General Information

PRECAUTIONS AND PROCEDURES

- 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 is not erased even if the ignition switch is turned OFF or the battery cables are disconnected from the battery.

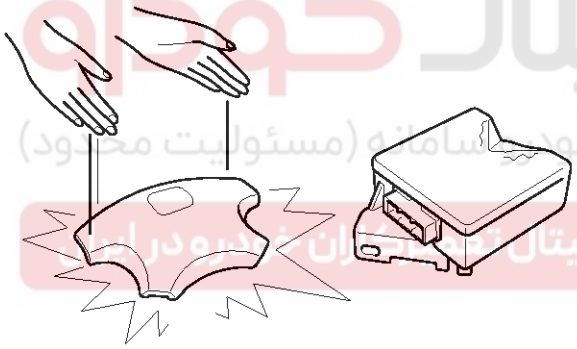
- Use the replacement parts which are manufactured to the same standards as the original parts and quality.

  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.



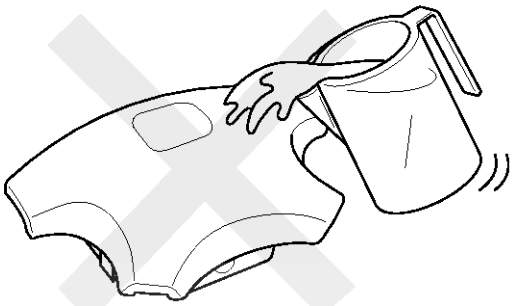
ERKD002V

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

AIRBAG HANDLING AND STORAGE

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

- Store the removed airbag with the pad surface up.
- Never twist the Curtain Airbag (CAB) module.
- Keep free from any oil, grease, detergent, or water to prevent damage to the airbag assembly.



ERKD002Z

- Store the removed airbag on secure, flat surface away from any high heat source (exceeding 200˚F/93˚C).
- 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 whenever the ignition switch is ON, or at wait least for 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. The airbags could accidentally deploy and cause damage or injury.

- After a collision in which the airbags were deployed, replace the front airbags and the SRS unit. After a collision in which the side airbag was deployed, replace the side air bag and side impact sensor on the side where the side airbag deployed and the SRS unit. 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 and/or the side impact sensors.
- Do not disassemble the SRS unit 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 and side impact sensors are installed securely with the mounting bolts.
- Do not spill water or oil on the SRS unit or the side impact sensors and keep them away from dust.
- Store the SRS unit and the side impact sensors in a cool (less than 104˚F/40˚C) and dry (less than 80% relative humidity, no moisture) area.

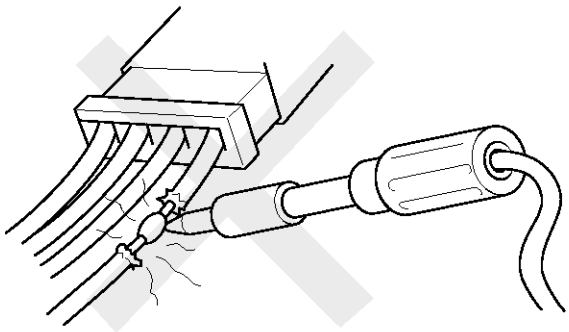
WIRING PRECAUTIONS

SRS wiring can be identified by special yellow outer covering (except the SRS circuits under the front seats).

Observe the instructions described in this section.

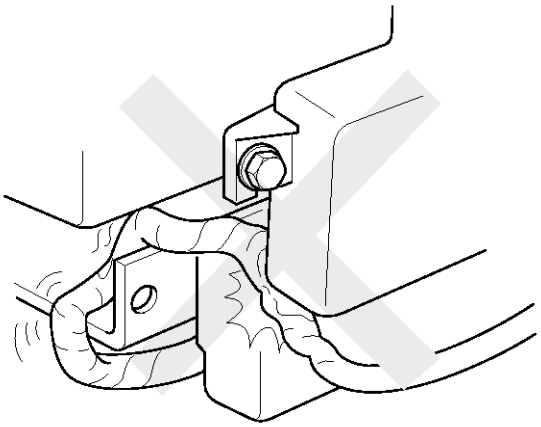
- Never attempt to modify, splice, or repair SRS wiring.

  If there is an open or damage in SRS wiring, replace the harness.



ERKD002Y

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



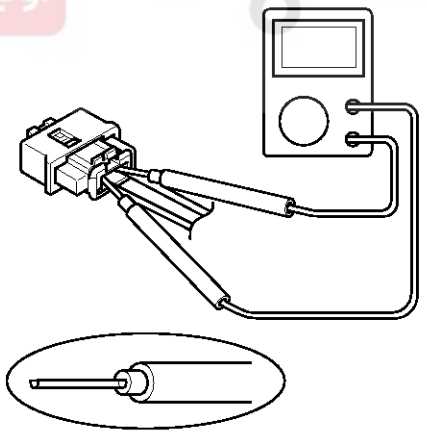
ERKD002X

- 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.



ERKD002W

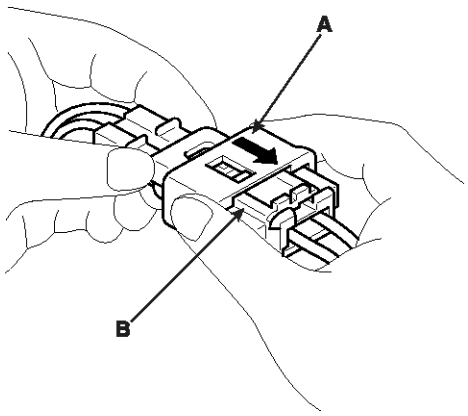
- Use a u-shaped probe. Do not insert the probe forcibly.
- Use specificed service connectors for troubleshooting.

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

SPRING-LOADED LOCK CONNECTOR

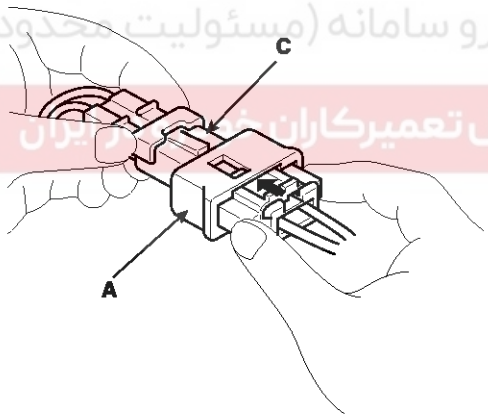
Some SRS system connectors have a spring-loaded lock.

AIRBAG CONNECTOR (I)



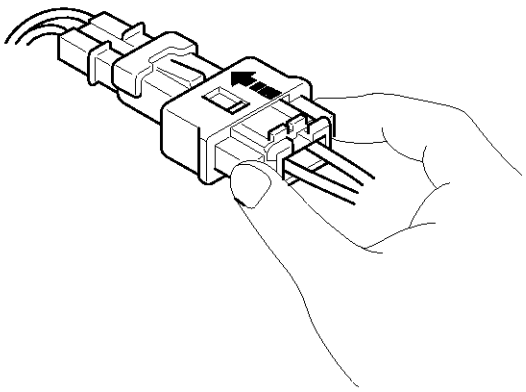
ERKD511A

1. To reconnect, hold the pawl-side connector half, and press on the back of the sleeve-side connector half in the direction shown. As the two connectpr halves are pressed together, the sleeve (A) is pushed back by the pawl (C). Do not touch the sleeve.



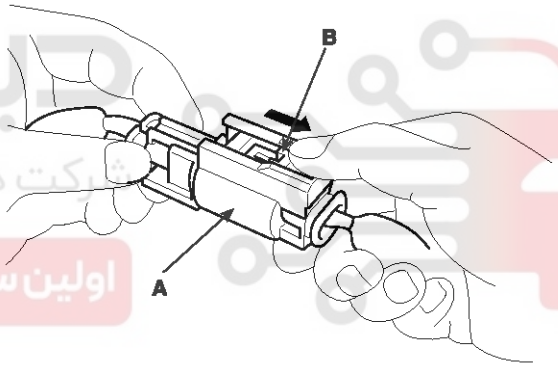
ERKD511B

2. When the connector halves are completely connected, the pawl is released, and the spring-loaded sleeve locks the connector.

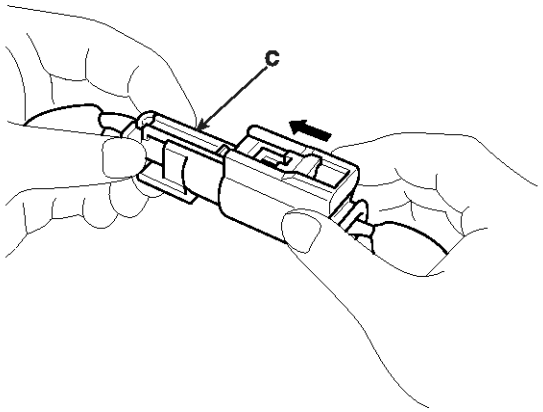


ERKD511C

AIRBAG CONNECTOR (II)

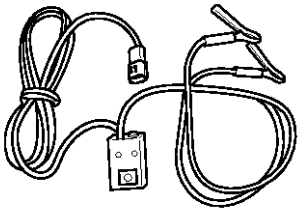
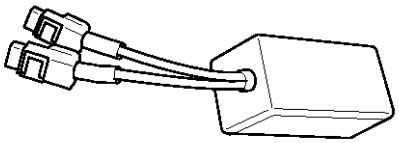
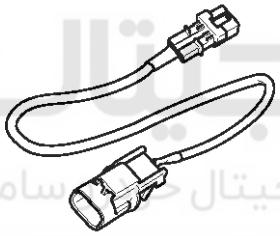
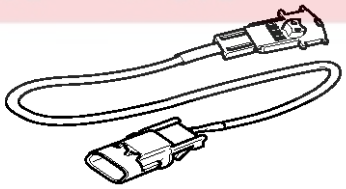
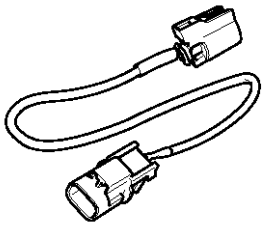


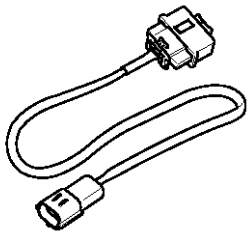
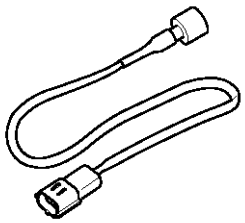
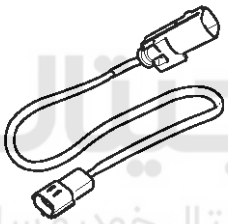
ERKD511D



ERKD511E

SPECIAL SERVICE TOOLS

Tool (Number and name)	Illustration	Use
0957A-34100A Deployment tool		Airbag deployment tool PAB : 0957A-38100 DAB, BPT, CAB : 0957A-38500 SAB : 0957A-3F100
0957A-38200 Dummy		Simulator to check the resistance of each wiring harness Dummy adapter PAB : 0957A-38300 DAB, BPT, CAB : 0957A-1C000 SAB : 0957A-3F000
0957A-38100 Deployment adapter (PAB)		Use with deployment tool.
0957A-38500 Deployment adapter (DAB, BPT, CAB)		Use with deployment tool.
0957A-3F100 Deployment adapter (SAB)		Use with deployment tool.

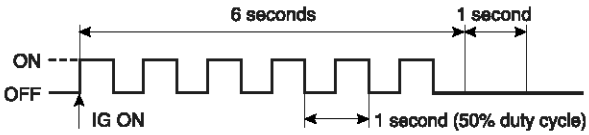
Tool (Number and name)	Illustration	Use
0957A-38300 Dummy adapter (PAB)		Use with dummy.
0957A-1C000 Dummy adapter (DAB, BPT, CAB)		Use with dummy.
0957A-3F000 Dummy adapter (SAB)		Use with dummy.

* DAB :Driver Airbag
* PAB : Prassenger Airbag
* SAB : Side Airbag
* CAB : Curtain Airbag
* BPT : Seat Belt Pretensioner

WARNING LAMP ACTIVATION

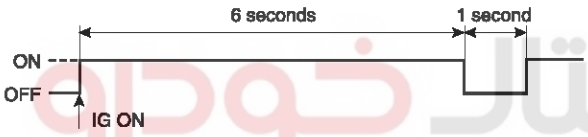
● WARNING LAMP OPERATION DURING PROVE-OUT PHASE

The SRSCM shall perform a warning lamp bulb check. The lamp shall blink for 6 seconds (±10%), at 1Hz (± 10%), 50% duty cycle (± 10%), during the module power-on prove-out phase and be turned off afterwards.



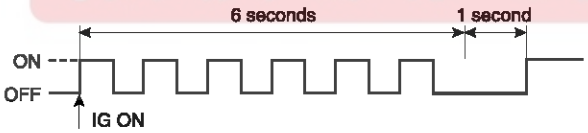
LRGE001K

The SRSCM shall perform a warning lamp check for 1 second after the initial 6 second prove-out period. If a recorded crash is present at power-up or at least 10 different fault qualifications have been recorded, the airbag warning lamp output will be activated ON immediately after the 1 second lamp check.

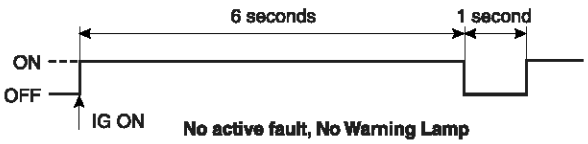


LRGE001L

When a current fault is detected at power-up, the lamp will not be affected until the end of prove-out. The lamp will blink normally at the rate defined in Case #1 above.



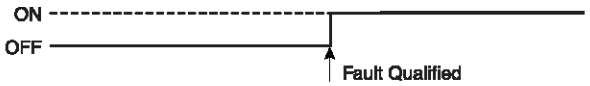
LRGE001M



LRGE001N

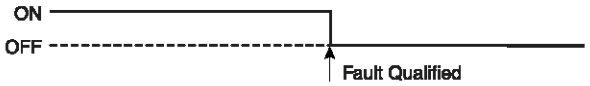
● NORMAL WARNING LAMP OPERATION AFTER PROVE-OUT PHASE

1. A current fault condition is present after prove-out phase
2. Loss of internal operating voltage (Vdd)
3. During SRSCM reset



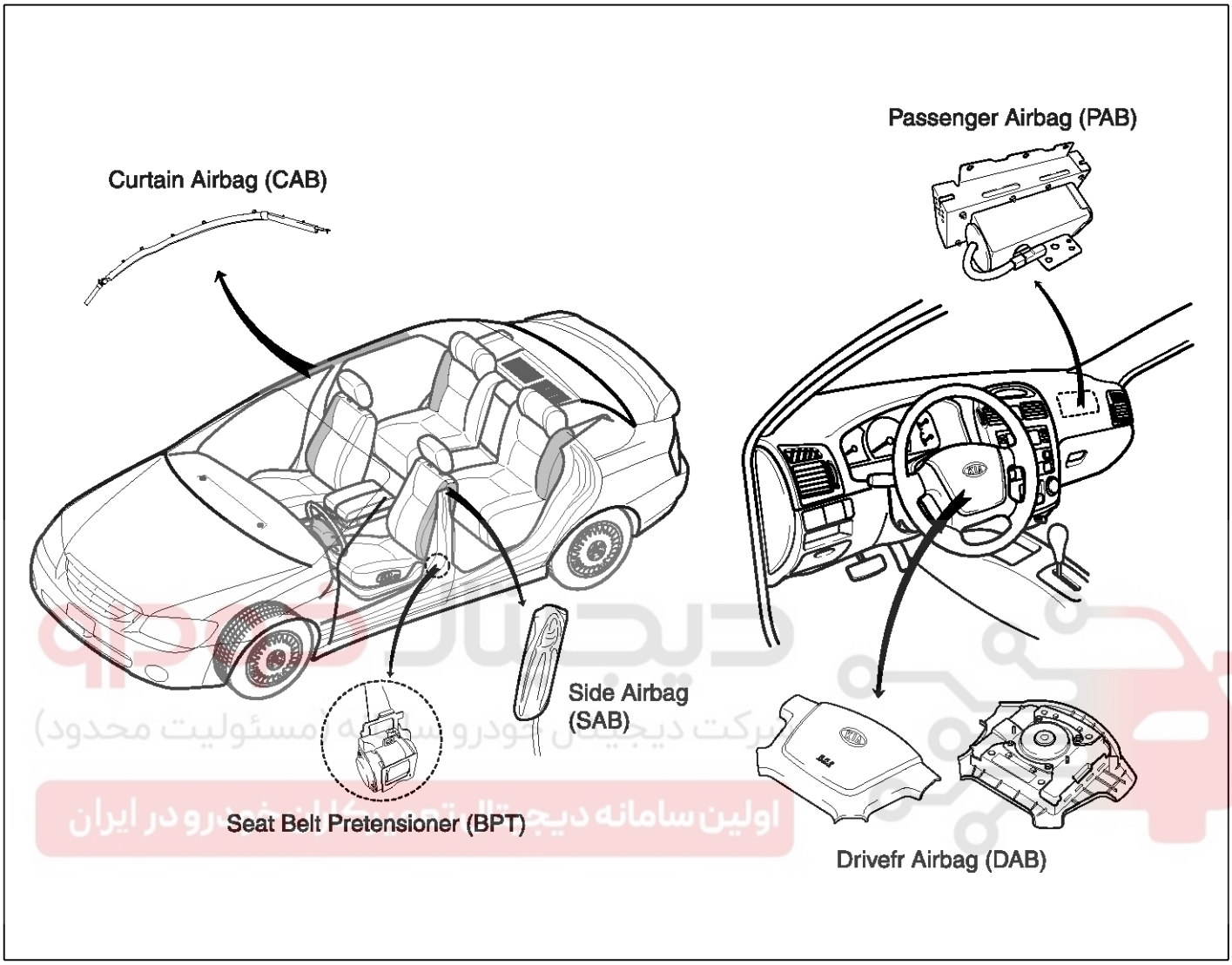
LRGE001O

The airbag warning lamp shall be deactivated (OFF), after a fault is dequalified.



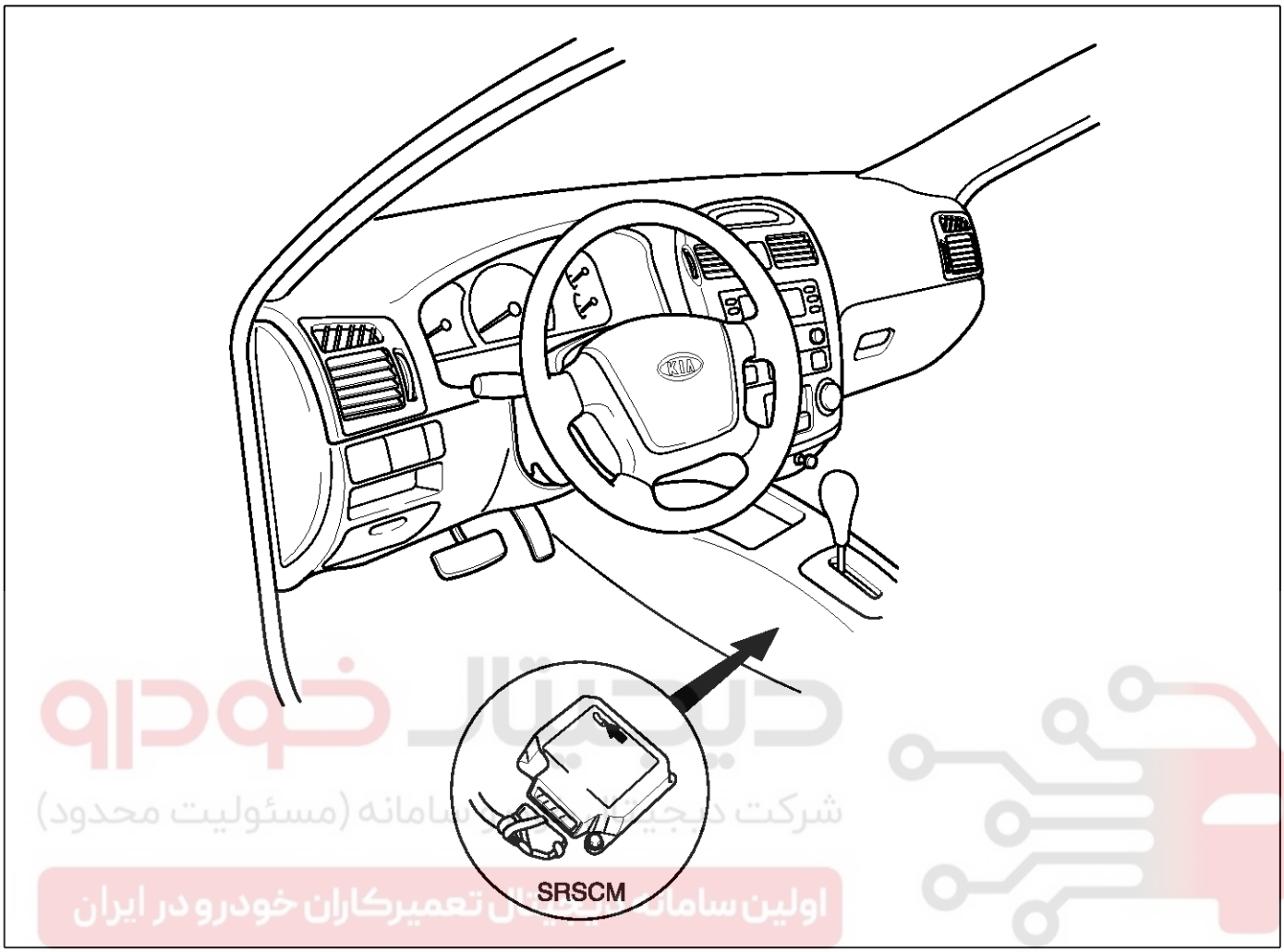
LRGE001P

COMPOENTS LOCATION
DAB, PAB, SAB, CAB, BPT



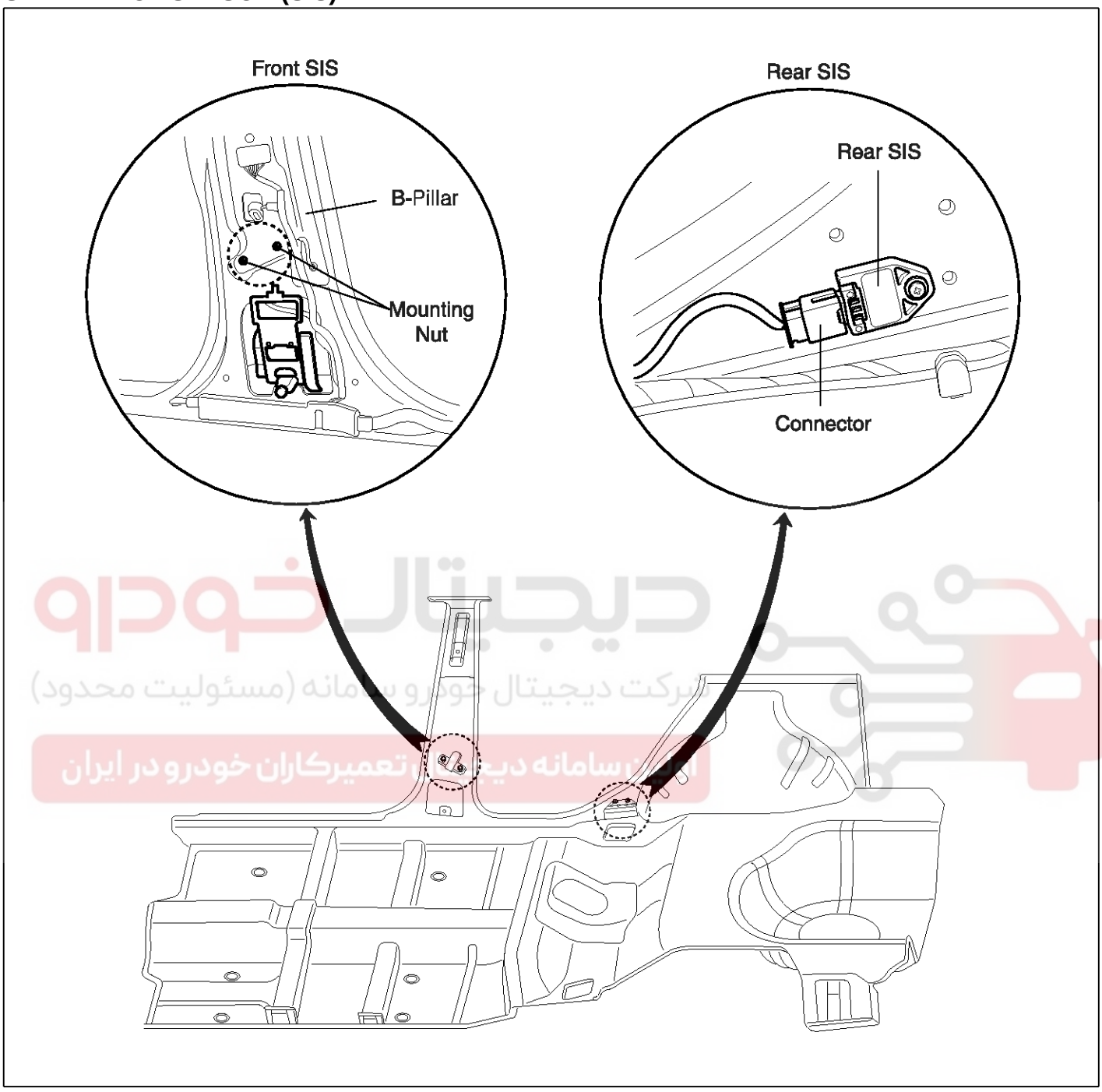
LRGE503A

SRSCM



BRGE110A

SIDE IMPACT SNESOR (SIS)



