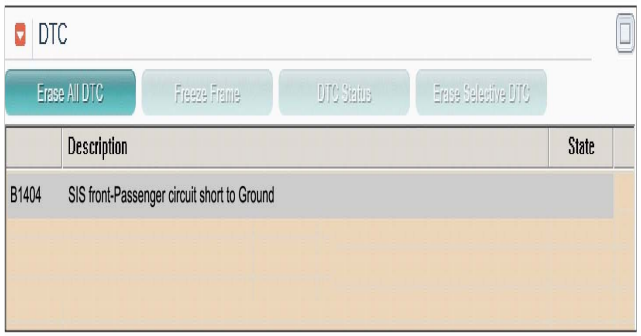
Diagnostic Circuit Diagram



SBHRT9611L

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.



SBHRT9541L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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?

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 ?

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 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

Refer to the DTC B1101 : Battery Voltage High.

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.

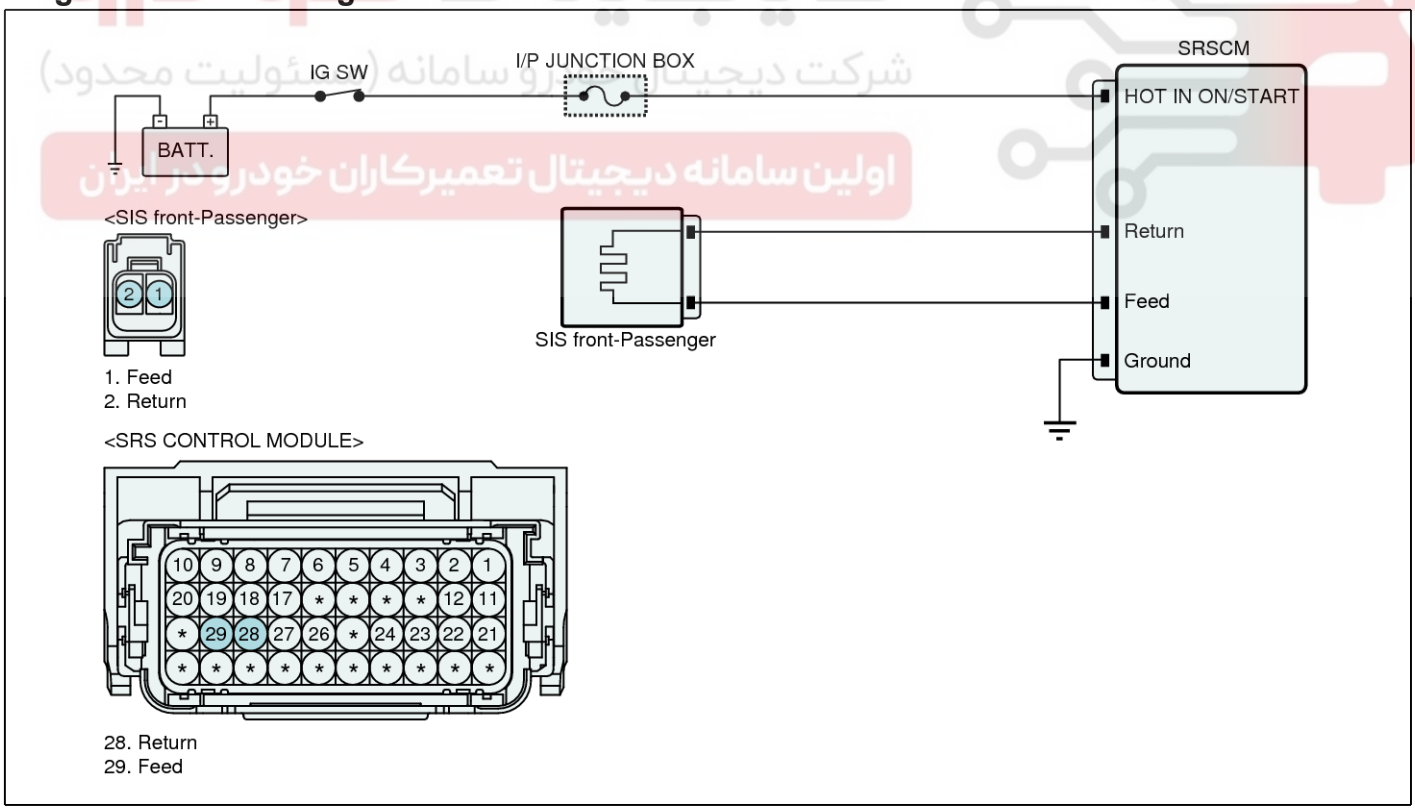
DTC Description

The SRSCM sets DTC B1405 if there is short to power harness in PSIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to power in PSIS harness . • Faulty PSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSIS 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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

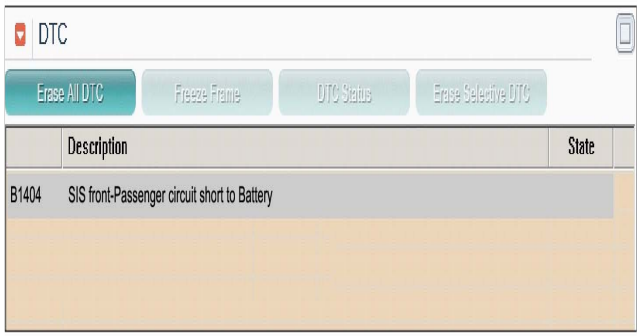
Diagnostic Circuit Diagram



SBHRT9611L

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.



SBHRT9542L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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. Ignition "ON" & Engine "OFF"
5. Measure voltage between terminal "Low" or "High" of the PSIS 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 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.

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

Refer to the DTC B1101 : Battery Voltage High.

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.

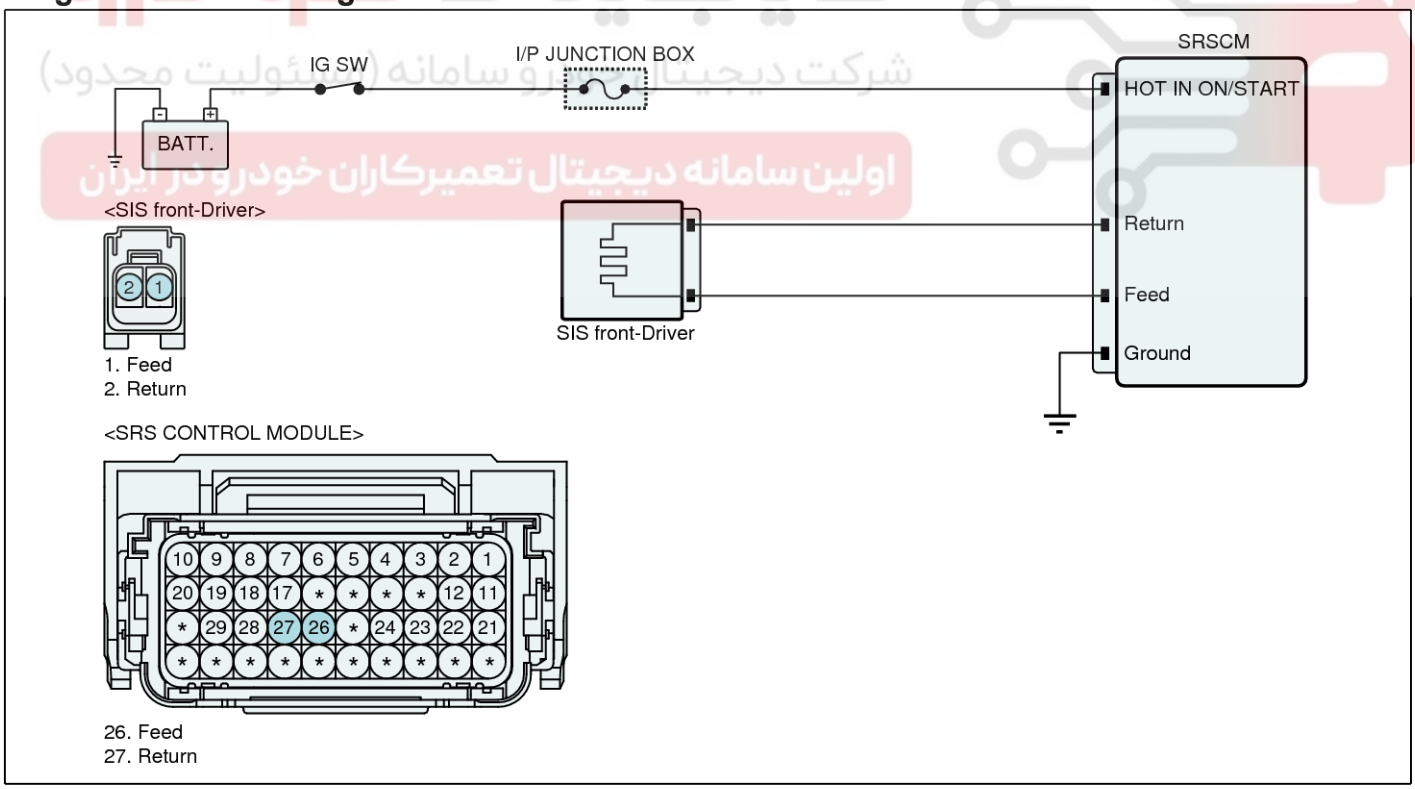
DTC Description

The SRSCM sets DTC B1409 if there is any error in communication between DSIS and SRSCM.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Data	• Faulty DSIS circuit. • Faulty DSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DSIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

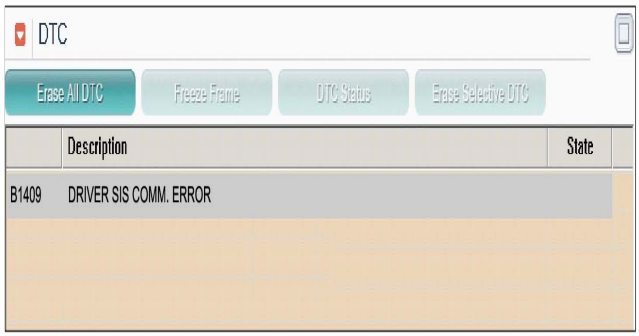
Diagnostic Circuit Diagram



SBHRT9610L

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.



SBHRT9543L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

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.

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.

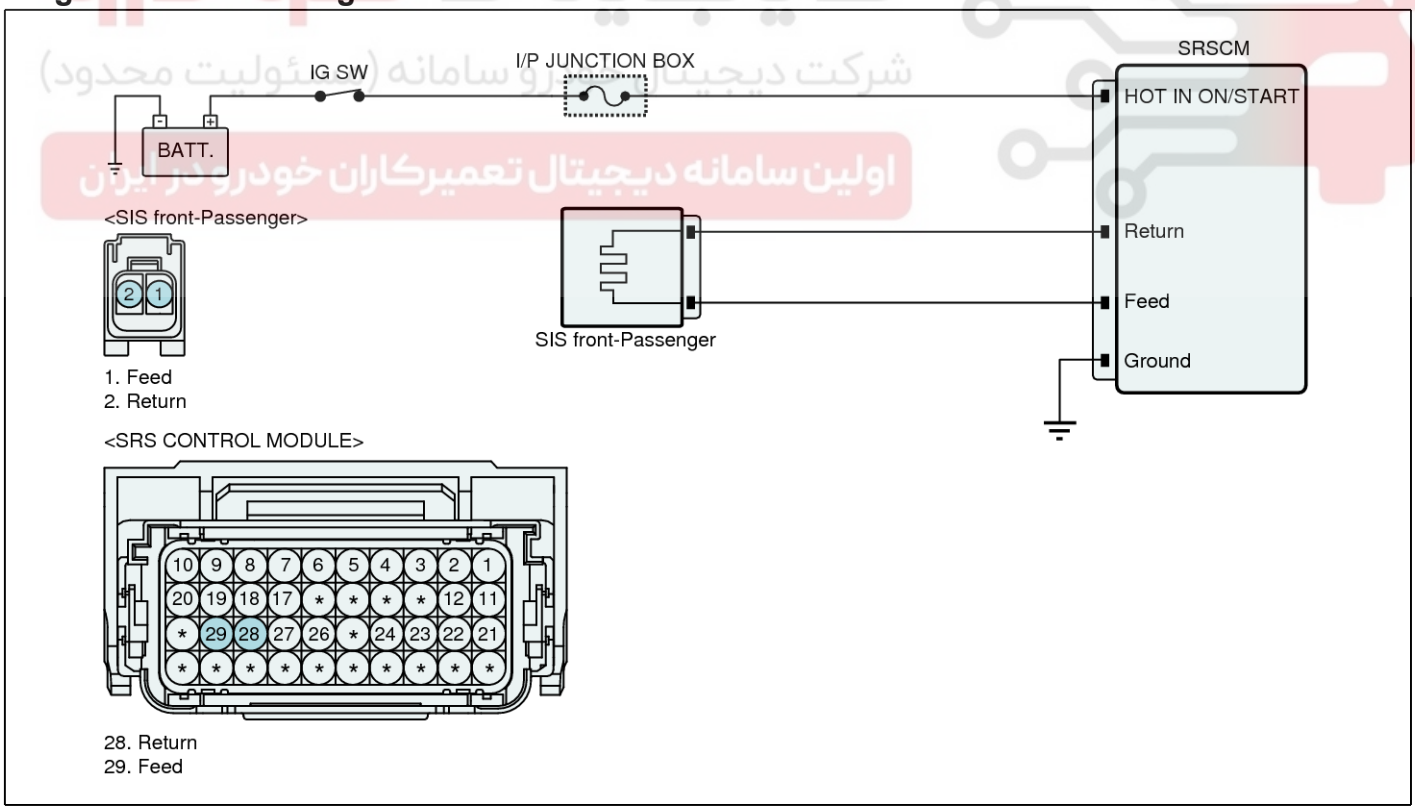
DTC Description

The SRSCM sets DTC B1410 if there is any error in communication between PSIS and SRSCM.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Data	• Faulty PSIS circuit. • Faulty PSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PSIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

Diagnostic Circuit Diagram



SBHRT9611L

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.

SBHRT9544L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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" 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.

B1412 SIS(Side Impact Sensor)Rear-Driver Communication error

General Description

Side Impact Sensor(SIS) is located in both side of C 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.

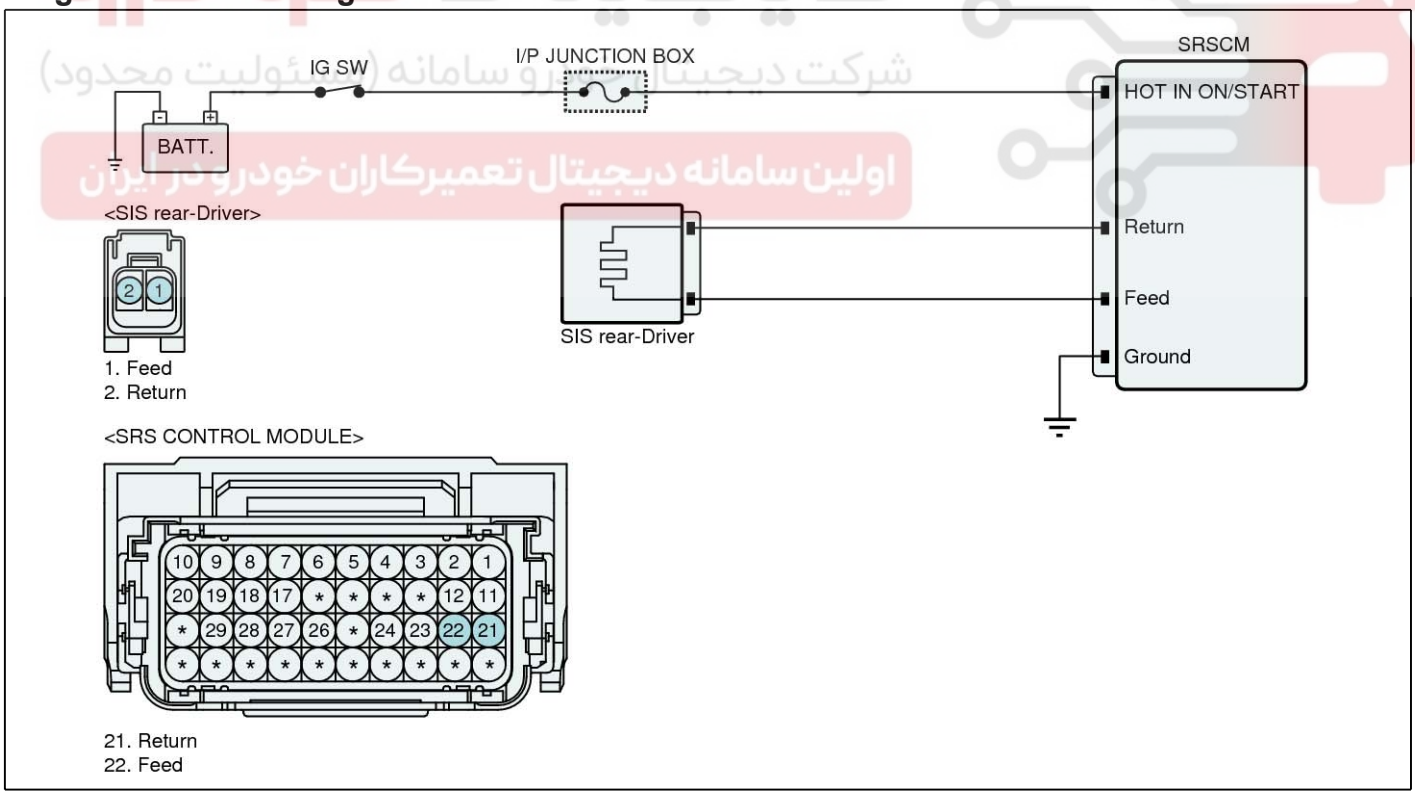
DTC Description

The SRSCM sets DTC B1412 if there is any error in communication between RDSIS and SRSCM.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Data	• Faulty RDSIS circuit. • Faulty RDSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• RDSIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

Diagnostic Circuit Diagram



SBHRT9612L

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.

SBHRT9545L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSIS connector .
5. Substitute the RDSIS 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 RDSIS, 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

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.

B1413 SIS(Side Impact Sensor)Rear-Passenger Communication error

General Description

Side Impact Sensor(SIS) is located in both side of C 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.

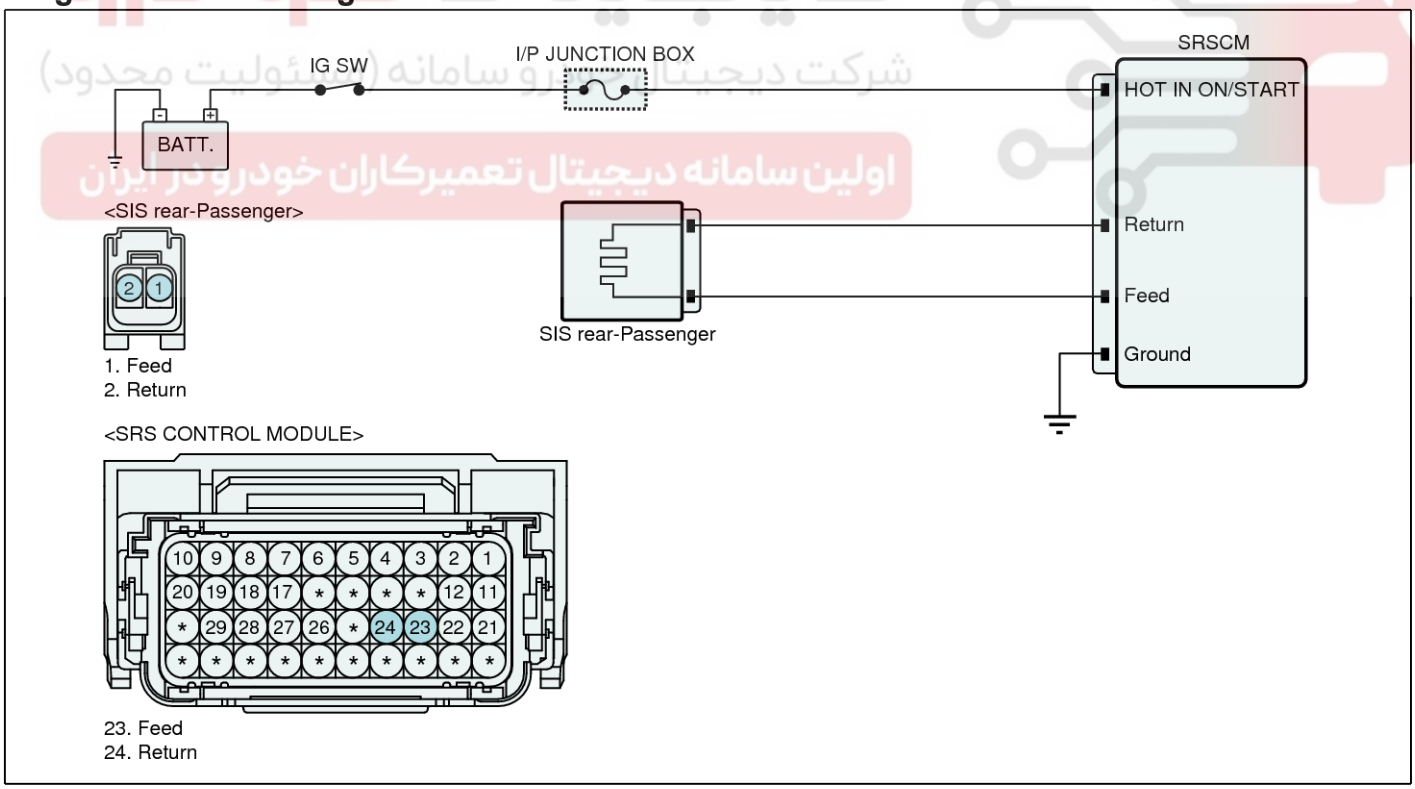
DTC Description

The SRSCM sets DTC B1413 if there is any error in communication between RPSIS and SRSCM.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Data	• Faulty RPSIS circuit. • Faulty RPSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• RPSIS no acceleration data, and line voltage is ok (between 3V and 11V)	
Diagnostic Time	Qualification	• 1 time	
	De-Qualification	• 1 time	

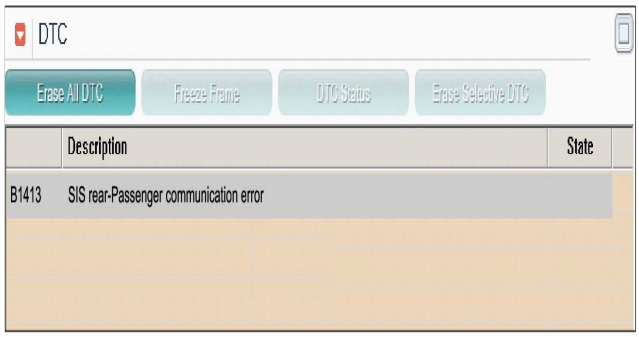
Diagnostic Circuit Diagram



SBHRT9613L

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.



SBHRT9546L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RRPSIS 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 RPSIS, 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

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.

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.

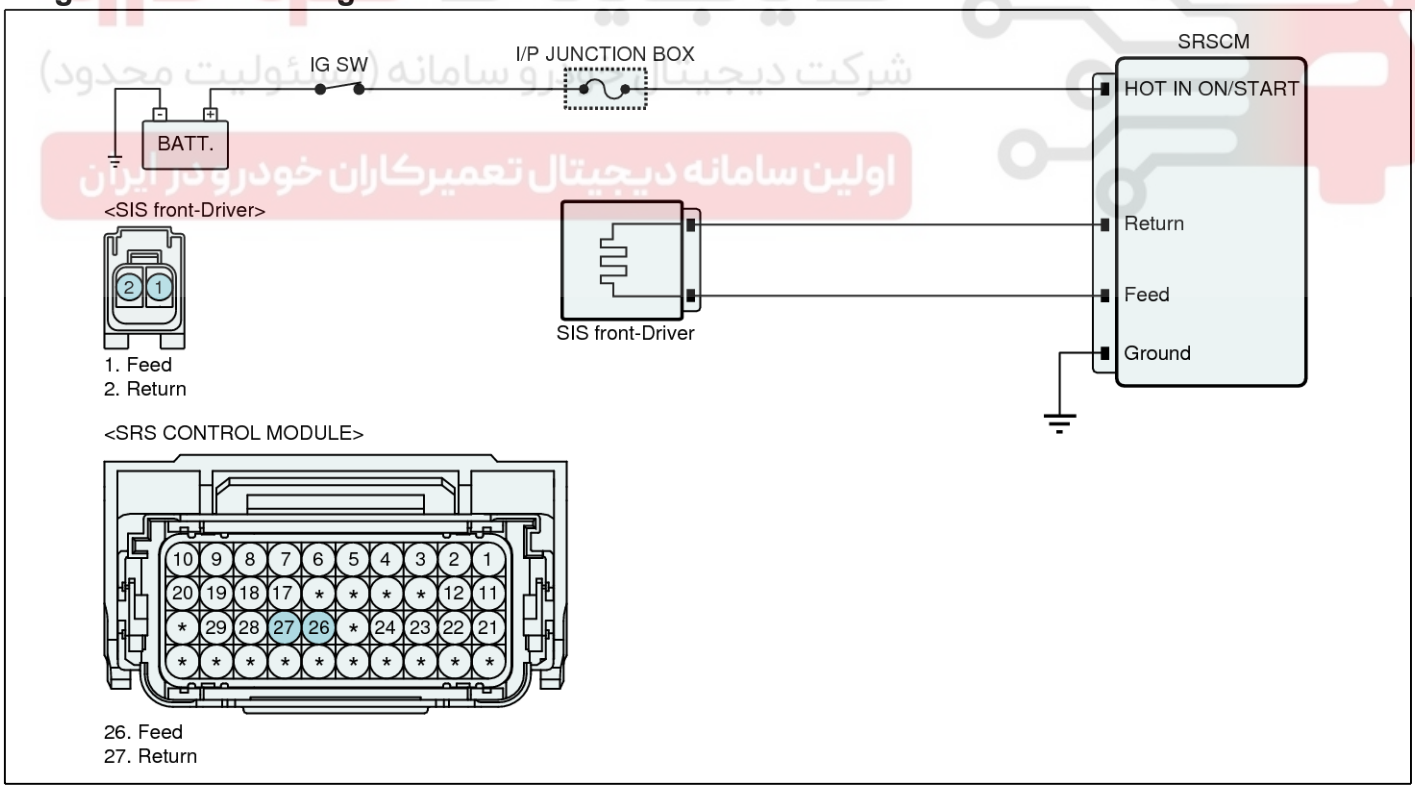
DTC Description

The SRSCM sets DTC B1414 if DSIS with wrong ID is detected.

DTC Detecting Condition

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

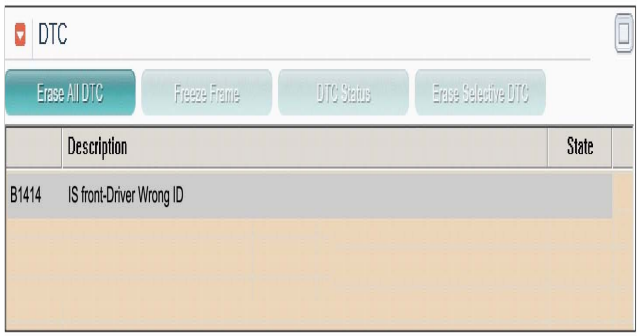
Diagnostic Circuit Diagram



SBHRT9610L

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.



SBHRT9547L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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

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.

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.