LRGE001E

SPECIFICATION

ITEM	CONDITION	SPECIFICATION	
Driver Airbag (DAB)	Resistance (Ω)	1.7 ~ 5.0 Ω	
Passenger Airbag (PAB)	Resistance (Ω)	1.7 ~ 5.0 Ω	
Side Airbag (SAB)	Resistance (Ω)	1.7 ~ 5.0 Ω	
Curtain Airbag (CAB)	Resistance (Ω)	1.7 ~ 5.0 Ω	
Seat Belt Pretensioner (BPT)	Resistance (Ω)	1.7 ~ 5.0 Ω	
Seat Belt Buckle Switch (BS)	Current (mA)	Buckled	8.7 ~ 16.5 mA
		Unbuckled	3.0 ~ 8.2 mA
	Resistance (kΩ)	Buckled	0.9 ~ 0.1 kΩ
		Unbuckled	360 ~ 440 kΩ

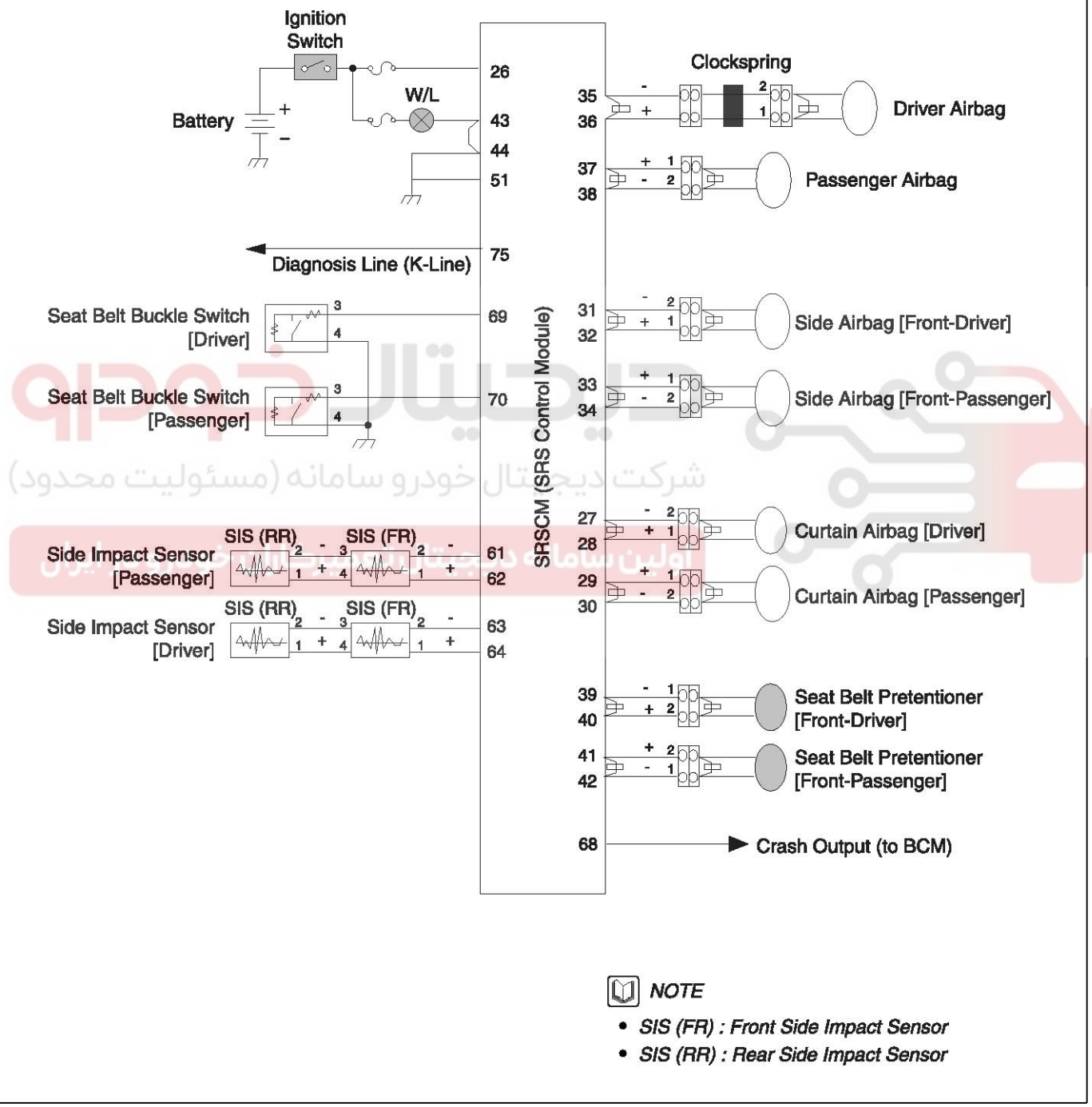
TIGHTENING TORQUES

ITEM	N·m	lb·ft	kgf·m
Driver Airbag Mounting Bolts	8 ~ 10	5.8 ~ 7.3	0.8 ~ 1.0
Passenger Airbag Mounting Nuts	19 ~ 27	13.7 ~ 19.5	1.9 ~ 2.7
Side Airbag Mounting Nuts	6 ~ 8	4.3 ~ 5.8	0.6 ~ 0.8
Seat Belt Lower Anchor Bolt	40 ~ 55	28.9 ~ 39.8	4.0 ~ 5.5
Curtain Airbag Mounting Bolts	5 ~ 7	3.6 ~ 5.1	0.5 ~ 0.7
SRSCM Mounting Bolt	8 ~ 10	5.9 ~ 7.4	0.8 ~ 1.0

Supplemental Restraint System Control Module (SRSCM)

CIRCUIT DIAGRAM

DAB + PAB + 2BPT + SAB + CAB + 2BS

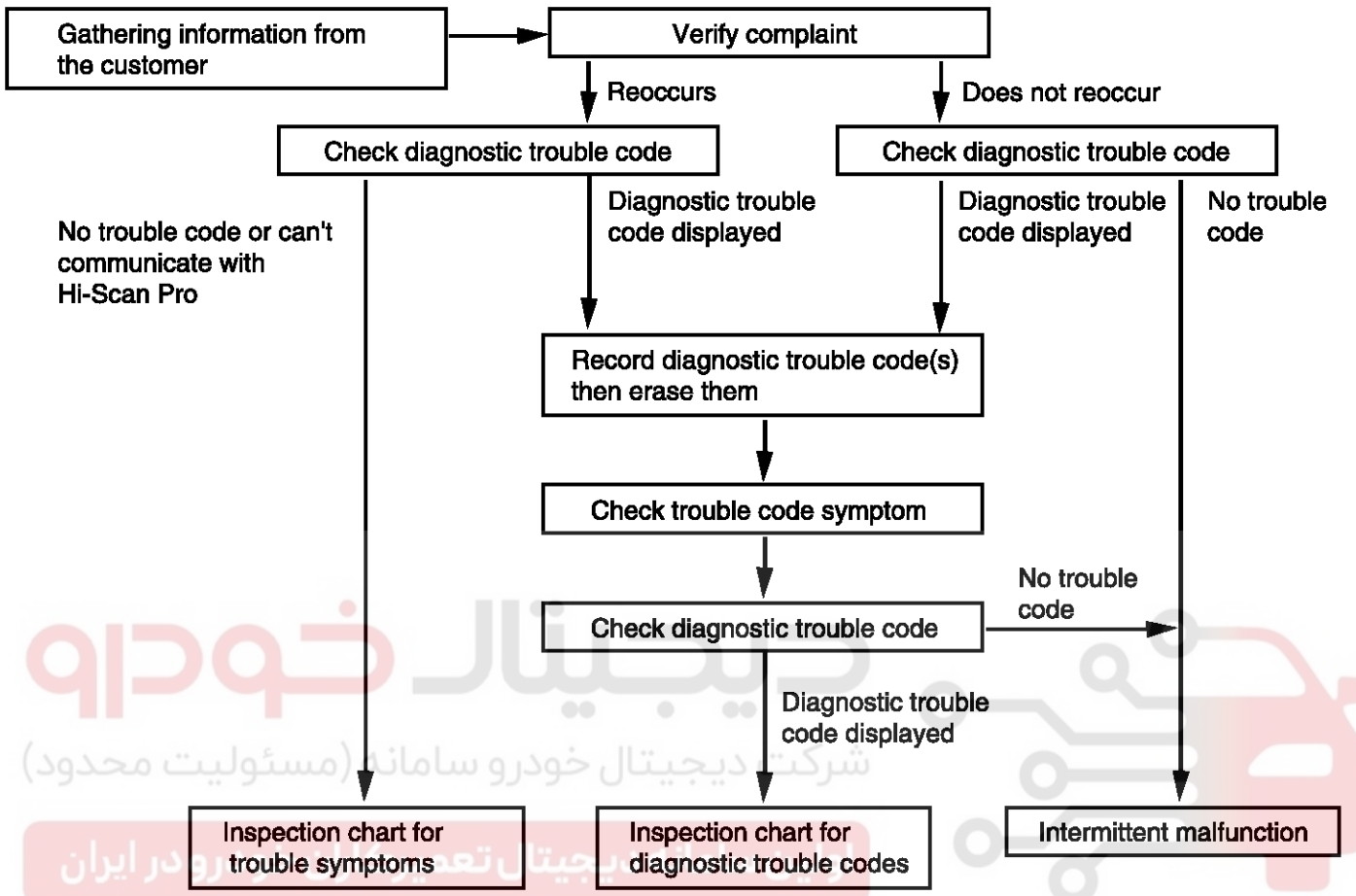


NOTE

- *SIS (FR) : Front Side Impact Sensor*
- *SIS (RR) : Rear Side Impact Sensor*

LRGE509A

DIAGNOSTIC TROUBLESHOOTING FLOW



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DIAGNOSTIC TROUBLE CODES (DTC)

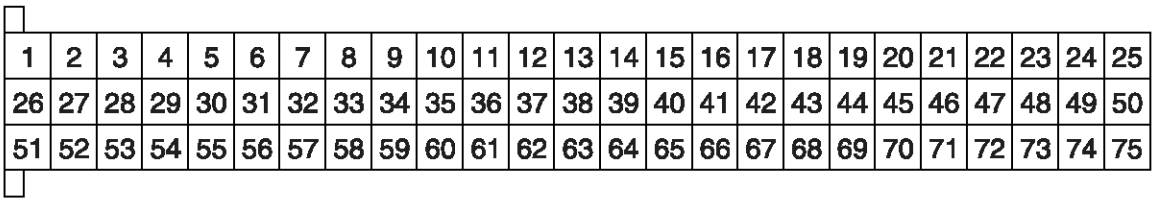
DTC	FAULT DESCRIPTION
B1111	Battery Voltage too High
B1112	Battery Voltage too Low
B1346	Driver Airbag Resistance too High
B1347	Driver Airbag Resistance too Low
B1348	Driver Airbag Circuit Short to Ground
B1349	Driver Airbag Circuit Short to Battery Line
B1352	Passenger Airbag Resistance too High
B1353	Passenger Airbag Resistance too Low
B1354	Passenger Airbag Circuit Short to Ground
B1355	Passenger Airbag Circuit Short to Battery Line
B1361	Seat Belt Pretensioner [Front-Driver] Resistance too High
B1362	Seat Belt Pretensioner [Front-Driver] Resistance too Low
B1363	Seat Belt Pretensioner [Front-Driver] Circuit Short to Ground
B1364	Seat Belt Pretensioner [Front-Driver] Circuit Short to Battery Line
B1367	Seat Belt Pretensioner [Front-Passenger] Resistance too High
B1368	Seat Belt Pretensioner [Front-Passenger] Resistance too Low
B1369	Seat Belt Pretensioner [Front-Passenger] Circuit Short to Ground
B1370	Seat Belt Pretensioner [Front-Passenger] Circuit Short to Battery Line
B1378	Side Airbag [Front-Driver] Resistance too High
B1379	Side Airbag [Front-Driver] Resistance too Low
B1380	Side Airbag [Front-Driver] Circuit Short to Ground
B1381	Side Airbag [Front-Driver] Circuit Short to Battery Line
B1382	Side Airbag [Front-Passenger] Resistance too High
B1383	Side Airbag [Front-Passenger] Resistance too Low
B1384	Side Airbag [Front-Passenger] Circuit Short to Ground
B1385	Side Airbag [Front-Passenger] Circuit Short to Battery Line
B1400	Side Impact Sensor [Front-Driver] Defect
B1403	Side Impact Sensor [Front-Passenger] Defect
B1409	Side Impact Sensor [Front-Driver] Communication Error
B1410	Side Impact Sensor [Front-Passenger] Communication Error
B1412	Side Impact Sensor [Rear-Driver] Communication Error
B1413	Side Impact Sensor [Rear-Passenger] Communication Error
B1418	Side Impact Sensor [Rear-Driver] Defect
B1419	Side Impact Sensor [Rear-Pasenger] Defect

Supplemental Restraint System Control Module (SRSCM) RT-15

DTC	FAULT DESCRIPTION
B1473	Curtain Airbag [Driver] Resistance too High
B1474	Curtain Airbag [Driver] Resistance too Low
B1475	Curtain Airbag [Driver] Circuit Short to Ground
B1476	Curtain Airbag [Driver] Circuit Short to Battery Line
B1477	Curtain Airbag [Passenger] Resistance too High
B1478	Curtain Airbag [Passenger] Resistance too Low
B1479	Curtain Airbag [Passenger] Circuit Short to Ground
B1480	Curtain Airbag [Passenger] Circuit Short to Battery Line
B1511	Seat Belt Buckle Switch [Driver] Open or Short to Battery Line
B1512	Seat Belt Buckle Switch [Driver] Short or Short to Ground
B1513	Seat Belt Buckle Switch [Passenger] Open or Short to Battery Line
B1514	Seat Belt Buckle Switch [Passenger] Short or Short to Ground
B1620	Internal Fault
B1650	Crash Recorded (Frontal Airbag)
B1651	Crash Recorded-Driver Side & Curtain Airbag
B1652	Crash Recorded-Passenger Side & Curtain Airbag
B1657	Crash Recorded Seat Belt Pretensioner Only
B1658	Seat Belt Pretensioner 6 times deployment
B2503	Warning Lamp Circuit Open or Short to Ground
B2504	Warning Lamp Circuit Short or Short to Battery Line

SRSCM CONNECTOR TERMINAL

SRSCM HARNESS CONNECTOR



BRGE001P

Pin	Function	Pin	Function
1	-	50	-
2 ~ 25	Shorting Bar	51	Chassis Ground
26	Battery Supply (Vbatt)	52	-
27	Curtain Airbag [Driver] Low	53	-
28	Curtain Airbag [Driver] High	54	-
29	Curtain airbag [Passenger] High	55	-
30	Curtain airbag [Passenger] Low	56	-
31	Side Airbag [Front-Driver] Low	57	-
32	Side Airbag [Front-Driver] High	58	-
33	Side Airbag [Front-Passenger] High	59	-
34	Side Airbag [Front-Passenger] Low	60	-
35	Driver Airbag Low	61	Side Impact Sensor [Passenger] Low
36	Driver Airbag High	62	Side Impact Sensor [Passenger] High
37	Passenger Airbag High	63	Side Impact Sensor [Driver] Low
38	Passenger Airbag Low	64	Side Impact Sensor [Driver] High
39	Seat Belt Pretensioner [Front-Driver] Low	65	-
40	Seat Belt Pretensioner [Front-Driver] High	66	-
41	Seat Belt Pretensioner [Front-Passenger] High	67	-
42	Seat Belt Pretensioner [Front-Passenger] Low	68	Crash Output (To BCM)
43	Airbag Warning Lamp	69	Seat Belt Buckle Switch [Driver]
44	Chassis Ground	70	Seat Belt Buckle Switch [Passenger]
45	-	71	-
46	-	72	-
47	-	73	-
48	-	74	-
49	-	75	Diagnosis Line (K-Line)

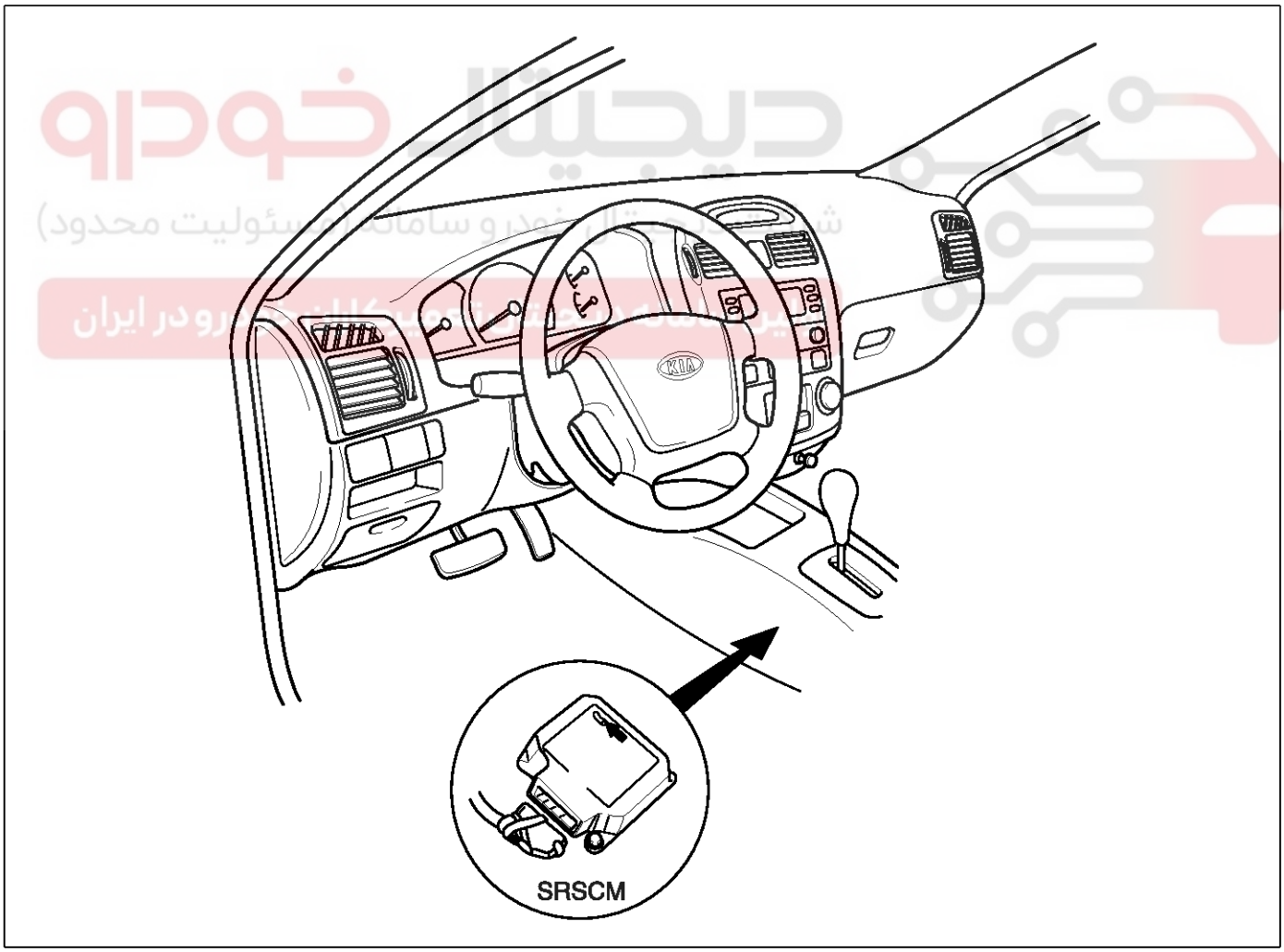
SRS Control Module (SRSCM)

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 if and when to deploy the restraint system pretensioners and airbags. 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 buckle switches and side impact sensors 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.

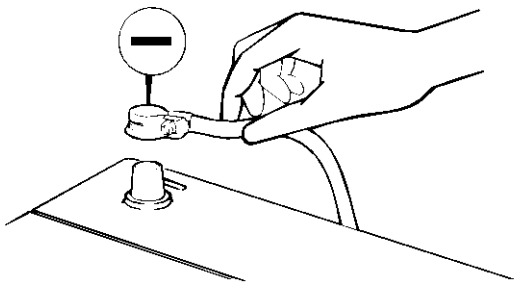
COMPONENTS



BRGE110A

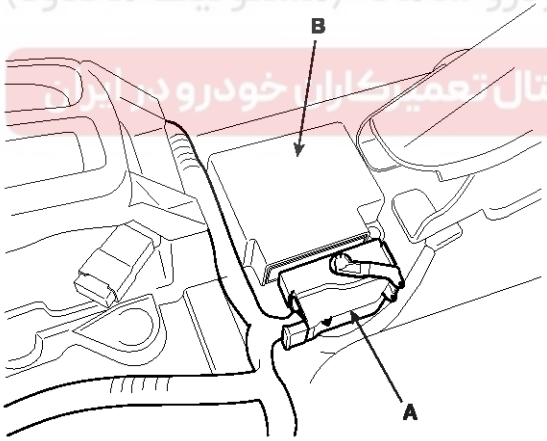
REMOVAL

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



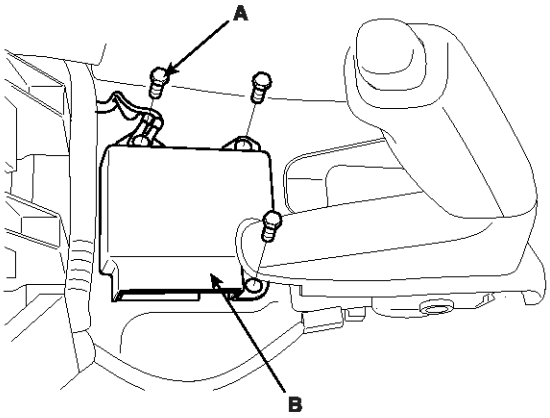
ARCD512A

2. Remove ignition key from the vehicle.
3. Disconnect the DAB, PAB, SAB, CAB and BPT connectors.
4. Remove the center console (Refer to BD group in this Service Manual).
5. Disconnect the SRSCM harness connector (A) from the SRSCM (B).



ERKD600B

6. Remove the SRSCM mounting bolts (A) from the SRSCM and pull out the SRSCM from the bracket.

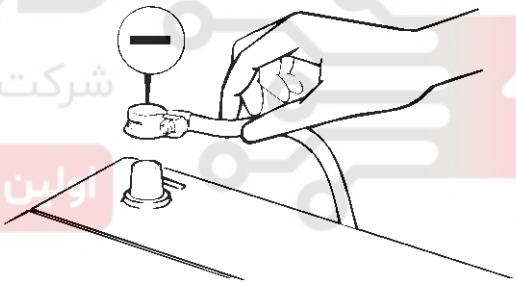


ERKD600D

Tightening Torque (SRSCM Mounting Bolt)
: 8 ~ 10 N·m (5.9 ~ 7.4 lb·ft)

INSTALLATION

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Install a SRSCM on the bracket with the three mounting bolts.

Tightening Torque (SRSCM Mounting Bolt)
: 8 ~ 10 N·m (5.9 ~ 7.4 lb·ft)

4. Connect the SRSCM harness connector.
5. Install the center console.
6. Connect the DAB, PAB, SAB, CAB and BPT connectors.
7. After installing the SRSCM, confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should blink for about six seconds and then go off.

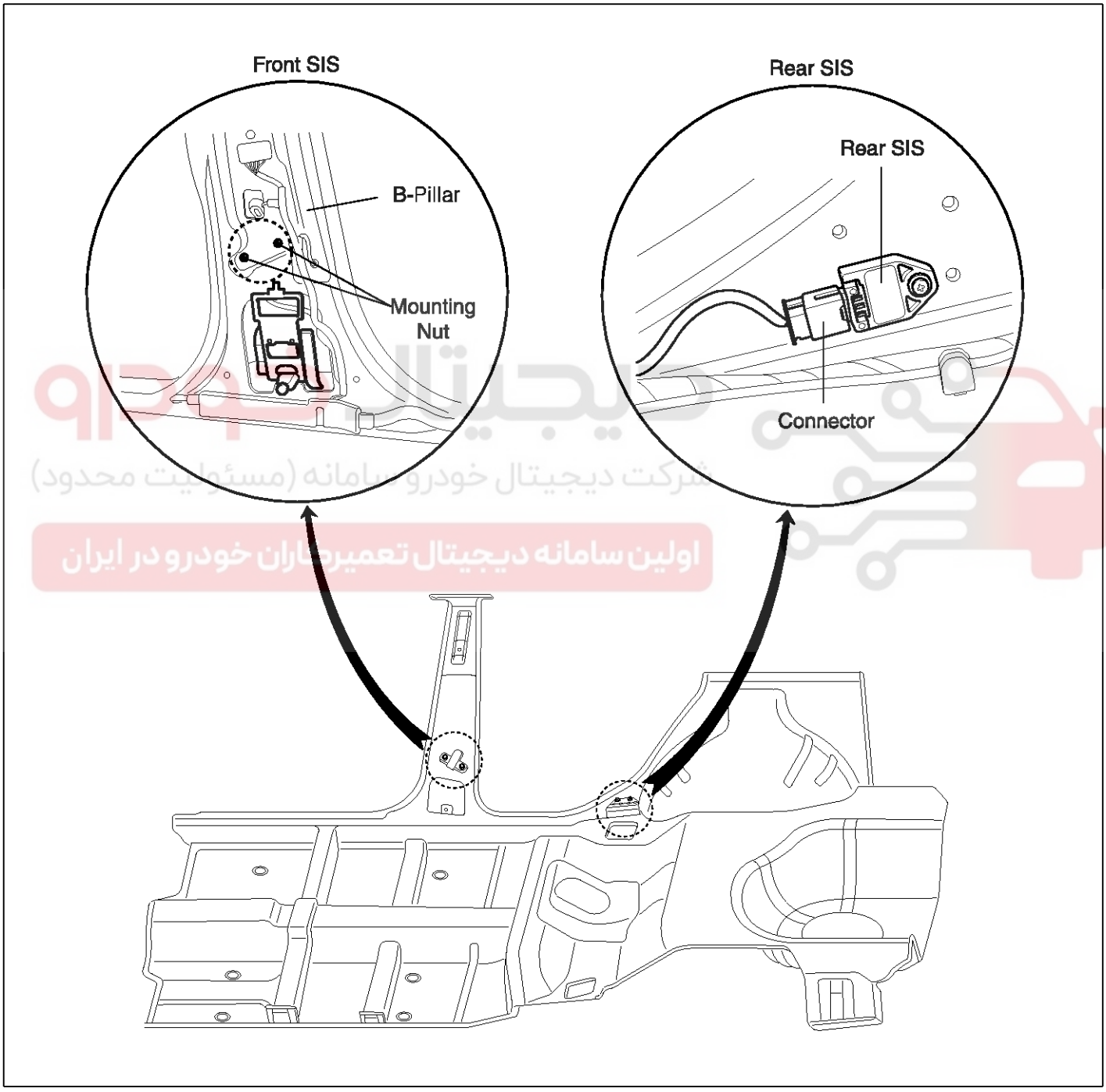
Side Impact Sensor (SIS)

DESCRIPTION

The Side Impact Sensor (SIS) system consist of two front SIS which are installed inside the B-Pillar (LH and RH) and two rear SIS which are installed in the C-Pillar (LH and RH).

They are remote sensor 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



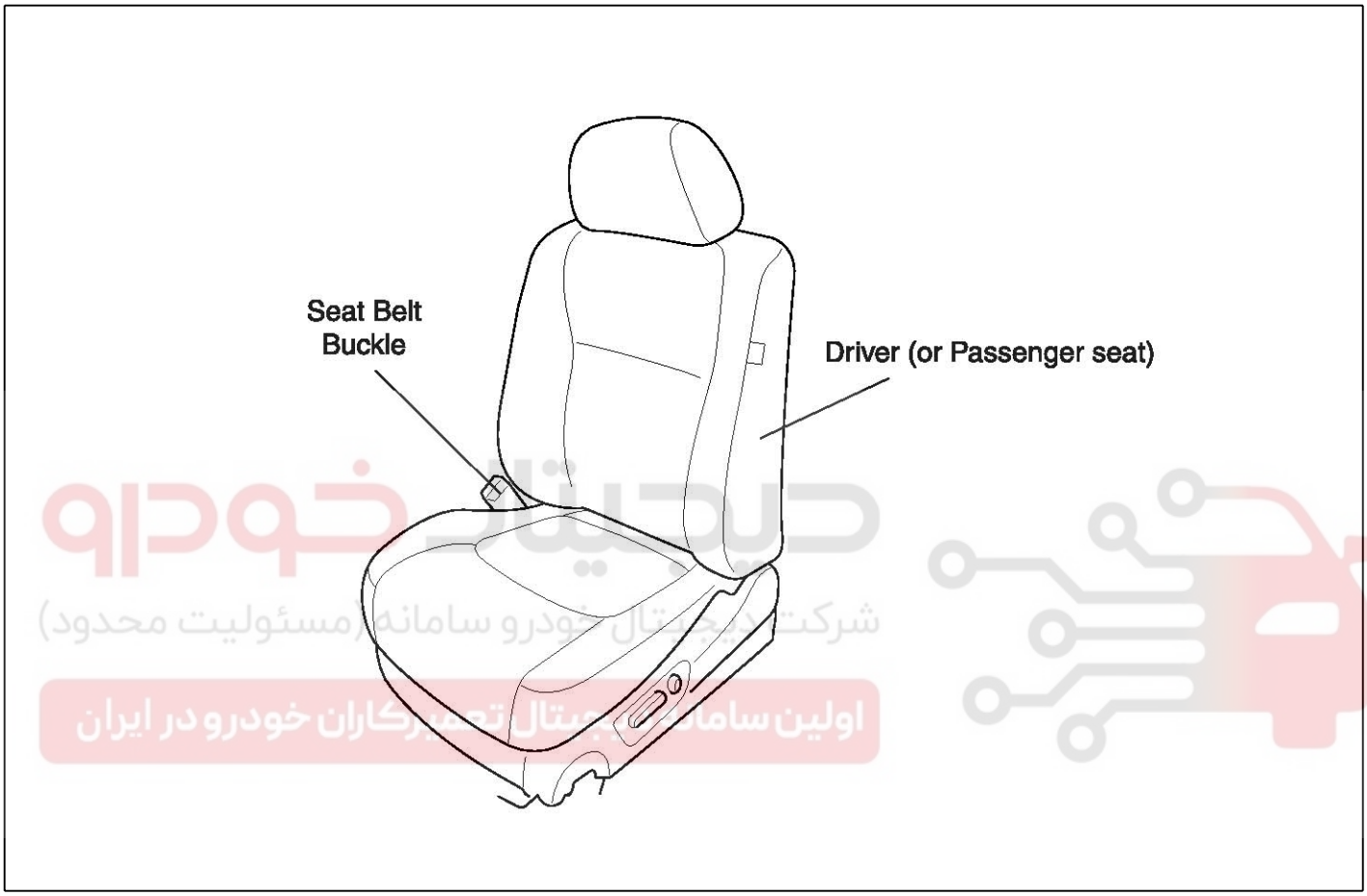
LRGE001E

Seat Belt Buckle Switch (BS)

DESCRIPTION

The buckle status shall modify the SRSCM deployment. If the Buckle Status is Unbuckled, the corresponding pretensioner will be deactivated.

COMPONENTS



BRGE300D

Airbag Module

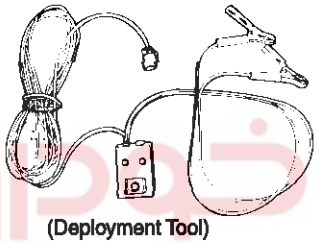
AIRBAG MODULE DISPOSAL PROCEDURES

Before disposing of a vehicle equipped with an airbag, or prior to disposing of the airbag module, be sure to first follow the procedures described below to deploy the airbag.

⚠CAUTION

When handling the deployed airbag be careful that not the dust enters your eyes and always wear gloves to avoid direct contact with the dust.

AIRBAG REMOTE DEPLOYMENT DEVICES

Tool Name	Use
1. Deployment tool 2. Deployment tool adapter  (Deployment Tool)  (Deployment Tool Adapter)	To deploy a airbag module by compulsion.

DISPOSAL PLAN

Take the following disposal steps.

CASE		DISPOSAL PLAN
Car scrapping	DAB, PAB, BPT, SAB, CAB	Deploy the airbag module with the SST
Crash (Deployed)		Discard

UNDEPLOYED AIRBAG MODULE DISPOSAL

⚠CAUTION

- **If the vehicle is to be scrapped, junked, or otherwise disposed of, deploy the airbag inside the vehicle.**
- **Since there is a loud noise when the airbag is deployed, avoid residential areas whenever possible. If anyone is nearby, give warning of the impending noise.**
- **Since a large amount of smoke is produced when the airbag is deployed, select a well ventilated site. Moreover, never attempt the test near a fire or smoke sensor.**

DEPLOYMENT INSIDE THE VEHICLE

When vehicle will no longer be driven :

1. Open all windows and doors of the vehicle. Move the vehicle to an isolated spot.
2. Disconnect the negative (-) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle

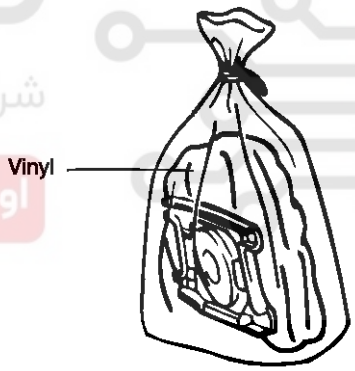
   ⚠CAUTION
   Wait at least 30 seconds after disconnecting the battery cable before doing any further work.
3. Remove the center crash pad side cover.
4. Remove the Airbag SRSCM connector.
5. Connect the deployment tool to the connector of each module.
6. As far away from the vehicle as possible, press the push button on the depolyment tool to deploy the airbag.

   ⚠CAUTION
   - **Before diploying the airbag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.**
   - **The inflator will be quite hot immediately following the deployment, so wait at least 30minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from airbag deployment. See the Deployed Airbag Module Disposal Procedures for post-deployment handling instructions.**
   - **If the airbag fails to deploy when the procedures above are followed, do not go near the module. CIntact your DPSM.**

DEPLOYED AIRBAG MODULE DISPOSAL PROCEDURES

After deployment, the airbag module should be disposed of in the same manner as any other scrap part, except thath the following points should be carefully noted during disposal.

1. The inflator will be quite hot immediately following deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it.
2. Do not put water or oil on hte airbag after deployment.
3. There may be adhered to the deployed airbag module, material that could irritate the eyes and/or skin, so wear gloves and safety glasses when handling a deployed airbag module. If despite these precautions, the material does get into your eyes or on your skin, immediately rinse the affected area with a large amount of clean water, If any irritation develops, seek medical attention.
4. Tightly seal the airbag module in a strong viny bag for disposal.



BRGE009C

5. Be sure to always wash your hands after completing this operation.

Driver Airbag (DAB) Module and Clock Spring

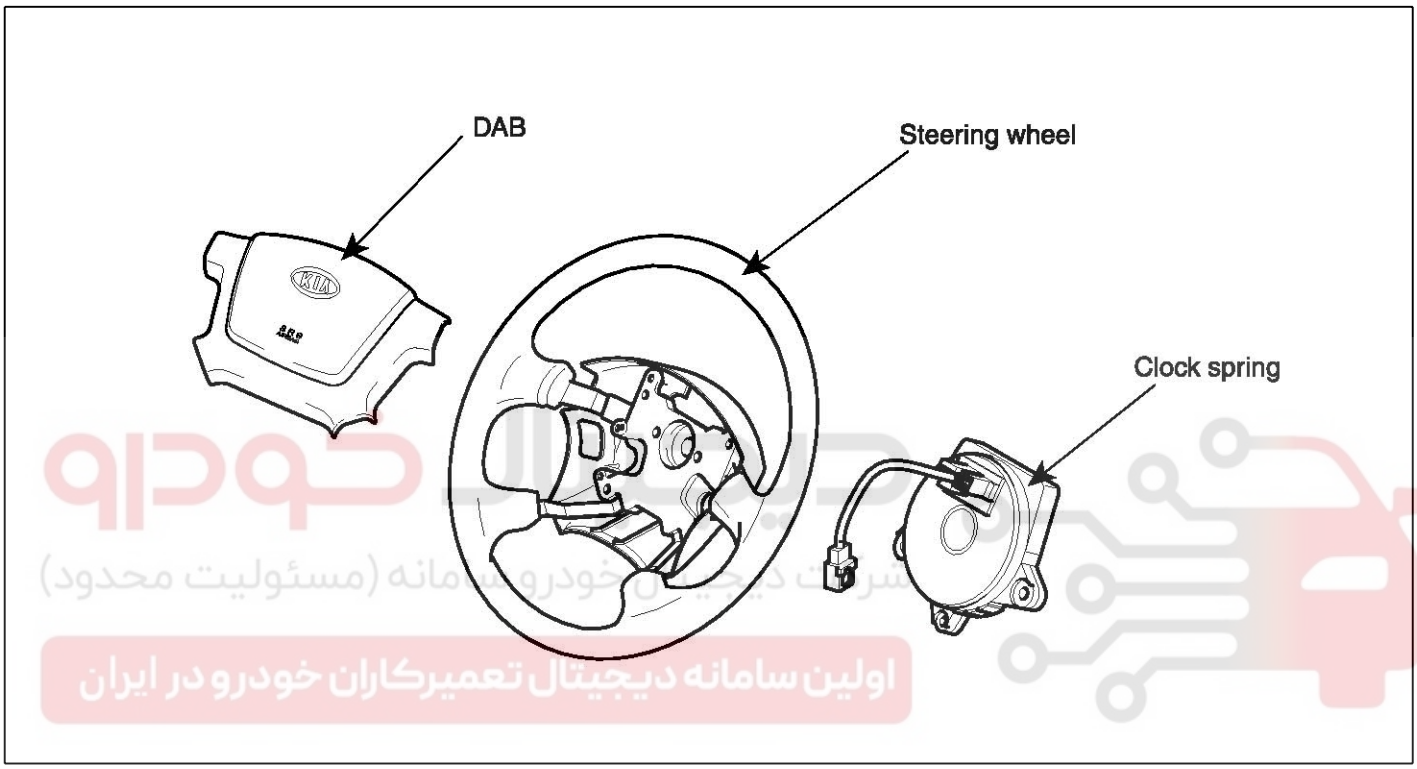
DESCRIPTION

Driver Airbag (DAB) is installed in steering wheel and electrically connected to SRSCM via clockspring. It protects the driver from danger with 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



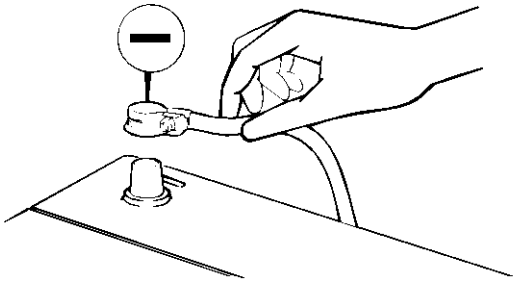
LRGE001J

REMOVAL

⚠CAUTION

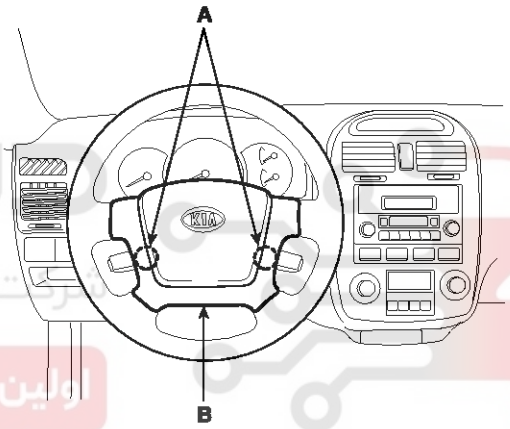
- **Turn the front wheel to the straight-ahead position when removing/installing the Driver Airbag or Clockspring.**
- **Prior to installing the clockspring, set the clockspring on NEUTRAL position and after turning the front wheels to the straight-ahead position, install the clockspring to the column switch. If the mating mark of the clockspring is not properly aligned, the steering wheel may not completely rotate during a turn, or the flat cable within the clockspring may be broken obstructing normal operation of the SRS and possibly leading to serious injury to the vehicle's driver.**
- **Never attempt to disassemble or repair the airbag module or clockspring. If faulty, replace it.**
- **Do not drop the airbag module or clockspring or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.**
- **The airbag module should be stored on a flat surface and placed so that the pad surface is facing upward. Do not place anything on top of it.**
- **Do not expose the air bag module to temperatures over 93℃(200℉).**
- **After deployment of an airbag, replace the clockspring with a new one.**
- **Wear gloves and safety glasses when handing an air bag that has been deployed.**
- **An undeployed airbag module should only be disposed of in accordance with the procedures mentioned in the restraints section.**
- **When you disconnect the air bag module-clockspring connector, take care not to apply excessive force.**
- **The removed air bag module should be stored in a clean, dry place.**

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



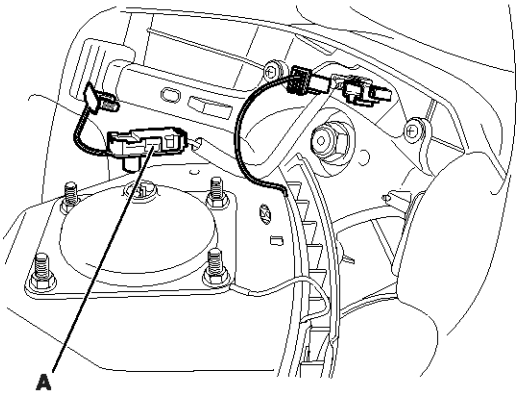
ARCD512A

2. Remove ignition key from the vehicle.
3. Unscrew the DAB mounting bolts (A).



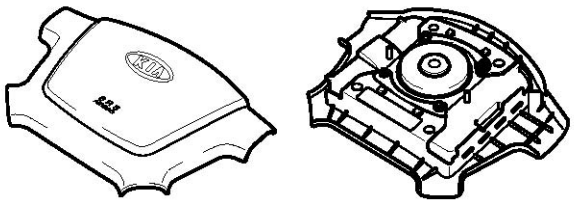
LRGE003A

4. Disconnect the DAB connectors (A).



LRGE017B

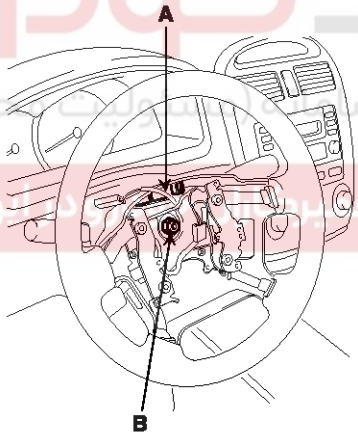
5. Remove the Driver Airbag (DAB) module from the steering wheel.



LRGE512C

⚠CAUTION
The removed airbag module should be stored in a clean, dry place with the pad cover face up.

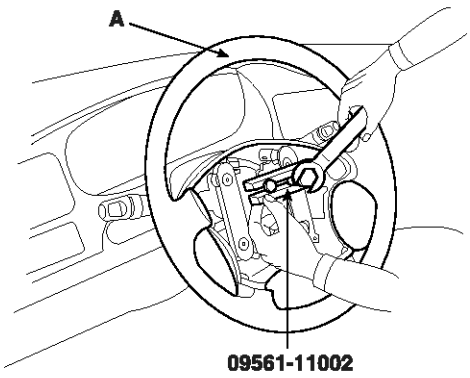
6. Remove the switch connector (A) and the steering-wheel lock nut (B).



APGE003B

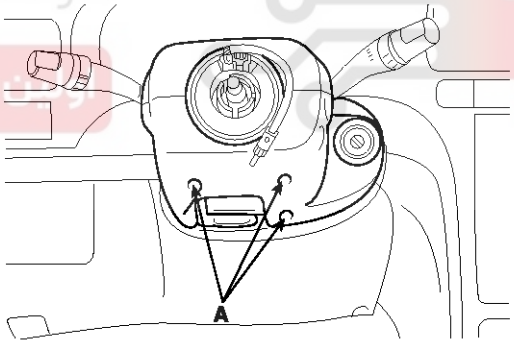
7. After setting the steering shaft to the mark on wheel, remove the steering wheel with the SST (09561-11002).

⚠CAUTION
Don't strike the steering wheel with a hammer or other device. Damage to the steering wheel or components could occur.



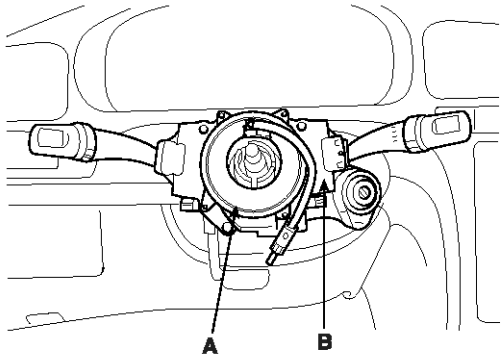
EPKE014A

8. Unscrew the three bolts (A) and remove the column shroud.



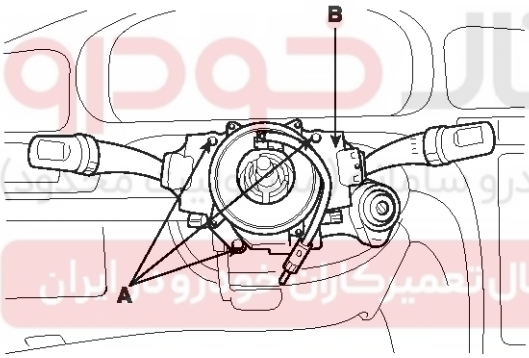
APGE003C

9. Disconnect the connectors on the clockspring (A) and the multi-function switch (B).



APGE003D

10. Unscrew the three bolts (A) and remove the multi-function switch (B).

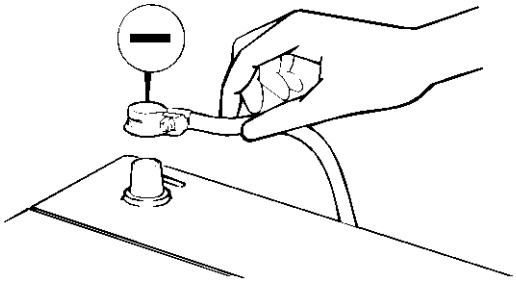


EPKE150A

11. Remove the clockspring from the multi-function switch.

INSTALLATION

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Connect the Driver Airbag (DAB) harness connectors, then install a Driver Airbag (DAB) module on the steering wheel.
4. Secure the Driver Airbag (DAB) with the new mounting bolts.

Tightening Torque (DAB Mounting Bolt)
: 8 ~ 10 N·m (5.8 ~ 7.2 lb·ft)

5. Connect the battery negative cable.
6. After installing the airbag, confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should blink for about six seconds and thengo off.
   - Make sure both horn buttons work.

INSPECTION

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

Passenger Airbag (PAB) Module

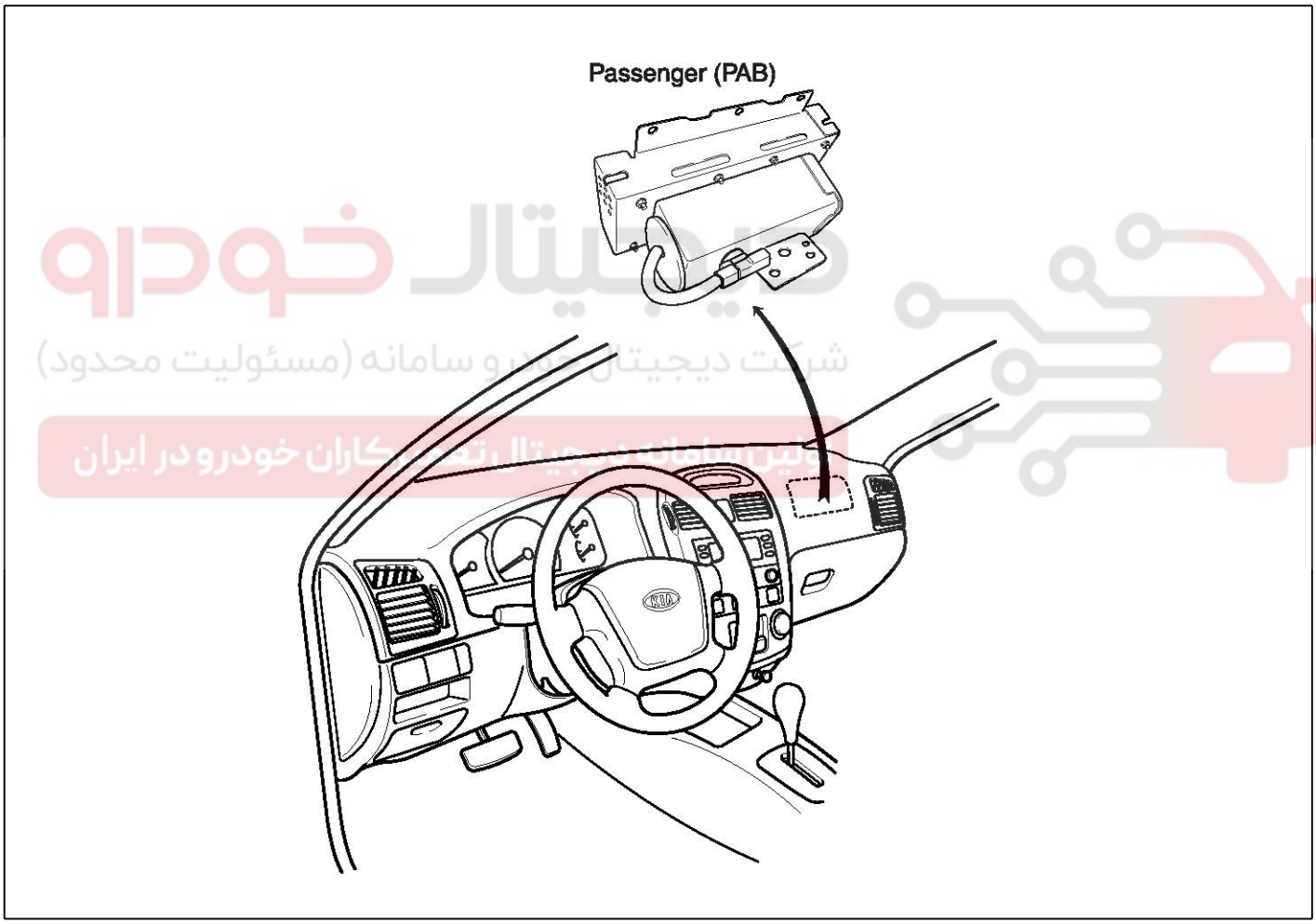
DESCRIPTION

The passenger Airbag (PAB) is installed inside the dash 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



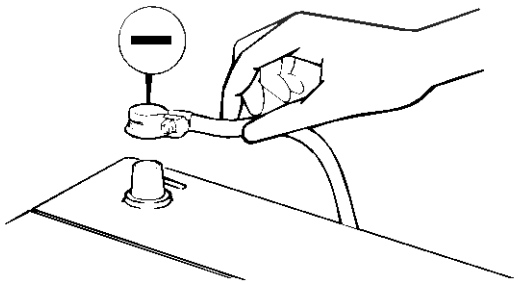
LRGE001F

REMOVAL

⚠CAUTION

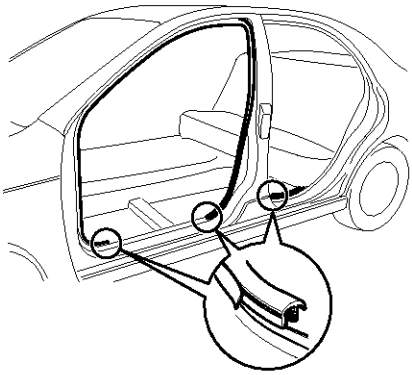
- **Never attempt to disassemble or repair the airbag module.**
- **Do not drop the airbag module or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.**
- **The airbag module should be stored on a flat surface and placed so that the pad surface is facing upward. Do not place anything on top of it.**
- **Do not expose the airbag module to temperature over 93℃(200˚F).**
- **An undeployed airbag module should only be disposed in accordance with the procedures.**
- **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.**
- **Whenever the PAB is deployed it should be replaced with a new one assembled with an extension wire. The squib is melt down if the PAB is deployed making the extension wire useless.**

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



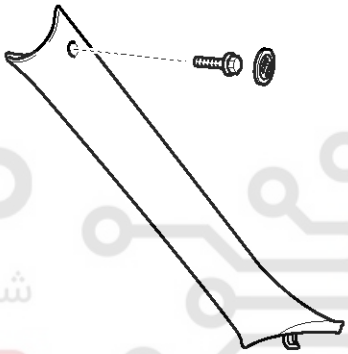
ARCD512A

2. Remove ignition key from the vehicle.
3. Remove the floor console assembly.
4. Remove the front pillar trim.
   a. Remove the body side weather strip.