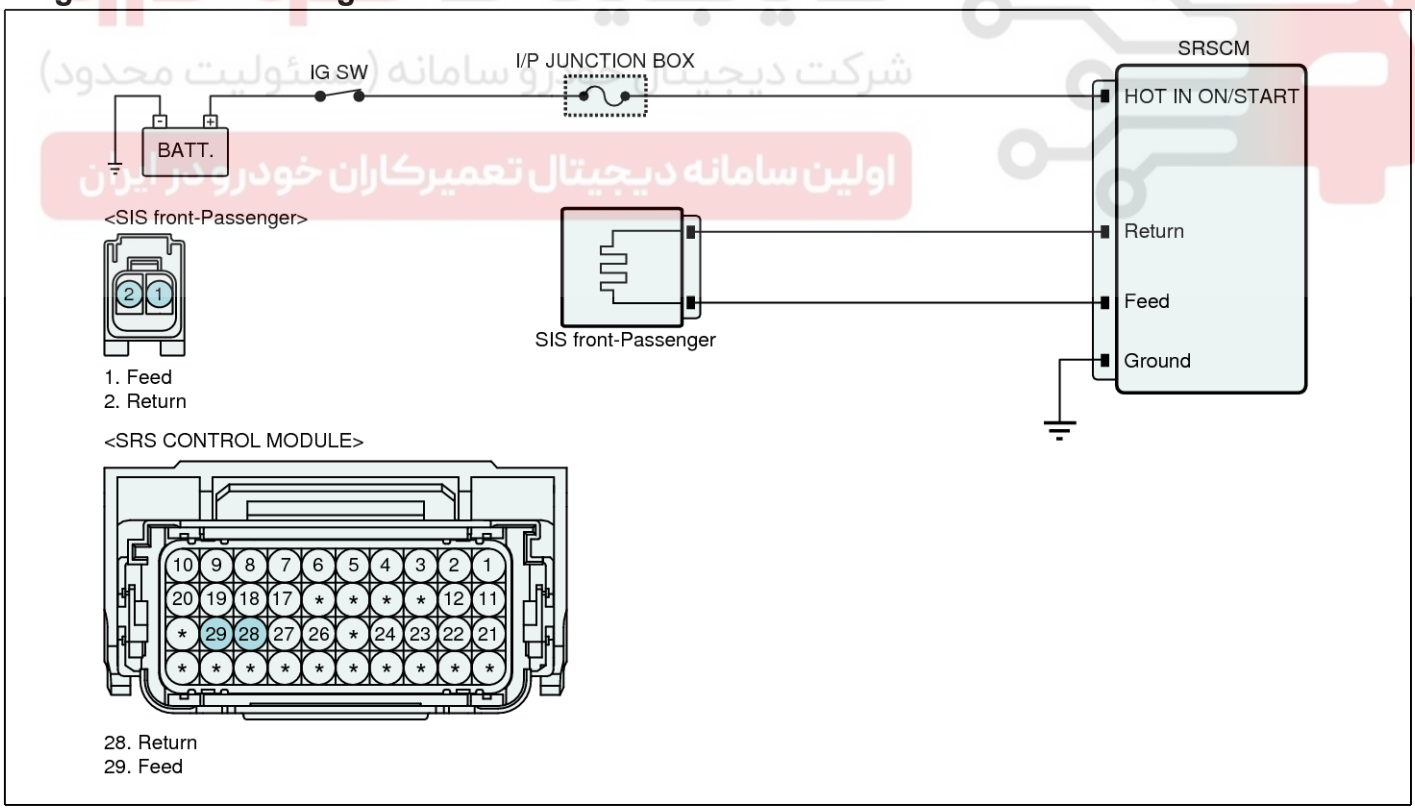
DTC Description

The SRSCM sets DTC B1415 if PSIS with wrong ID is detected.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9611L

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.

SBHRT9548L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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" 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.

B1416 SIS(Side Impact Sensor)Rear-Driver Wrong ID

General Description

Rear Side Impact Sensor(RSIS) is located in both side of C 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.

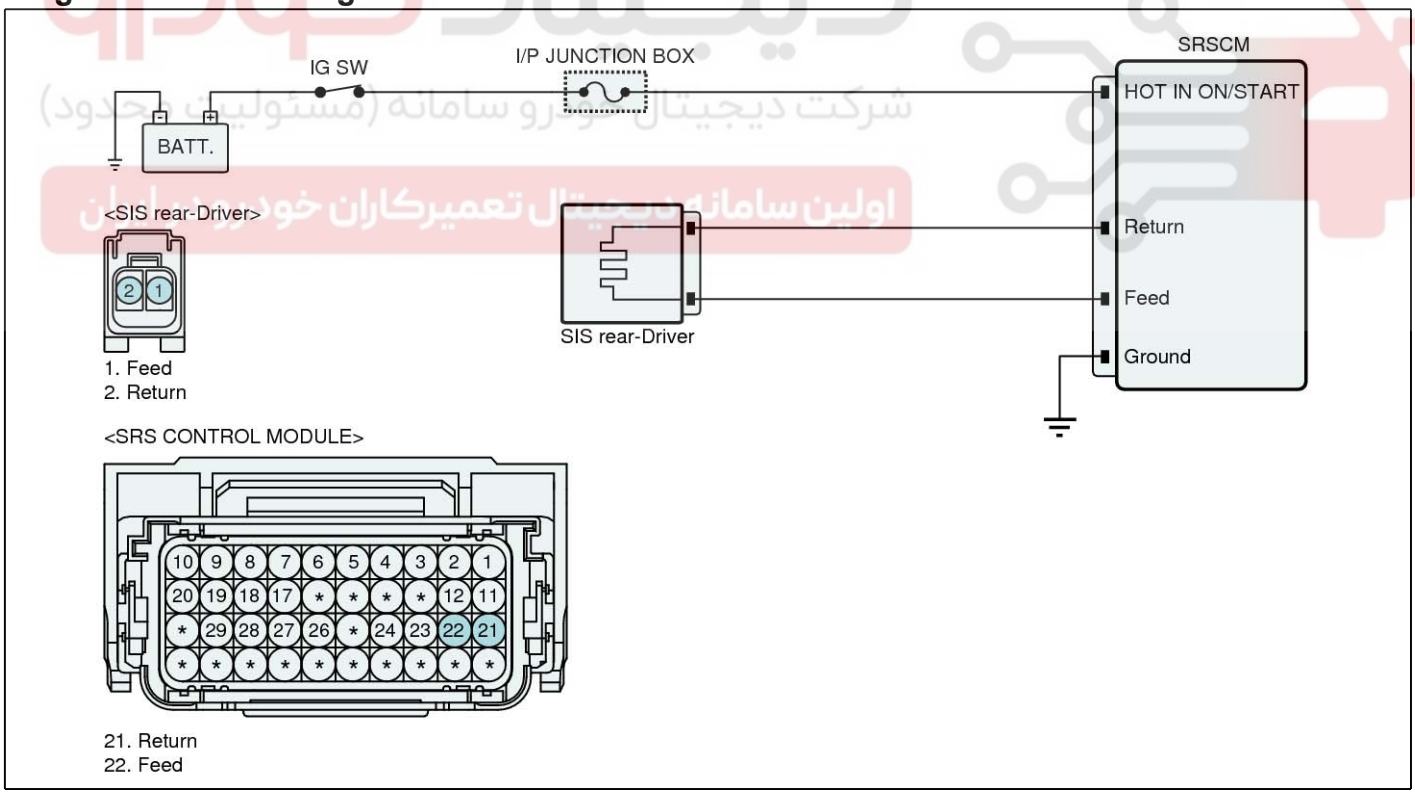
DTC Description

The SRSCM sets DTC B1416 if RDSIS with wrong ID is detected.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9612L

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.

SBHRT9549L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSIS connector .
5. Substitute the RDSIS 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 RDSIS, 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

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.

B1417 SIS(Side Impact Sensor)Rear-Passenger Wrong ID

General Description

Rear Side Impact Sensor(RSIS) is located in both side of C 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.

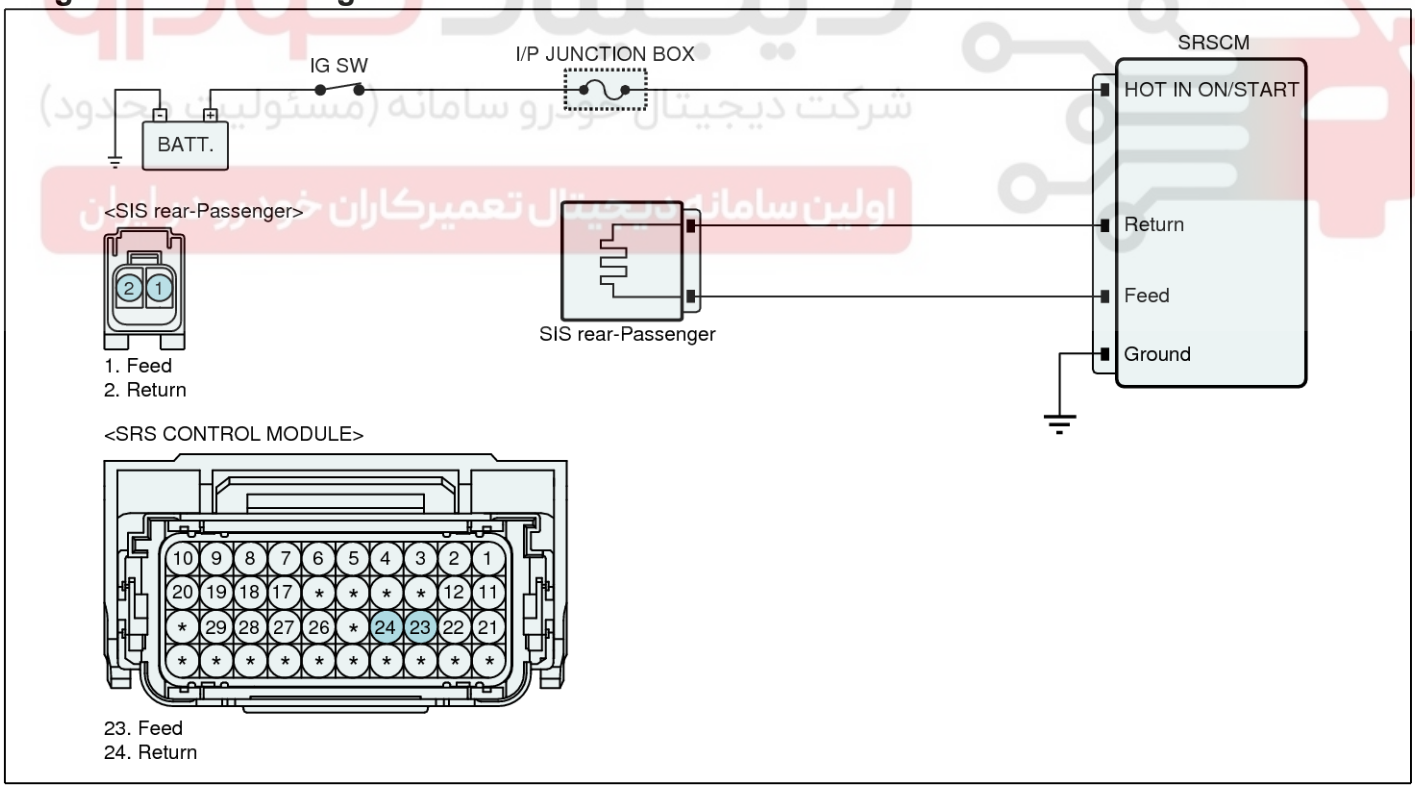
DTC Description

The SRSCM sets DTC B1417 if RPSIS with wrong ID is detected.4

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9613L

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.

SBHRT9550L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSIS connector .
5. Substitute the RPSIS 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 RPSIS, 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

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.

B1418 SIS(Side Impact Sensor)Rear-Driver Defect

General Description

Side Impact Sensor(SIS) is located in both side of C 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.

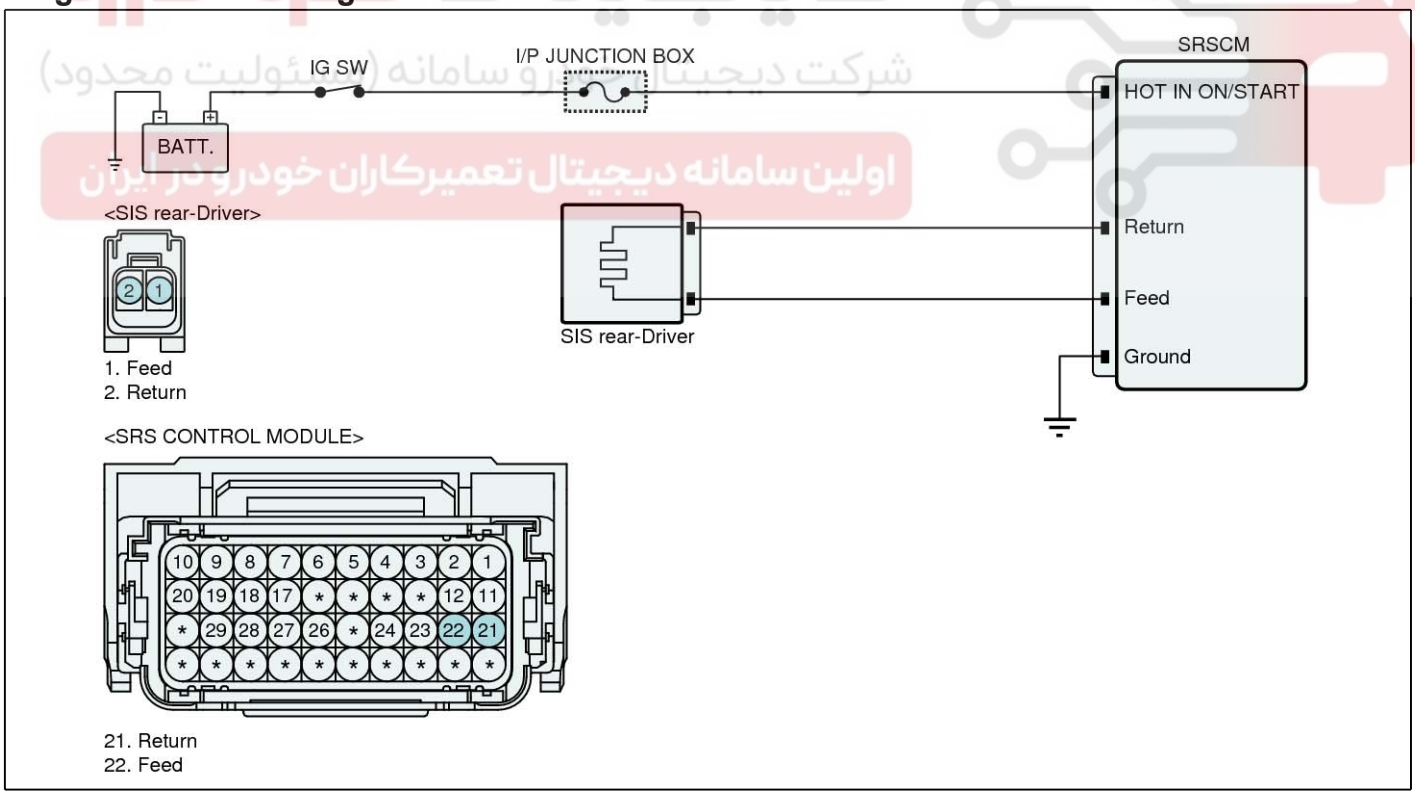
DTC Description

The SRSCM sets DTC B1418 if there is any error in communication between RDSIS and SRSCM.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9612L

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.

SBHRT9551L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSIS connector .
5. Substitute the RDSIS 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 RDSIS, 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

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.

B1419 SIS(Side Impact Sensor)Rear-Passenger Defect

General Description

Side Impact Sensor(SIS) is located in both side of C 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.

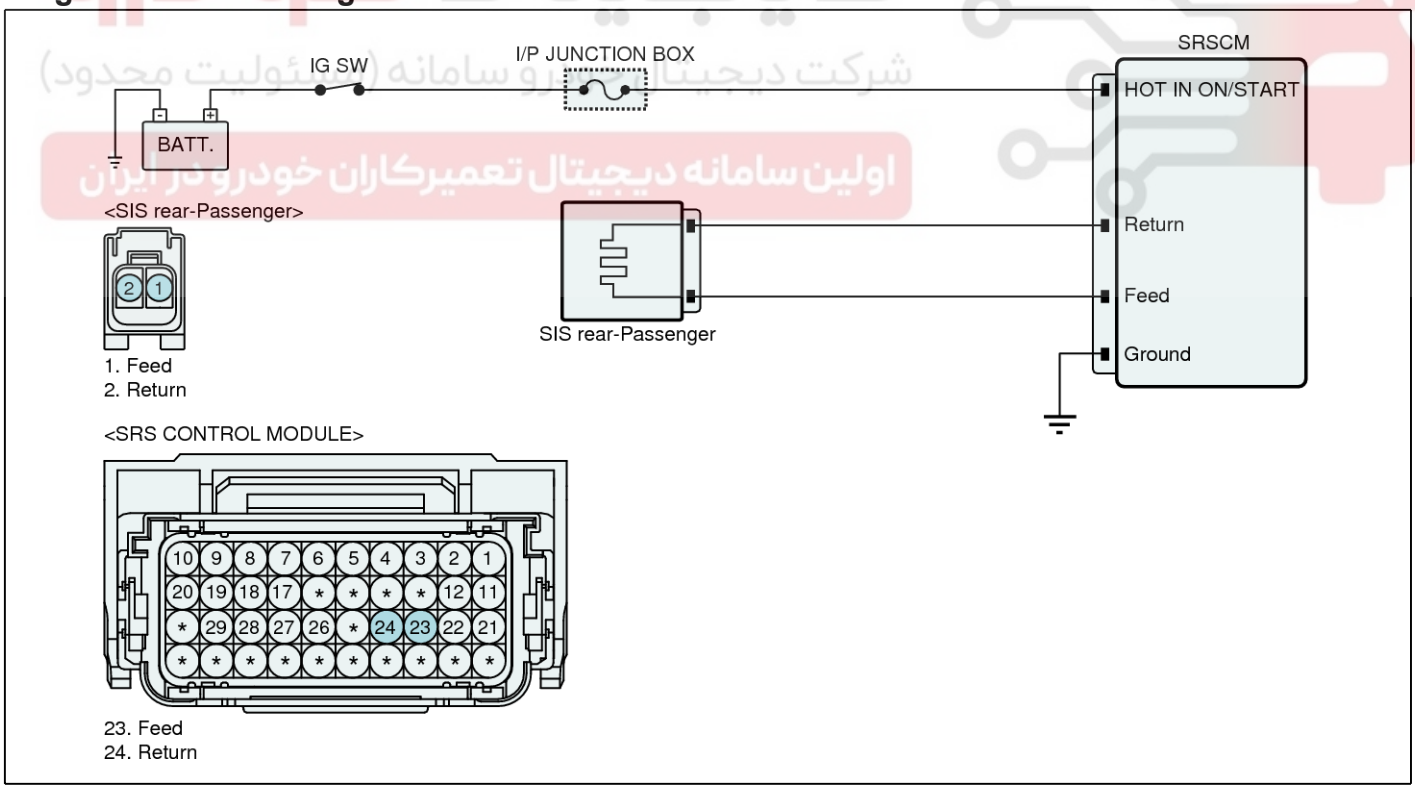
DTC Description

The SRSCM sets DTC B1419 if there is any error in communication between PSIS and SRSCM.

DTC Detecting Condition

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

Diagnostic Circuit Diagram



SBHRT9613L

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.

SBHRT9552L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSIS connector .
5. Substitute the RPSIS 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 RPSIS, 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

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.

B1429 Side Airbag Rear-Driver Resistance too High

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1429 if the measured resistance value of DRSAB 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.

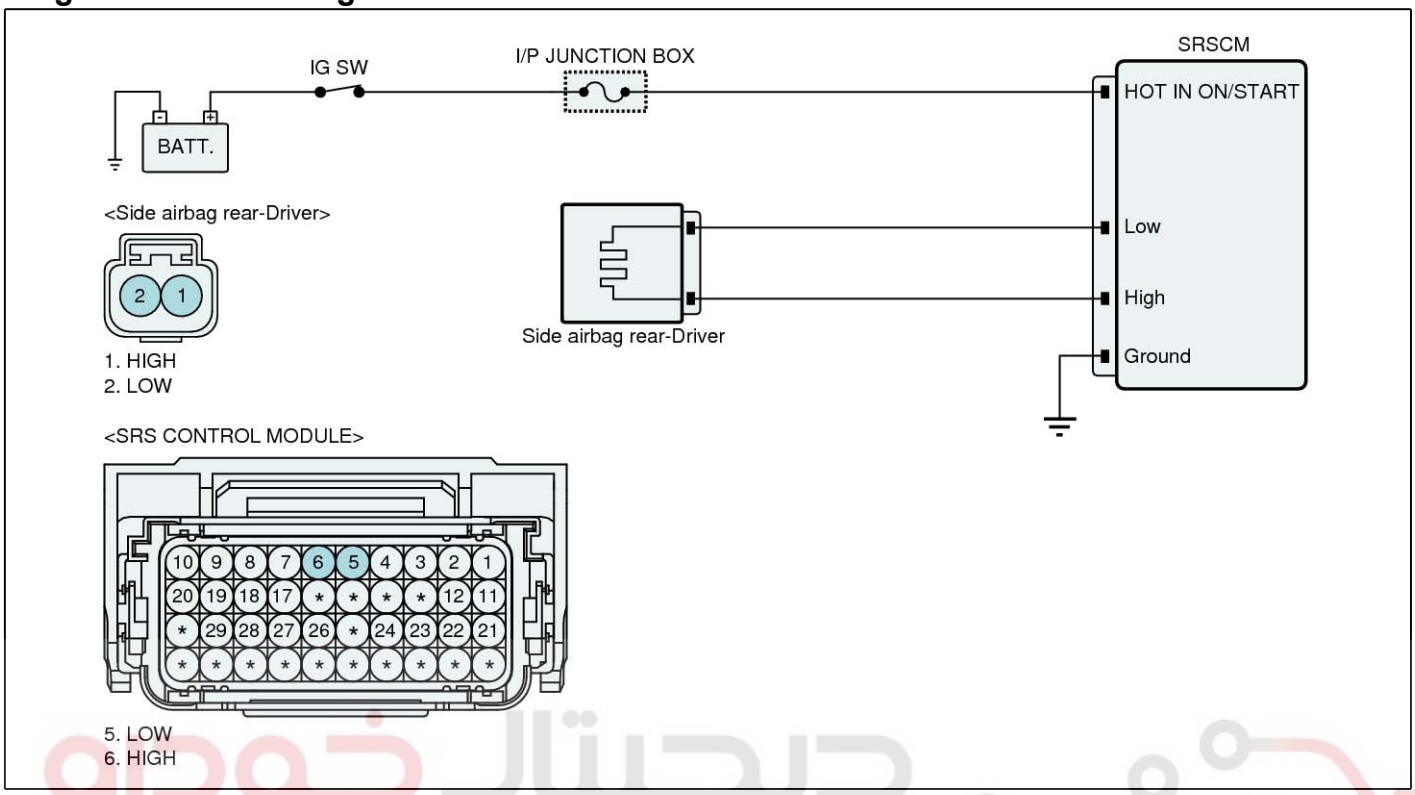
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DRSAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

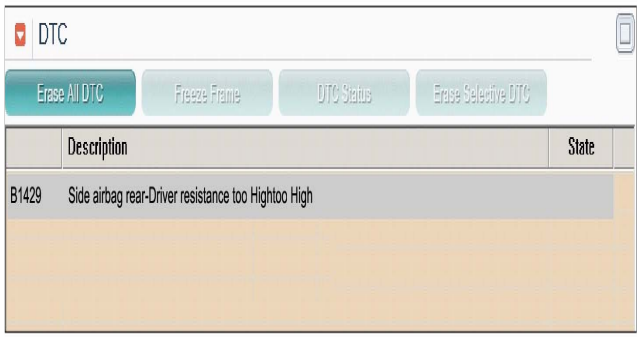
Diagnostic Circuit Diagram



SBHRT9614L

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.



SBHRT9553L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RDSAB or 2Ω 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 RDSAB assembly, and check for proper operation.
If the problem is corrected, replace RDSAB 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 RDSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "2" and "1" of the RDSAB harness connector.

Specification : approx. 1 Ω 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.

B1430 Side Airbag Rear-Driver Resistance too Low

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1430 if the measured resistance value of DRSAB 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.

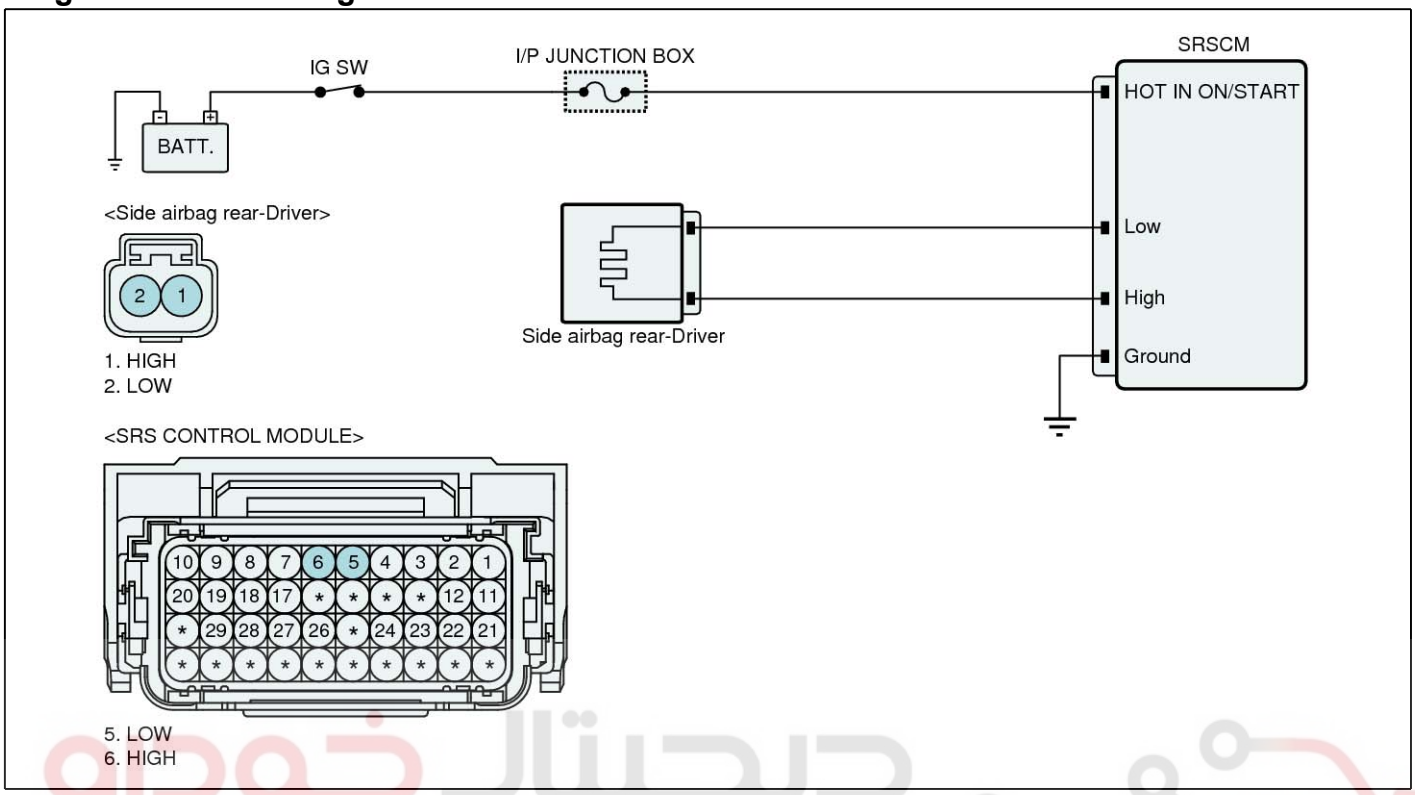
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DRSAB resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9614L

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.

SBHRT9554L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RDSAB or 2Ω 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 RDSAB assembly, and check for proper operation.
If the problem is corrected, replace RDSAB 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 RDSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "2" and "1" of the RDSAB harness connector.

Specification : approx. 1 Ω 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 SRSM 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.