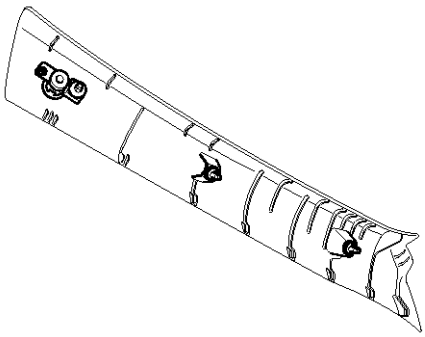
ASGE016B

   b. Remove the pillar blanking cover and bolt.



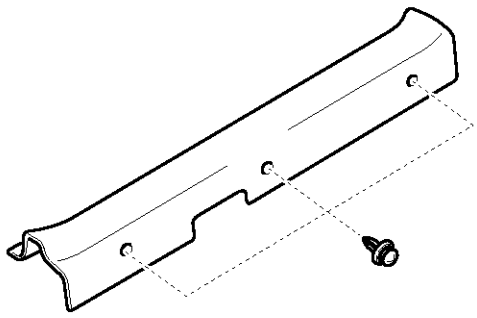
ASGE016C

   c. Remove the trim from the front pillar.

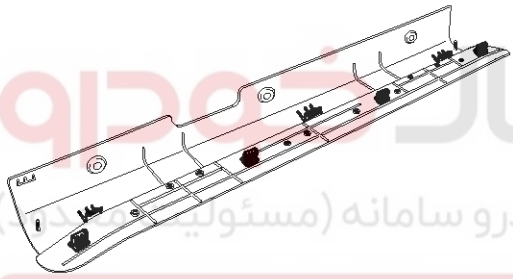


ASGE016D

5. Remove the cowl side trim.
   a. Remove the front door scuff trim.

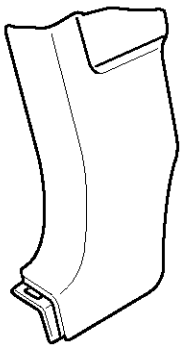


ASGE016E

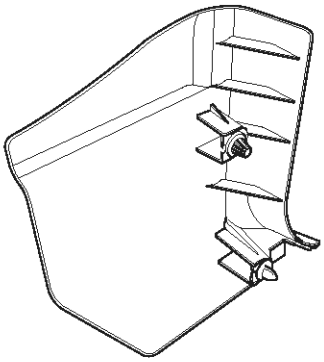


ASGE016F

   b. Remove the cowl side trim.

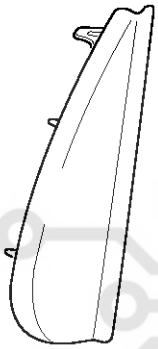


ASGE016G



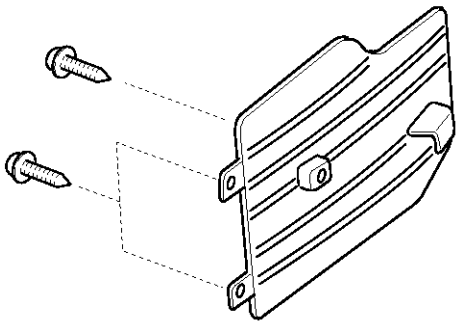
ASGE016H

6. Remove the side cover.



ASGE012B

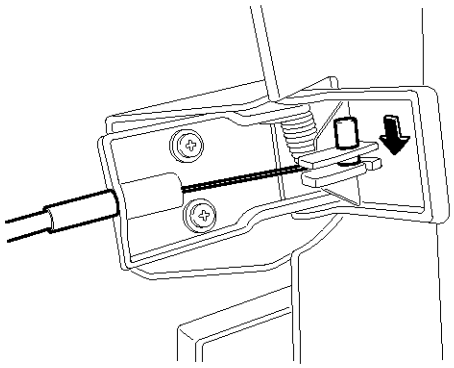
7. Remove the center crash pad side cover (LH/RH).



ASGE012C

   a. Remove the screws(6).
   b. Remove the center crash pad side cover.

8. Remove the lower panel (LH).
   a. Remove the hood release handle cable.

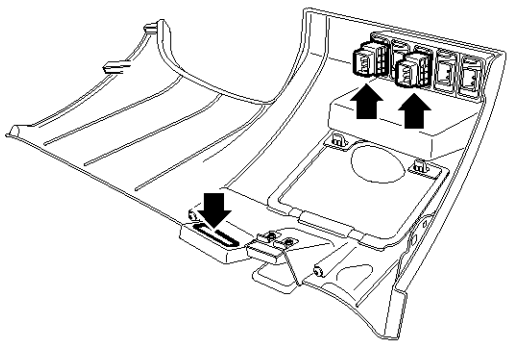


ASGE014D

   b. Remove the screws(4).

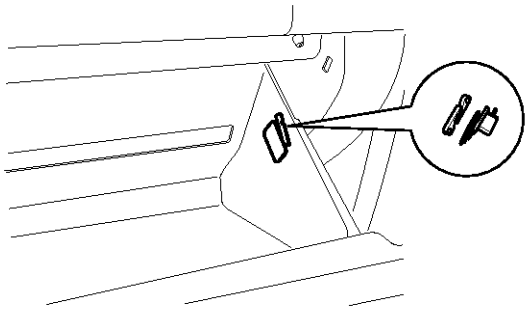
ASGE012E

   c. Disconnect the lower panel connector.



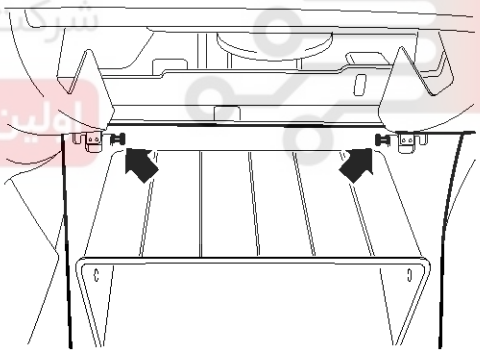
ASGE112B

   d. Remove the lower panel from the instrument panel.
9. Remove the steering shaft from the cowl cross bar after removing the steering wheel and the column cover, and then set them on floor.
10. Remove the glove box.
   A. Remove the guide and the damper wire.



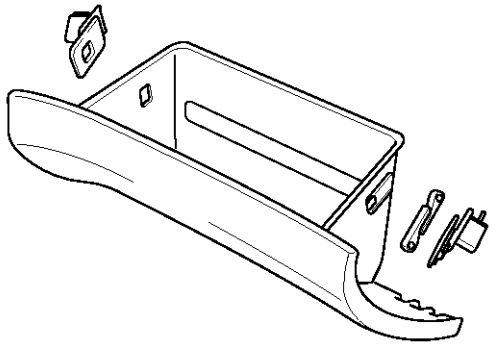
ASGE114C

   B. Remove the hinge pin(2).



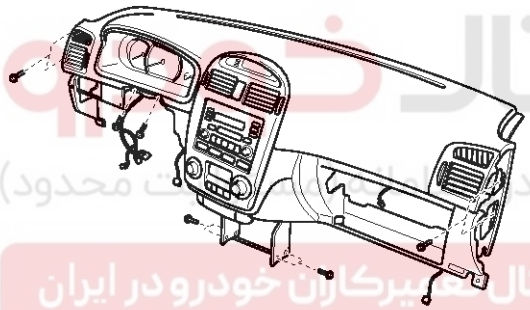
ASGE114D

C. Remove the glove box.



ASGE114E

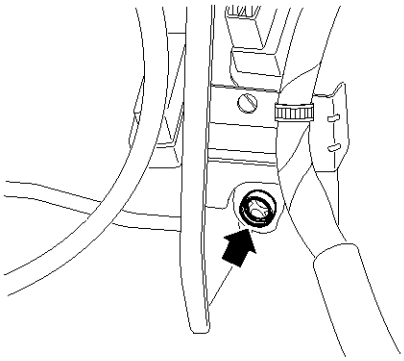
11. Remove the instrument panel assembly.
    a. Remove the mounting bolts(12).



ASGE014G

    b. Disconnect the fuse box and the electrical connector.

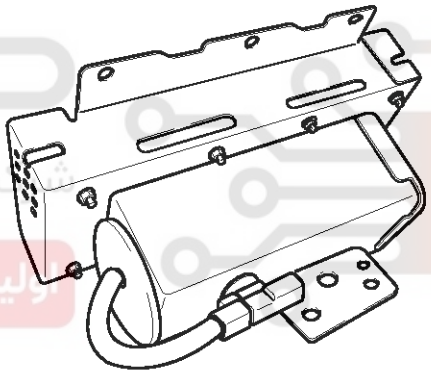
c. Remove the audio antenna cable.



ASGE014H

    d. Remove the instrument panel assembly.

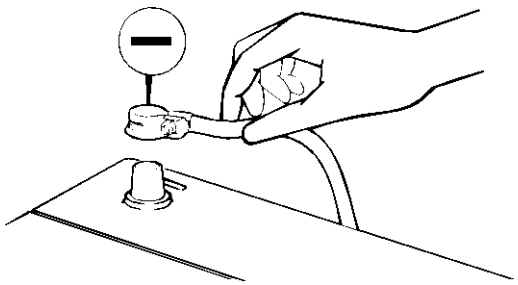
12. Remove the Passenger Airbag (PAB) module from the instrument panel.



ARGE001F

INSTALLATION

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Place a Passenger Airbag (PAB) on the instrument panel and tighten the Passenger Airbag (PAB) mounting nuts.

Tightening Torque (PAB Mounting Nut)
: 19 ~ 27 N·m (13.7 ~ 19.5 lb·ft)

4. Install the instrument panel (Refer to BD group in this Service Manual).
5. Connect the Passenger Airbag (PAB) harness connector to the SRS main harness connector.

   Attach the Passenger Airbag (PAB) connector to the connector holder, then reinstall the glove box.
6. Reconnect the battery negative cable.
7. After installing the Passenger Airbag (PAB), confirm proper system operation:
   - Turn the ignition switch ON; the SRS indicator light should blink for about six seconds and then go off.

Side Airbag (SAB) Module

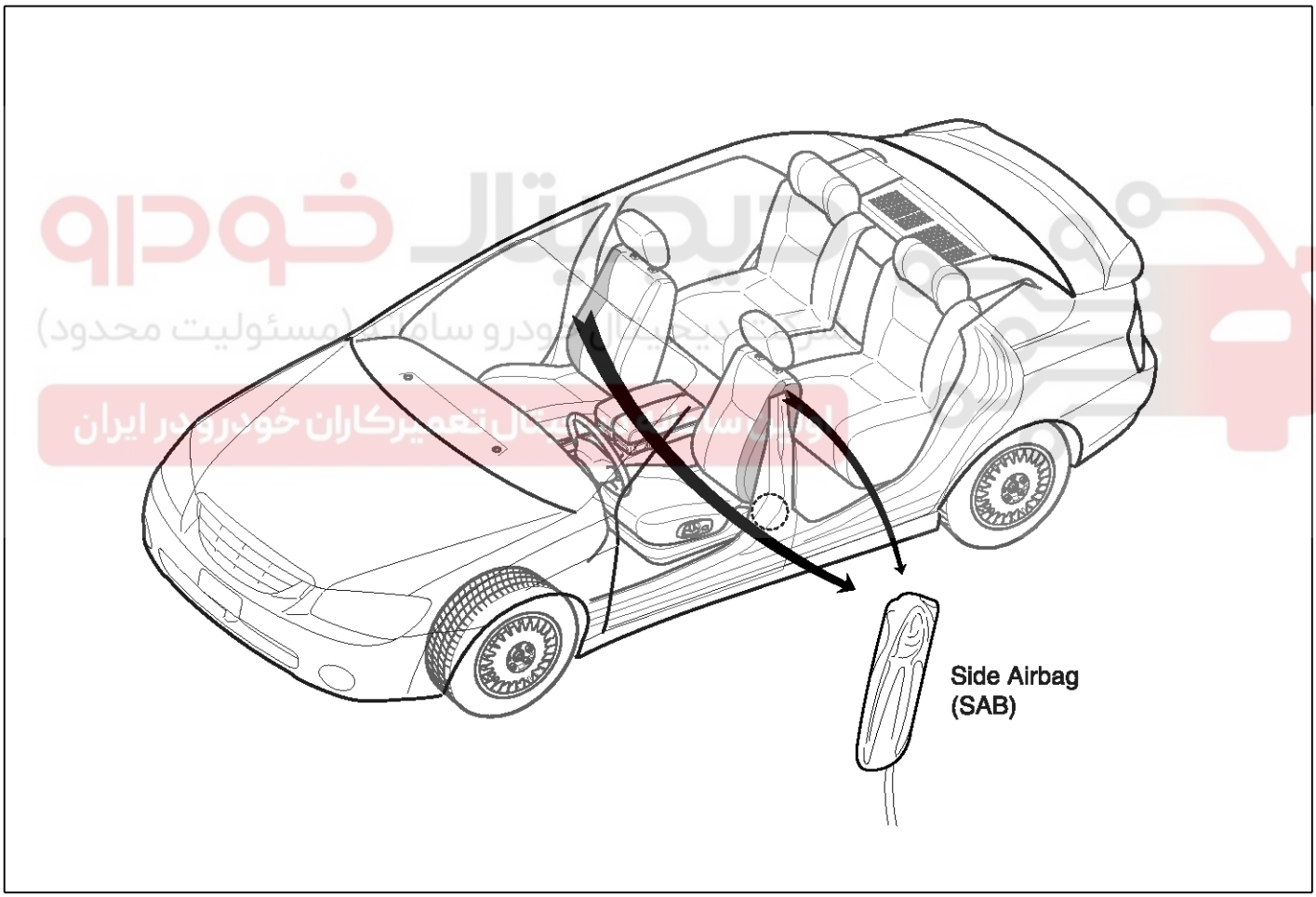
DESCRIPTION

The two Side Airbags (SAB) are installed inside the driver and passenger seat and protects 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



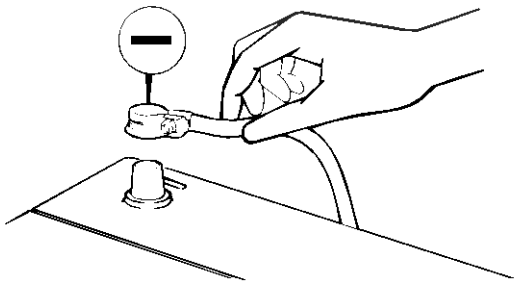
BRGE001G

REMOVAL

⚠CAUTION

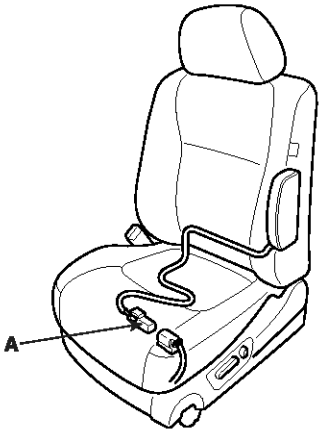
- **Never attempt to disassemble or repair the airbag module.**
- **Do not drop the airbag module or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.**
- **The airbag module should be stored on a flat surface and placed so that the pad surface is facing upward. Do not place anything on top of it.**
- **Do not expose the airbag module to temperature over 93℃(200˚F).**
- **An undeployed airbag module should only be disposed in accordance with the procedures.**
- **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.**
- **Whenever the SAB is deployed it should be replaced with a new one assembled with an extension wire. The squib is melt down if the SAB is deployed making the extension wire useless.**

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



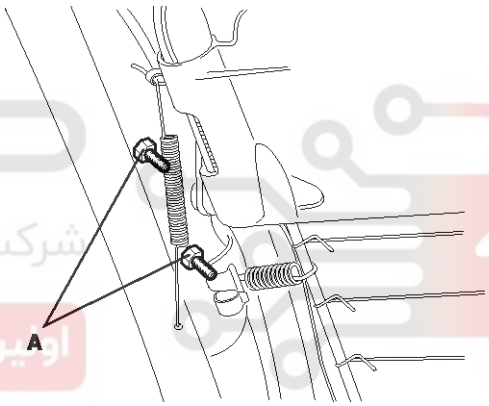
ARCD512A

2. Remove ignition key from the vehicle.
3. Remove the driver or passenger seat (Refer to BD group in this Service Manual).
4. Disconnect the SAB connector (A).

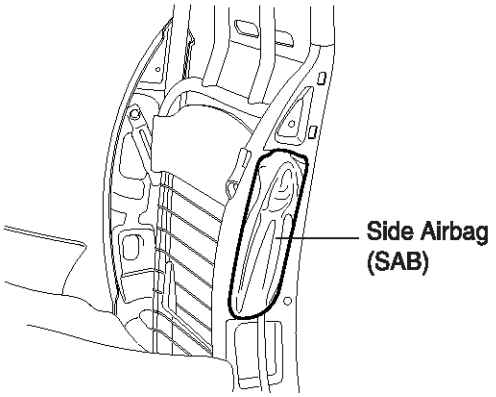


ERKD510A

5. Unscrew the SAB mounting nuts (A) and remove the Side Airbag (SAB) module.



BRGE001A



BRGE001B

INSTALLATION

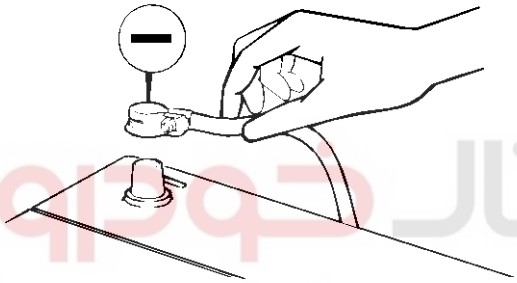
CAUTION

Be sure to install the harness wires so that they are not pinched or interfering 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 seat-back cover is installed properly. Improper installation may prevent the proper deployment.*

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Place a Side Airbag (SAB) on the seat back-frame and tighten the side airbag mounting nuts.

Tightening Torque (SAB Mounting Nut)
: 6 ~ 8 N·m (4.3 ~ 5.8 lb·ft)

4. Install the new seat-back cover.
5. Install the seat assembly, then connect the Side Airbag (SAB) harness connector.
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 blink for about six seconds and then go off.
8. Recline and slide the front seat forward fully, make sure the harness wires are not pinched or interfering with other parts.

Curtain Airbag (CAB) Module

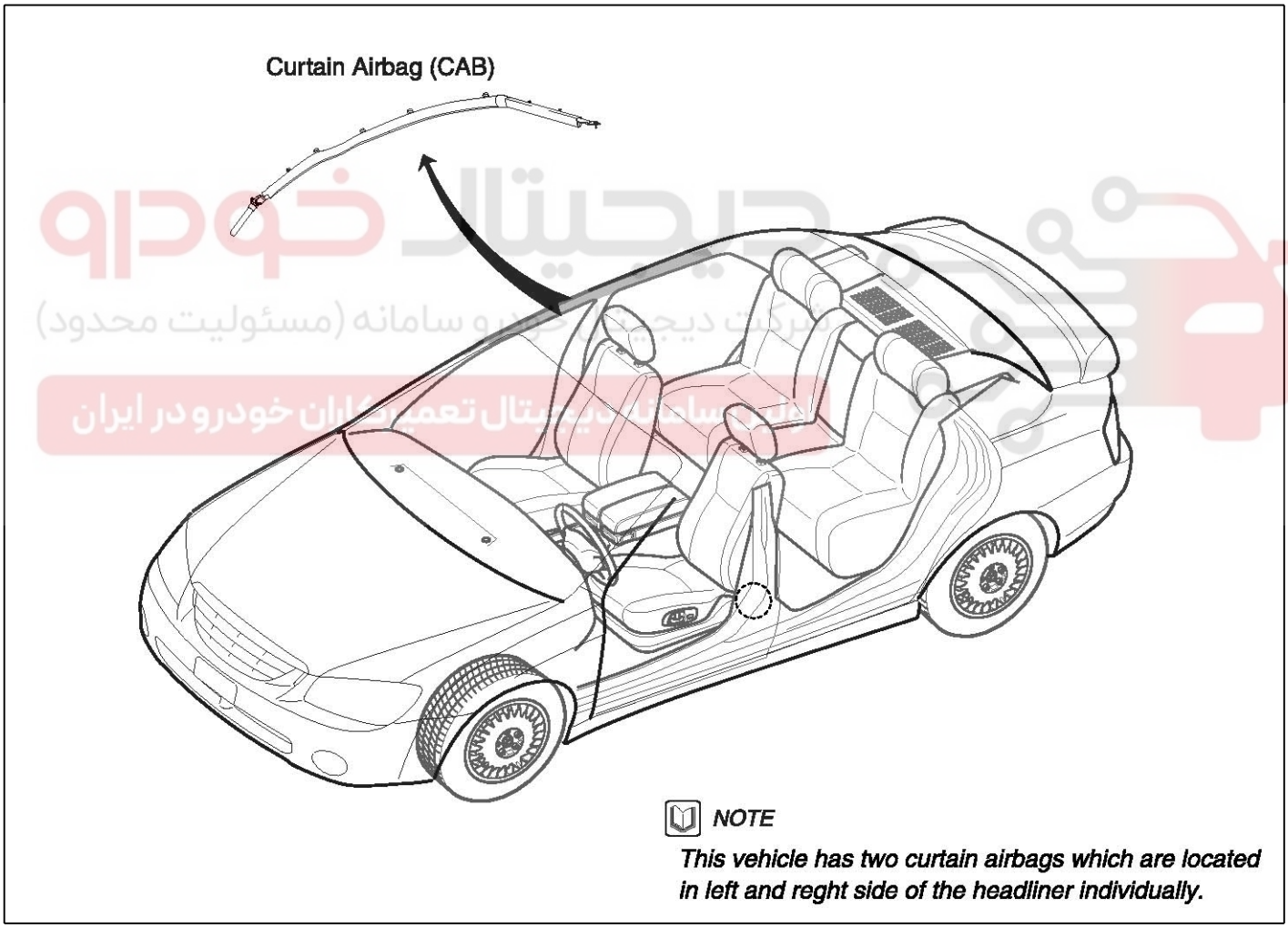
DESCRIPTION

The two Curtain Airbags (CAB) are installed inside the headliner and help to protect the vehicle passengers in the event of a side crash. 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 (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



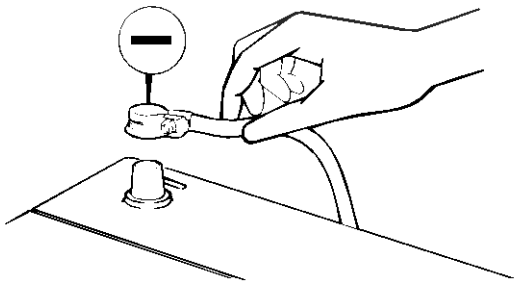
BRGE001H

REMOVAL

⚠CAUTION

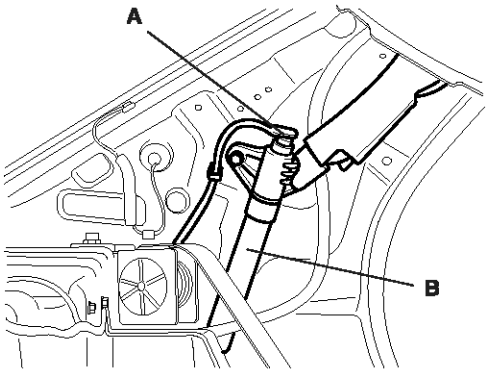
- **Never attempt to disassemble or repair the airbag module.**
- **Do not drop the airbag module or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust is detected.**
- **The airbag module should be stored on a flat surface and placed so that the pad surface is facing upward. Do not place anything on top of it.**
- **Do not expose the airbag module to temperature over 93℃(200˚F).**
- **An undeployed airbag module should only be disposed in accordance with the procedures.**
- **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.**
- **Whenever the CAB is deployed it should be replaced with a new one assembled with an extension wire. The squib is melt down if the CAB is deployed making the extension wire useless.**

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



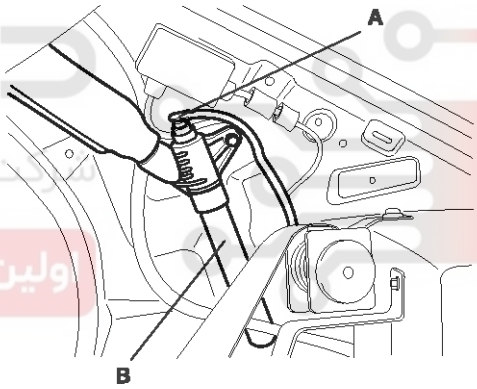
ARCD512A

2. Remove ignition key from the vehicle.
3. Remove the headliner (Refer to BD group in this Service Manual).
4. Disconect the CAB connector (A) from the inflator (B).



[LH]

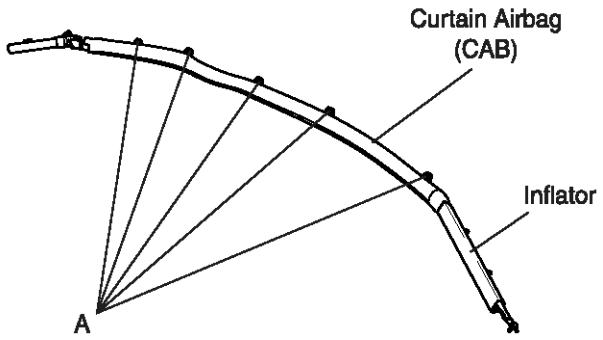
BRGE001D



[RH]

BRGE001C

5. Unscrew the CAB mounting bolts (A) and remove the Curtain Airbag (CAB) module from the vehicle.



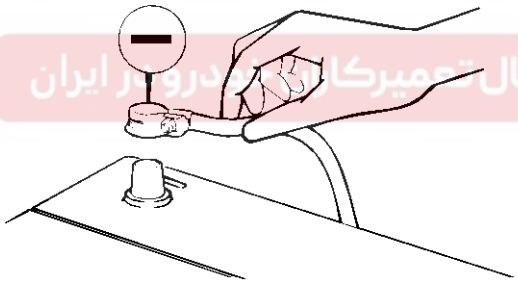
BRGE026M

INSTALLATION

⚠CAUTION

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

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Install a Curtain Airbag (CAB) on the mounting bracket.

Tightening Torque (CAB Mounting Bolt)
: 5 ~ 7 N·m (3.6 ~ 5.1 lb·ft)

⚠CAUTION

- **Never twist the airbag module when installing it.**

4. Install the inflator on the bracket.
5. Connect the CAB connector.
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 blink for about six seconds and then go off.

Seat Belt Pretensioner

Seat Belt Pretensioner (BPT)

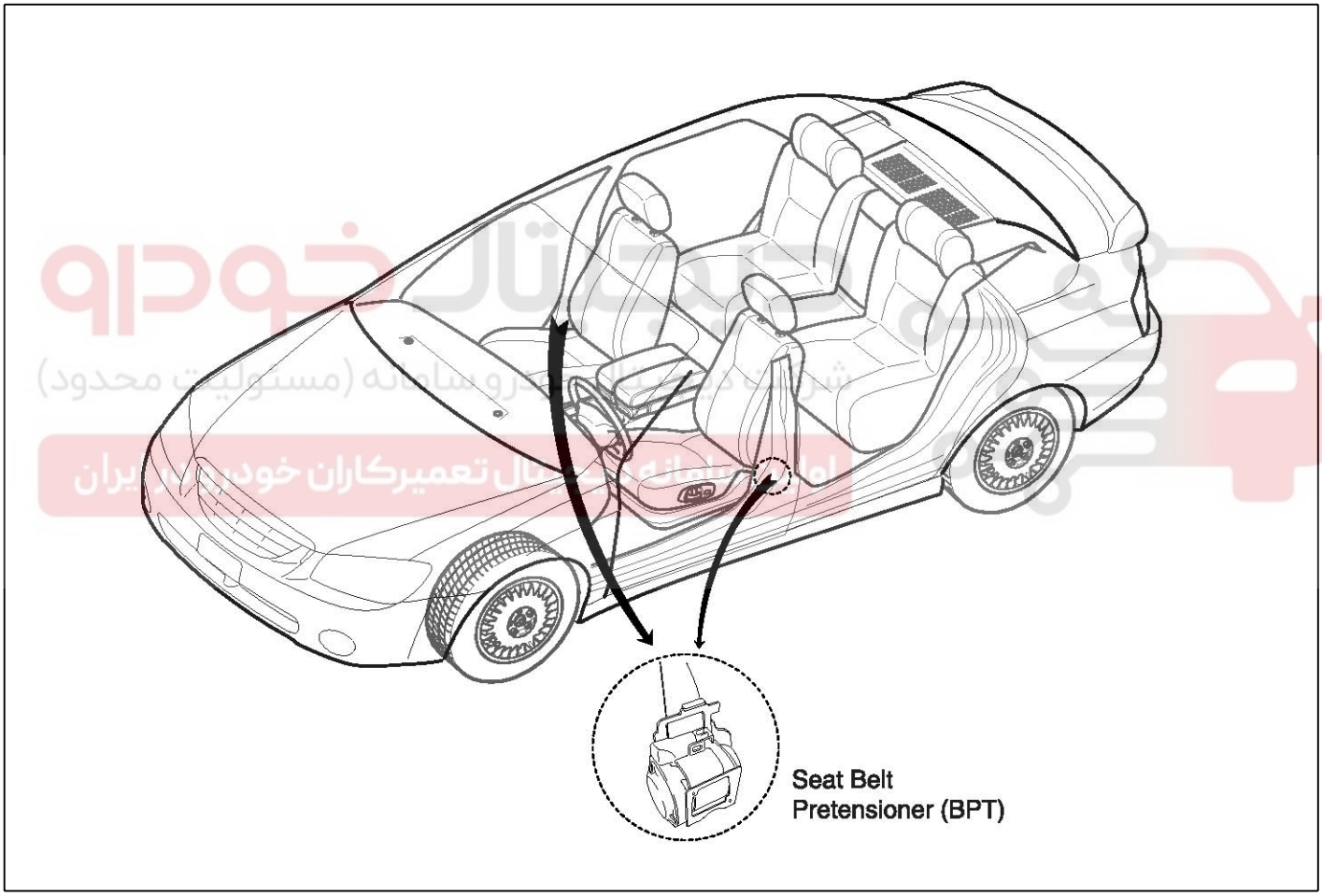
DESCRIPTION

The Seat Belt Pretensioners (BPT) are installed inside B-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 retraction 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



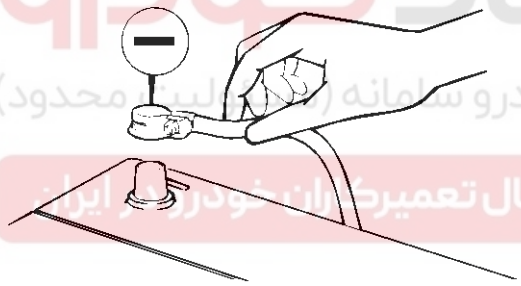
BRGE001I

REMOVAL

⚠CAUTION

- **Never attempt to disassemble or repair the Seat Belt Pretensioner (BPT).**
- **Do not drop the Seat Belt Pretensioner (BPT) or allow contact with water, grease, oil. Replace it if a dent, crack, deformation or rust is detected.**
- **Do not place anything on the Seat Belt Pretensioner (BPT).**
- **Do not expose the Seat Belt Pretensioner (BPT) to temperature over 93℃(200˚F).**
- **Seat Belt Pretensioner (BPT) functions one time only. Be sure to replace the Seat Belt Pretensioner (BPT) after it is deployed.**
- **Be sure to wear gloves and safety goggles when handling the deployed Seat Belt Pretensioner (BPT).**

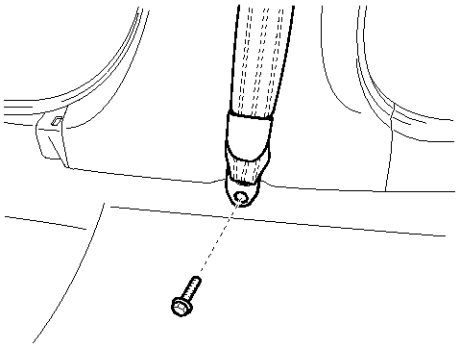
1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.

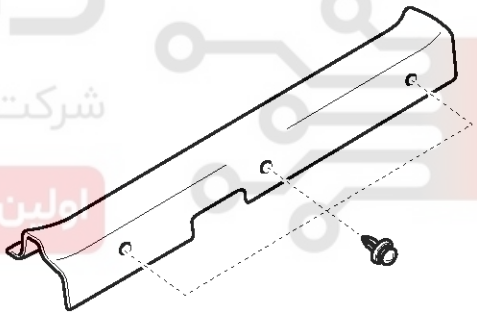
3. Remove the seat belt lower anchor bolt.



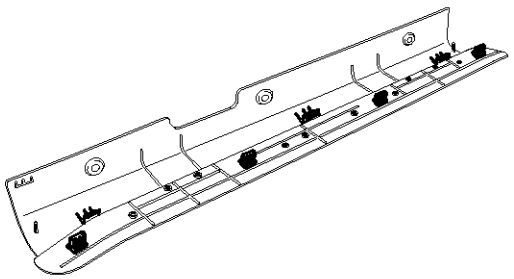
ASGE016N

Tightening Torque (Seat Belt Lower Anchor Bolt)
: 40 ~ 55 N·m (28.9 ~ 39.8 lb·ft)

4. Remove the center pillar lower trim.
   a. Remove the front door scuff trim.

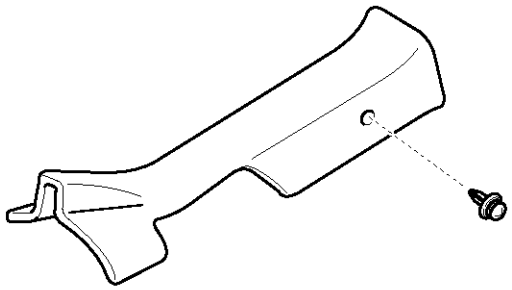


ASGE016E

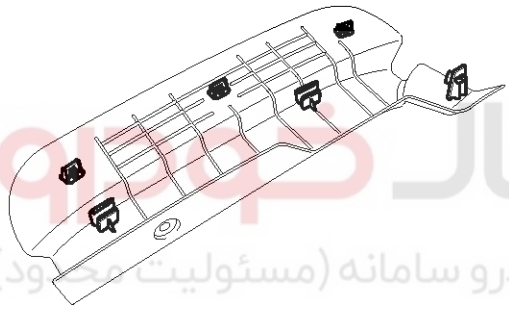


ASGE016F

b. Remove the rear door scuff trim.

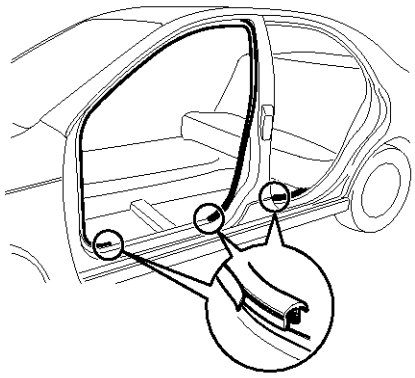


ASGE016J



ASGE016K

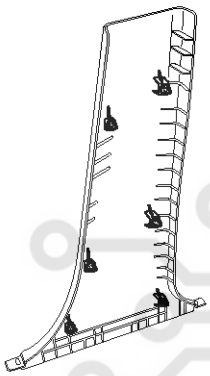
c. Remove the body side weather strip.



ASGE016B

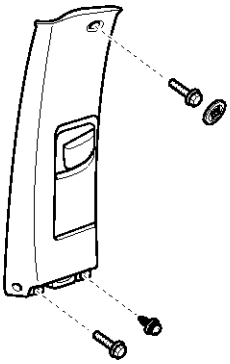
d. Remove the center pillar lower trim.

ASGE016L



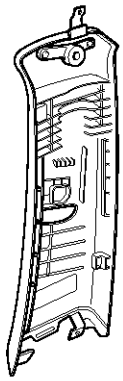
ASGE016M

5. Remove the center pillar upper trim.
   a. Remove the pillar blanking cover.
   b. Remove the bolts(2) and the fastener.



ASGE016P

c. Remove trim from center pillar.

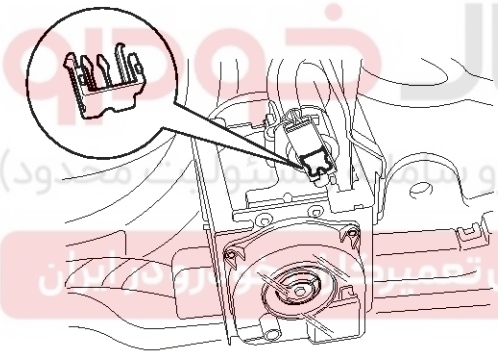


ASGE016Q

d. Remove the seat belt from the trim.

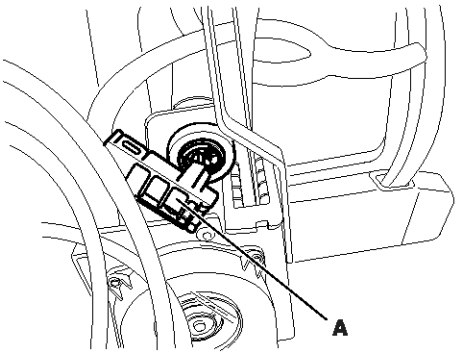
6. Removal the Seat Belt Pretensioner (BPT) module.

a. Remove the BPT connector stopper.



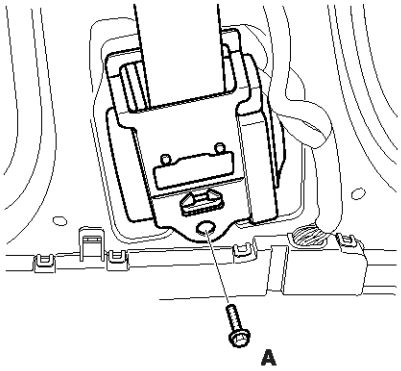
ASGE027B

b. Disconnect the BPT connector (A).



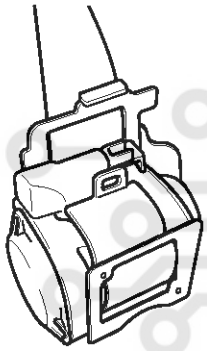
BRGE027C

c. Remove the BPT retractor bolt (A).



BRGE027D

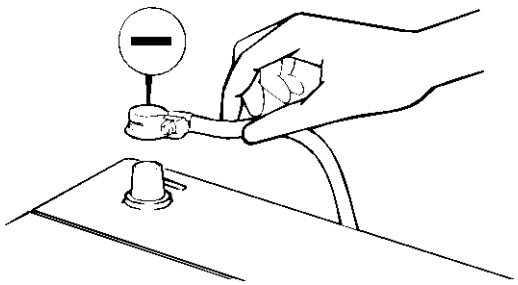
d. Remove the Seat Belt Pretensioner (BPT) module.



ARGE001G

INSTALLATION

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Install a Seat Belt Pretensioner (BPT) with bolt.
4. Install the upper anchor bolt.

Tightening Torque (Seat Belt Upper Anchor Bolt)
: 40 ~ 55 N·m (28.9 ~ 39.8 lb·ft)

5. Install the lower anchor bolt.

Tightening Torque (Seat Belt Lower Anchor Bolt)
: 40 ~ 55 N·m (28.9 ~ 39.8 lb·ft)

6. Install the center pillar trim.
7. Install the front door scuff trim.
8. Install the seat assembly.
9. Reconnect the negative battery cable.
10. After installing the Seat Belt Pretensioner (BPT), confirm proper system operation:
    - Turn the ignition switch ON; the SRS indicator light should blink for about six seconds and then go off.

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

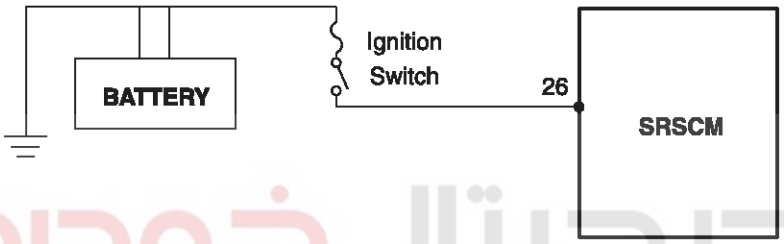
DTC	B1111 Battery Voltage too High B1112 Battery Voltage too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1111	Battery Voltage < 9.0V for 10 seconds after IG ON	• Battery • Alternator • Wiring Harness • SRSCM
B1112	Battery Voltage > 17.0V for 10 seconds after IG ON	

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[HARNESS CONNECTORS]

SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
●	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75

LRGE301A

INSPECTION PROCEDURE

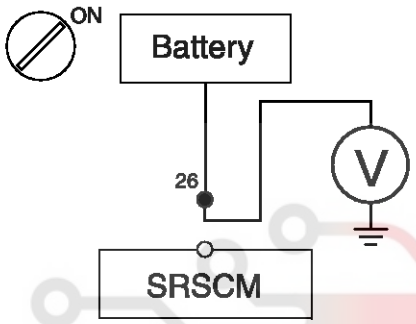
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SOURCE VOLTAGE

1. Turn the ignition switch to ON.
2. Measure voltage between the terminal 26 of SRSCM harness connector and chassis ground.
   - **Specification (Voltage): 9 ~ 17V**



Is the measured voltage within specification?

No	Yes — Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

3. CHECK BATTERY

1. Check the battery.
   - **Refer to "EE" group in this SERVICE MANUAL.**

Is the battery normal?

Yes	No — Repair or replace the battery (Refer to "EE" group in this SERVICE MANUAL).

4. CHECK ALTERNATOR

1. Check the alterator.
   - **Refer to "EE" group in this SERVICE MANUAL.**

Is the alternator normal?

LRGE302A

Yes	No	Repair or replace the alternator (Refer to "EE" group in this SERVICE MANUAL).

5. CHECK WIRING HARNESS

1. Check the wiring harness between the battery and SRSCM.

Is the wiring harness normal?

Yes	No	Repair or replace the wiring harness.

6. CHECK THE DTC AGAIN

1. Turn the ignition switch to LOCK and wait for at least 30 seconds.

CAUTION

Check again that the battery negative (-) terminal is disconnected from the battery.

2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does HI-Scan (Pro) Indicate any DTC?

No	Yes	Perform the troubleshooting procedures associated with those codes.

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302B

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

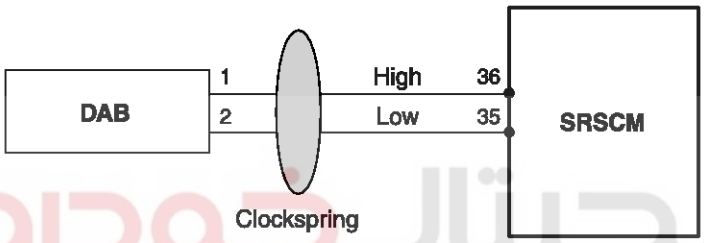
DTC	B1346 Driver Airbag Resistance too High B1347 Driver Airbag Resistance too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1346 B1347	• Too high or low resistance between DAB high(+) and DAB low (-) • Driver Airbag (DAB) Malfunction • Clockspring Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Driver Airbag (DAB) squib • Clockspring • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]

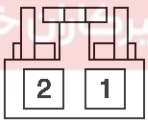


[CONNECTION INFORMATION]

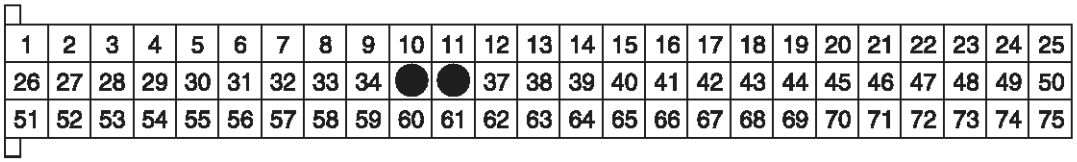
Pin	Connected to	Function
1	SRSCM terminal 36	DAB High
2	SRSCM terminal 35	DAB Low

[HARNESS CONNECTORS]

DAB



SRSCM



LRGE301C

INSPECTION PROCEDURE

WARNING

- **NEVER attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester, otherwise the module may deploy accidentally.**

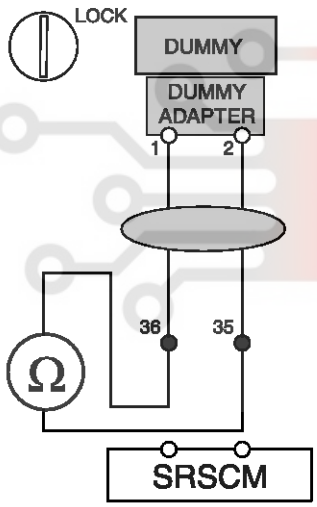
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK DAB RESISTANCE

1. Connect the Dummy and the Dummy Adapter on DAB harness connector.
   - **Refer to "SPECIAL SERVICE TOOL" section in this SERVICE MANUAL for the SST No. of Dummy and Dummy Adapter.**
2. Measure resistance between the terminal 35 and 36 of SRSCM harness connector.
   - **Specification (Resistance): 1.7 ~ 5.0 Ω**



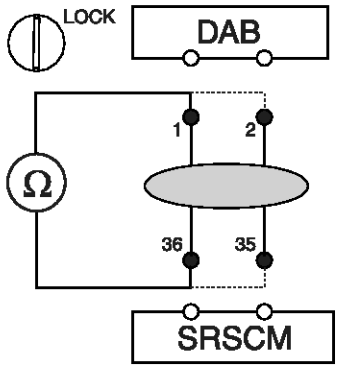
Is the measured resistance within specification?

No	
Yes	Replace the Driver Airbag (DAB) module.

LRGE302E

3. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 1 of DAB harness connector and the terminal 36 of SRSCM harness connector.
2. Measure resistance between the terminal 2 of DAB harness connector and the terminal 35 of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**

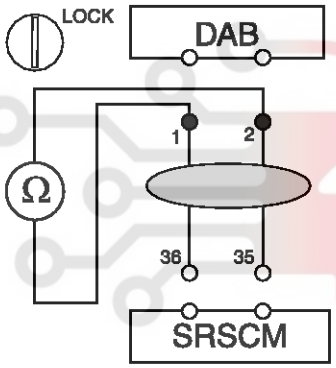


Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

4. CHECK SHORT CIRCUIT

1. Measure resistance between the terminal 1 and 2 of DAB harness connector.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

LRGE302F

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	
No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302G

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

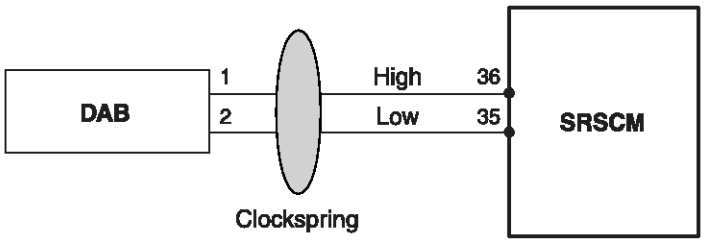
DTC	B1348 Driver Airbag Circuit Short to Ground

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1348	• Short to ground between DAB and clockspring • Short to ground between clockspring and SRSCM • Driver Airbag (DAB) Malfunction • Clockspring Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Driver Airbag (DAB) squib • Clockspring • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]

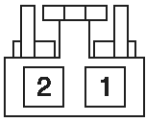


[CONNECTION INFORMATION]

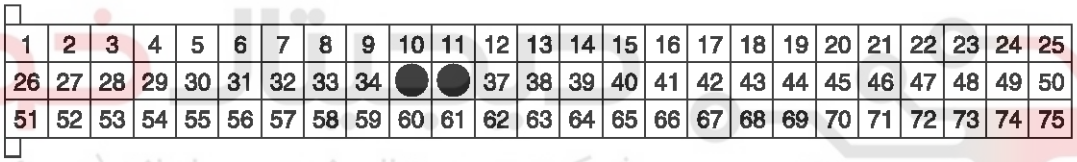
Pin	Connected to	Function
1	SRSCM terminal 36	DAB High
2	SRSCM terminal 35	DAB Low

[HARNESS CONNECTORS]

DAB



SRSCM



LRGE301C

INSPECTION PROCEDURE

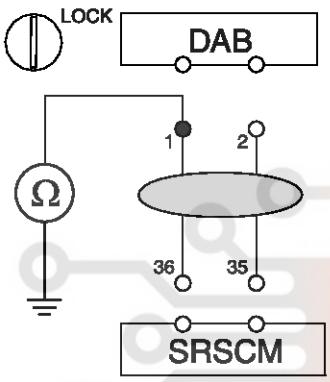
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO GROUND

1. Measure resistance between the terminal 1 of DAB harness connector and chassis ground.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	
No	Repair the short to ground circuit on wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

LRGE302H

3. CHECK THE DRIVER AIRBAG (DAB) MODULE

1. Replace the Driver Airbag (DAB) with a new one.
   • **Refer to "Driver Airbag (DAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to DAB?