B1431 Side Airbag Rear-Driver Resistance Circuit Short to Ground

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1431 if there is a short to ground in DRSAB harness.

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

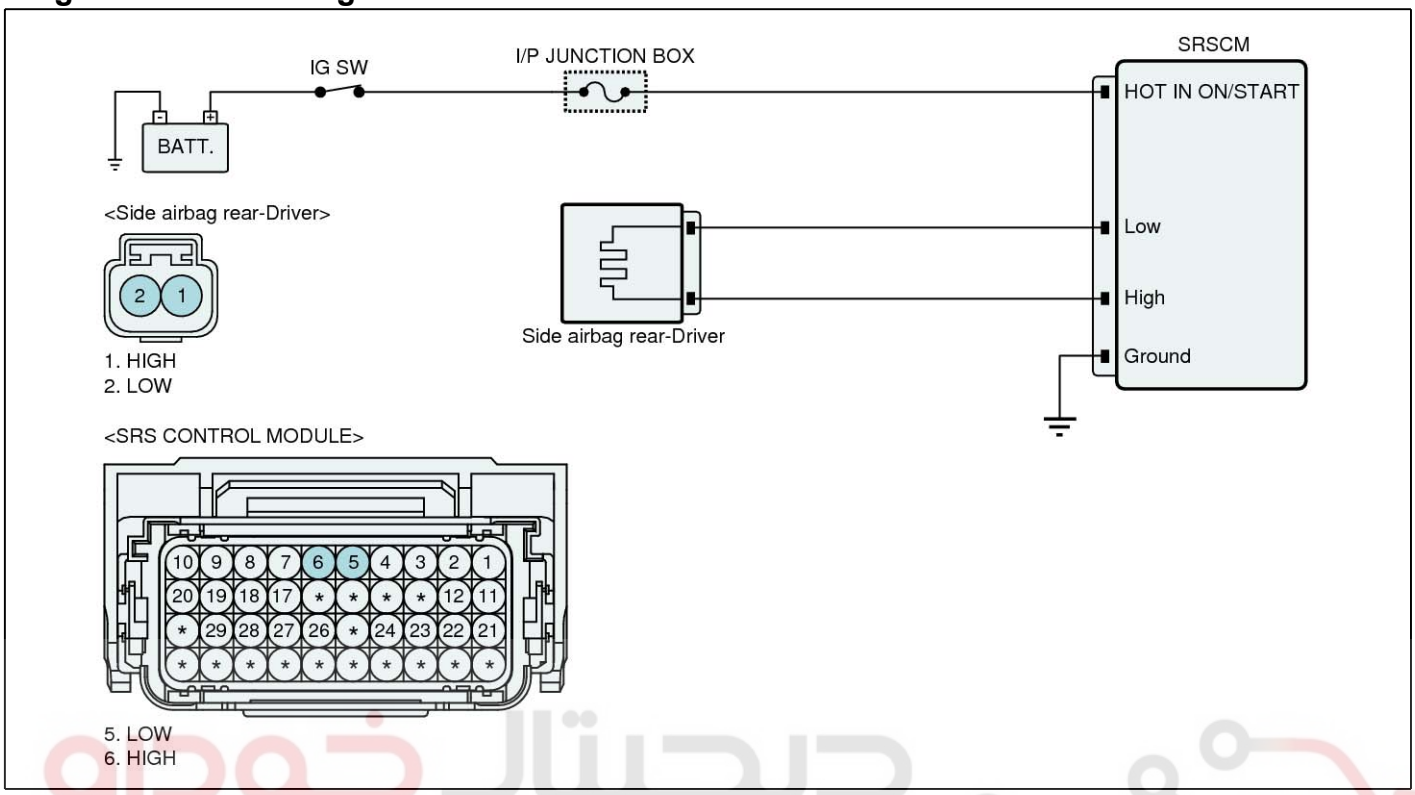
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in DRSAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DRSAB 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

Diagnostic Circuit Diagram



SBHRT9614L

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.

SBHRT9555L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RDSAB or 2Ω 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 RDSAB assembly, and check for proper operation.
If the problem is corrected, replace RDSAB 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 RDSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "1" or "2" of the RDSAB 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

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.

B1432 Side Airbag Rear-Driver Resistance Circuit Short to Battery

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1432 if there is a short to power in DRSAB harness.

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

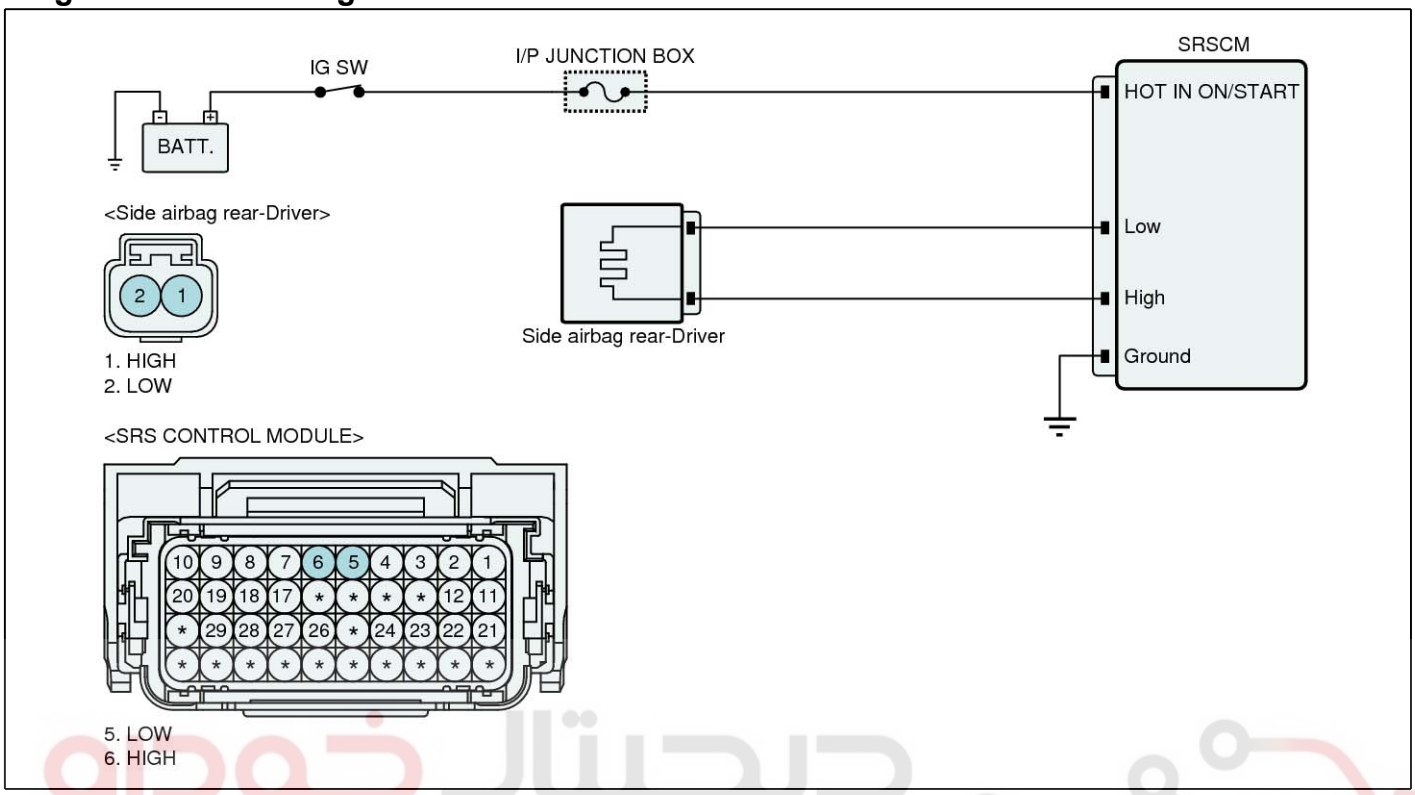
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in DRSAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DRSAB Squib line voltage is > 2.9V	
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

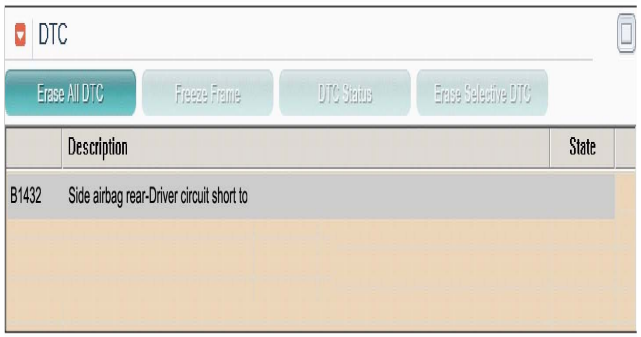
Diagnostic Circuit Diagram



SBHRT9614L

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.



SBHRT9556L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RDSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RDSAB or 2Ω 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 RDSAB assembly, and check for proper operation.
If the problem is corrected, replace RDSAB 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 RDSAB 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 "1 or 2" of the RDSAB 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

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.

B1433 Side Airbag Rear-Passenger Resistance too High

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1433 if the measured resistance value of PRSAB 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.

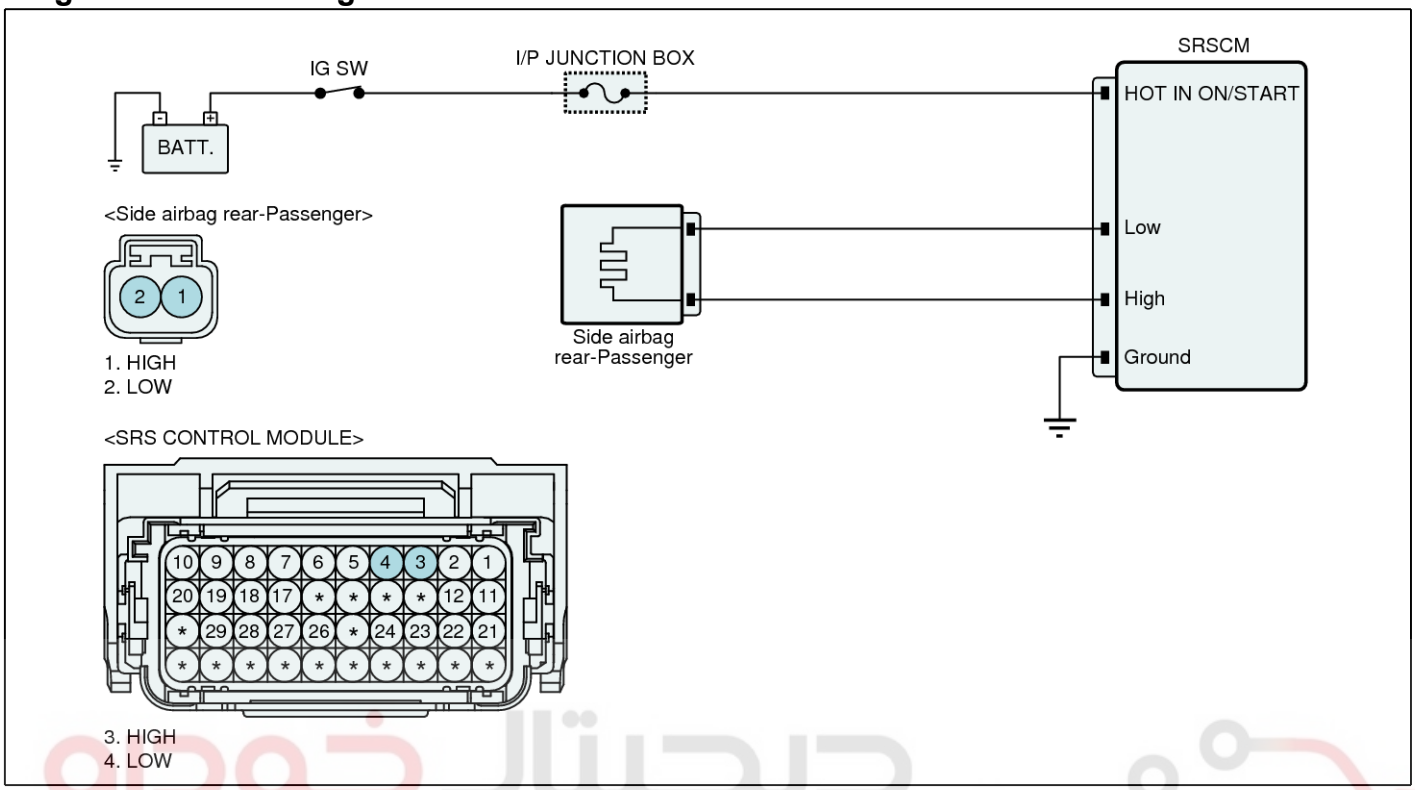
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PRSAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9615L

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.

SBHRT9557L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RPSAB or 2Ω 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 RPSAB assembly, and check for proper operation.
If the problem is corrected, replace RPSAB 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 RPSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "2" and "1" of the RPSAB harness connector.

Specification : approx. 1 Ω 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.

B1434 Side Airbag Rear-Passenger Resistance too Low

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1434 if the measured resistance value of PRSAB 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.

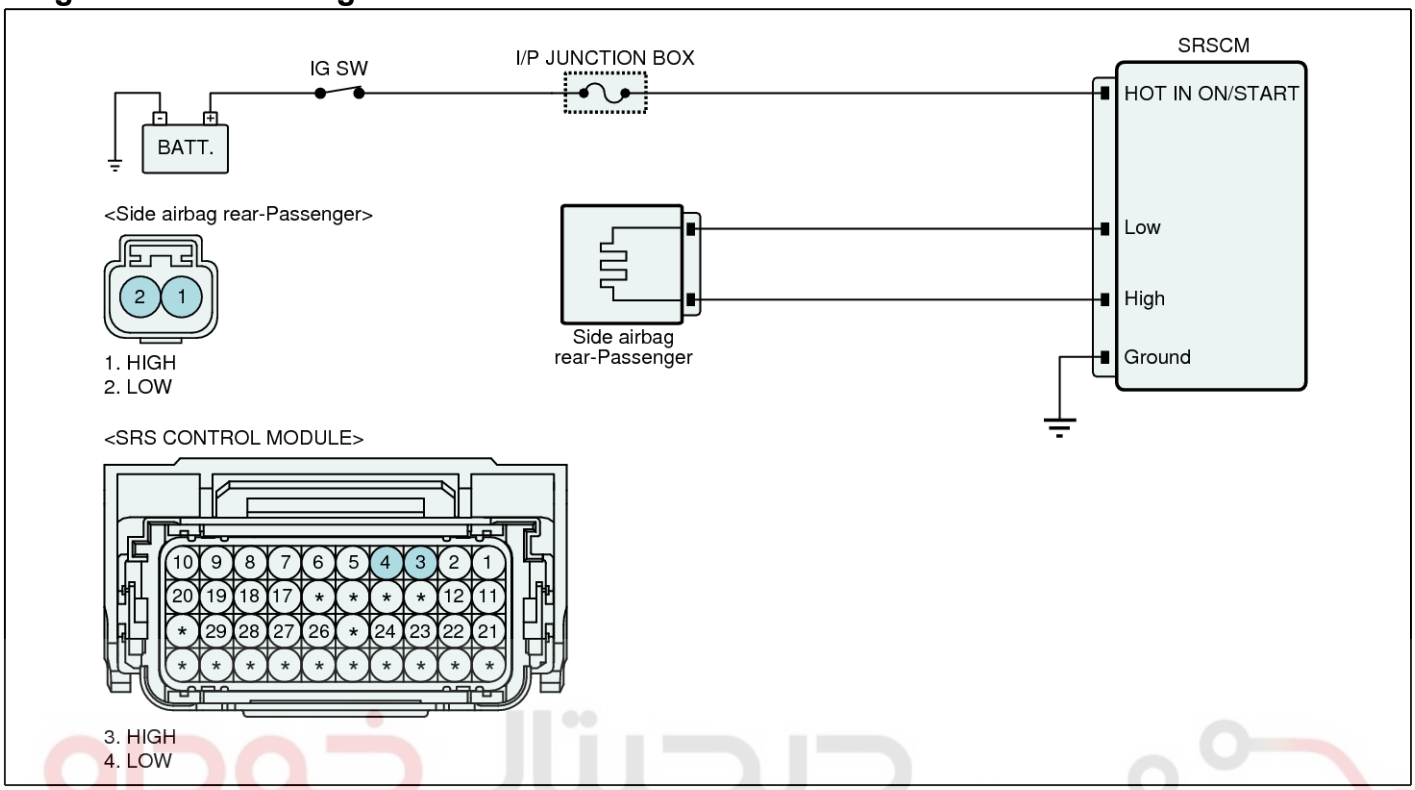
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PRSAB resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9615L

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.

SBHRT9558L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RPSAB or 2Ω 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 RPSAB assembly, and check for proper operation.
If the problem is corrected, replace RPSAB 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 RPSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "2" and "1" of the RPSAB harness connector.

Specification : approx. 1 Ω 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.

B1435 Side Airbag Rear-Passenger Resistance Circuit Short to Ground

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1435 if there is a short to ground in PRSAB harness.

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

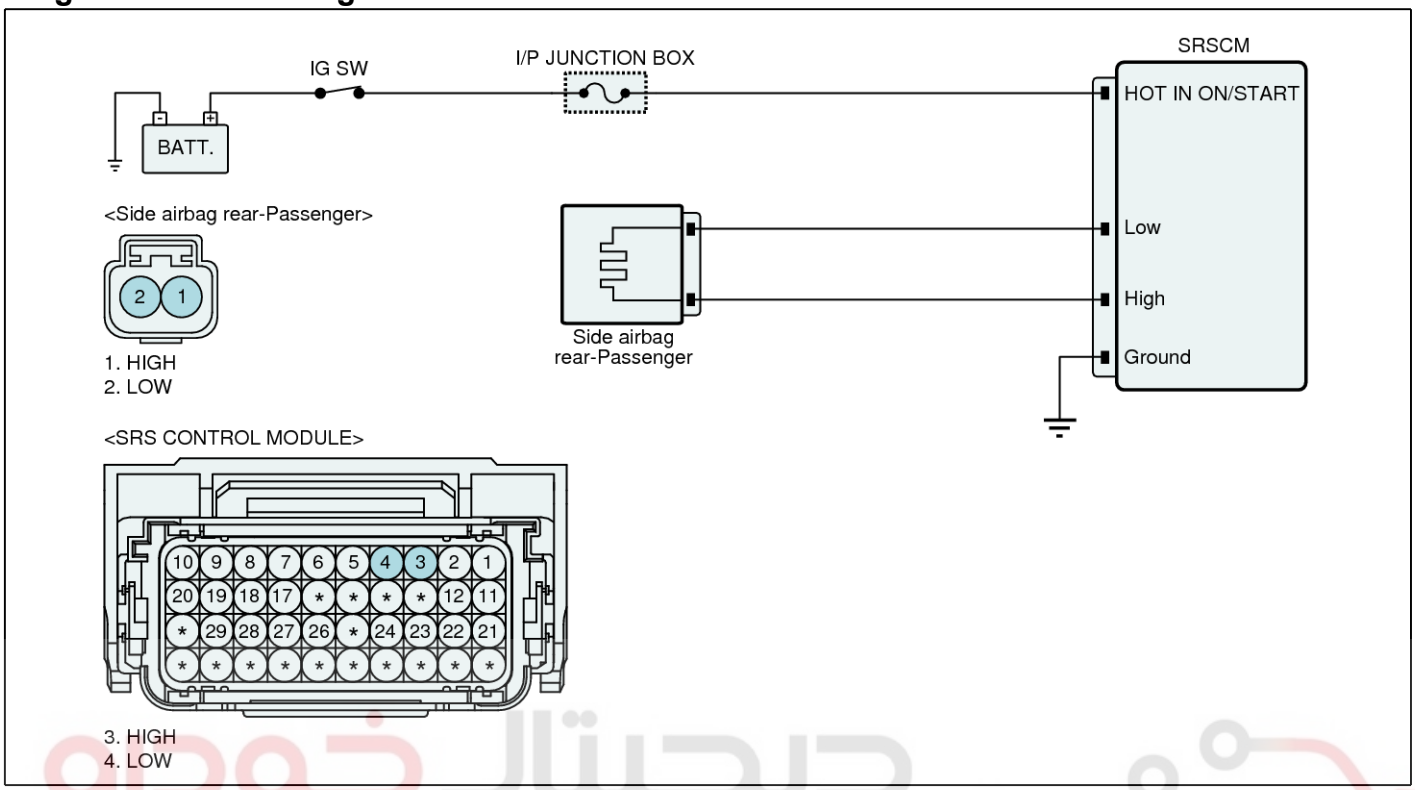
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PRSAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PRSAB 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

Diagnostic Circuit Diagram



SBHRT9615L

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.

SBHRT9559L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RPSAB or 2Ω 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 RPSAB assembly, and check for proper operation.
If the problem is corrected, replace RPSAB 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 RPSAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "1" or "2" of the RPSAB 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

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.

B1436 Side Airbag Rear-Passenger Resistance Circuit Short to Battery

General Description

Rear Side Airbag (hereinafter referred to RSAB) is located in driver and passenger side rear seat.

It protects passenger's head and shoulder in broad collision.

RSAB 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 RSAB directly, Current of measuring device may cause unexpected air bag deploy.

DTC Description

The SRSCM sets DTC B1436 if there is a short to power in PRSAB harness.

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

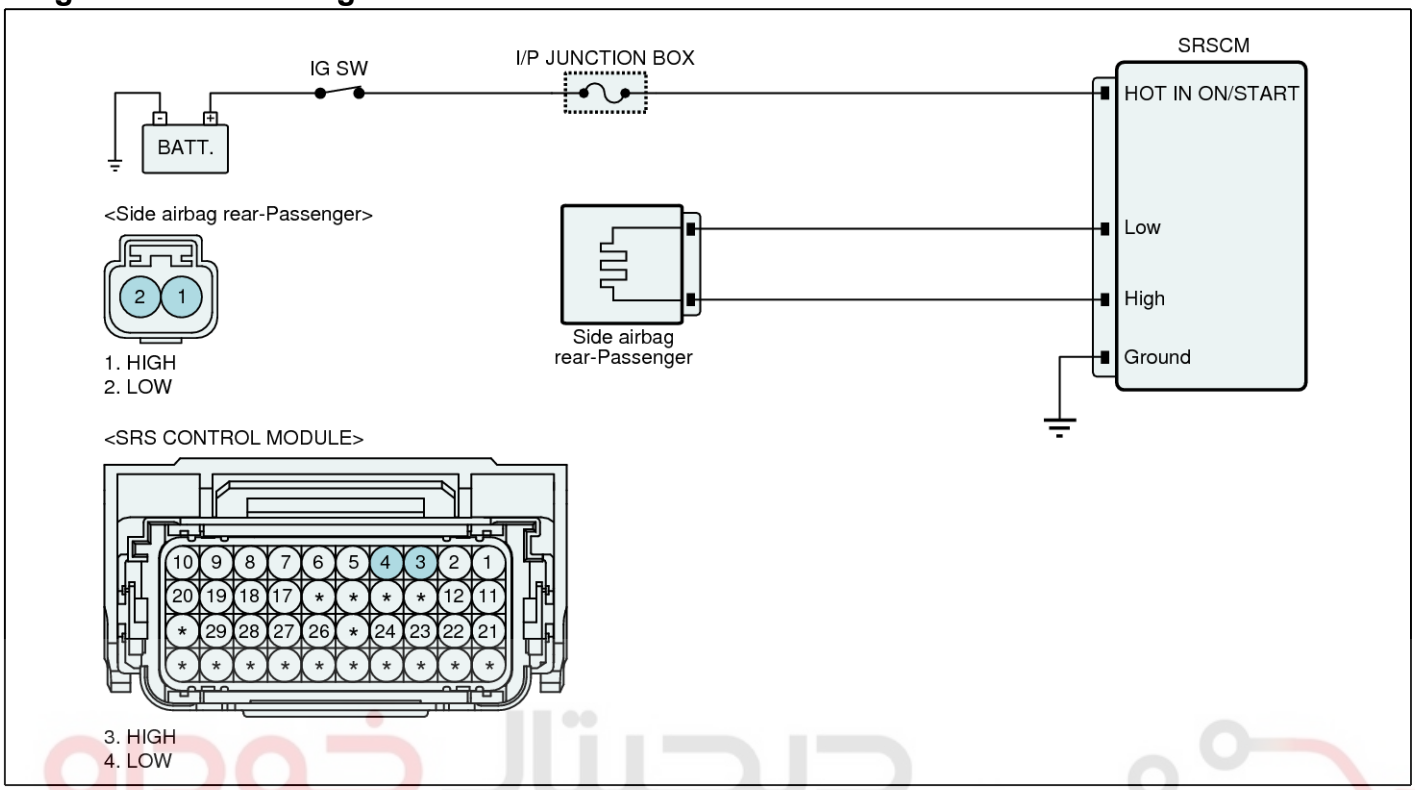
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PRSAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PRSAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PRSAB Squib line voltage is > 2.9V	
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

Diagnostic Circuit Diagram



SBHRT9615L

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.

SBHRT9560L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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 RPSAB module and connect the dummy (0957A-38200) and dummy adapter (0957A-3F000) to main harness connector.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good RPSAB or 2Ω 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 RPSAB assembly, and check for proper operation.
If the problem is corrected, replace RPSAB 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 RPSAB 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 "1 or 2" of the RPSAB 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

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.

B1451 SIS(Side Impact Sensor)rear-Driver Circuit Short to Ground

General Description

Rear Side Impact Sensor(RSIS) is located in both side of rear seat back panel detects rear side collision.

When RSIS delivers collision signal to SRSCM, SRSCM checks whether safing sensor located in SRSCM detects collusion. and if both RSIS and safing sensor detects collision simultaneously, SRSCM operates rear side air bag.

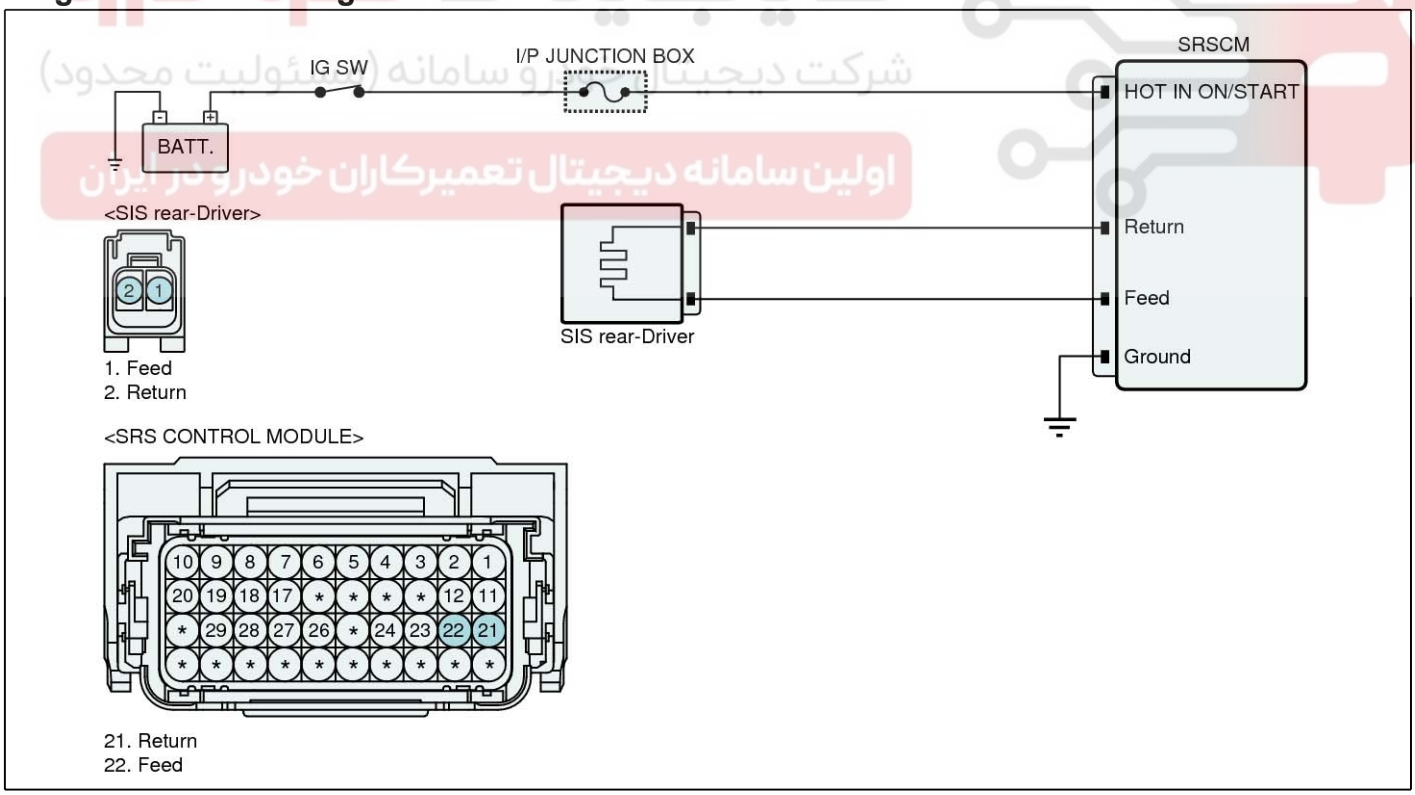
DTC Description

The SRSCM sets DTC B1451 if there is a short to ground in RDSIS harness.