Yes	No	Replace the Driver Airbag (DAB).

4. CHECK THE CLOCKSPRING

1. Check the clockspring.

Is the clockspring normal?

Yes	No	Replace the clockspring.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302I

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

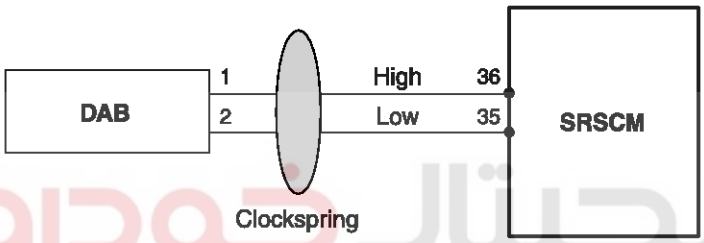
DTC	B1349 Driver Airbag Circuit Short to Battery Line

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1349	• Short to battery line between DAB and clockspring • Short to battery line between clockspring and SRSCM • Driver Airbag (DAB) Malfunction • Clockspring Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Driver Airbag (DAB) squib • Clockspring • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]

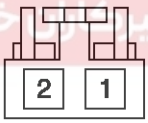


[CONNECTION INFORMATION]

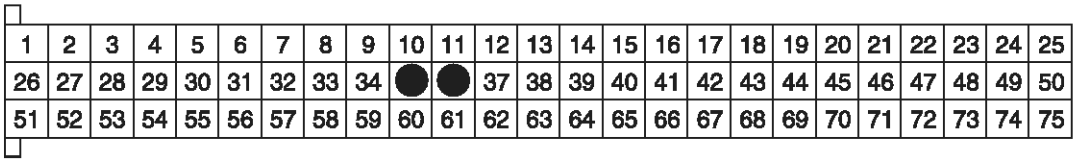
Pin	Connected to	Function
1	SRSCM terminal 36	DAB High
2	SRSCM terminal 35	DAB Low

[HARNESS CONNECTORS]

DAB



SRSCM



LRGE301C

INSPECTION PROCEDURE

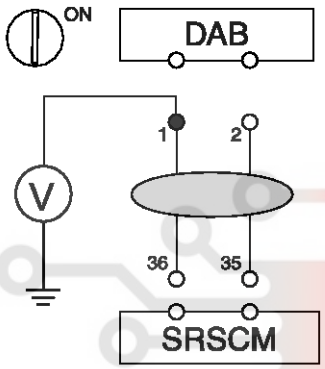
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 1 of DAB harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



Is the measured voltage within specification?

Yes	
No	Repair the short to battery line circuit on wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

LRGE302K

3. CHECK THE DRIVER AIRBAG (DAB) MODULE

1. Replace the Driver Airbag (DAB) with a new one.
   • **Refer to "Driver Airbag (DAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to DAB?

Yes	No	Replace the Driver Airbag (DAB).

4. CHECK THE CLOCKSPRING

1. Check the clockspring.

Is the clockspring normal?

Yes	No	Replace the clockspring.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302L

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

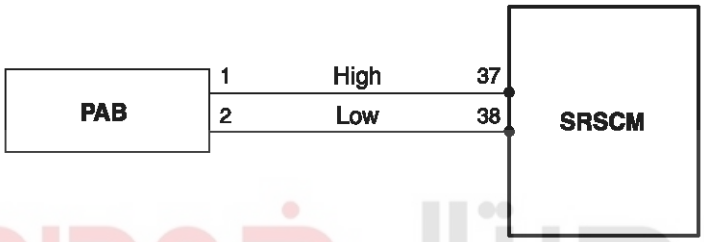
DTC	B1352 (1st Stage) Passenger Airbag Resistance too High B1353 (1st Stage) Passenger Airbag Resistance too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1352 B1353	• Too high or low resistance between PAB high(+) and PAB low (-) • Passenger Airbag (PAB) Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Passenger Airbag (PAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

Pin	Connected to	Function
1	SRSCM terminal 37	PAB High
2	SRSCM terminal 38	PAB Low

[HARNESS CONNECTORS]

PAB

SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	●	●	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75

LRGE301F

INSPECTION PROCEDURE

WARNING

- **NEVER attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester, otherwise the module may deploy accidentally.**

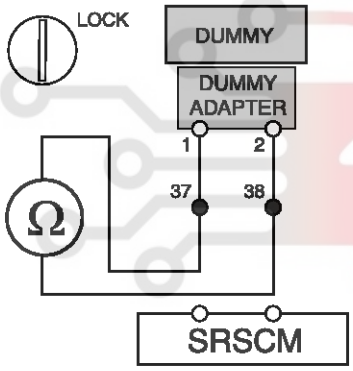
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK PAB RESISTANCE

1. Connect the Dummy and the Dummy Adapter on PAB harness connector.
   - **Refer to "SPECIAL SERVICE TOOL" section in this SERVICE MANUAL for the SST No. of Dummy and Dummy Adapter.**
2. Measure resistance between the terminal 37 and 38 of SRSCM harness connector.
   - **Specification (Resistance): 1.7 ~ 5.0 Ω**

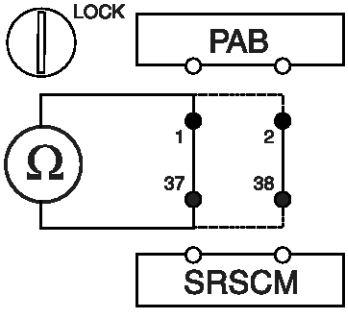


Is the measured resistance within specification?

No	
Yes	Replace the Passenger Airbag (PAB) module.

3. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 1 of PAB harness connector and the terminal 37 of SRSCM harness connector.
2. Measure resistance between the terminal 2 of PAB harness connector and the terminal 38 of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**



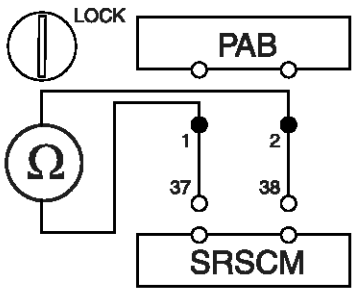
Is the measured resistance within specification?

LRGE302N

Yes	No	Repair or replace the wiring harness between the PAB and the SRSCM.

4. CHECK SHORT CIRCUIT

1. Measure resistance between the terminal 1 and 2 of PAB harness connector.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the PAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302O

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

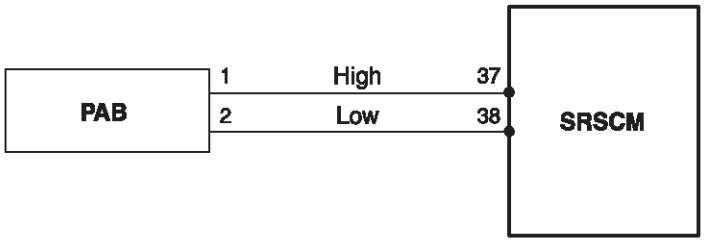
DTC	B1354 Passenger Airbag Circuit Short to Ground

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1354	• Short to ground between PAB and SRSCM • Passenger Airbag (PAB) Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Passenger Airbag (PAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



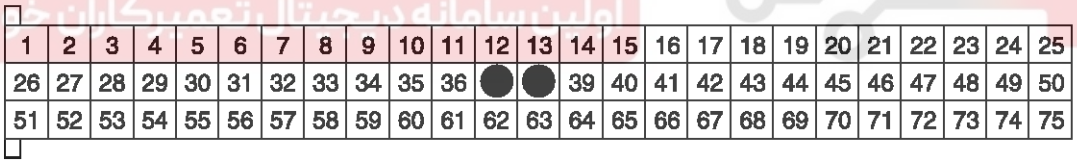
[CONNECTION INFORMATION]

Pin	Connected to	Function
1	SRSCM terminal 37	PAB High
2	SRSCM terminal 38	PAB Low

[HARNESS CONNECTORS]

PAB

SRSCM



LRGE301F

INSPECTION PROCEDURE

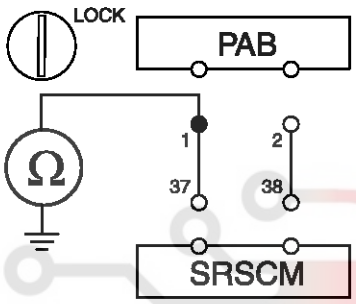
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO GROUND

1. Measure resistance between the terminal 1 of PAB harness connector and chassis ground.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair the short to ground circuit on wiring harness between the PAB and the SRSCM.

3. CHECK THE PASSENGER AIRBAG (PAB) MODULE

1. Replace the Passenger Airbag (PAB) with a new one.
   - **Refer to "Passenger Airbag (PAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to PAB?

Yes	No	Replace the Passenger Airbag (PAB).

LRGE302P

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	
No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302Q

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

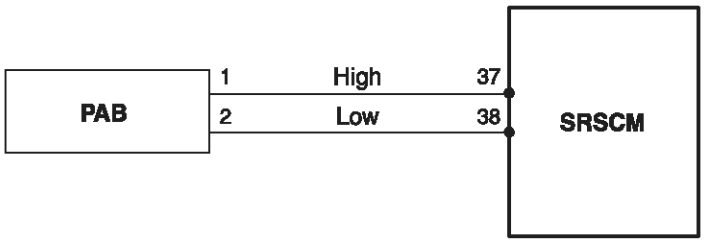
DTC	B1355 Passenger Airbag Circuit Short to Battery

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1355	• Short to battery line between PAB and SRSCM • Passenger Airbag (PAB) Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Passenger Airbag (PAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



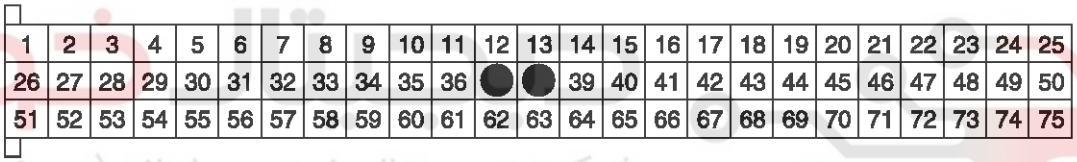
[CONNECTION INFORMATION]

Pin	Connected to	Function
1	SRSCM terminal 37	PAB High
2	SRSCM terminal 38	PAB Low

[HARNESS CONNECTORS]

PAB

SRSCM



LRGE301F

INSPECTION PROCEDURE

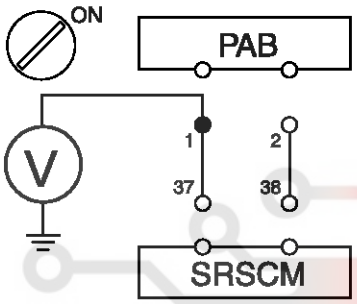
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 1 of PAB harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



Is the measured voltage within specification?

Yes	No	Repair the short to battery line circuit on wiring harness between the PAB and the SRSCM.

3. CHECK THE PASSENGER AIRBAG (PAB) MODULE

1. Replace the Passenger Airbag (PAB) with a new one.
   - **Refer to "Passenger Airbag (PAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to PAB?

Yes	No	Replace the Passenger Airbag (PAB).

LRGE302R

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	
No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302S

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

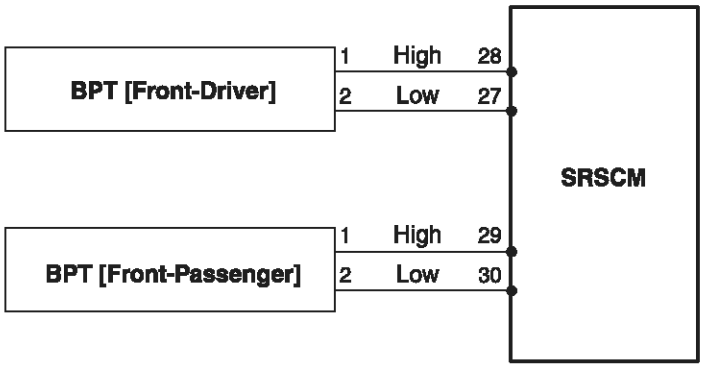
DTC	B1361 Seat Belt Pretensioner [Front-Driver] Resistance too High B1362 Seat Belt Pretensioner [Front-Driver] Resistance too Low B1367 Seat Belt Pretensioner [Front-Passenger] Resistance too High B1368 Seat Belt Pretensioner [Front-Passenger] Resistance too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1361 B1362 B1367 B1368	• Too high or low resistance between BPT high(+) and BPT low (-) • Seat Belt Pretensioner (BPT) Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Seat Belt Pretensioner (BPT) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

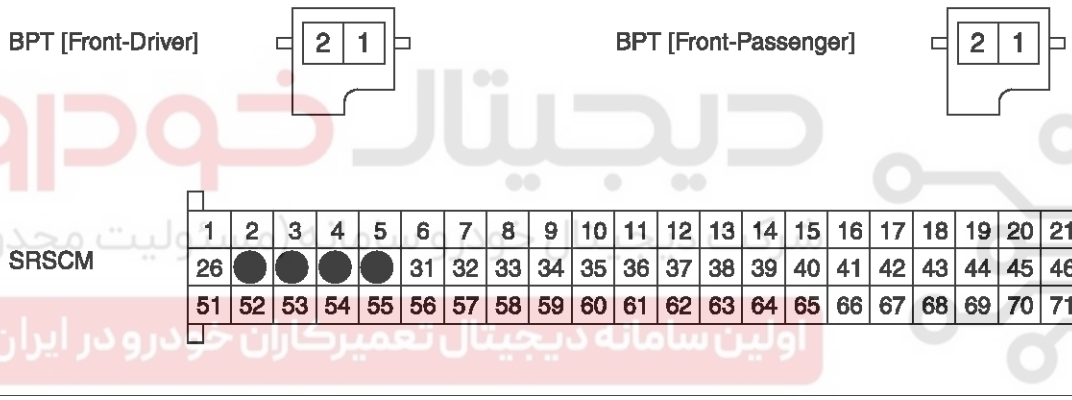
BPT [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 28	BPT High
2	SRSCM terminal 27	BPT Low

BPT [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 29	BPT High
2	SRSCM terminal 30	BPT Low

[HARNESS CONNECTORS]



LRGE301I

INSPECTION PROCEDURE

WARNING

- **NEVER attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester, otherwise the module may deploy accidentally.**

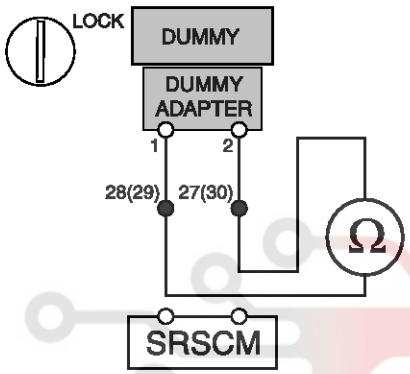
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK BPT RESISTANCE

1. Connect the Dummy and the Dummy Adapter on BPT harness connector.
   - **Refer to "SPECIAL SERVICE TOOL" section in this SERVICE MANUAL for the SST No. of Dummy and Dummy Adapter.**
2. Measure resistance between the terminal 28(29) and 27(30) of SRSCM harness connector.
   - **Specification (Resistance): 1.7 ~ 5.0 Ω**

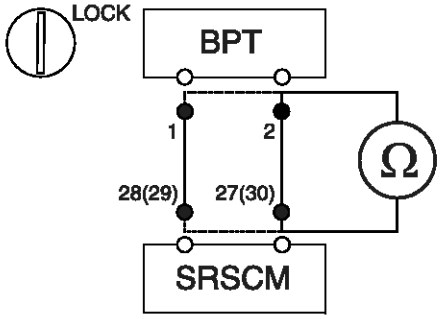


Is the measured resistance within specification?

No	
Yes	Replace the Seat Belt Pretensioner (BPT) module.

3. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 1 of BPT harness connector and the terminal 28(29) of SRSCM harness connector.
2. Measure resistance between the terminal 2 of BPT harness connector and the terminal 27(30) of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**



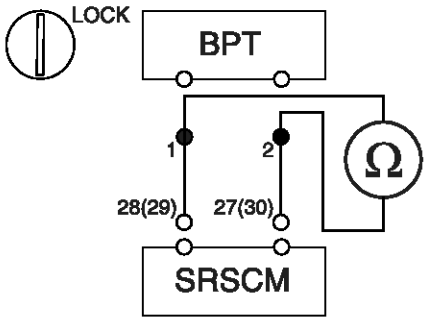
Is the measured resistance within specification?

LRGE302T

Yes	No	Repair or replace the wiring harness between the BPT and the SRSCM.

4. CHECK SHORT CIRCUIT

1. Measure resistance between the terminal 1 and 2 of BPT harness connector.
   - **Specification (Resistance): Infinite**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the BPT and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302U

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

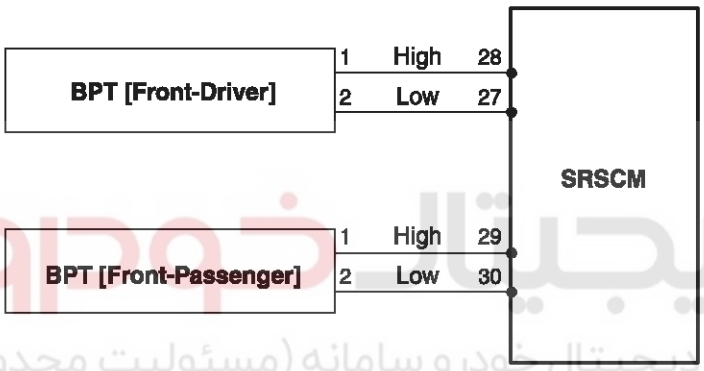
DTC	B1363 Seat Belt Pretensioner [Front-Driver] Circuit Short to Ground B1369 Seat Belt Pretensioner [Front-Passenger] Circuit Short to Ground

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1363 B1369	• Short to ground between BPT and SRSCM • Seat Belt Pretensioner (BPT) Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Seat Belt Pretensioner (BPT) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

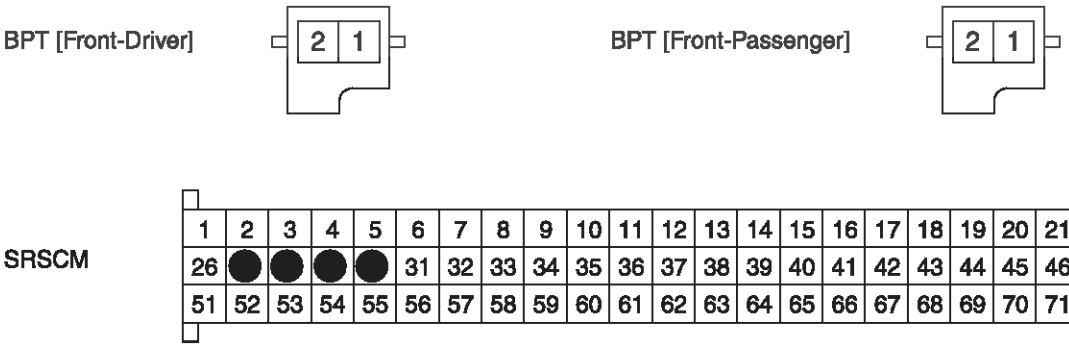
BPT [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 28	BPT High
2	SRSCM terminal 27	BPT Low

BPT [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 29	BPT High
2	SRSCM terminal 30	BPT Low

[HARNESS CONNECTORS]



LRGE301I

INSPECTION PROCEDURE

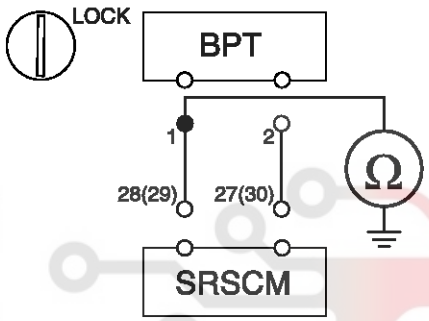
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO GROUND

1. Measure resistance between the terminal 1 of BPT harness connector and chassis ground.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	
No	Repair the short to ground circuit on wiring harness between the BPT and the SRSCM.

3. CHECK THE SEAT BELT PRETENSIONER (BPT) MODULE

1. Replace the Seat Belt Pretensioner (BPT) with a new one.
   - **Refer to "Seat Belt Pretensioner (BPT)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to BPT?

LRGE302V

Yes	No	Replace the Seat Belt Pretensioner (BPT).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302W

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

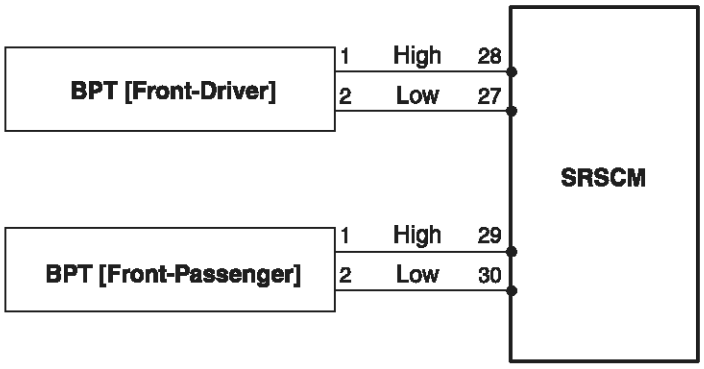
DTC	B1364 Seat Belt Pretensioner [Front-Driver] Circuit Short to Battery Line B1370 Seat Belt Pretensioner [Front-Passenger] Circuit Short to Battery Line

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1364 B1370	• Short to battery line between BPT and SRSCM • Seat Belt Pretensioner (BPT) Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Seat Belt Pretensioner (BPT) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

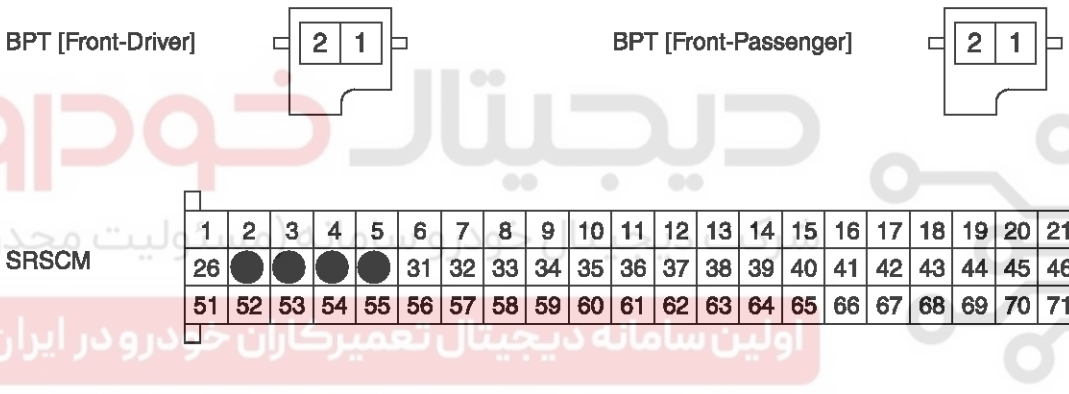
BPT [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 28	BPT High
2	SRSCM terminal 27	BPT Low

BPT [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 29	BPT High
2	SRSCM terminal 30	BPT Low

[HARNESS CONNECTORS]



LRGE301I

INSPECTION PROCEDURE

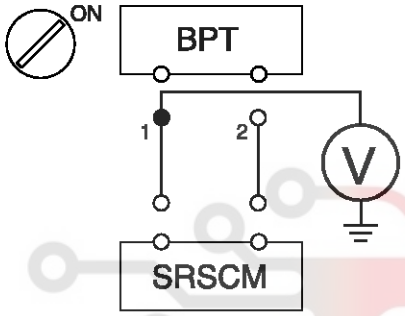
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 1 of BPT harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



Is the measured voltage within specification?

Yes	No	Repair the short to battery line circuit on wiring harness between the BPT and the SRSCM.

3. CHECK THE SEAT BELT PRETENSIONER (BPT) MODULE

1. Replace the Seat Belt Pretensioner (BPT) with a new one.
   - **Refer to "Seat Belt Pretensioner (BPT)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to BPT?