DTC Detecting Condition

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

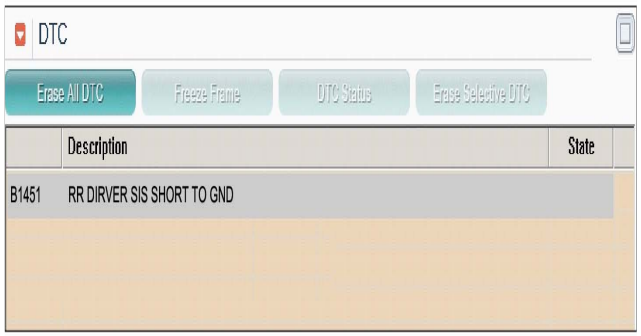
Diagnostic Circuit Diagram



SBHRT9612L

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.



SBHRT9561L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 RDSIS connector and SRSCM main harness connector.
4. Measure resistance between terminal "1" or "2" 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 RDSIS connector .
5. Substitute the RDSIS 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 RDSIS, 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

Refer to the DTC B1101 : Battery Voltage High.

B1452 SIS(Side Impact Sensor)Rear-Driver Circuit Short to Battery

General Description

Rear Side Impact Sensor(RSIS) is located in both side of rear seat back panel detects rear side collision.

When RSIS delivers collision signal to SRSCM, SRSCM checks whether safing sensor located in SRSCM detects collusion. and if both RSIS and safing sensor detects collision simultaneously, SRSCM operates rear side air bag.

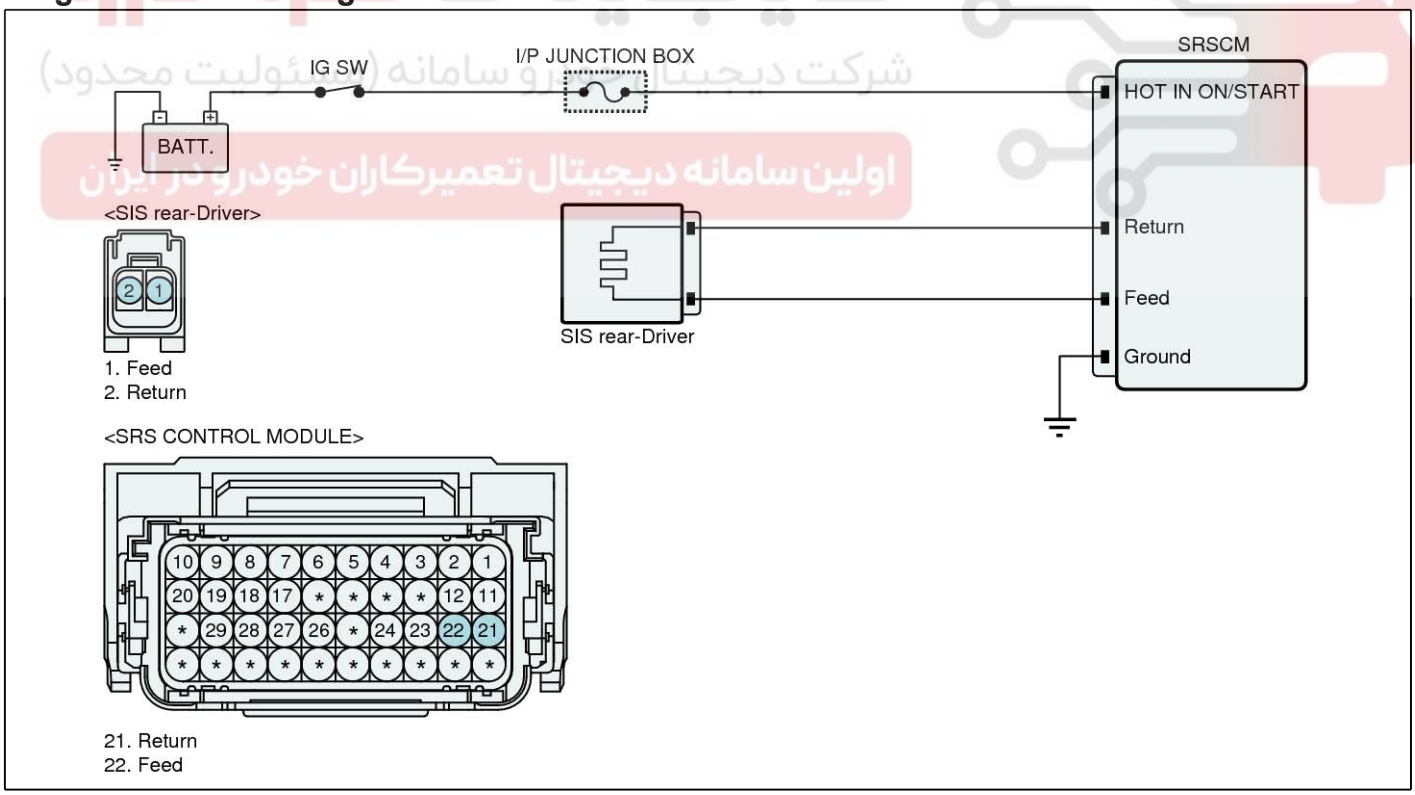
DTC Description

The SRSCM sets DTC B1452 if there is short to power harness in DSIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to power in RDSIS harness. • Faulty RDSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• RDSIS 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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

Diagnostic Circuit Diagram



SBHRT9612L

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.

SBHRT9562L

NOTICE
- H : Historical fault
- P : Present fault

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 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 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 RDSIS connector and SRSCM main harness connector.
4. Ignition "ON" & Engine "OFF"
5. Measure voltage between terminal "1" or "2" of the RDSIS 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 RDSIS connector .
5. Substitute the RDSIS 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 RDSIS, 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

Refer to the DTC B1101 : Battery Voltage High.

B1454 SIS(Side Impact Sensor)Rear-Passenger Circuit Short to Ground

General Description

Rear Side Impact Sensor(RSIS) is located in both side of rear seat back panel detects rear side collision.

When RSIS delivers collision signal to SRSCM, SRSCM checks whether safing sensor located in SRSCM detects collusion. and if both RSIS and safing sensor detects collision simultaneously, SRSCM operates rear side air bag.

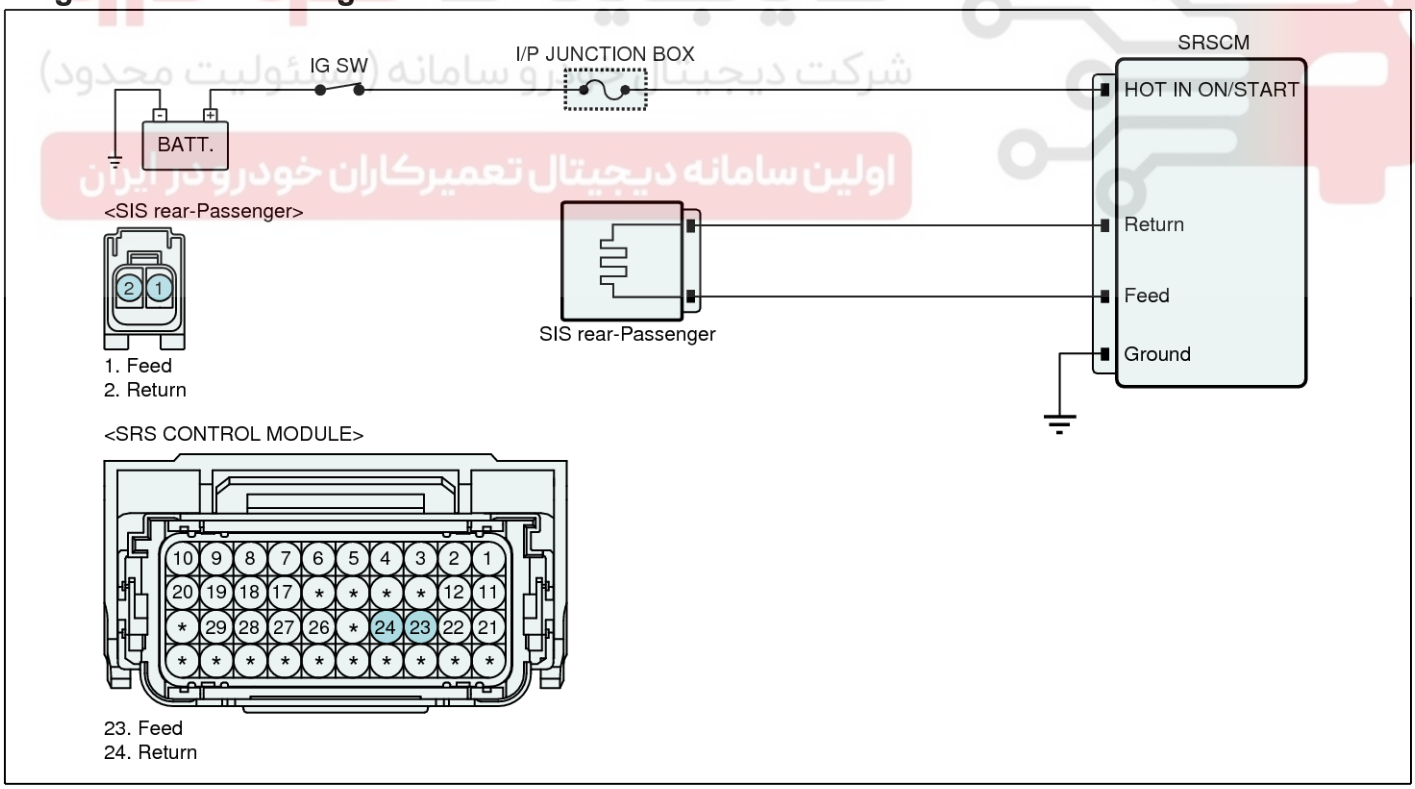
DTC Description

The SRSCM sets DTC B1454 if there is a short to ground in RPSIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to ground in RPSIS harness. • Faulty RPSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• RDSIS no acceleration data, and line voltage >11V	
Diagnostic Time	Qualification	• Ini(Start Up):2.1s (2 times) • Steady:500μs x 8 + 2.2s (2 times)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

Diagnostic Circuit Diagram



SBHRT9613L

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.

SBHRT9563L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 RPSIS connector and SRSCM main harness connector.
4. Measure resistance between terminal "1" or "2" of the RPSIS 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 RPSIS connector .
5. Substitute the RPSIS 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 RPSIS, and check for proper operation.
If the problem is corrected, replace RPSIS and then go to "Verification of Vehicle Repair" procedure.

Verification of Vehicle Repair

Refer to the DTC B1101 : Battery Voltage High.

B1455 SIS(Side Impact Sensor)Rear-Passenger Circuit Short to Battery

General Description

Rear Side Impact Sensor(RSIS) is located in both side of rear seat back panel detects rear side collision.

When RSIS delivers collision signal to SRSCM, SRSCM checks whether safing sensor located in SRSCM detects collusion. and if both RSIS and safing sensor detects collision simultaneously, SRSCM operates rear side air bag.

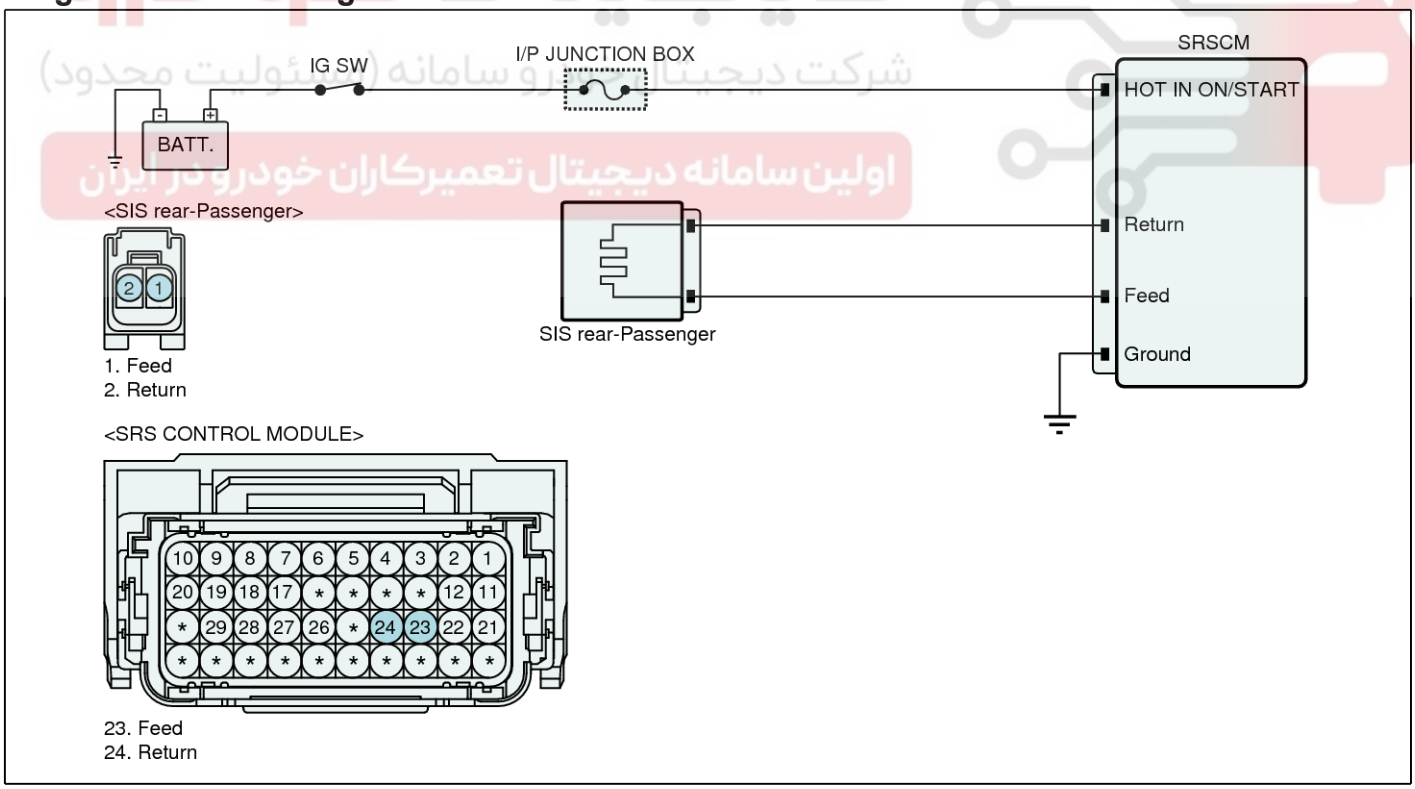
DTC Description

The SRSCM sets DTC B1455 if there is short to power harness in RPSIS harness.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check voltage	• Short to power in RPSIS harness. • Faulty RPSIS. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• RPSIS 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)	
	De-Qualification	• Ini(Start Up):1 time • Steady:1 time	

Diagnostic Circuit Diagram



SBHRT9613L

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.

SBHRT9564L

NOTICE

- H : Historical fault

- P : Present fault

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 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 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 RPSIS connector and SRSCM main harness connector.
4. Ignition "ON" & Engine "OFF"
5. Measure voltage between terminal "1" or "2" of the RPSIS 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 RPSIS connector .
5. Substitute the RPSIS 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 RPSIS, and check for proper operation.
If the problem is corrected, replace RPSIS and then go to "Verification of Vehicle Repair" procedure.

Verification of Vehicle Repair

Refer to the DTC B1101 : Battery Voltage High.

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

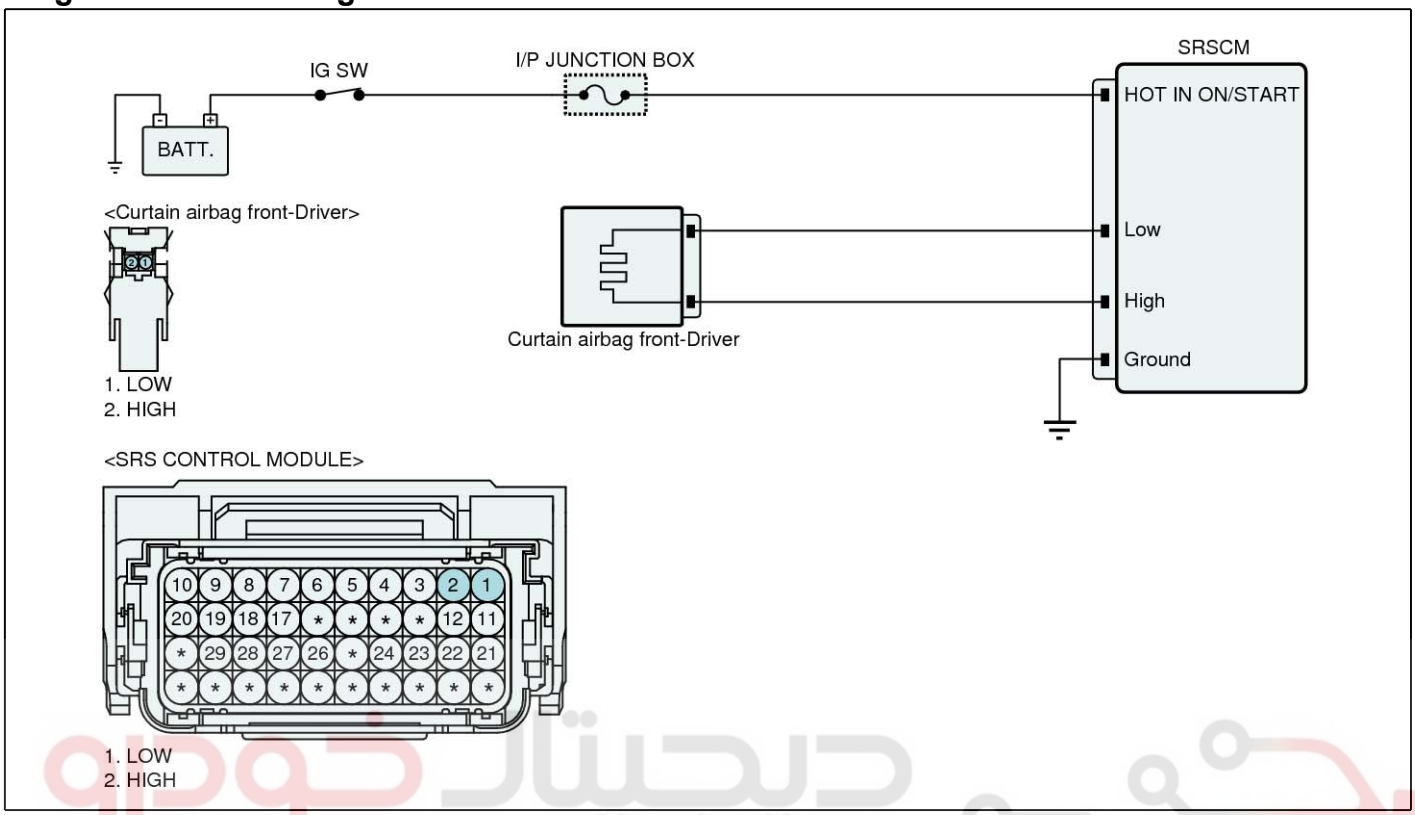
The SRSCM sets DTC B1473 if the measured resistance value of DCAB circuit is more than the threshold value.

*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. • Poor connection between shorting bar and release pin. • Faulty DCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DCAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

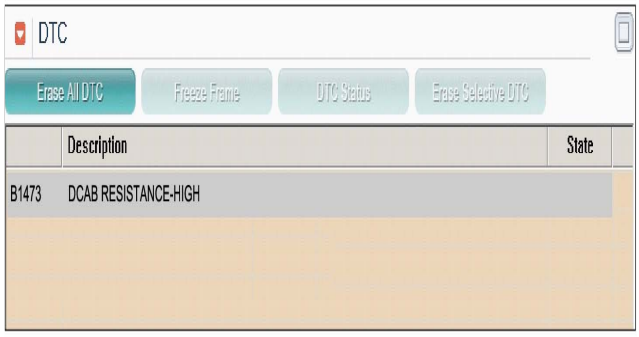
Diagnostic Circuit Diagram



SBHRT9616L

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.



SBHRT9565L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or 2Ω 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. Measure resistance between terminal "Low" and "High" of the DCAB harness connector.

Specification : approx. 1 Ω 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.

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

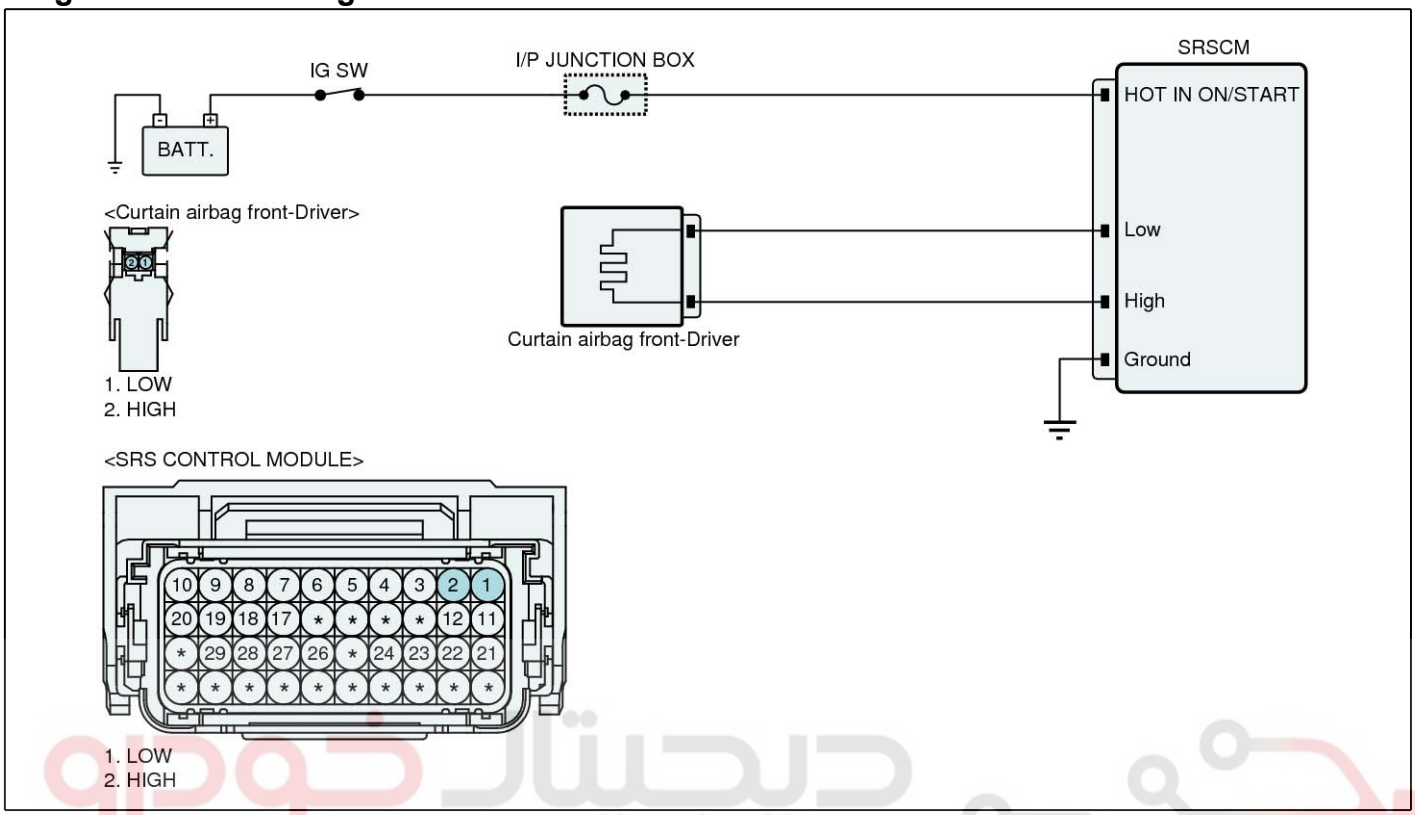
The SRSCM sets DTC B1474 if the measured resistance value of DCAB circuit is less than the threshold value.

*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 part. • Poor connection between shorting bar and release pin. • Faulty DCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DCAB resistance ≤1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

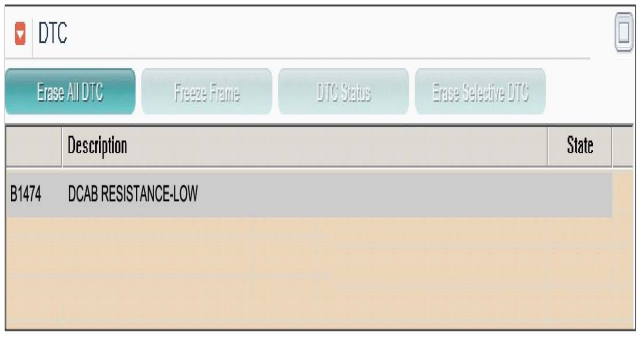
Diagnostic Circuit Diagram



SBHRT9616L

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.



SBHRT9566L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good DCAB or 2Ω 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. Measure resistance between terminal "Low" and "High" of the DCAB harness connector.

Specification : approx. 1 Ω 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.

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.

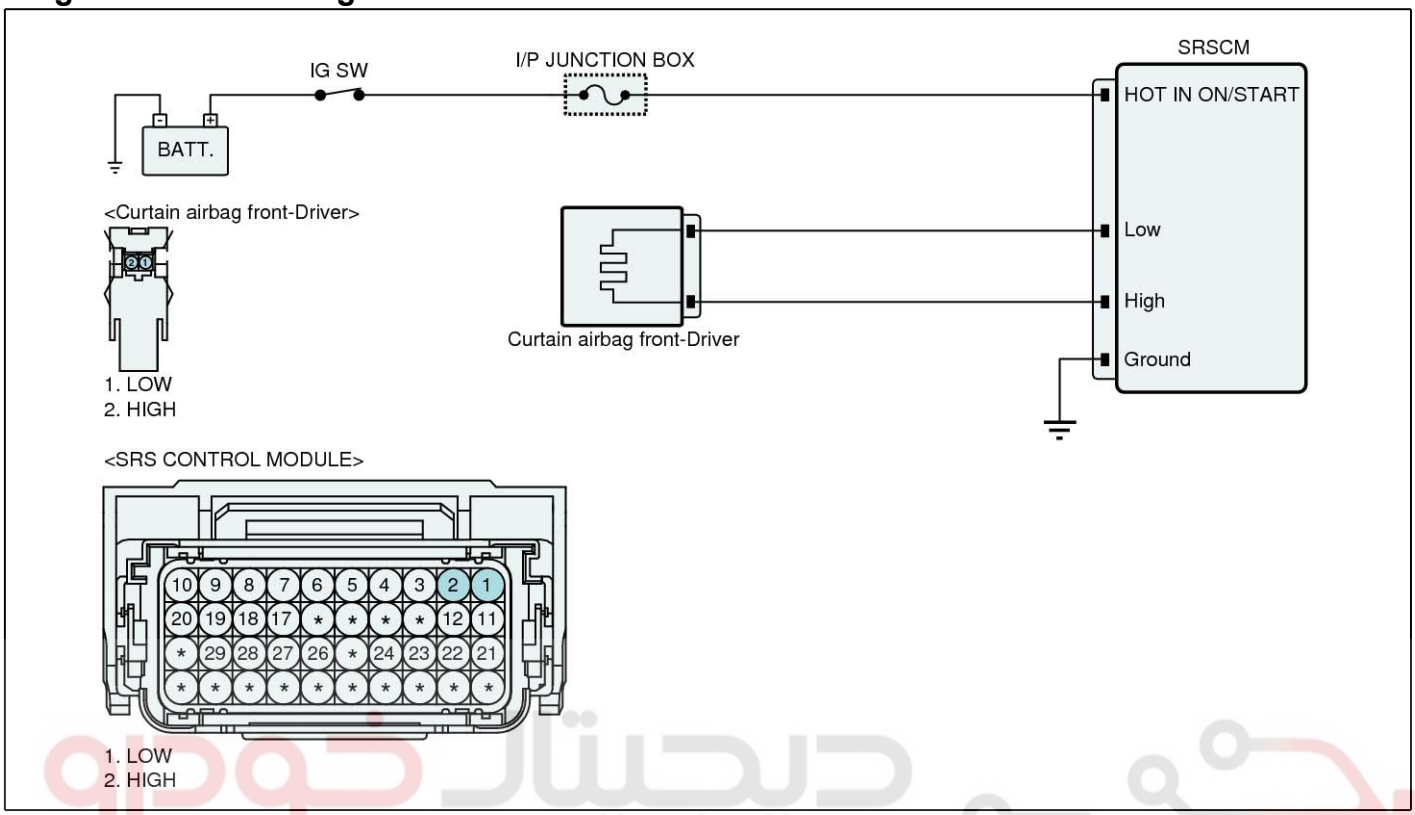
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in DCAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DCAB 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

Diagnostic Circuit Diagram



SBHRT9616L

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.

SBHRT9567L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

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.

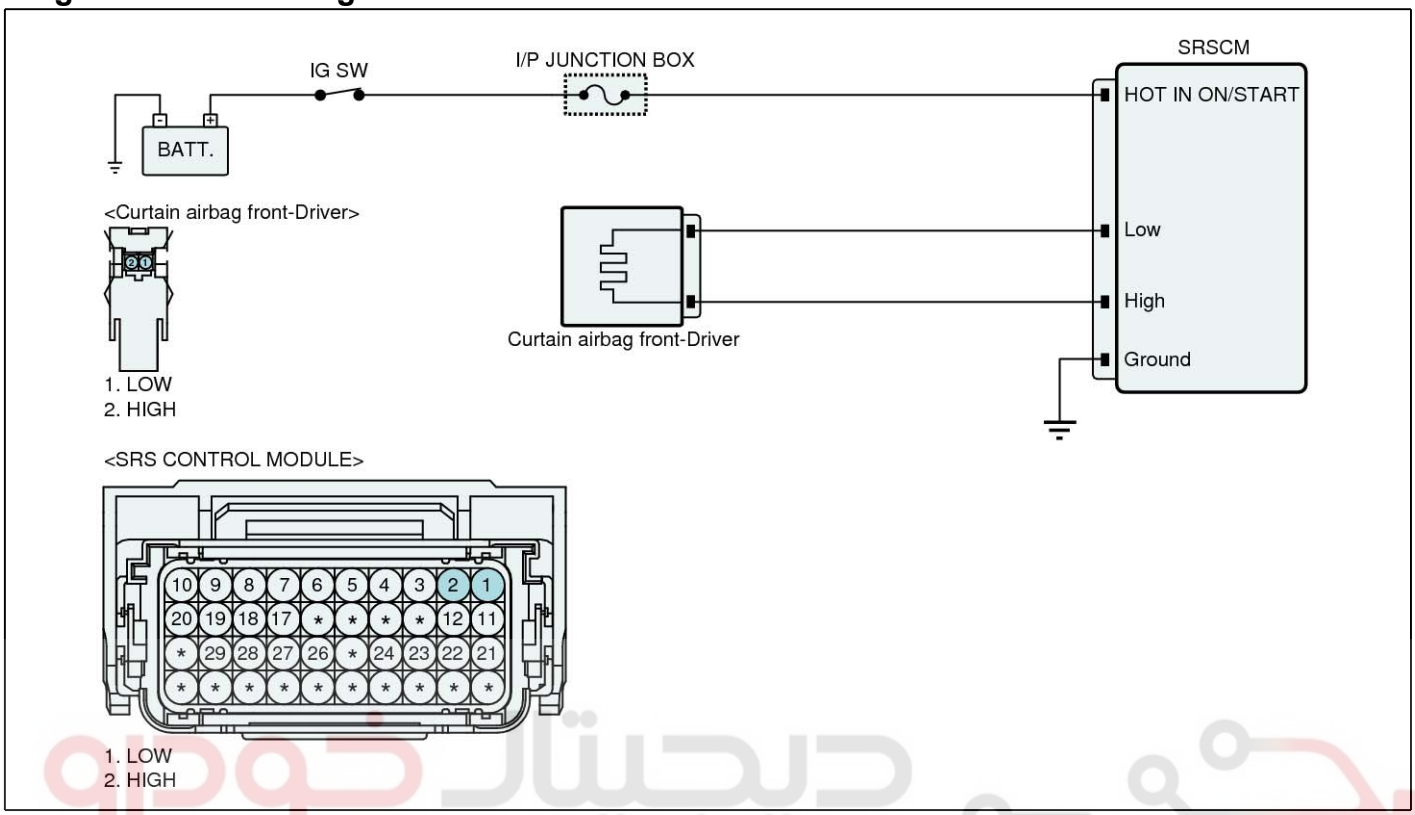
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in DCAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DCAB Squib line voltage is > 2.9V	
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

Diagnostic Circuit Diagram



SBHRT9616L

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.

SBHRT9568L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

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.

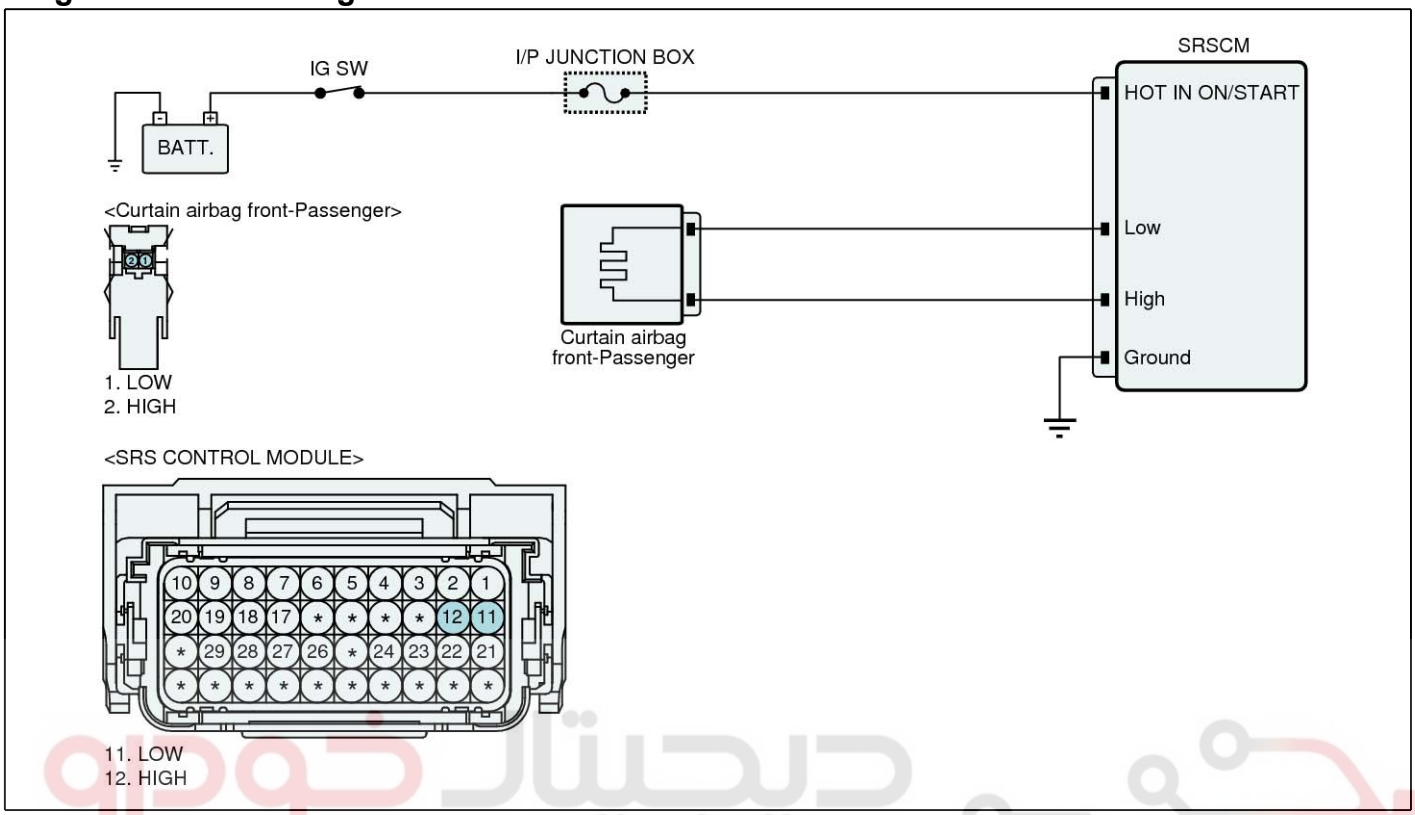
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PCAB resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

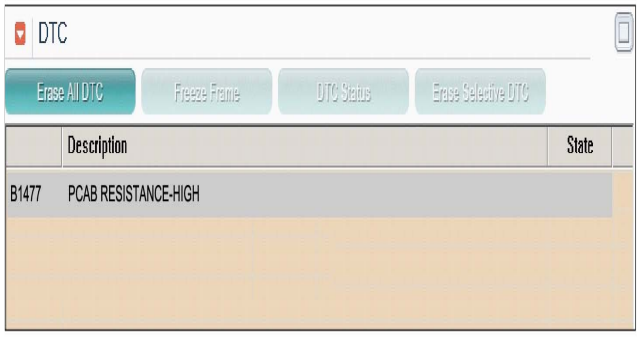
Diagnostic Circuit Diagram



SBHRT9617L

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.



SBHRT9569L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or 2Ω 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 PCAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "Low" and "High" of the PCAB harness connector.

Specification : approx. 1 Ω 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.

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.

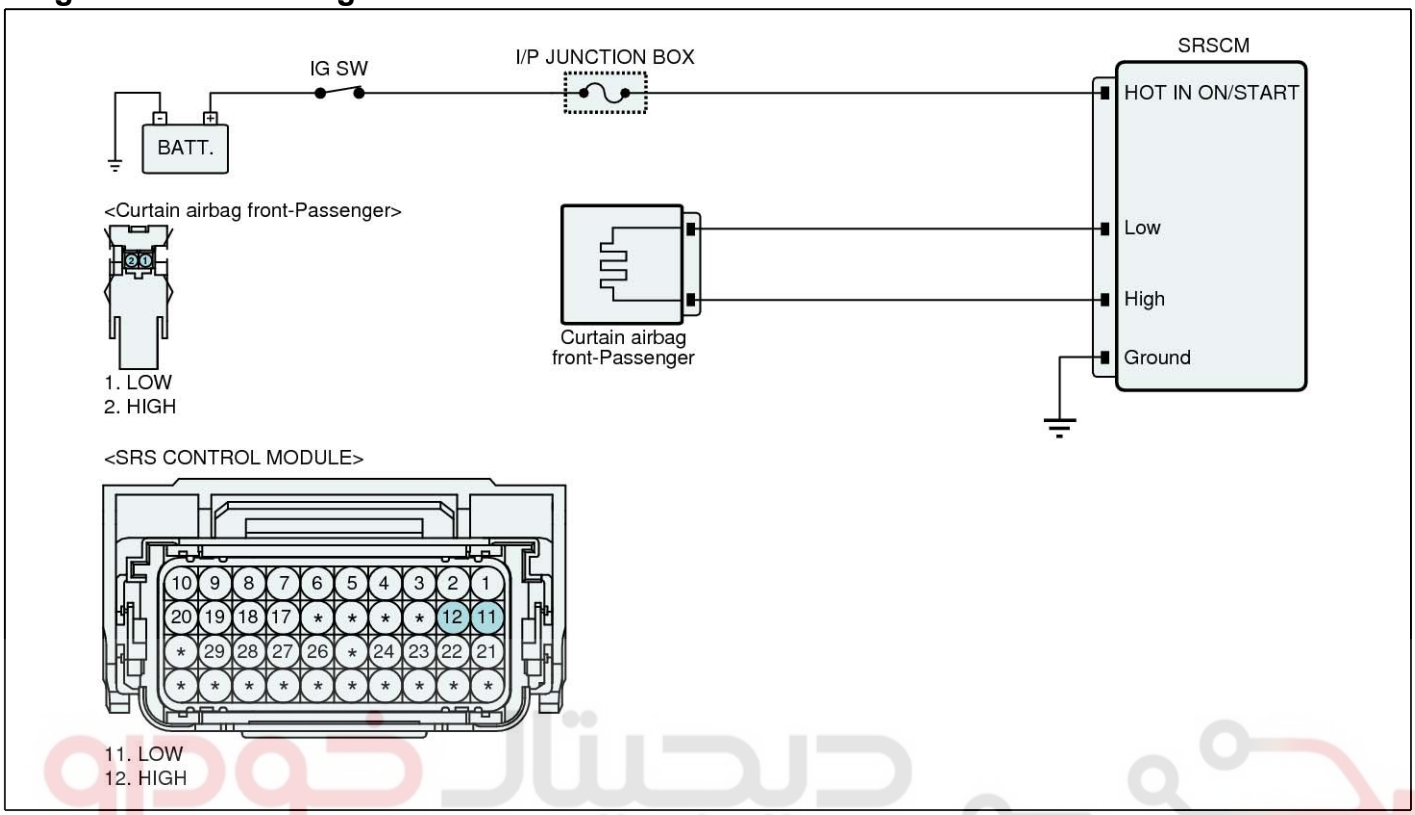
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PCAB resistance ≤1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

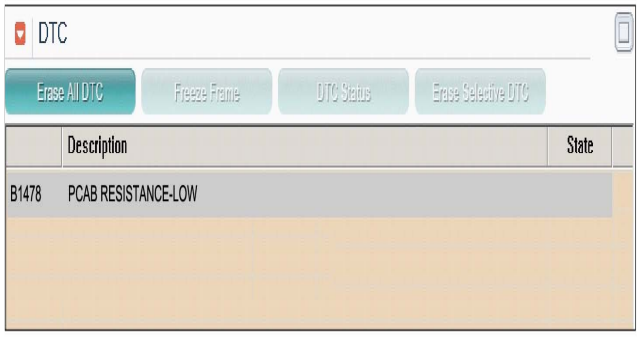
Diagnostic Circuit Diagram



SBHRT9617L

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.



SBHRT9570L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good PCAB or 2Ω 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 PCAB connector and SRSCM main harness connector.
4. Measure resistance between terminal "Low" and "High" of the PCAB harness connector.

Specification : approx. 1 Ω 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.

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.

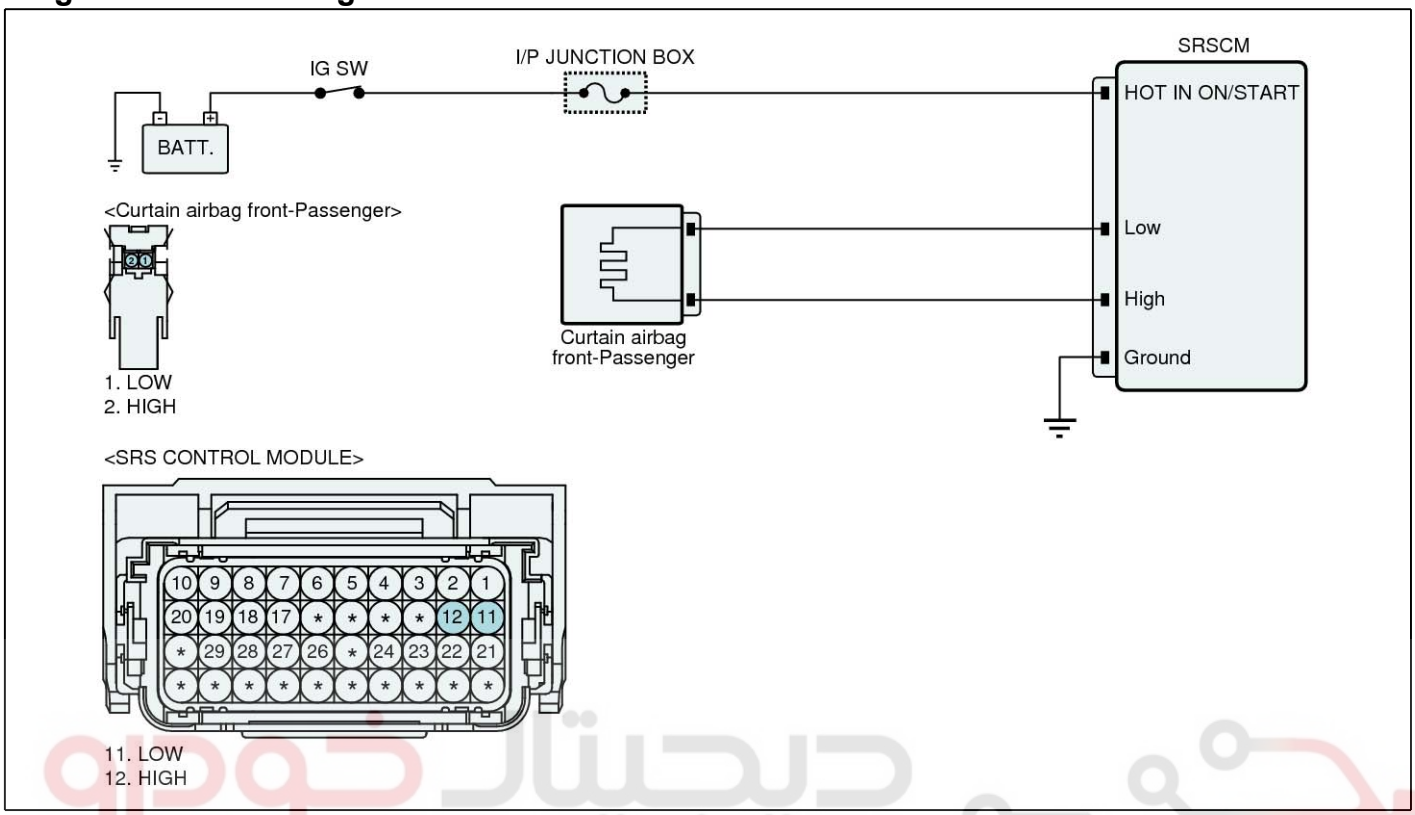
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PCAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PCAB 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

Diagnostic Circuit Diagram



SBHRT9617L

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.

SBHRT9571L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

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.

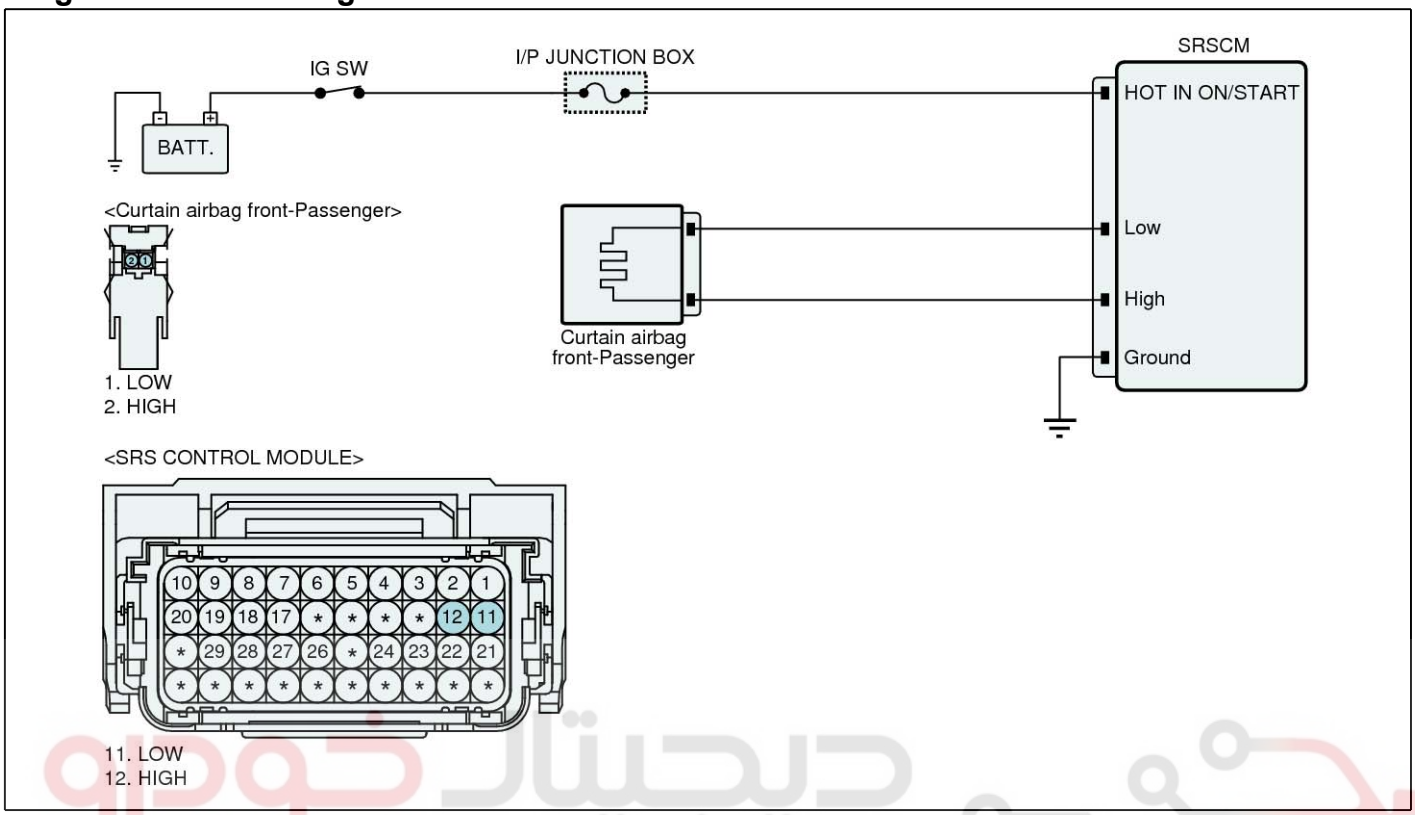
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PCAB harness. • Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PCAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PCAB Squib line voltage is > 2.9V	
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

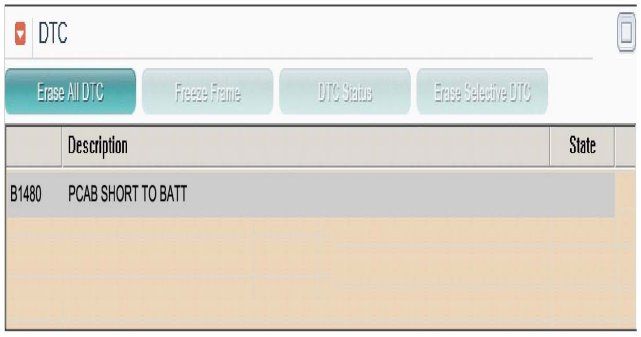
Diagnostic Circuit Diagram



SBHRT9617L

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.



SBHRT9572L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

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

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.

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.

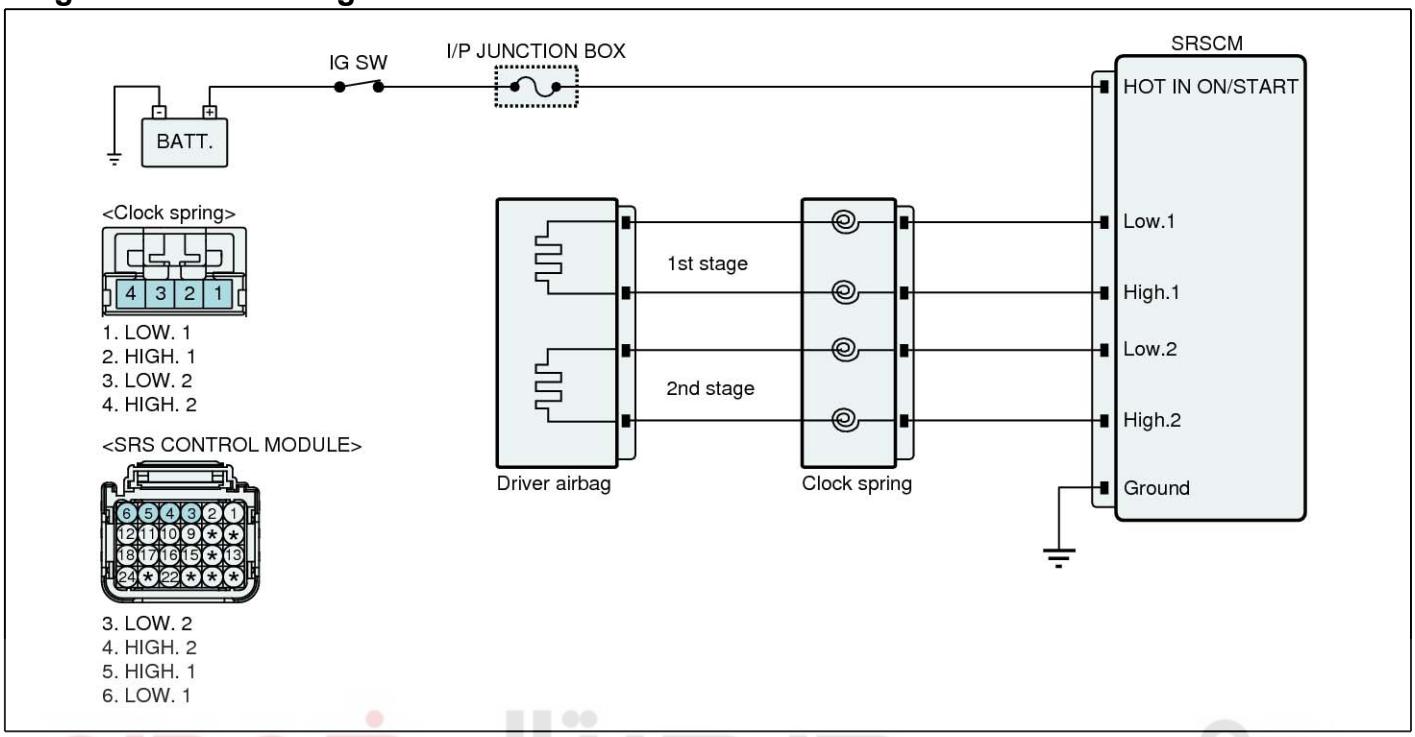
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 2nd stage resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9603L

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.

SBHRT9573L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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. Measure resistance between terminal "Low.2" and "High.2" of the Clock Spring 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 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 Ω 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

Refer to the DTC B1101 : Battery Voltage High.