LRGE302X

Yes	No	Replace the Seat Belt Pretensioner (BPT).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE302Y

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

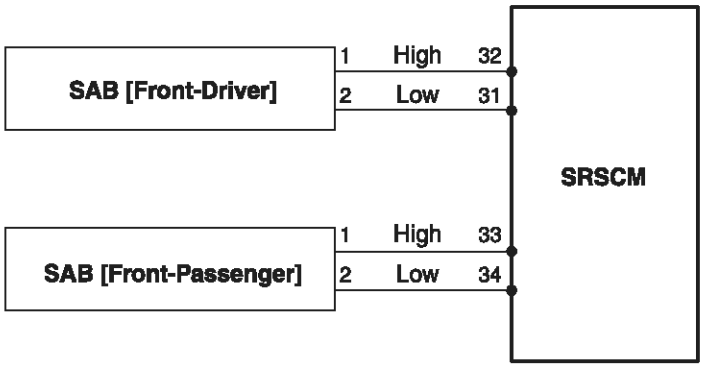
DTC	B1378 Side Airbag [Front-Driver] Resistance too High B1379 Side Airbag [Front-Driver] Resistance too Low B1382 Side Airbag [Front-Passenger] Resistance too High B1383 Side Airbag [Front-Passenger] Resistance too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1378 B1379 B1382 B1383	• Too high or low resistance between SAB high(+) and SAB low (-) • Side Airbag (SAB) Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Side Airbag (SAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

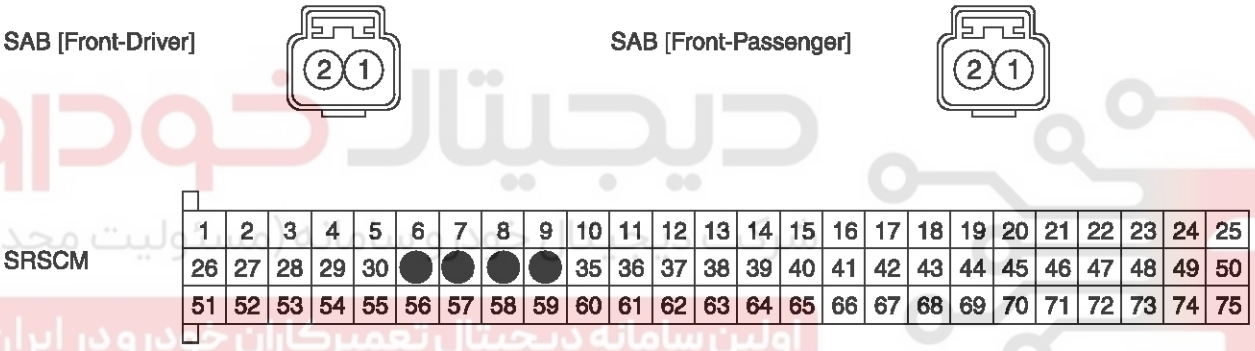
SAB [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 32	SAB High
2	SRSCM terminal 31	SAB Low

SAB [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 33	SAB High
2	SRSCM terminal 34	SAB Low

[HARNESS CONNECTORS]



LRGE301L

INSPECTION PROCEDURE

WARNING

- **NEVER attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester, otherwise the module may deploy accidentally.**

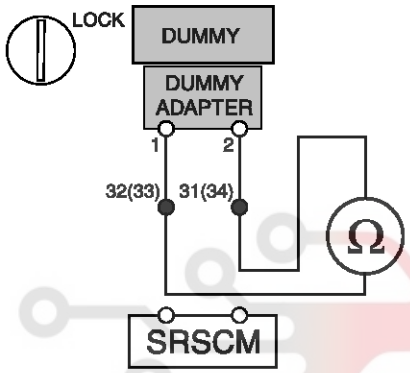
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SAB RESISTANCE

1. Connect the Dummy and the Dummy Adapter on SAB harness connector.
   - **Refer to "SPECIAL SERVICE TOOL" section in this SERVICE MANUAL for the SST No. of Dummy and Dummy Adapter.**
2. Measure resistance between the terminal 32(33) and 31(34) of SRSCM harness connector.
   - **Specification (Resistance): 1.7 ~ 5.0 Ω**

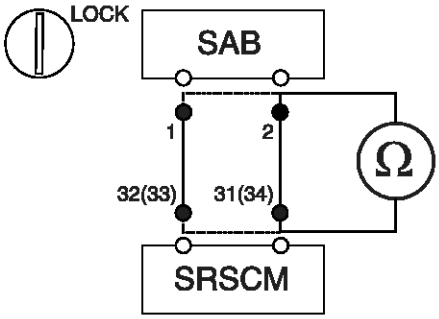


Is the measured resistance within specification?

No	Yes	Replace the Side Airbag (SAB) module.

3. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 1 of SAB harness connector and the terminal 32(33) of SRSCM harness connector.
2. Measure resistance between the terminal 2 of SAB harness connector and the terminal 31(34) of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**



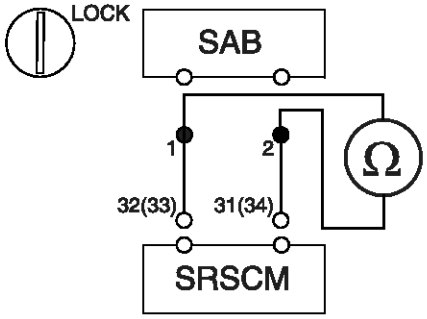
Is the measured resistance within specification?

LRGE302Z

Yes	No	Repair or replace the wiring harness between the SAB and the SRSCM.

4. CHECK SHORT CIRCUIT

1. Measure resistance between the terminal 1 and 2 of SAB harness connector.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the SAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303A

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

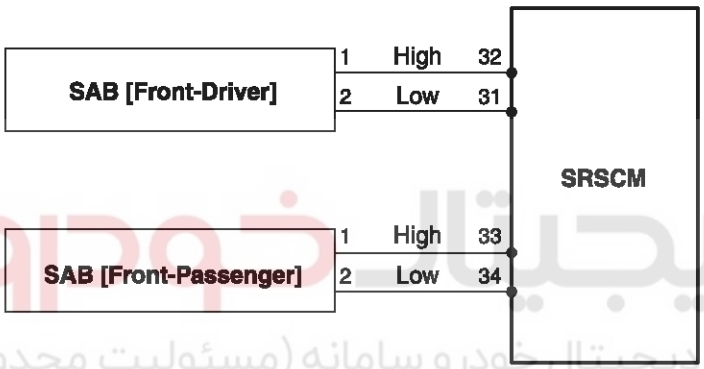
DTC	B1380 Side Airbag [Front-Driver] Circuit Short to Ground B1384 Side Airbag [Front-Passenger] Circuit Short to Ground

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1380 B1384	• Short to ground between SAB and SRSCM • Side Airbag (SAB) Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Side Airbag (SAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

SAB [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 32	SAB High
2	SRSCM terminal 31	SAB Low

SAB [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 33	SAB High
2	SRSCM terminal 34	SAB Low

[HARNESS CONNECTORS]

SAB [Front-Driver]

SAB [Front-Passenger]

SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	●	●	●	●	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75

LRGE301L

INSPECTION PROCEDURE

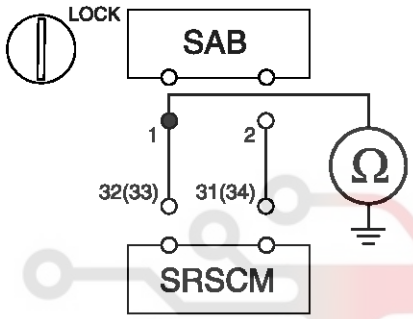
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO GROUND

1. Measure resistance between the terminal 1 of SAB harness connector and chassis ground.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair the short to ground circuit on wiring harness between the SAB and the SRSCM.

3. CHECK THE SIDE AIRBAG (SAB) MODULE

1. Replace the Side Airbag (SAB) with a new one.
   - **Refer to "Side Airbag (SAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to SAB?

LRGE303B

Yes	No	Replace the Side Airbag (SAB).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303C

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

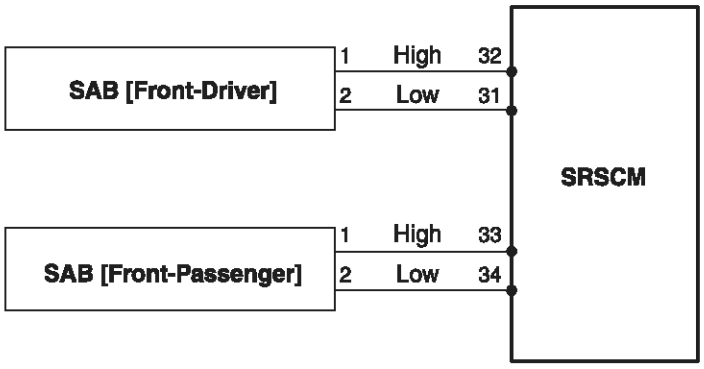
DTC	B1381 Side Airbag [Front-Driver] Circuit Short to Battery Line B1385 Side Airbag [Front-Passenger] Circuit Short to Battery Line

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1381 B1385	• Short to battery line between SAB and SRSCM • Side Airbag (SAB) Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Side Airbag (SAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

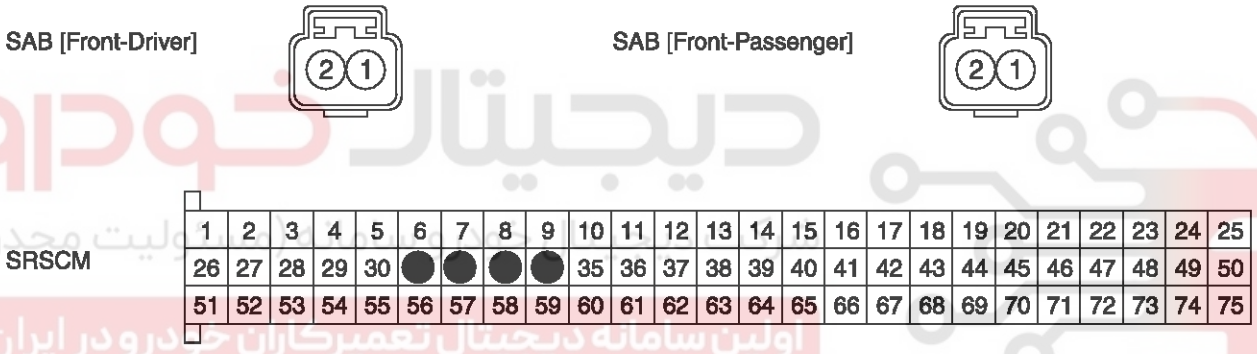
SAB [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 32	SAB High
2	SRSCM terminal 31	SAB Low

SAB [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 33	SAB High
2	SRSCM terminal 34	SAB Low

[HARNESS CONNECTORS]



LRGE301L

INSPECTION PROCEDURE

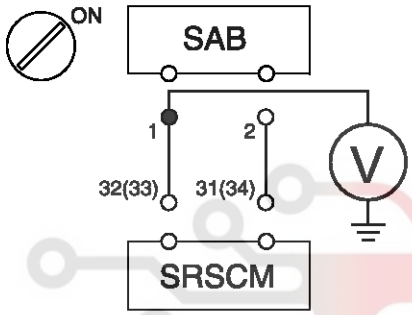
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 1 of SAB harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



Is the measured voltage within specification?

Yes	No	Repair the short to battery line circuit on wiring harness between the SAB and the SRSCM.

3. CHECK THE SIDE AIRBAG (SAB) MODULE

1. Replace the Side Airbag (SAB) with a new one.
   - **Refer to "Side Airbag (SAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to SAB?

LRGE303D

Yes	No	Replace the Side Airbag (SAB).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303E

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

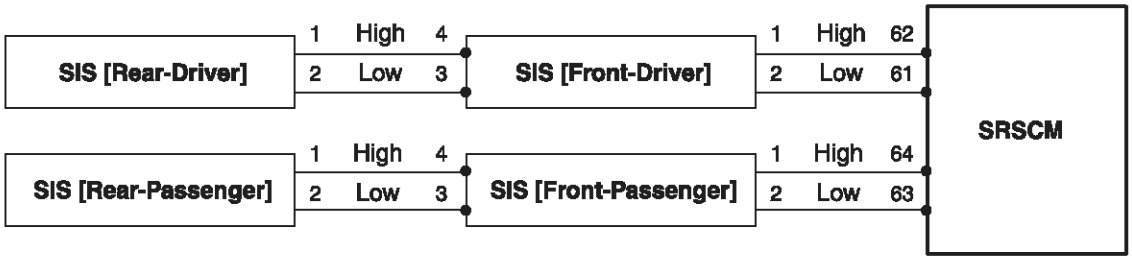
DTC	B1400 Side Impact Sensor [Front-Driver] Defect B1403 Side Impact Sensor [Front-Passenger] Defect B1409 Side Impact Sensor [Front-Driver] Communication Error B1410 Side Impact Sensor [Front-Passenger] Communication Error

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1400 B1403 B1409 B1410	• Open between front SIS and SRSCM • Front Side Impact Sensor (SIS) Malfunction • SRSCM Malfunction	• Wiring Harness • Front Side Impact Sensor (SIS) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

SIS [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 62	Front SIS High
2	SRSCM terminal 61	Front SIS Low
3	Rear SIS terminal 2	Rear SIS Low
4	Rear SIS terminal 1	Rear SIS High

SIS [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 64	Front SIS High
2	SRSCM terminal 63	Front SIS Low
3	Rear SIS terminal 2	Rear SIS Low
4	Rear SIS terminal 1	Rear SIS High

SIS [REAR-DRIVER]

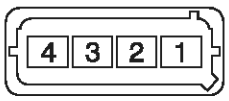
Pin	Connected to	Function
1	Front SIS terminal 4	Rear SIS High
2	Front SIS terminal 3	Rear SIS Low

SIS [REAR-PASSENGER]

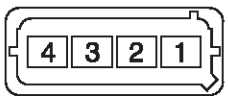
Pin	Connected to	Function
1	Front SIS terminal 4	Rear SIS High
2	Front SIS terminal 3	Rear SIS Low

[HARNESS CONNECTORS]

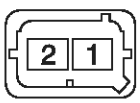
SIS [Front-Driver]



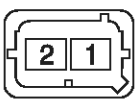
SIS [Front-Passenger]



SIS [Rear-Driver]



SIS [Rear-Passenger]



SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	●	●	●	●	65	66	67	68	69	70	71	72	73	74	75

LRGE301E

INSPECTION PROCEDURE

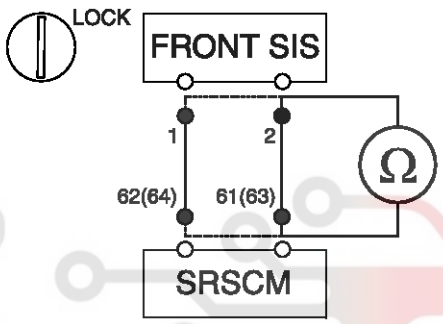
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SIS CIRCUIT

1. Measure resistance between the terminal 1 of front SIS harness connector and the terminal 62(64) of SRSCM harness connector.
2. Measure resistance between the terminal 2 of front SIS harness connector and the terminal 61(63) of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the front SIS and the SRSCM.

3. CHECK FRONT SIDE IMPACT SENSOR

1. Replace the Front Side Impact Sensor (SIS) with a new one.
   - **Refer to "SIDE IMPACT SENSOR (SIS)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to SIS?

LRGE303L

Yes	No	Replace the Front Side Impact Sensor (SIS).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
2. Turn the ignition switch to LOCK and wait for at least 30 seconds.
3. Turn the ignition switch to ON and wait for at least 30 seconds.
4. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303M

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

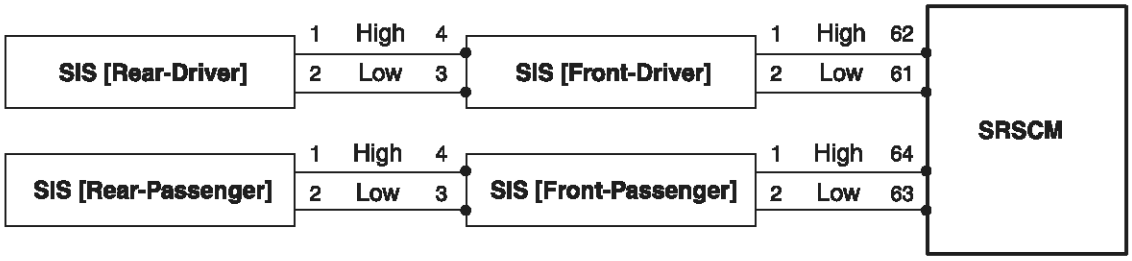
DTC	B1412 Side Impact Sensor [Rear-Driver] Communication Error B1413 Side Impact Sensor [Rear-Passenger] Communication Error B1418 Side Impact Sensor [Rear-Driver] Defect B1419 Side Impact Sensor [Rear-Pasenger] Defect

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1412 B1413 B1418 B1419	• Open between rear SIS and SRSCM • Rear Side Impact Sensor (SIS) Malfunction • SRSCM Malfunction	• Wiring Harness • Rear Side Impact Sensor (SIS) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

SIS [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 62	Front SIS High
2	SRSCM terminal 61	Front SIS Low
3	Rear SIS terminal 2	Rear SIS Low
4	Rear SIS terminal 1	Rear SIS High

SIS [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 64	Front SIS High
2	SRSCM terminal 63	Front SIS Low
3	Rear SIS terminal 2	Rear SIS Low
4	Rear SIS terminal 1	Rear SIS High

SIS [REAR-DRIVER]

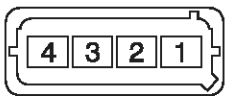
Pin	Connected to	Function
1	Front SIS terminal 4	Rear SIS High
2	Front SIS terminal 3	Rear SIS Low

SIS [REAR-PASSENGER]

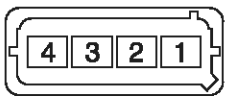
Pin	Connected to	Function
1	Front SIS terminal 4	Rear SIS High
2	Front SIS terminal 3	Rear SIS Low

[HARNESS CONNECTORS]

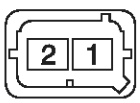
SIS [Front-Driver]



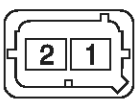
SIS [Front-Passenger]



SIS [Rear-Driver]



SIS [Rear-Passenger]



SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	●	●	●	●	65	66	67	68	69	70	71	72	73	74	75

LRGE301E

INSPECTION PROCEDURE

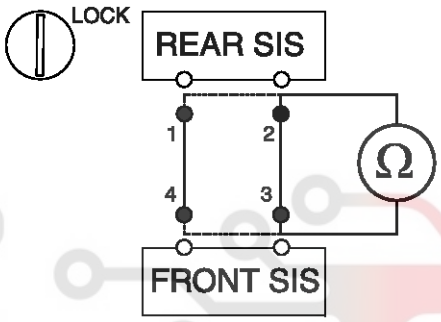
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SIS CIRCUIT

1. Measure resistance between the terminal 1 of rear SIS harness connector and the terminal 4 of front SIS harness connector.
2. Measure resistance between the terminal 2 of rear SIS harness connector and the terminal 3 of front SIS harness connector.
   - **Specification (Resistance): below 1Ω**



Is the measured resistance within specification?

Yes	
No	Repair or replace the wiring harness between the rear SIS and the front SIS.

3. CHECK REAR SIDE IMPACT SENSOR

1. Replace the Rear Side Impact Sensor (SIS) with a new one.
   - **Refer to "SIDE IMPACT SENSOR (SIS)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to SIS?

LRGE304O

Yes	No	Replace the Rear Side Impact Sensor (SIS).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
2. Turn the ignition switch to LOCK and wait for at least 30 seconds.
3. Turn the ignition switch to ON and wait for at least 30 seconds.
4. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE304P

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

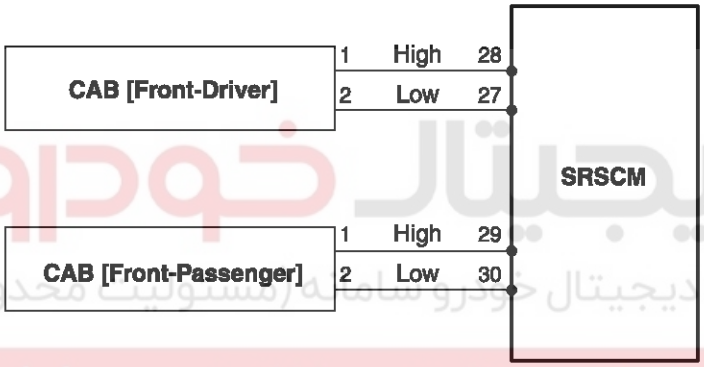
DTC	B1473 Curtain Airbag [Driver] Resistance too High B1474 Curtain Airbag [Driver] Resistance too Low B1477 Curtain Airbag [Passenger] Resistance too High B1478 Curtain Airbag [Passenger] Resistance too Low

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1473 B1474 B1477 B1478	• Too high or low resistance between CAB high(+) and CAB low (-) • Curtain Airbag (CAB) Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Curtain Airbag (CAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

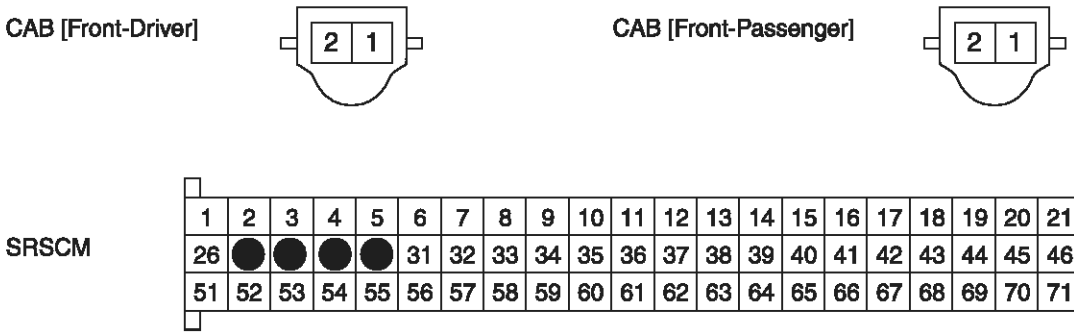
CAB [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 28	CAB High
2	SRSCM terminal 27	CAB Low

CAB [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 29	CAB High
2	SRSCM terminal 30	CAB Low

[HARNESS CONNECTORS]



LRGE301H

INSPECTION PROCEDURE

WARNING

- **NEVER attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester, otherwise the module may deploy accidentally.**

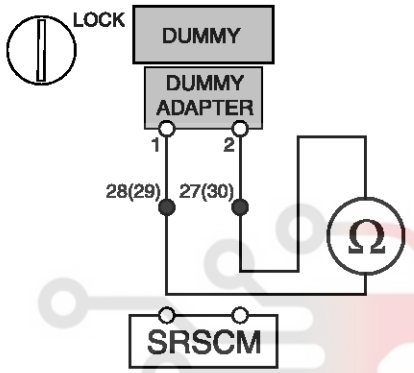
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK CAB RESISTANCE

1. Connect the Dummy and the Dummy Adapter on BPT harness connector.
   - **Refer to "SPECIAL SERVICE TOOL" section in this SERVICE MANUAL for the SST No. of Dummy and Dummy Adapter.**
2. Measure resistance between the terminal 28(29) and 27(30) of SRSCM harness connector.
   - **Specification (Resistance): 1.7 ~ 5.0 Ω**



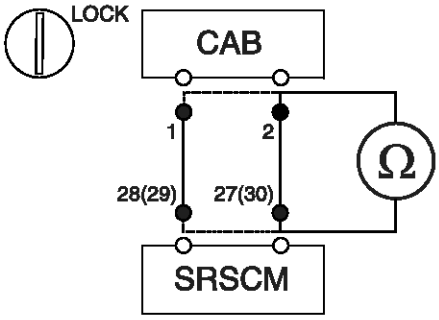
Is the measured resistance within specification?

No

Yes	Replace the Curtain Airbag (CAB) module.

3. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 1 of CAB harness connector and the terminal 28(29) of SRSCM harness connector.
2. Measure resistance between the terminal 2 of CAB harness connector and the terminal 27(30) of SRSCM harness connector.



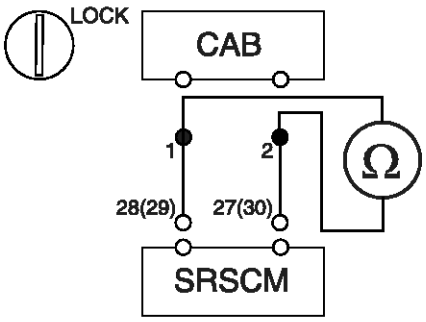
Is the measured resistance within specification?

LRGE303Q

Yes	No	Repair or replace the wiring harness between the CAB and the SRSCM.

4. CHECK SHORT CIRCUIT

1. Measure resistance between the terminal 1 and 2 of CAB harness connector.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair or replace the wiring harness between the CAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303R

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

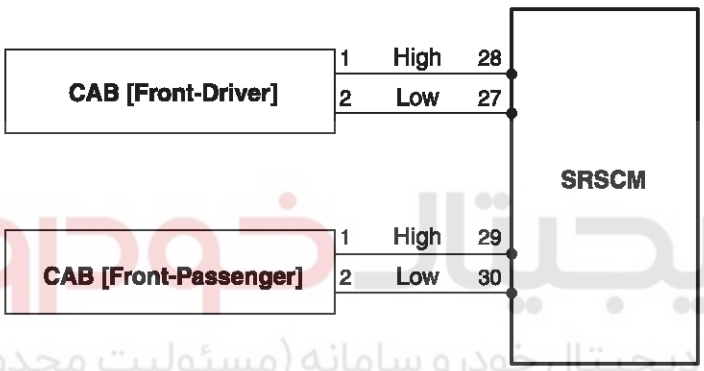
DTC	B1475 Curtain Airbag [Driver] Circuit Short to Ground B1479 Curtain Airbag [Passenger] Circuit Short to Ground

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1475 B1479	• Short to ground between CAB and SRSCM • Curtain Airbag (CAB) Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Curtain Airbag (CAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

CAB [FRONT-DRIVER]

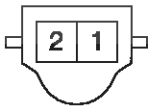
Pin	Connected to	Function
1	SRSCM terminal 28	CAB High
2	SRSCM terminal 27	CAB Low

CAB [FRONT-PASSENGER]

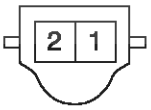
Pin	Connected to	Function
1	SRSCM terminal 29	CAB High
2	SRSCM terminal 30	CAB Low

[HARNESS CONNECTORS]

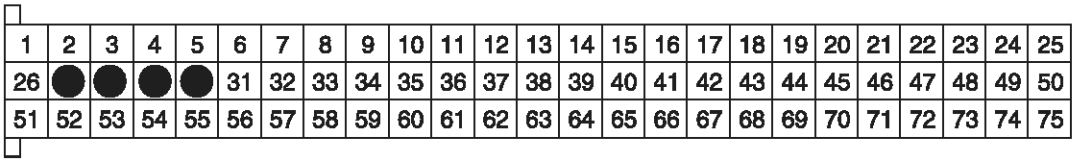
CAB [Front-Driver]



CAB [Front-Passenger]



SRSCM



LRGE301H

INSPECTION PROCEDURE

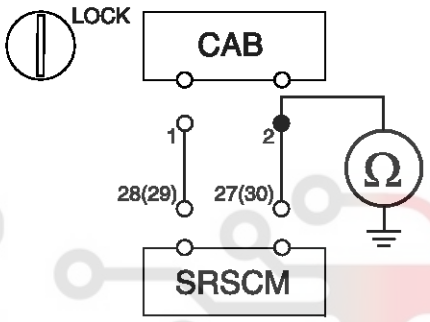
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO GROUND

1. Measure resistance between the terminal 1 of CAB harness connector and chassis ground.
   - **Specification (Resistance): infinite**



Is the measured resistance within specification?