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(1.0Ω)

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

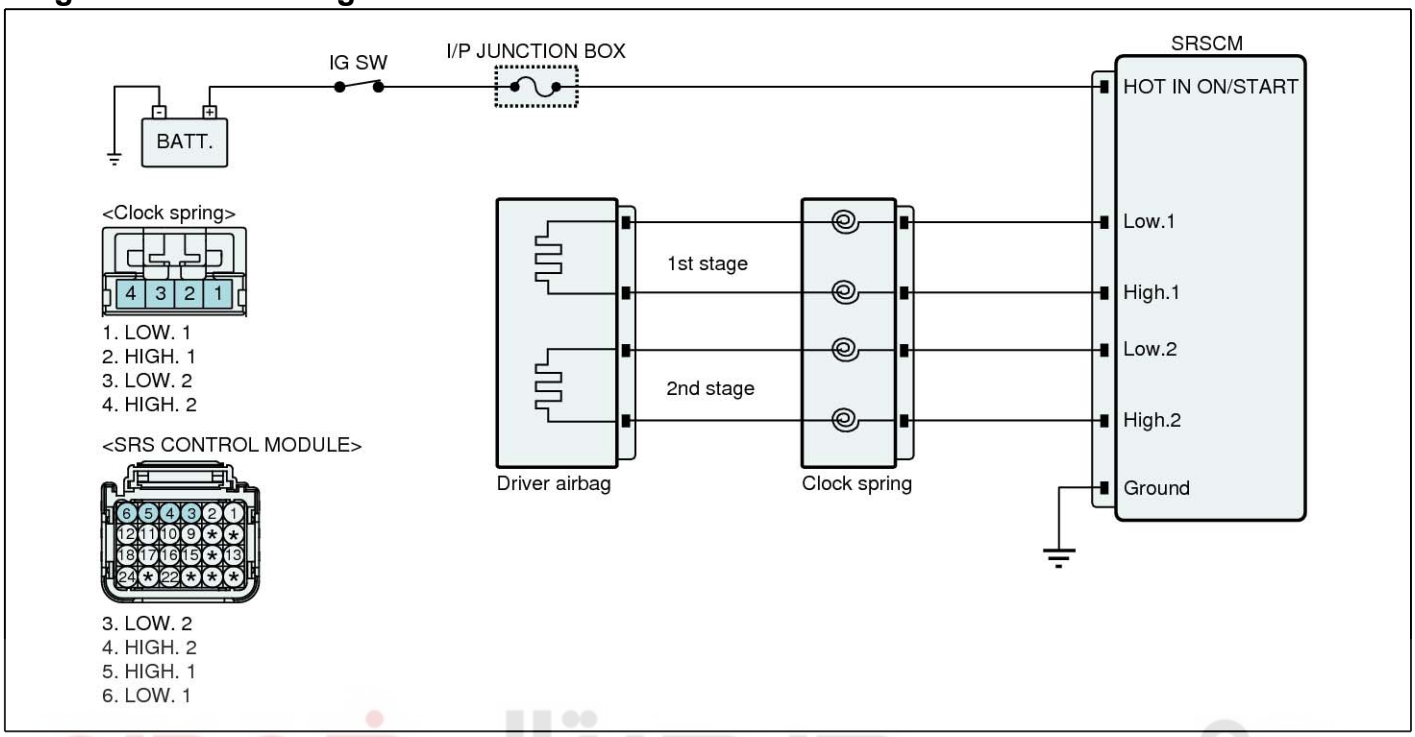
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 2nd stage resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

Diagnostic Circuit Diagram



SBHRT9603L

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.

SBHRT9574L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

NOTICE
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. Measure resistance between terminal "Low.2" and "High.2" of the Clock Spring 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 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 Ω 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.

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

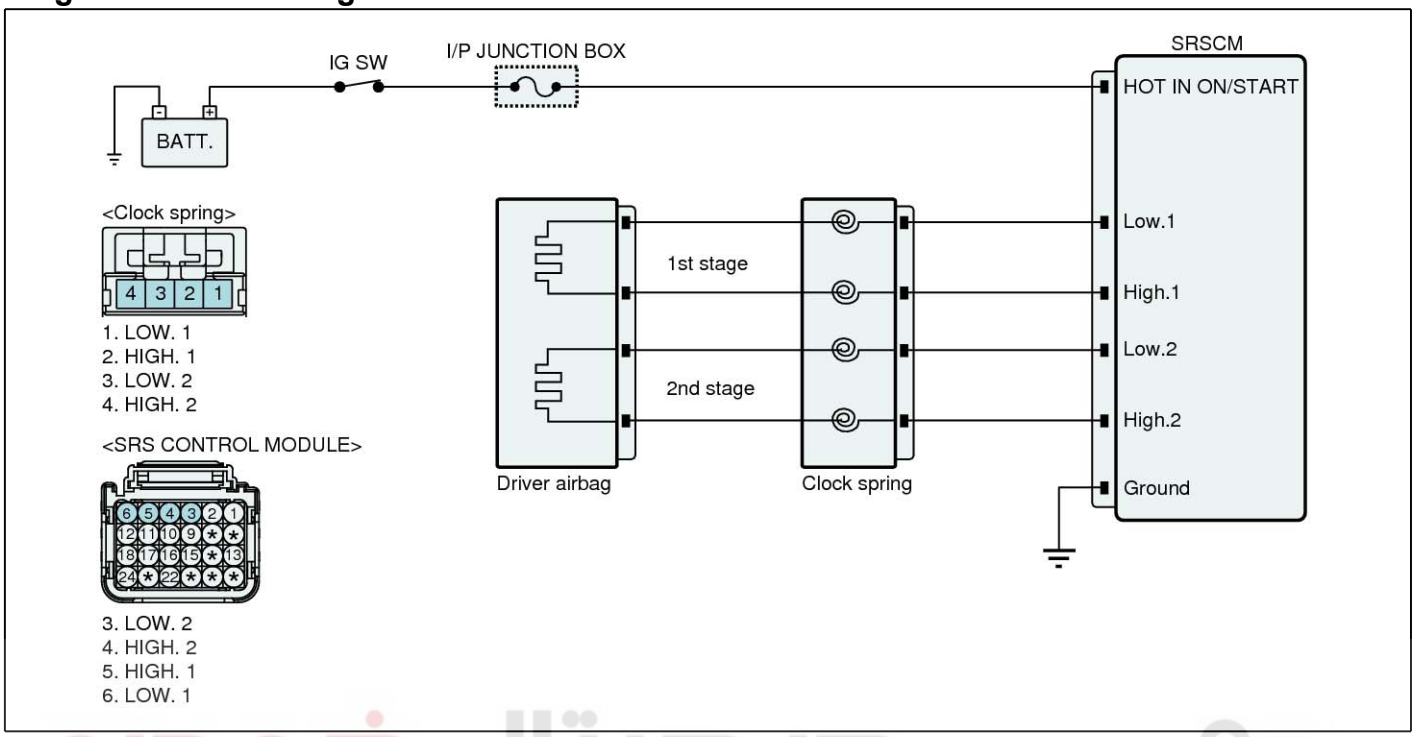
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in DAB harness. • Poor connection of connected part. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 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

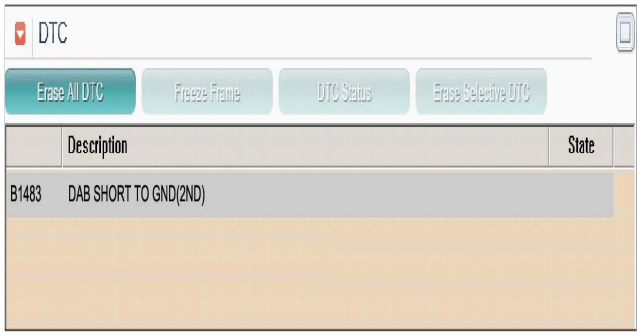
Diagnostic Circuit Diagram



SBHRT9603L

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.



SBHRT9575L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

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

NO ▶ Go to "Squib Circuit Inspection" 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.

Verification of Vehicle Repair

Refer to the DTC B1101 : Battery Voltage High.

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.

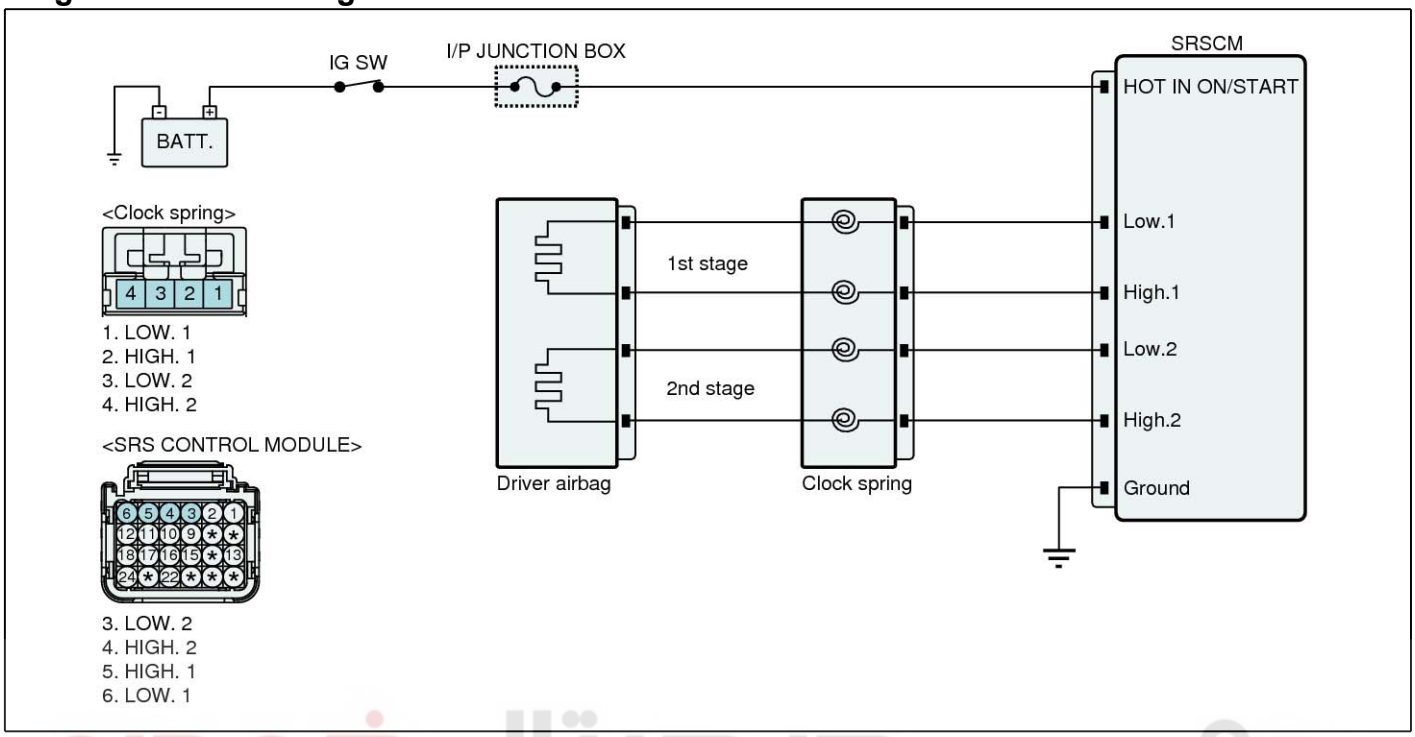
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in DAB harness . • Poor connection of connected part. • Faulty DAB. • Faulty Clock spring. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• DAB 2nd stage Squib line voltage is > 2.9V	
Diagnostic Time	Qualificati-on	• More than 2.5s (250ms x 10)	
	De-Qualifi-cation	• More than 5s	

Specification

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

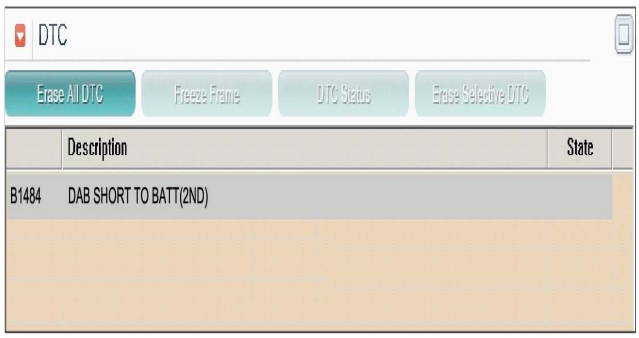
Diagnostic Circuit Diagram



SBHRT9603L

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.



SBHRT9576L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   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.2" or "High.2" 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. 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?

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

Refer to the DTC B1101 : Battery Voltage High.

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

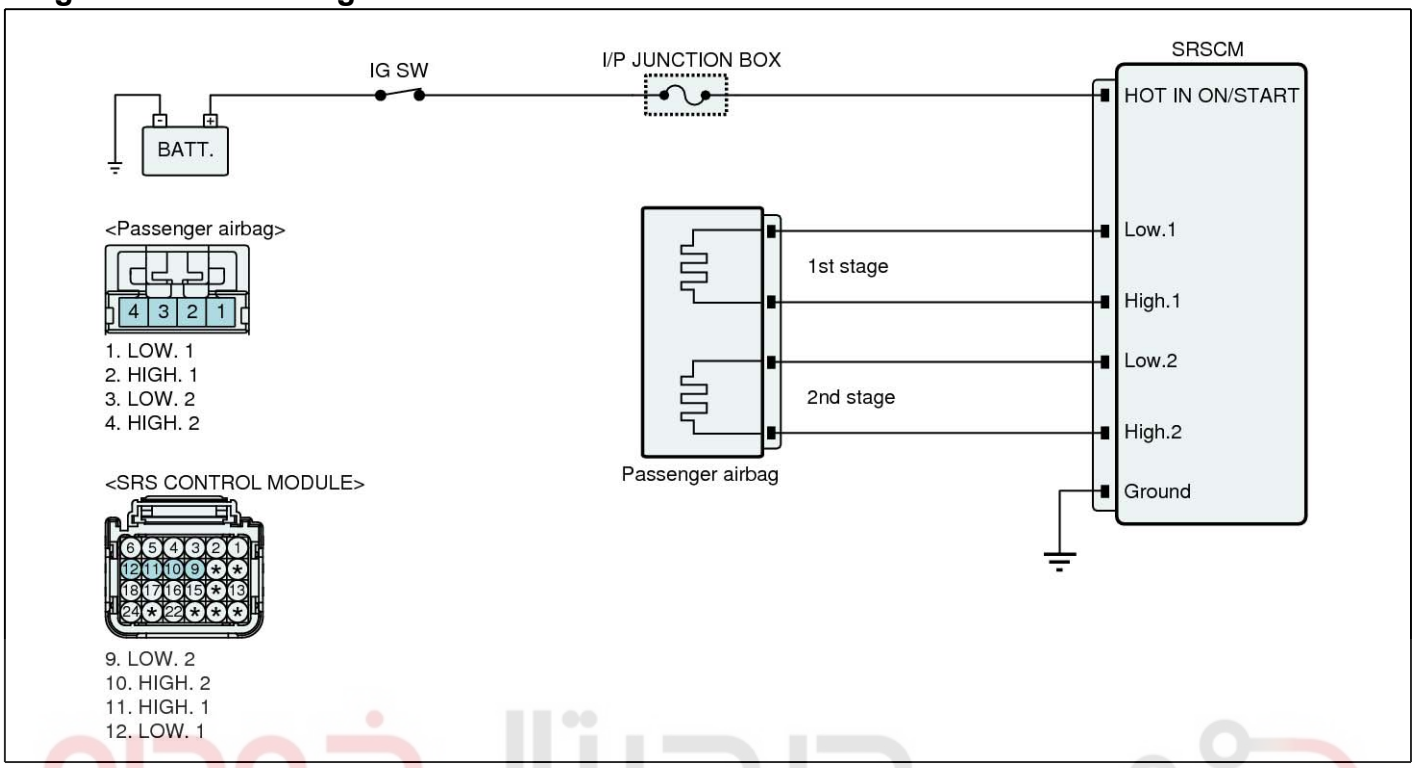
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 2nd stage resistance ≥ 6.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

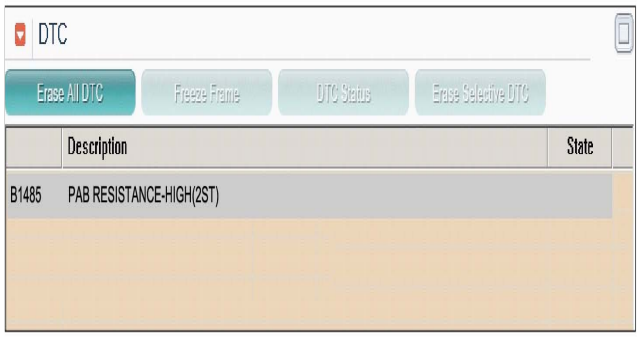
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9577L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE

   If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or 2Ω 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.2" and "High.2" of the PAB harness connector.

Specification : approx. 1 Ω 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.

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 B1486 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.

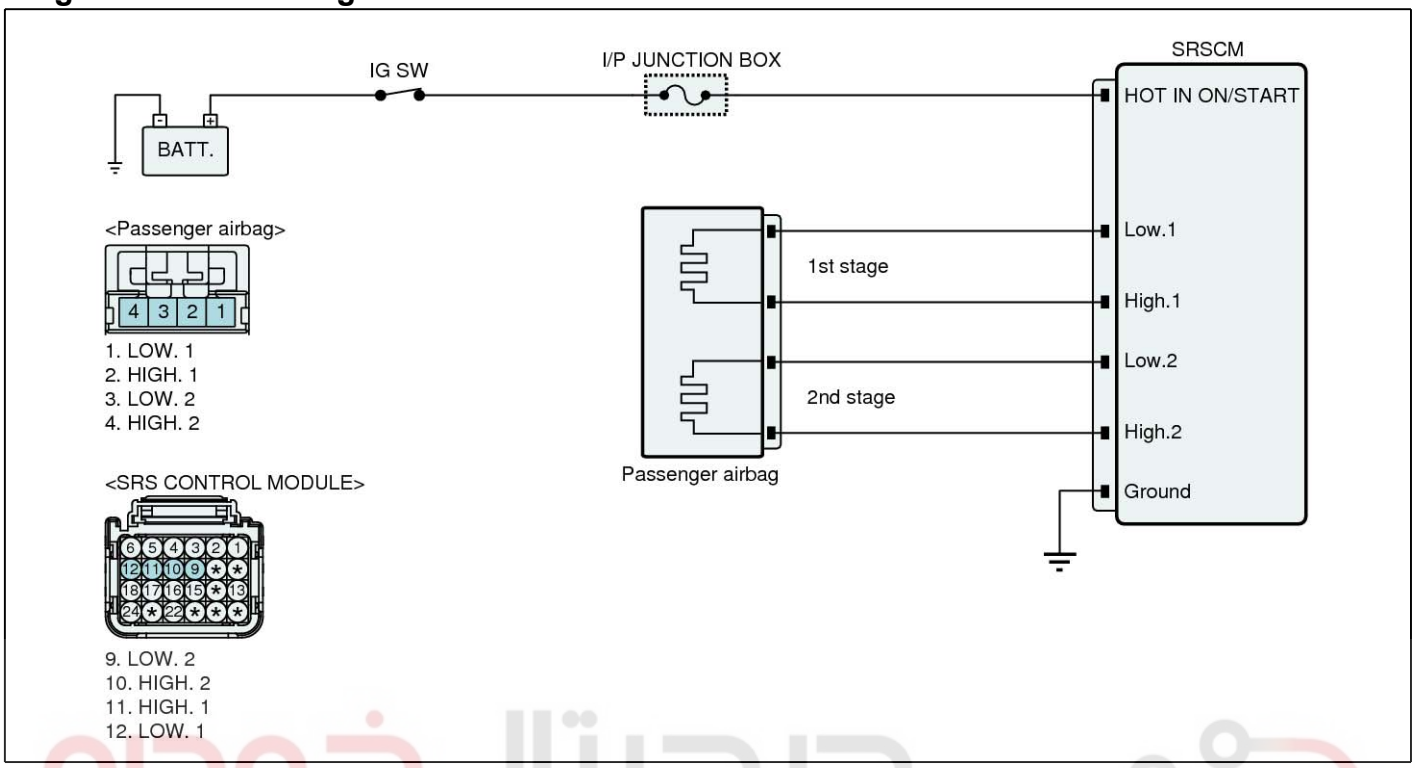
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Poor connection of connected part. • Poor connection between shorting bar and release pin. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 2nd stage resistance ≤ 1.4Ω	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

Specification

Test Condition	Resistance
Ignition ON	1.4Ω ≤ Squib resistance ≤ 6.4Ω

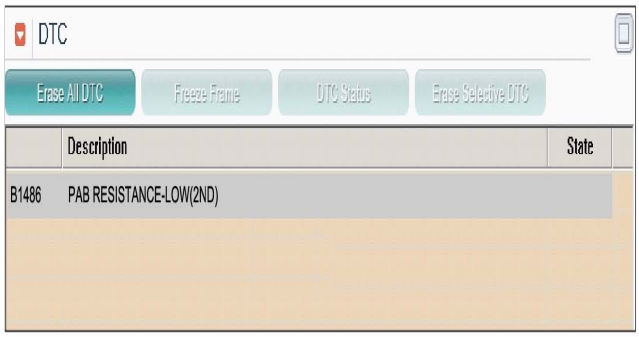
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9578L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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.

   NOTICE
   If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or 2Ω 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.2" and "High.2" of the PAB harness connector.

Specification : approx. 1 Ω 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.

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 B1487 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.

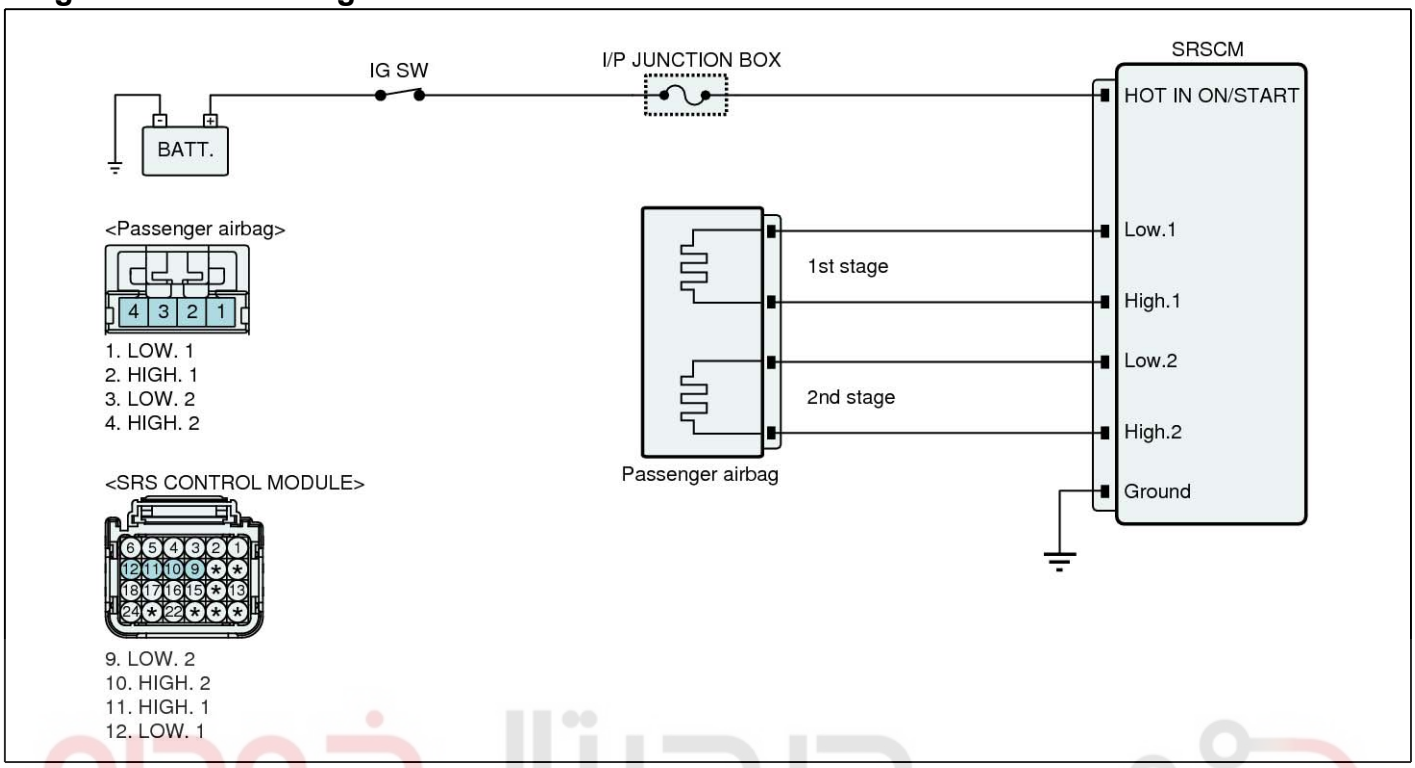
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to ground in PAB harness. • Poor connection of connected part. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold 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

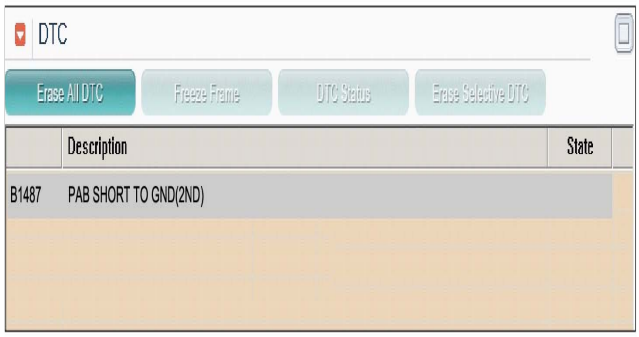
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9579L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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-2G000) to PAB harness connector.

   NOTICE
   If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or 2Ω 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.2" or "High.2" 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

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.

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 powerin PAB harness.*In this case, SRSCM checks if there's any fault in circuitby sending current for a while.

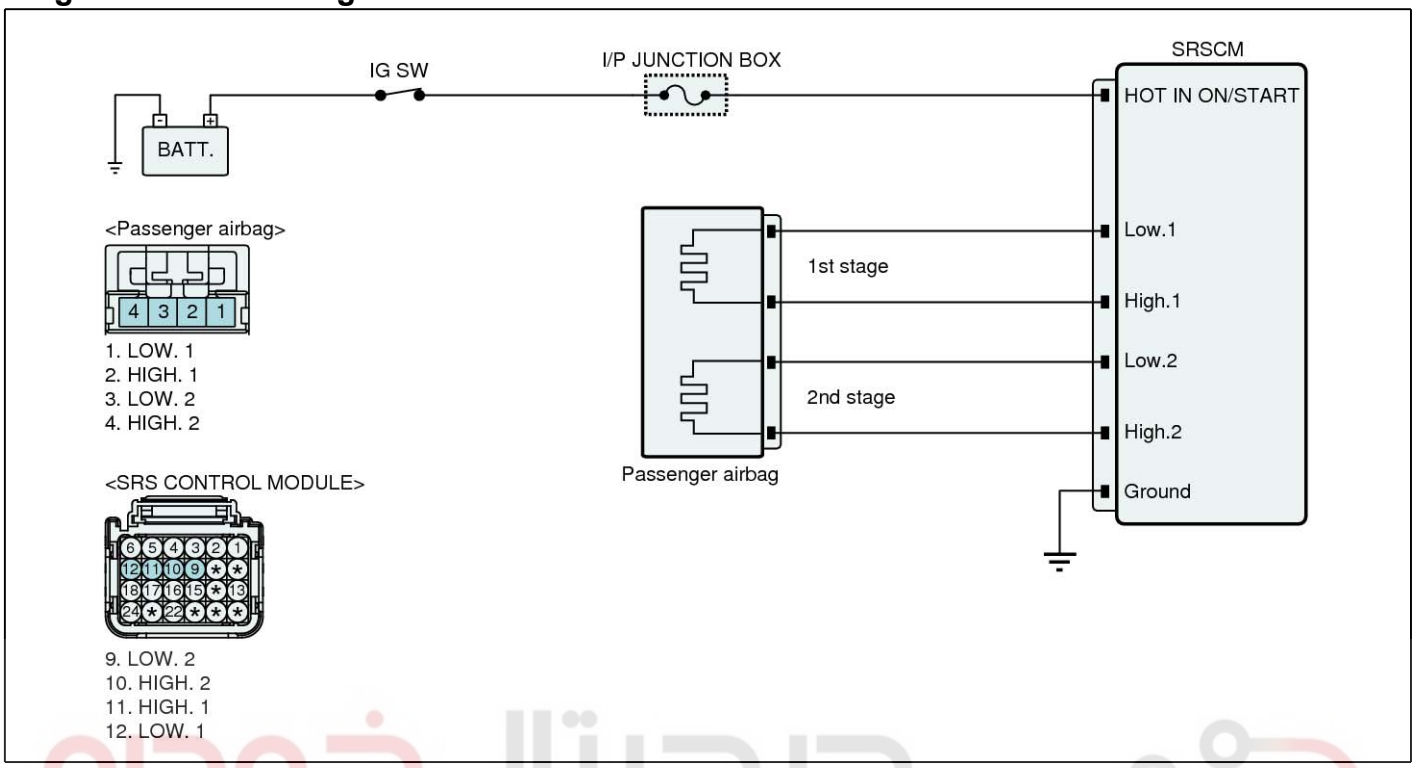
DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PAB harness. • Poor connection of connected part. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 2nd stage Squib line voltage is > 2.9V	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check Resistance	• Short to power in PAB harness. • Poor connection of connected part. • Faulty PAB. • Faulty SRSCM.
Enable Conditions		• Ignition "ON"	
Threshold Value		• PAB 2nd stage Squib line voltage is > 2.9V	
Diagnostic Time	Qualification	• More than 2.5s (250ms x 10)	
	De-Qualification	• More than 5s	

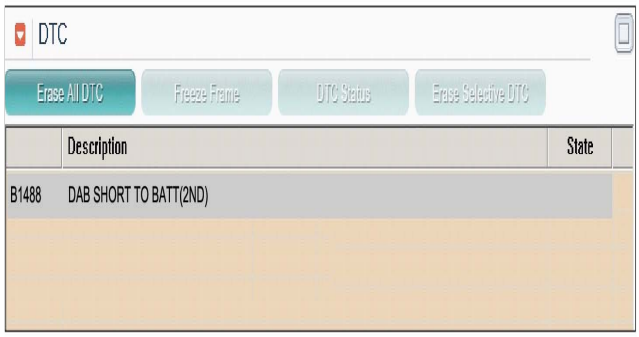
Diagnostic Circuit Diagram



SBHRT9604L

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.



SBHRT9580L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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-2G000) to PAB harness connector.

   NOTICE
   If dummy and dummy adaptor are not able to be prepared, use a known-good PAB or 2Ω 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

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.

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, BUPT 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

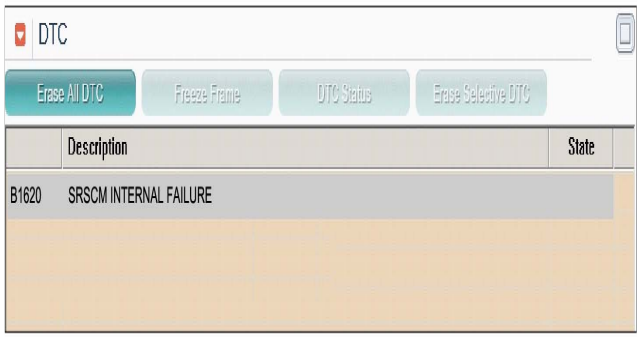
The SRSCM sets DTC B1620 if there is any fault in SRSCM.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check SRSCM	• SRSCM.
Enable Conditions		• Ignition "ON"	
Diagnostic Time	Qualification	• N/A	
	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.



SBHRT9581L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ Internal fault of SRSCM. 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

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.

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, BUPT 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

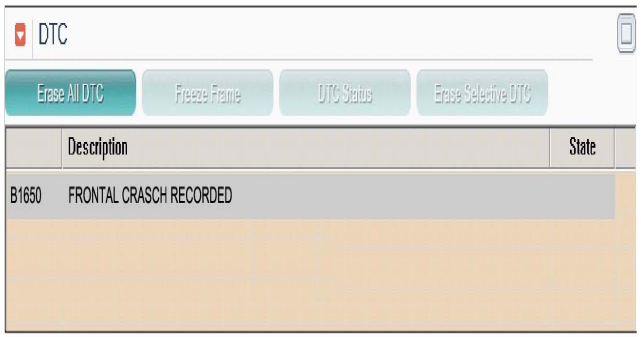
The SRSCM sets DTC B1650 if DAB or PAB deploys.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check DAB or PAB deployment	• SRSCM. • DAB or PAB deployment
Enable Conditions		• Ignition "ON"	
Diagnostic Time	Qualification	• N/A	
	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.



SBHRT9582L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ 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

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.

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, BUPT 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. • DSAB and DCAB deployment
Enable Conditions		• Ignition "ON"	
Diagnostic Time	Qualification	• N/A	
	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.

SBHRT9583L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ DTC caused by deployment of front driver s-ab front driver sab and driver cab. Substitute with a SRSCM and check for proper operation. If the problem is corrected, replace SRSCM an-d then go to "Verification of Vehicle Repair" pr-ocedure.

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 proced-ure.

NO ▶ System is performing to specification at this time.

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, BUPT 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

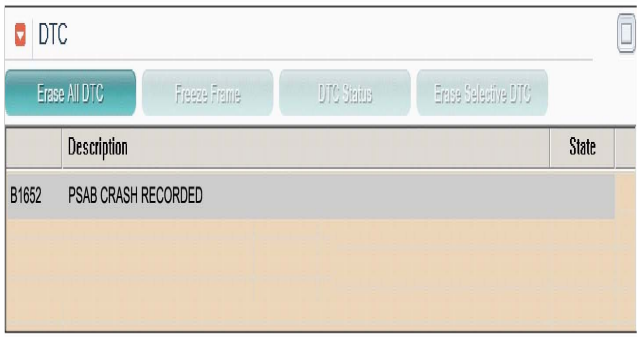
The SRSCM sets DTC B1652 if PSAB and PCAB deploys.

DTC Detecting Condition

Item		Detecting Condition	Possible cause
DTC Strategy		• Check PSAB and PCAB deployment	• SRSCM. • PSAB and PCAB deployment
Enable Conditions		• Ignition "ON"	
Diagnostic Time	Qualification	• N/A	
	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.



SBHRT9584L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ 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

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.

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

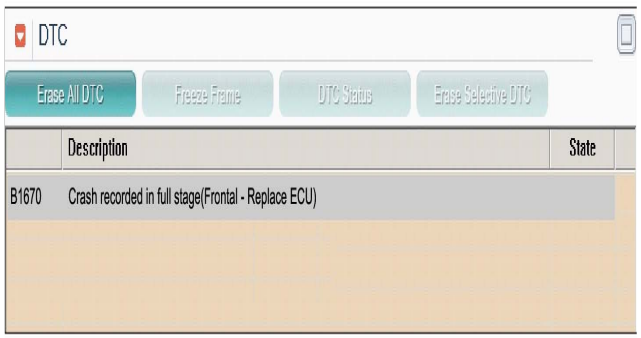
When the Crash recorded in full stage in the SRS Control module.

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. • Crash recorded in full stage
Enable Conditions		• Ignition "ON"	
Threshold Value		• Crash recorded in the SRSCM	
Diagnostic Time	Qualification	• N/A	
	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.



SBHRT9585L

NOTICE

- H : Historical fault

- P : Present fault

5. Is DTC present problem ?

YES ▶ 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

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.

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 whlie and then goes out.

SRSCM measures voltage of out terminal of warning lamp to check if warnning lamp is operated in accordance with signal SRSCM sends.

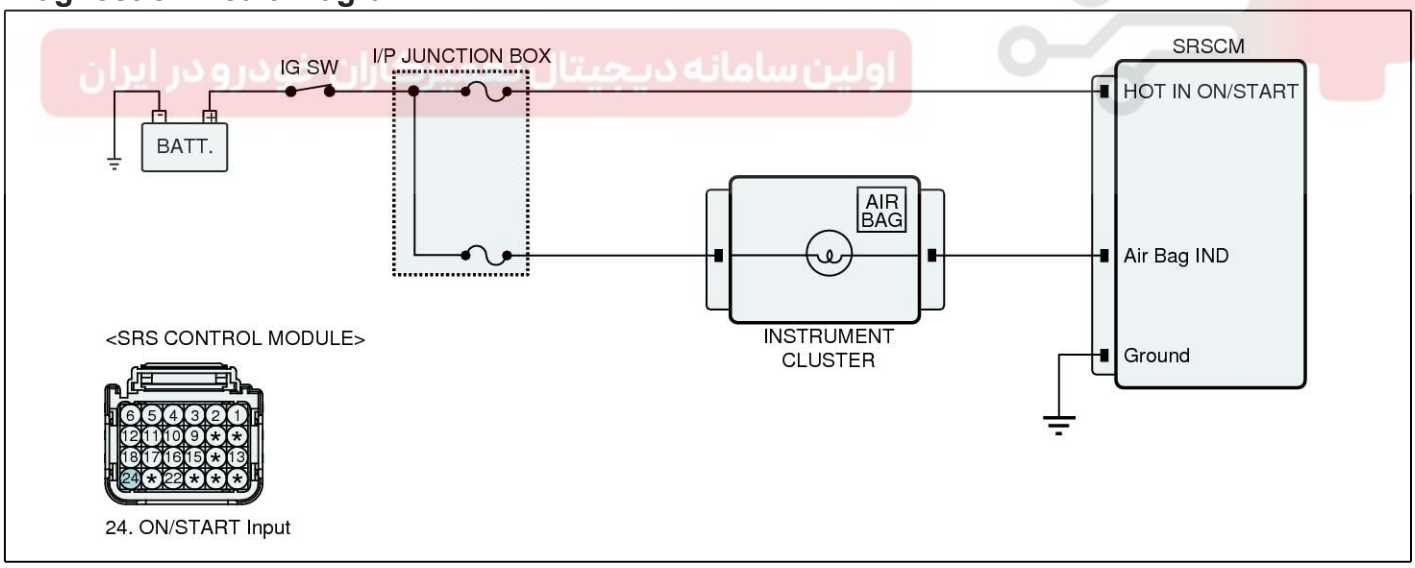
DTC Description

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	• Burnt-out fuse. • Burnt-out warning lamp. • Open circuit in warning lamp h-arness. • Short circuit in warning lamp h-arness. • Faulty SRSCM.
Lamp "OFF"	Enable conditions	• Ignition "ON"	
Diagnostic Time	Qualificati-on	• More than 2 sec	
	De-Qualifi-cation	• More than 4 sec	

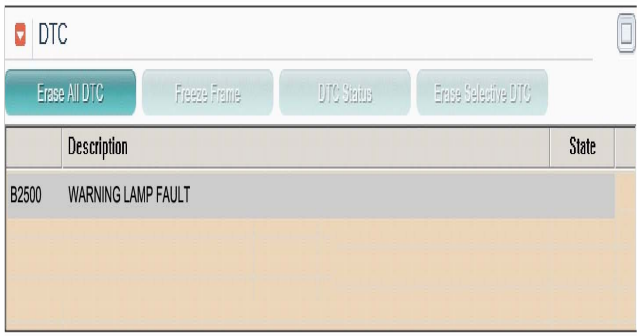
Diagnostic Circuit Diagram



SBHRT9618L

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.



SBHRT9586L

NOTICE

- H : Historical fault

- P : Present fault

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 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.

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?

YES ▶ 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.

NO ▶ 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

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.

Airbag Module

Driver Airbag (DAB) Module and Clock Spring

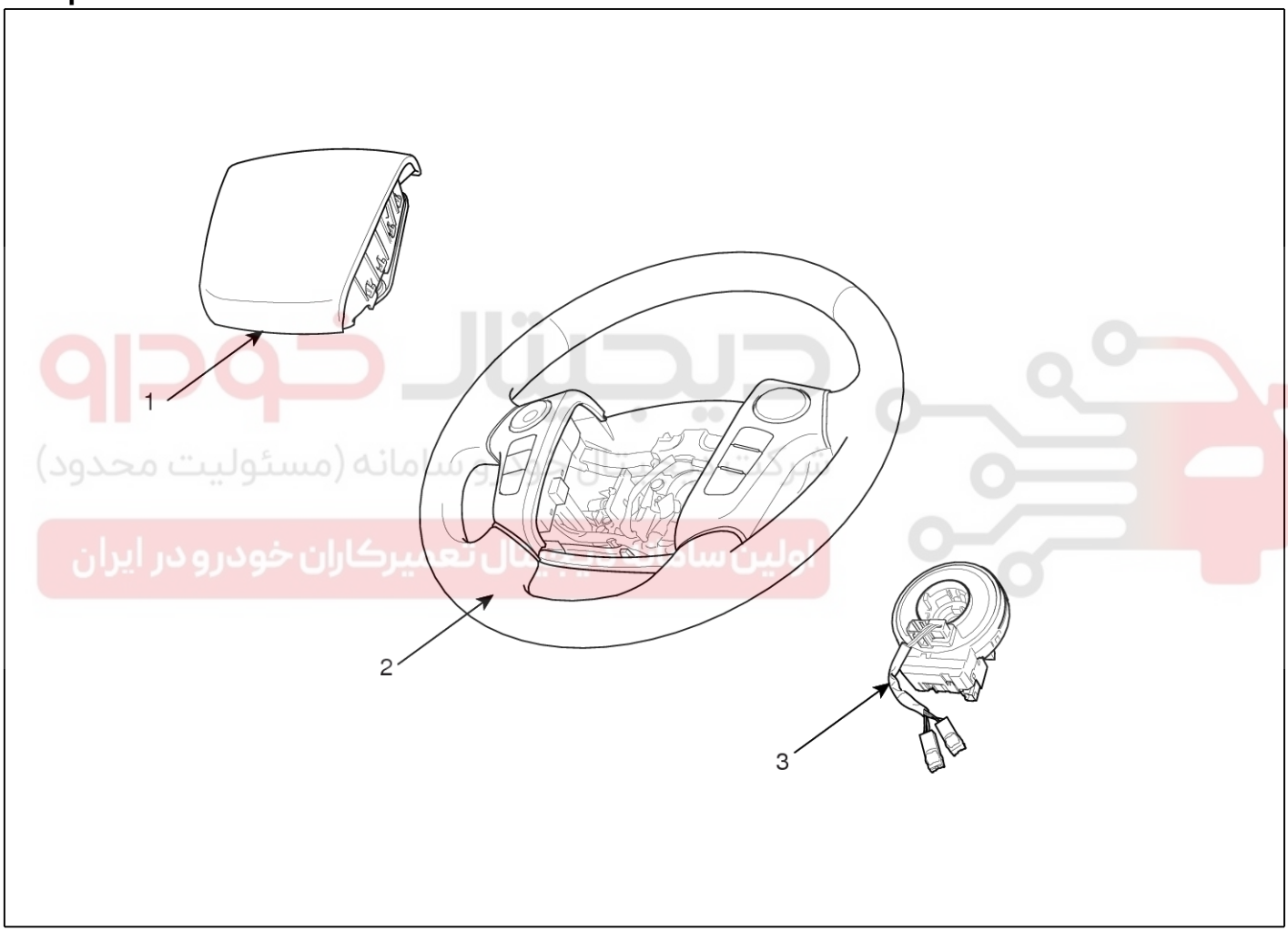
Description

Driver Airbag (DAB) is installed in steering wheel and electrically connected to SRSCM via clock spring. It protects the driver from danger by deploying a bag when frontal crash occurs. The SRSCM determines deployment of Driver Airbag (DAB).

⚠CAUTION

Never attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

Components

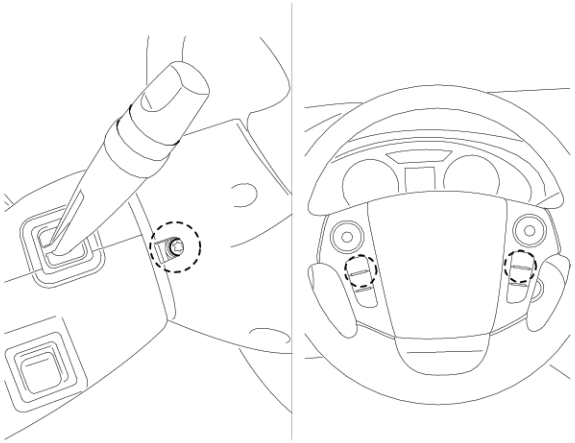


SBHRT9012N

1. Driver Airbag (DAB)
2. Steering Wheel
3. Clock Spring

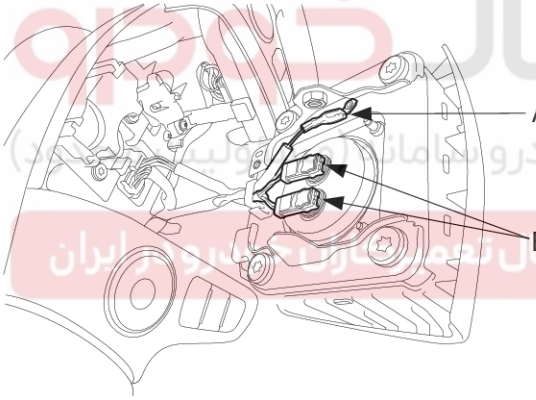
Removal

1. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
2. Remove the airbag module mounting bolts(2EA).



SBHRT8101D

3. Disconnect the horn connector(A).



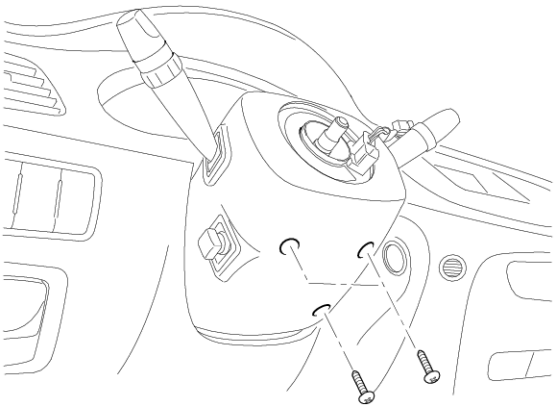
SBHRT8102D

4. Release the connector locking pin, then disconnect the driver airbag module connector(B).

CAUTION

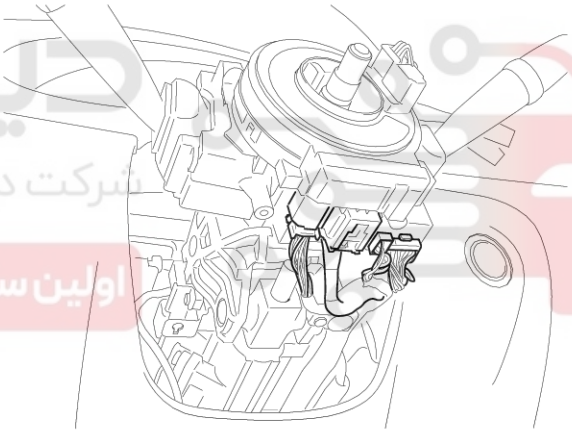
The removed airbag module should be stored in aclean, dry place with the pad cover face up.

5. Remove the steering wheel and steering wheel column cover. (Refer to the Steering System group- Steering Column and Shaft)



SBHRT8103D

6. Disconnect the clock spring and horn connector, then remove the clock spring.



SBHRT8104D

Inspection

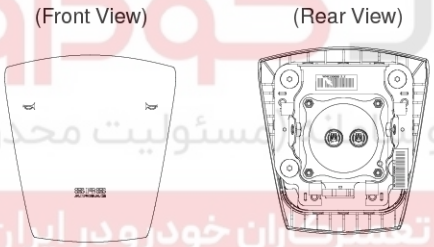
Driver Airbag (DAB)

If any improper parts are found during the following inspection, replace the airbag module with a new one.

⚠CAUTION

Never attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

1. Check pad cover for dents, cracks or deformities.
2. Check the airbag module for denting, cracking or deformation.
3. Check hooks and connectors for damage, terminals for deformities, and harness for binds.
4. Check airbag inflator case for dents, cracks or deformities.

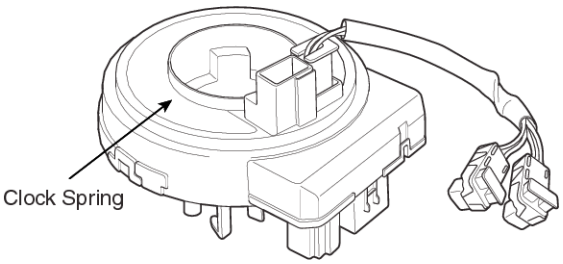


SBHRT9013N

5. Install the airbag module to the steering wheel to check for fit or alignment with the wheel.

Clock Spring

1. If, as a result of the following checks, even one abnormal point is discovered, replace the clock spring with a new one.
2. Check connectors and protective tube for damage, and terminals for deformities.

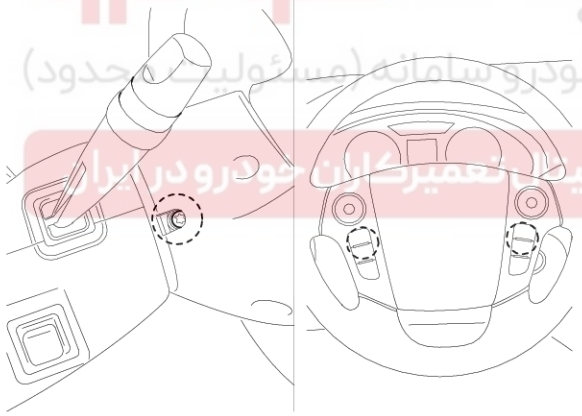


SBHRT9014N

Installation

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable from battery and wait for at least three minutes before beginning work.
3. Connect the clock spring harness connector and horn harness connector to the clock spring.
4. Set the center position by getting marks between the clock spring and the cover into line. Make an array the mark (▶◀) by turning the clock spring clockwise to the stop and then 3 revolutions counterclockwise.
5. Install the steering wheel column cover and the steering wheel. (Refer to the Steering System group- Steering Column and Shaft)
6. Connect the Driver Airbag (DAB) module connector and horn connector, and then install the Driver Airbag (DAB) module on the steering wheel.
7. Secure the Driver Airbag (DAB) with the new mounting bolts.

Tightening torque
: 7.8 ~ 10.8 Nm (0.8 ~ 1.1 kgf.m, 5.8 ~ 8.0 lb.ft)



SBHRT8101D

8. Connect the battery negative cable.
9. After installing the airbag, confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.
   - Make sure horn button works.

Passenger Airbag (PAB) Module

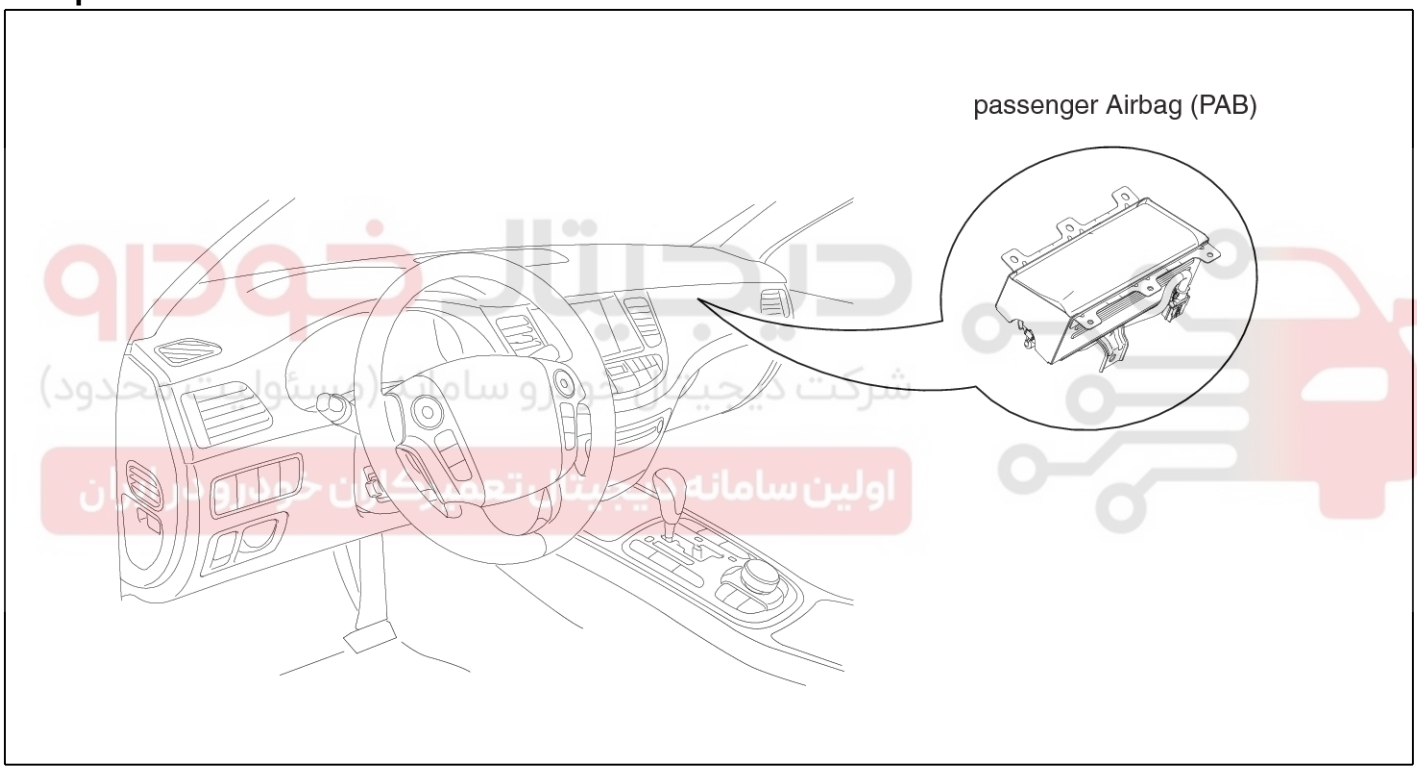
Description

The passenger Airbag (PAB) is installed inside the crash pad and protects the front passenger in the event of a frontal crash. The SRSCM determines if and when to deploy the PAB.

CAUTION

Never attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

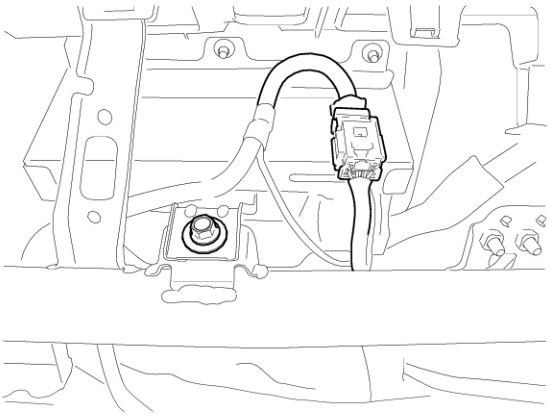
Components



SBHRT9015N

Removal

1. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
2. Remove the glove box. (Refer to the Body group- crash pad).
3. Disconnect the PAB connector and remove the PAB mounting bolt.



SBHRT9016N

4. Remove the crash pad. (Refer to the Body group- crash pad).

NOTICE

Replace the crash pad which is damaged while PAB is deployed.

5. Remove the heater duct from the crash pad.
6. Remove the mounting nuts(6EA) from the crash pad. Then remove the passenger airbag.

CAUTION

The removed airbag module should be stored in a clean, dry place with the airbag cushion up.

Installation

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable from battery and wait for at least three minutes before beginning work.
3. Place a Passenger Airbag (PAB) on the crash pad and tighten the Passenger Airbag (PAB) mounting nuts.

Tightening torque

: 5.9 ~ 6.9 Nm (0.6 ~ 0.7 kgf.m, 4.3 ~ 5.0 lb.ft)

4. Install the heater duct to the crash pad.
5. Install the crash pad. (Refer to the Body group- crash pad)
6. Tighten the PAB mounting bolt.