Yes	No	Repair the short to ground circuit on wiring harness between the CAB and the SRSCM.

3. CHECK THE CURTAIN AIRBAG (CAB) MODULE

1. Replace the Curtain Airbag (CAB) with a new one.
   - **Refer to "Curtain Airbag (CAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to CAB?

LRGE303S

Yes	No	Replace the Curtain Airbag (CAB).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303T

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

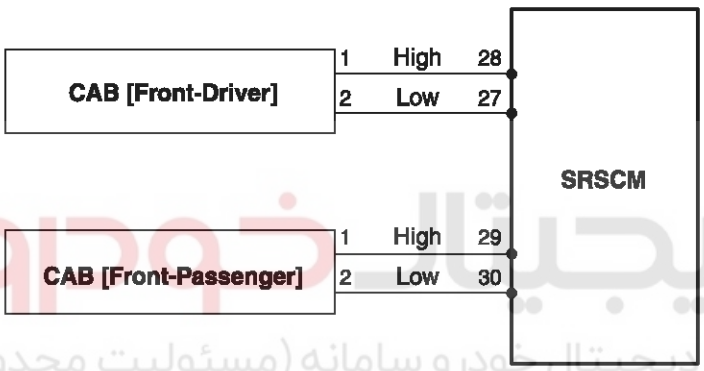
DTC	B1476 Curtain Airbag [Driver] Circuit Short to Battery Line B1480 Curtain Airbag [Passenger] Circuit Short to Battery Line

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B1476 B1480	• Short to battery line between CAB and SRSCM • Curtain Airbag (CAB) Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Curtain Airbag (CAB) squib • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

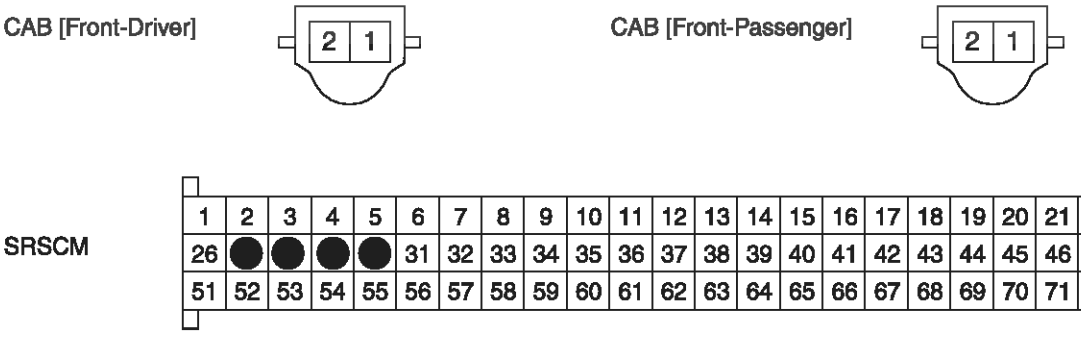
CAB [FRONT-DRIVER]

Pin	Connected to	Function
1	SRSCM terminal 28	CAB High
2	SRSCM terminal 27	CAB Low

CAB [FRONT-PASSENGER]

Pin	Connected to	Function
1	SRSCM terminal 29	CAB High
2	SRSCM terminal 30	CAB Low

[HARNESS CONNECTORS]



LRGE301H

INSPECTION PROCEDURE

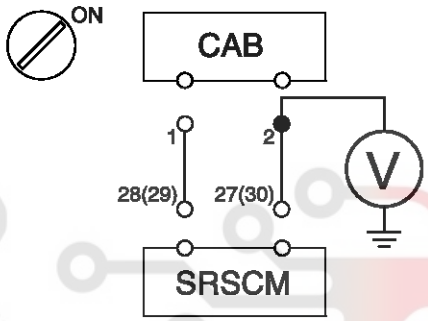
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 1 of CAB harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



Is the measured voltage within specification?

Yes	No	Repair the short to battery line circuit on wiring harness between the CAB and the SRSCM.

3. CHECK THE CURTAIN AIRBAG (CAB) MODULE

1. Replace the Curtain Airbag (CAB) with a new one.
   - **Refer to "Curtain Airbag (CAB)" section in this SERVICE MANUAL.**
2. Install the DAB module and connect the DAB connector.
3. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
4. Connect the SRSCM connector.
5. Connect the negative (-) terminal to the battery.
6. Connect a Hi-Scan (Pro) to the data link connector.
7. Turn the ignition switch to ON and check the vehicle again.

Does Hi-Scan (Pro) indicate any DTC related to CAB?

LRGE303U

Yes	No	Replace the Curtain Airbag (CAB).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE303V

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

DTC	B1511 Seat Belt Buckle Switch [Driver] Open or Short to Battery Line B1513 Seat Belt Buckle Switch [Passenger] Open or Short to Battery Line

DTC DETECTING CONDITION

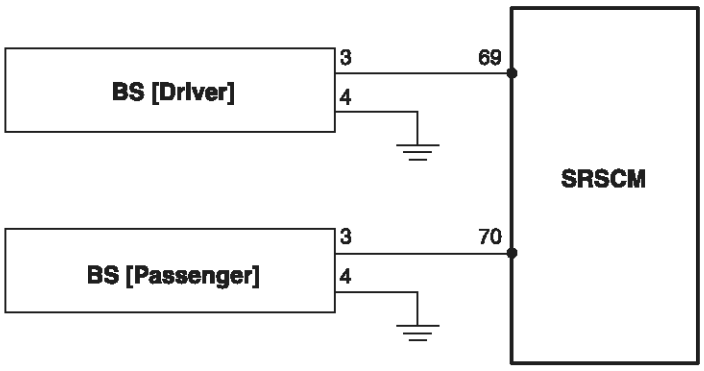
DTC CODE	Condition	Probable cause
B1511 B1513	• Open between BS and SRSCM (Current I < 2.8 mA). • Short to battery line between BS and SRSCM (Current I < 2.8 mA) • Seat Belt Buckle Switch (BS) Malfunction • SRSCM Malfunction	• Open or short to battery line circuit o-n wiring harness • Seat Belt Buckle Switch (BS) • SRSCM

SPECIFICATION

BS Satus	Resistance (kΩ)	Current (mA)	Related DTC(s)
Short or short to ground		I ≥ 17.5 mA	B1512, B1514
"BUCKLED" status	0.9 ~ 0.1 kΩ	8.7 ≤ I ≤ 16.5 mA	
"UNBUCKLED" status	360 ~ 440 kΩ	3.0 ≤ I ≤ 8.2 mA	
Open or short to battery		I ≤ 2.8 mA	B1511, B1513

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

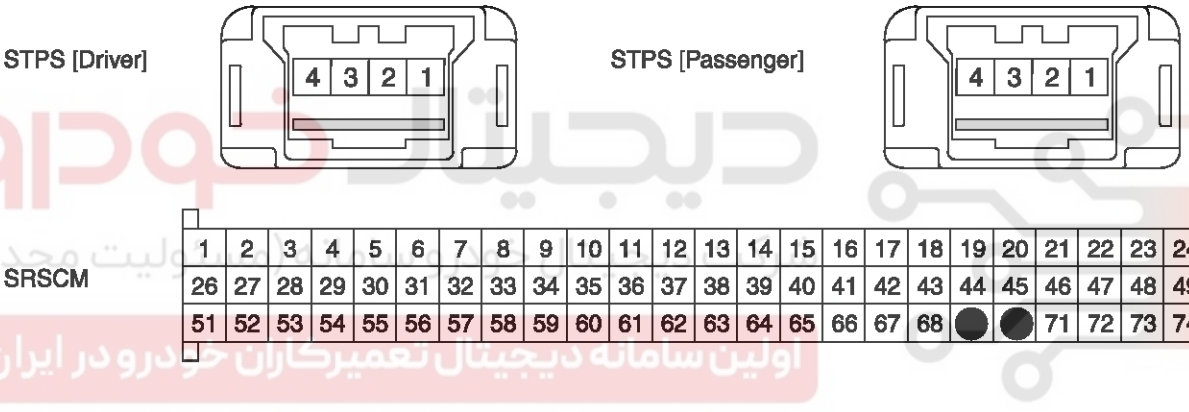
BS [DRIVER]

Pin	Connected to	Function
3	SRSCM terminal 69	BS Signal
4	Chassis Ground	Ground

BS [PASSENGER]

Pin	Connected to	Function
3	SRSCM terminal 70	BS Signal
4	Chassis Ground	Ground

[HARNESS CONNECTORS]



LRGE301J

INSPECTION PROCEDURE

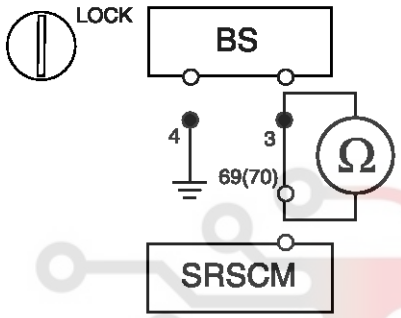
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK OPEN CIRCUIT

1. Disconnect the BS connector.
2. Measure resistance between the terminal 3 of BS harness connector and the terminal 69(70) of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**

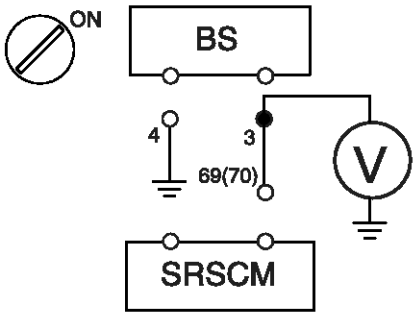


Is the measured resistance within specification?

Yes	No	Repair the open circuit on wiring harness between the BS and the SRSCM.

3. CHECK SHORT TO BATTERY LINE

1. Connect the negative (-) terminal to the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 3 of BS harness connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**



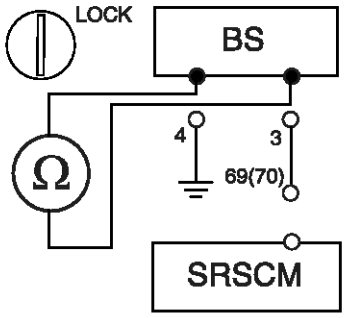
Is the measured voltage within specification?

LRGE304B

Yes	No	Repair the short to battery line circuit on wiring harness between the BS and the SRSCM.

4. CHECK THE SEAT BELT BUCKLE SWITCH (BS)

1. Turn the ignition switch to LOCK.
2. Disconnect the negative(-) terminal from the battery.
3. Measure resistance between the terminal 3 and 4 of BS at "BUCKLED" and "UNBUCKLED" status.
   - **Specification (Resistance):**
     "BUCKLED" status: 0.9 ~ 0.1 kΩ
     "UNBUCKLED" staus: 360 ~ 440 kΩ



Is the measured resistance within specification?

Yes	No	Replace the BS.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE304C

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

DTC	B1512 Seat Belt Buckle Switch [Driver] Short or Short to Ground B1514 Seat Belt Buckle Switch [Passenger] Short or Short to Ground

DTC DETECTING CONDITION

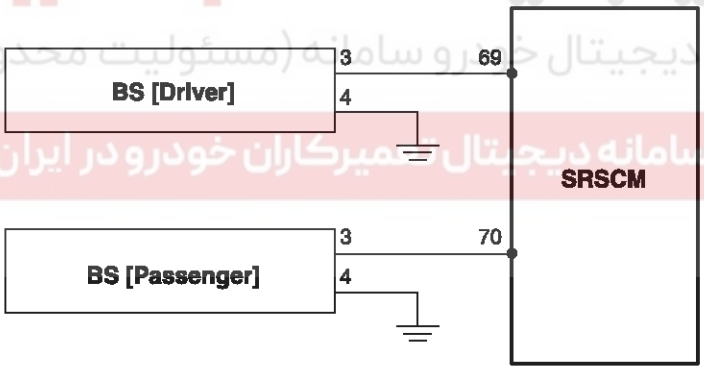
DTC CODE	Condition	Probable cause
B1512 B1514	• Short or Short to ground between BS and SRSCM (Current I > 17.5 mA) • Seat Belt Buckle Switch (BS) Malfunction • SRSCM Malfunction	• Short or short to ground circuit on wiring harness • Seat Belt Buckle Switch (BS) • SRSCM

SPECIFICATION

BS Satus	Resistance (kΩ)	Current (mA)	Related DTC(s)
Short or short to ground		I ≥ 17.5 mA	B1512, B1514
"BUCKLED" status	0.9 ~ 0.1 kΩ	8.7 ≤ I ≤ 16.5 mA	
"UNBUCKLED" status	360 ~ 440 kΩ	3.0 ≤ I ≤ 8.2 mA	
Open or short to battery		I ≤ 2.8 mA	B1511, B1513

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]



[CONNECTION INFORMATION]

BS [DRIVER]

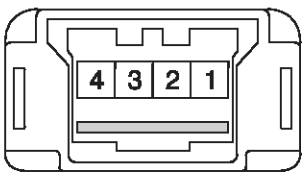
Pin	Connected to	Function
3	SRSCM terminal 69	BS Signal
4	Chassis Ground	Ground

BS [PASSENGER]

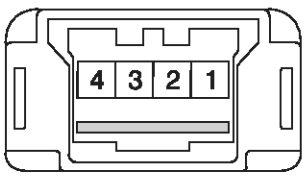
Pin	Connected to	Function
3	SRSCM terminal 70	BS Signal
4	Chassis Ground	Ground

[HARNESS CONNECTORS]

STPS [Driver]



STPS [Passenger]



SRSCM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	●	●	71	72	73	74	75

LRGE301J

INSPECTION PROCEDURE

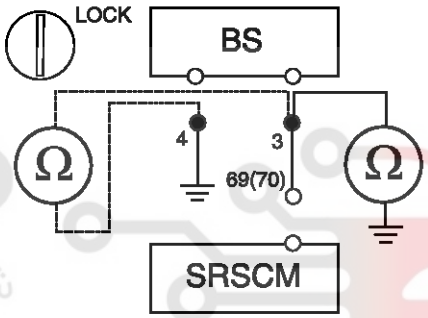
1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK SHORT OR SHORT TO GROUND

1. Disconnect the STPS connector.
2. Measure resistance between the terminal 3 of BS harness connector and chassis ground.
3. Measure resistance between the terminal 3 and 4 of BS harness connector.
   - **Specification (Resistance): infinite**

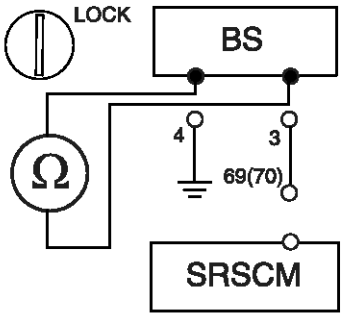


Is the measured resistance within specification?

Yes	No	Repair the short or short to ground circuit on wiring harness between the STPS and the SRSCM.

3. CHECK THE SEAT BELT BUCKLE SWITCH (BS)

1. Turn the ignition switch to LOCK.
2. Disconnect the negative(-) terminal from the battery.
3. Measure resistance between the terminal 3 and 4 of BS at "BUCKLED" and "UNBUCKLED" status.
   - **Specification (Resistance):**
     "BUCKLED" status: 0.9 ~ 0.1 kΩ
     "UNBUCKLED" staus: 360 ~ 440 kΩ



Is the measured resistance within specification?

LRGE304D

Yes	No	Replace the BS.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE304E

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

DTC	B1620 Internal Fault B1650 Crash Recorded (Frontal Airbag) B1651 Crash Recorded-Driver Side & Curtain Airbag B1652 Crash Recorded-Passenger Side & Curtain Airbag B1657 Crash Recorded-Seat Belt Pretensioner Only B1658 Seat Belt Pretensioner 6 times deployment

The SRSCM shall also cyclically monitor the following :

1. Functional readliness of the firing circuit activation transistors.
2. Adequacy of deployment energy reserves.
3. Safing sensor integrity : detection of faulty closure.
4. Plausibility of accelerometer signal.
5. Operation of SRSCM components.

INSPECTION PROCEDURE

REPLACE THE SRSCM

The timely completion of all tests is monitored by a separate hardware watchdog. During normal operation, the watch dog is triggered periodically by the SRSCM : If the SRSCM fails to trigger the watchdog, the watchdog will reset the SRSCM and activate the SRI (Service Reminder Indicator). The SRSCM must be replaced once the fault codes mentioned above (Except for B1657) are confirmed.

NOTE

For B1657 five times reusability is possible.

BRGE304H

INSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

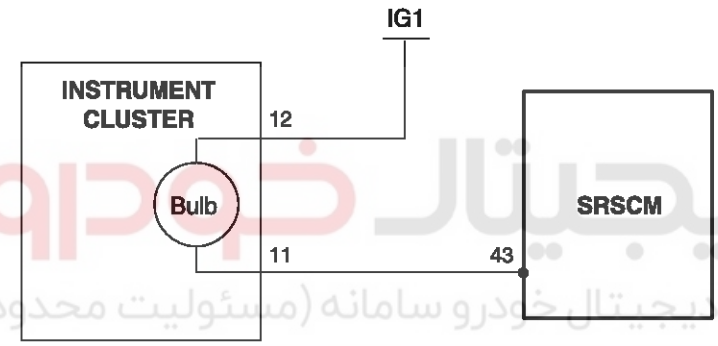
DTC	B2503 Warning Lamp Circuit Open or Short to Ground. B2504 Warning Lamp Circuit Short or Short to Battery Line

DTC DETECTING CONDITION

DTC CODE	Condition	Probable cause
B2503 B2504	• Airbag Fuse • Warning Lamp Bulb • Open between warning lamp and SRSCM • Short to ground or battery line between the warning lamp and SRSCM • SRSCM Malfunction	• Fuse • Warning Lamp Bulb • Wiring Harness • SRSCM

SCHEMATIC DIAGRAM

[CIRCUIT DIAGRAM]

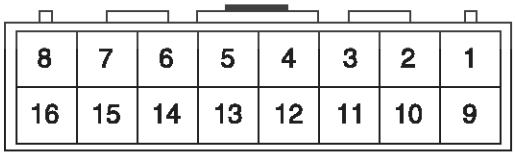


[CONNECTION INFORMATION]

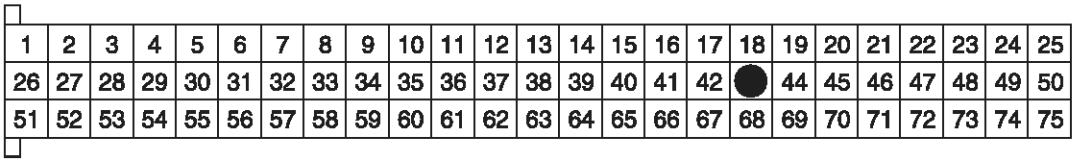
Pin	Connected to	Function
11	SRSCM terminal 43	Lamp Control
12	IG1	Battery Voltage

[HARNESS CONNECTORS]

INSTRUMENT CLUSTER
- (A) CONNECTOR



SRSCM



LRGE301K

INSPECTION PROCEDURE

1. PREPARATION

1. Turn the ignition switch to LOCK.
2. Disconnect the negative (-) terminal from the battery and wait for at least 3 minutes.
3. Remove the DAB module and disconnect the DAB connector.
4. Disconnect the connectors of the PAB, SAB, CAB, BPT and SIS.
5. Disconnect the SRSCM connector.

Go to next step.

2. CHECK THE FUSE

1. Remove the airbag fuse and the airbag warning lamp fuse from juction block.
2. Inspect the fuses.

Are the fuses normal?

Yes	No	Repair or replace the fuses.

3. CHECK THE WARNING LAMP BULB

1. Remove the bulb from the instrument cluster.
2. Inspect the bulb.

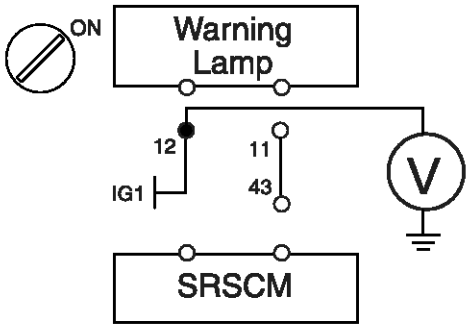
Are the bulb normal?

Yes	No	Repair or replace the bulb.

LRGE304I

4. CHECK SOURCE VOLTAGE

1. Connect the negative(-) terminal from the battery.
2. Turn the ignition switch to ON.
3. Measure voltage between the terminal 12 of the Instrument Cluster harness (A) connector and chassis ground.
   - **Specification (Voltage): 9 ~ 17V**

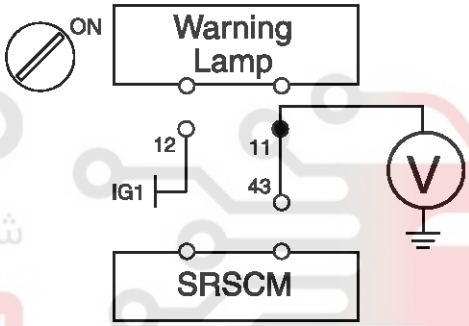


Is the measured voltage within specification?

No	
Yes	Repair or replace the wiring harness between ignition switch and the Warning Lamp.

5. CHECK SHORT TO BATTERY LINE

1. Measure voltage between the terminal 11 of the Instrument Cluster harness (A) connector and chassis ground.
   - **Specification (Voltage): Approximately 0V**

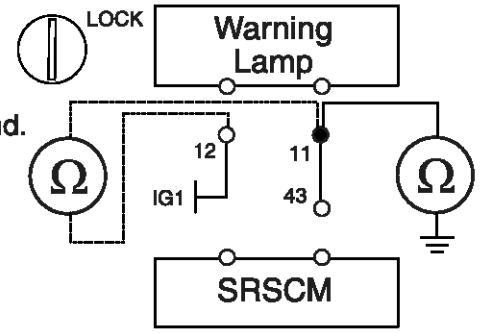


Is the measured voltage within specification?

Yes	
No	Repair the short to battery line circuit on wiring harness between the Warning Lamp and the SRSCM.

6. CHECK SHORT OR SHORT TO GROUND

1. Turn the ignition switch to LOCK.
2. Disconnect the negative(-) terminal form the battery.
3. Measure resistance between the terminal 11 of the Instrument Cluster harness (A) connector and chassis ground.
4. Measure resistance between the terminal 11 and 12 of the Instrument Cluster harness (A) connector.
   - **Specification (Resistance): infinite**



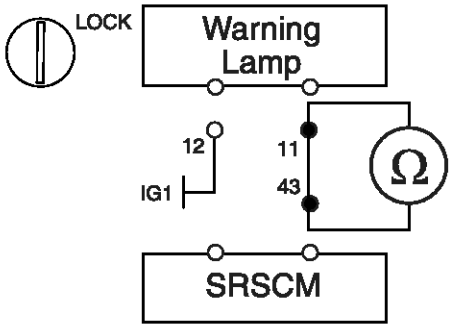
Is the measured resistance within specification?

LRGE304J

Yes	No	Repair the short or short to ground circuit on wiring harness between the Warning Lamp and the SRSCM.

7. CHECK OPEN CIRCUIT

1. Measure resistance between the terminal 11 of the Instrument Cluster harness (A) connector and the terminal 43 of SRSCM harness connector.
   - **Specification (Resistance): below 1Ω**



Is the measured resistance within specification?

Yes	No	Repair the open circuit on wiring harness between the Warning Lamp and the SRSCM.

8. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connectors of the PAB, SAB, CAB, BPT and SIS.
3. Connect the SRSCM connector.
4. Connect the negative (-) terminal to the battery.
5. Connect a Hi-Scan (Pro) to the data link connector.
6. Turn the ignition switch to ON.
7. Clear the DTC stored in the SRSCM memory with the Hi-Scan (Pro).
8. Turn the ignition switch to LOCK and wait for at least 30 seconds.
9. Turn the ignition switch to ON and wait for at least 30 seconds.
10. Check the vehicle again with the Hi-Scan (Pro)

Does the above DTC(s) go off?

Yes	No	Replace the SRSCM with a new one, and then check the vehicle again. At this time, if the vehicle normally operates with a new SRSCM, the fault may be the SRSCM (Replace SRSCM).

Problem is intermittent or was repaired and SRSCM memory was not cleared.

LRGE304K