Tightening torque

: 6.9 ~ 10.8 Nm (0.7 ~ 1.1 kgf.m, 5.1 ~ 8.0 lb.ft)

7. Connect the Passenger Airbag (PAB) harness connector to the SRS main harness connector.
8. Reinstall the glove box. (Refer to the Body group- crash pad)
9. Reconnect the battery negative cable.
10. After installing the Passenger Airbag (PAB), confirm proper system operation:
    - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.

Side Airbag (SAB) Module

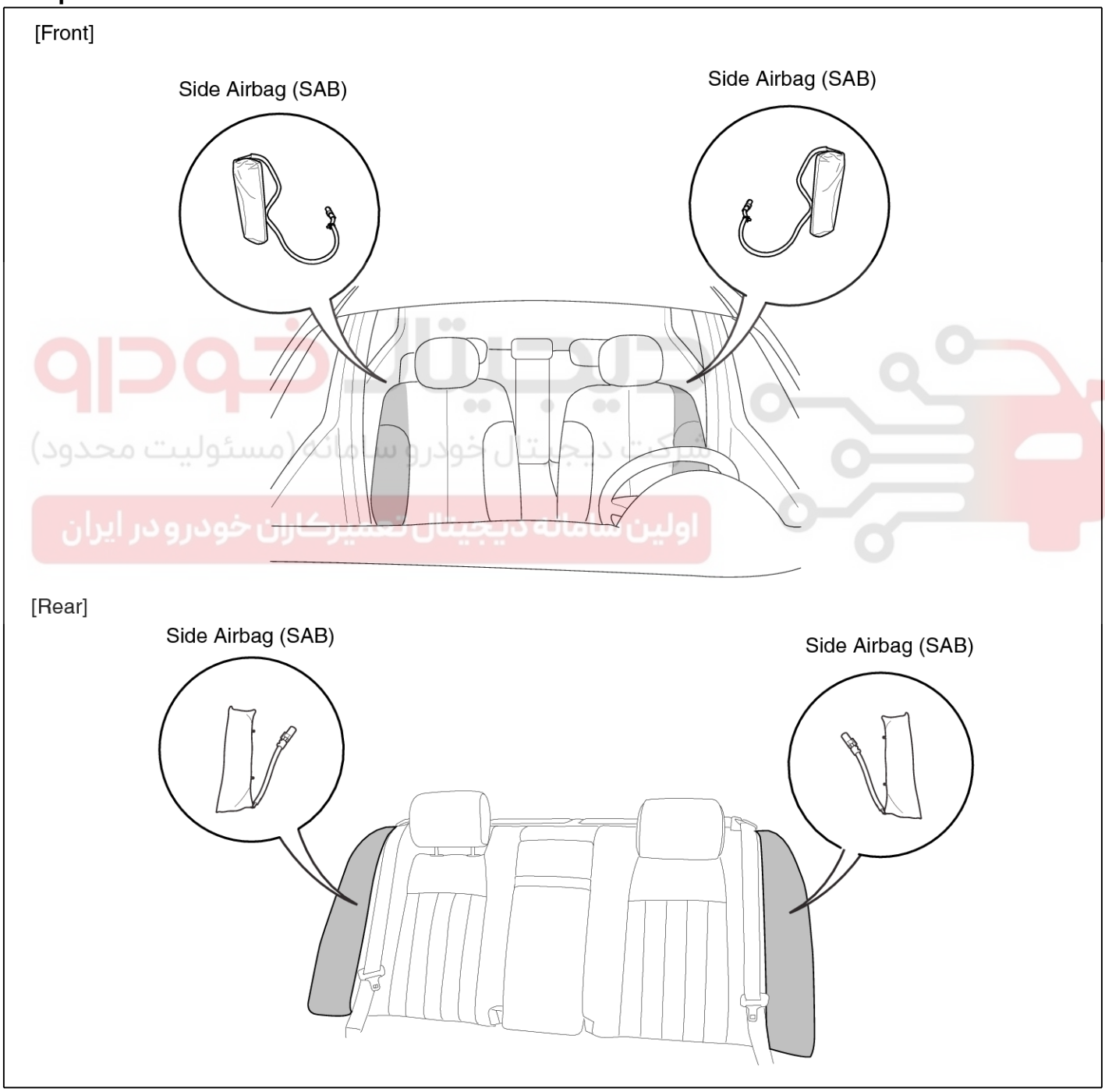
Description

The Side Airbags (SAB) are installed inside the front and rear seat and protect the driver and front passenger from danger when side crash occurs. The SRSCM determines deployment of side airbag by using Side Impact Sensor (SIS) signal.

⚠CAUTION

Never attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

Components



SBHRT9017N

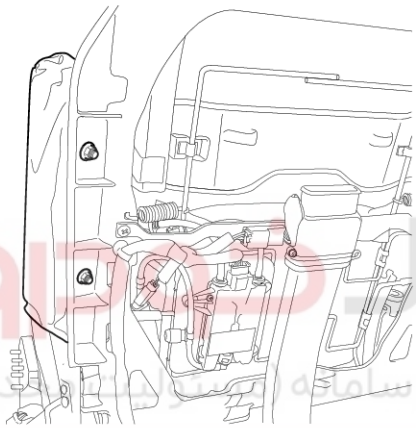
Removal

Front Side Airbag

1. Disconnect the battery negative cable and wait for at least 3 minutes before beginning work.
2. Remove the front seat assembly. (Refer to the Body group- Seat)
3. Remove the seatback cover. (Refer to the Body group- Seat)

NOTICE
When the front side airbag deployed after a collision, replace the seatback as an assembly.

4. Loosen the SAB mounting nuts and remove the SAB module.

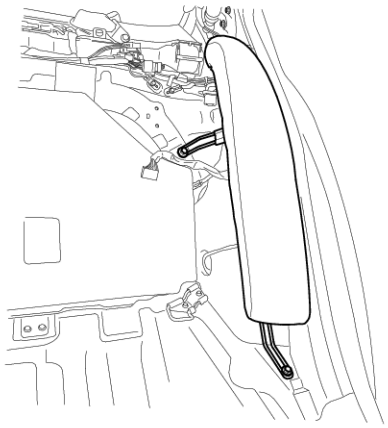


SBHRT8301D

WARNING
The removed airbag module should be stored in a clean and dry place with the cushion side up.

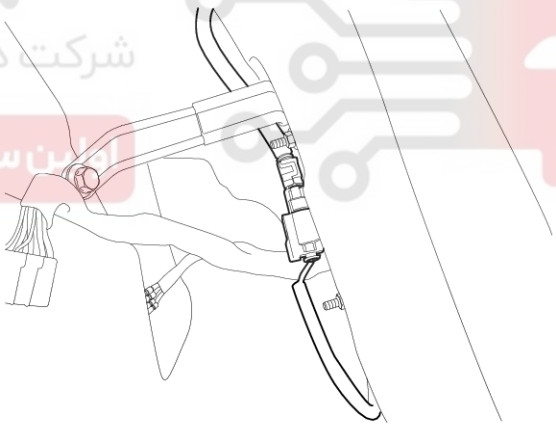
Rear Side Airbag

1. Disconnect the battery negative cable and wait for at least 3 minutes before beginning work.
2. Remove the rear seat cushion. (Refer to the Body group- Seat)
3. Loosen the rear side seatback mounting bolt (1EA).



SBHRT8302D

4. Disconnect the rear side airbag assembly connector, and then remove the rear side seat back.



SBHRT8303D

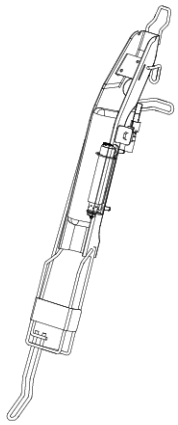
5. Remove the rear side seatback cover.

NOTICE
When the rear side airbag deployed after a collision, replace the rear side seatback as an assembly.

6. Loosen the rear side airbag module mounting nuts and remove the airbag module.

CAUTION

The removed airbag module should be stored in a clean and dry place with the cushion side up.



SBHRT8304D

Installation

Front Side Airbag

CAUTION

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

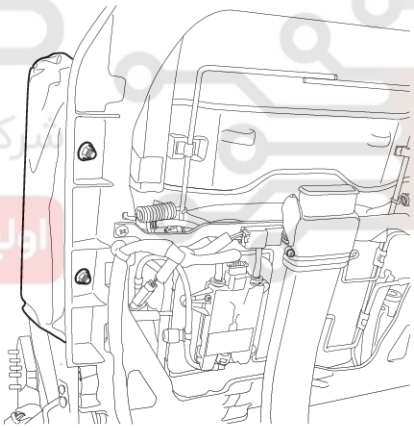
NOTICE

- *Do not open the lid of the side airbag cover.*
- *Use a new mounting nuts when you replace a side airbag.*
- *Make sure that the airbag assembly cover is installed properly. Improper installation may prevent the proper deployment.*

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes.
3. Place a Side Airbag (SAB) on the side airbag frame and tighten the side airbag mounting nuts (2EA).

Tightening torque

: 6.8 ~ 8.8 Nm (0.7 ~ 0.9 kgf.m , 5.1 ~ 6.5 lb.ft)



SBHRT8301D

4. Install the new seatback cover. (Refer to the Body group- Seat)
5. Install the front seat assembly, and then connect the Side Airbag (SAB) harness connector.
6. Recline and slide the front seat forward fully, make sure the harness wires are not pinched of interfering with other parts.
7. Reconnect the battery negative cable.
8. After installing the Side Airbag (SAB), confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.

Rear Side Airbag

CAUTION

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

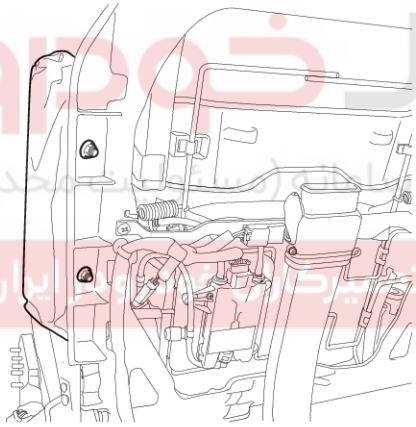
NOTICE

- *Do not open the lid of the side airbag cover.*
- *Use a new mounting nuts when you replace a side airbag.*
- *Make sure that the rear side seatback cover is installed properly. Improper installation may prevent the proper deployment.*

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes.
3. Place a Side Airbag (SAB) on the side airbag frame and tighten the side airbag mounting nuts(2EA).

Tightening torque

: 6.8 ~ 8.8 Nm (0.7 ~ 0.9 kgf.m , 5.1 ~ 6.5 lb.ft)

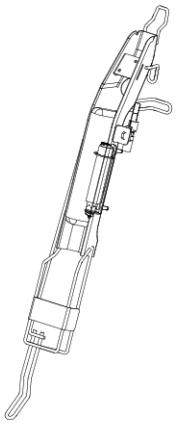


SBHRT8301D

4. Install the new rear side seatback cover. (Refer to the Body group- Seat)
5. Connect the Side Airbag (SAB) harness connector, and then install the rear side seatback.

Tightening torque

: 16.7 ~25.5 Nm (1.7 ~2.6 kgf.m, 12.3 ~ 18.8 lb.ft)



SBHRT8304D

6. Reconnect the battery negative cable.
7. After installing the Side Airbag (SAB), confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.

Curtain Airbag (CAB) Module

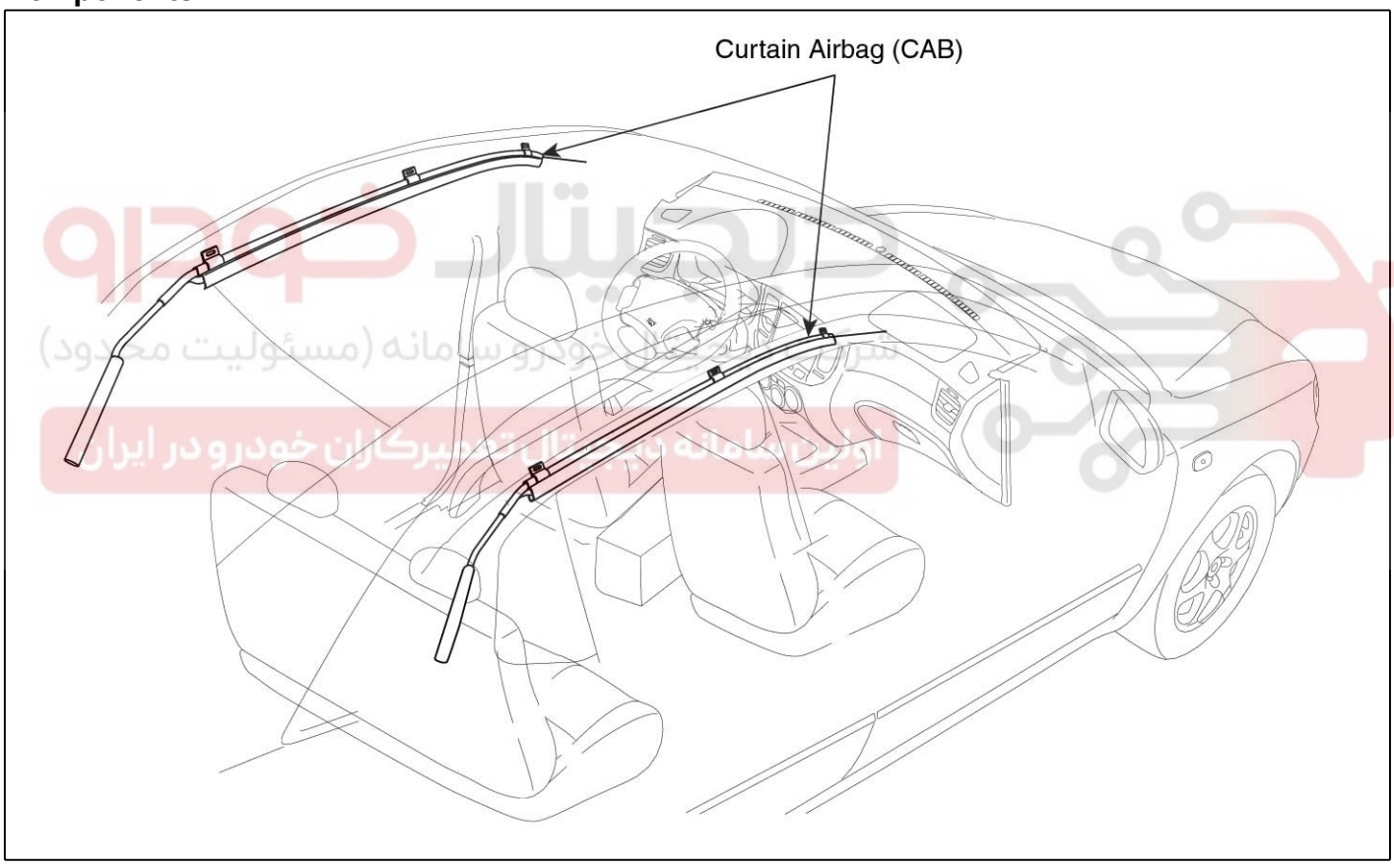
Description

Curtain airbags are installed inside the headliner (LH and RH) and protect the driver and passenger from danger when side crash occurs. The SRSCM determines deployment of curtain airbag by using side impact sensor (SIS) signal.

⚠CAUTION

Never attempt to measure the circuit resistance of the airbag module even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

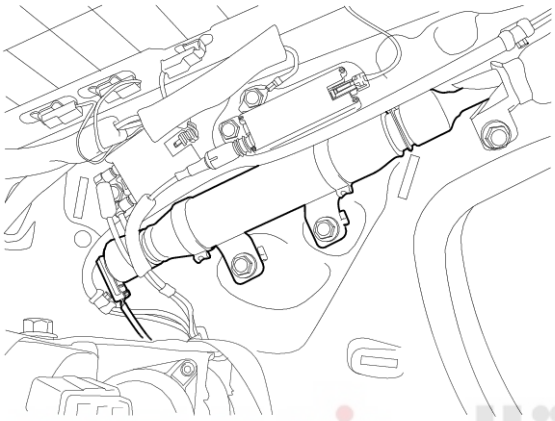
Components



SBHRT9006N

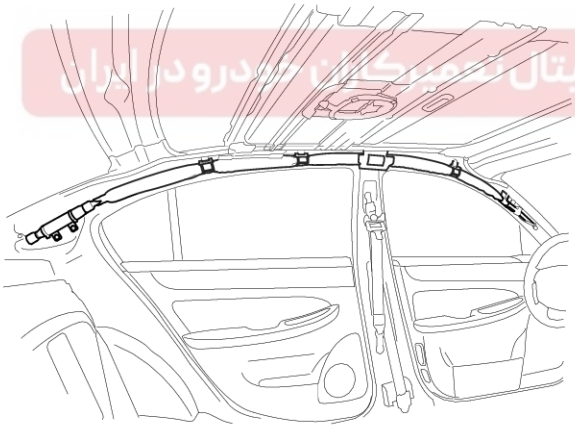
Removal

1. Disconnect the battery negative cable and wait for at least 3 minutes before beginning work.
2. Remove the following parts. (Refer to the Body group- Interior)
   - Front pillar trim, Center pillar trim
   - Rear pillar trim, Headliner
3. Disconnect the Curtain Airbag harness connector.



SBHRT8401D

4. After loosening the mounting bolts and nuts remove the curtain airbag.



SBHRT8402D

Installation

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes.
3. Tighten the Curtain Airbag (CAB) mounting bolts.

Tightening torque
: 11.8 ~ 14.7 Nm (1.2 ~ 1.5 kgf.m, 8.7 ~ 10.9 lb.ft)

⚠CAUTION

- **Never twist the airbag module when installing it. If the module is twisted, airbag module may operate abnormally.**

4. Connect the CAB connector.
5. Install the following parts. (Refer to the Body group- Interior)
   - Headliner, Front pillar trim
   - Center pillar trim, Rear pillar trim
6. Reconnect the battery negative cable.
7. After installing the Curtain Airbag (CAB), confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.

Air bag Module Disposal

Airbag Disposal

Special Tool Required

Deployment tool 0957A-34100A

Before scrapping any airbags or side airbags (including those in a whole vehicle to be scrapped), the airbags or side airbags must be deployed. If the vehicle is still within the warranty period, before deploying the airbags or side airbags, the Technical Manager must give approval and/or special instruction. Only after the airbags or side airbags have been deployed (as the result of vehicle collision, for example), can they be scrapped. If the airbags or side airbags appear intact (not deployed), treat them with extreme caution. Follow this procedure.

Deploying Airbags In The Vehicle

If an SRS equipped vehicle is to be entirely scrapped, its airbags or side airbags should be deployed while still in the vehicle. The airbags or side airbags should not be considered as salvageable parts and should never be installed in another vehicle.

1. Turn the ignition switch OFF, and disconnect the battery negative cable and wait at least three minutes.
2. Confirm that each airbag or side airbag is securely mounted.
3. Confirm that the special tool is functioning properly by following the check procedure.
   1) Driver's Airbag :
      - Remove the driver's airbag and install the SST (0957A-38510).
      - Install the driver's airbag on the steering wheel.
   2) Front Passenger's Airbag :
      - Remove the glove box, and then disconnect the 4P connector between the front passenger's airbag and SRS main harness.
      - Install the SST(0957A-2E110).
   3) Side Airbag :
      - Disconnect the 2P connector between the side airbag and side wire harness.
      - Install the SST (0957A-3F100).
   4) Curtain Airbag :
      - Disconnect the 2P connector between the curtain airbag and wire harness.
      - Install the SST (0957A-38500).
   5) Seat Belt Pretensioner :
      - Disconnect the 2P connector from the seat belt pretensioner.
      - Install the SST (0957A-38500).
4. Place the deployment tool at least thirty feet (10meters) away from the airbag.
5. Connect a 12 volt battery to the tool.
6. Push the tool's deployment switch. The airbag should deploy (deployment is both highly audible and visible: a loud noise and rapid inflation of the bag, followed by slow deflection)
7. Dispose of the complete airbag. No part of it can be reused. Place it in a sturdy plastic bag and seal it securely.

Deploying the Airbag Out of the Vehicle

If an intact airbag has been removed from a scrapped vehicle, or has been found defective or damage during transit, storage or service, it should be deployed as follows:

1. Confirm that the special is functioning properly by following the check procedure on this page.
2. Position the airbag face up, outdoors on flat ground at least thirty feet (10meters) from any obstacles or people.

Disposal of Damaged Airbag

1. If installed in a vehicle, follow the removal procedure of driver's airbag front passenger's and side airbag.
2. In all cases, make a short circuit by twisting together the two airbag inflator wires.
3. Package the airbag in exactly the same packing that the new replacement part come in.

Seat Belt Pretensioner

Seat Belt Pretensioner (BPT)

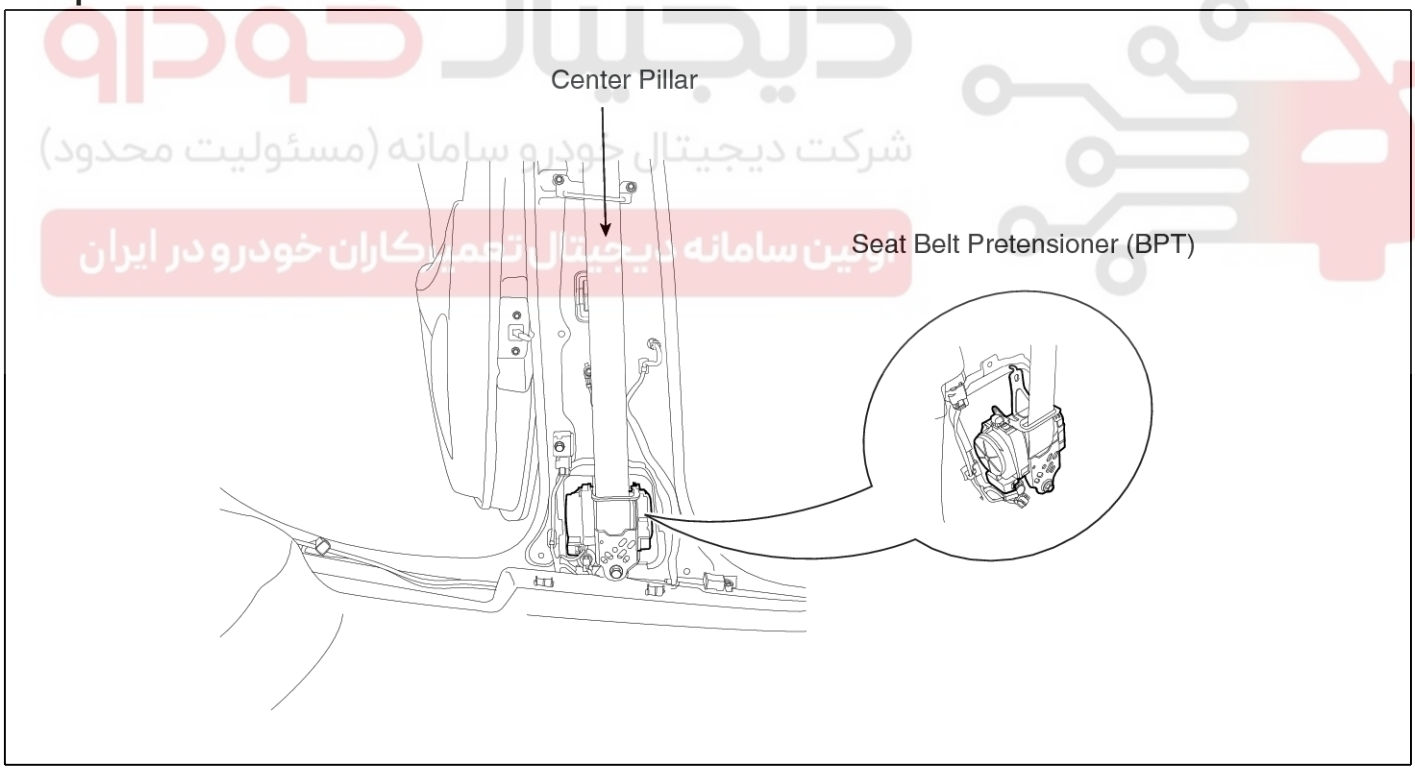
Description

The Seat Belt Pretensioners (BPT) are installed inside Center Pillar (LH & RH). When a vehicle crashes with a certain degree of frontal impact, the pretensioner seat belt helps to reduce the severity of injury to the front seat occupants by retracting the seat belt webbing. This prevents the front occupants from thrusting forward and hitting the steering wheel or the instrument panel when the vehicle crashes.

CAUTION

Never attempt to measure the circuit resistance of the Seat Belt Pretensioner (BPT) even if you are using the specified tester. If the circuit resistance is measured with a tester, the pretensioner will be ignited accidentally. This will result in serious personal injury.

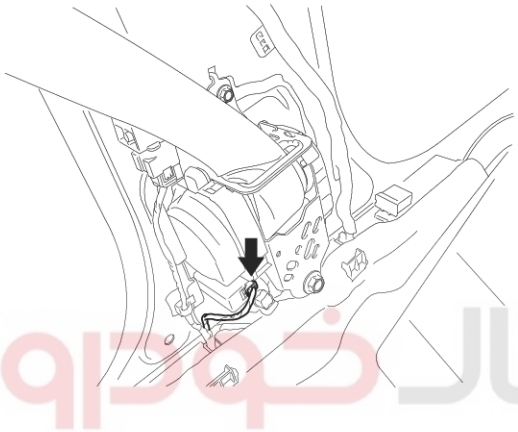
Components



SBHRT9003L

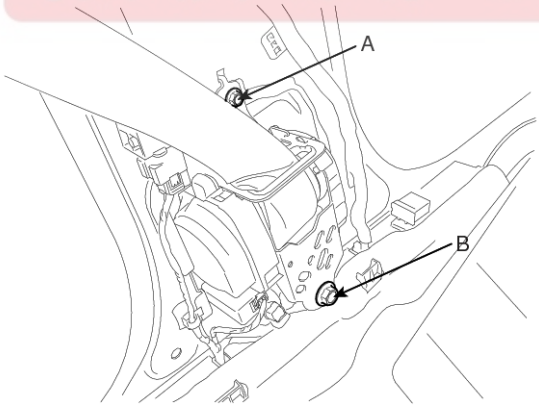
Removal

1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the lower anchor bolt.
3. Remove the following parts. (Refer to the Body group- Seat belt)
   - Door scuff trim
   - Center pillar trim
4. Remove the upper anchor bolt.
5. Disconnect the Seat Belt Pretensioner connector.



SBHRT8109D

6. Loosen the Seat Belt Pretensioner mounting bolt and remove the Seat Belt Pretensioner.

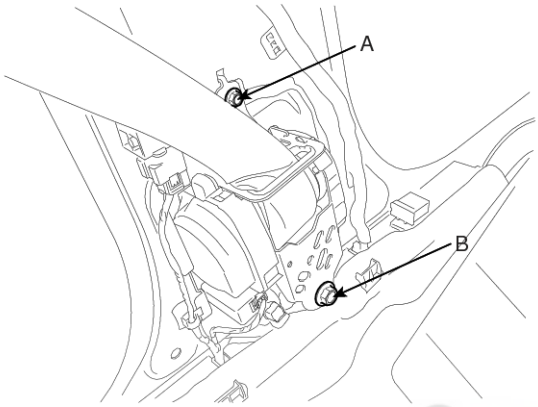


SBHRT8110D

Installation

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes.
3. Install the Seat Belt Pretensioner (BPT) with a bolt.

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



SBHRT8110D

4. Connect the Seat Belt Pretensioner (BPT) connector.
5. Install the upper anchor bolts.

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

6. Install the following parts. (Refer to the Body group- Seat belt)
   - Center pillar trim
   - Door scuff trim
7. Install the lower anchor bolts.

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

8. Reconnect the battery negative cable.
9. After installing the Seat Belt Pretensioner (BPT), confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should be turned on for about six seconds and then go off.