Restraints

GENERAL

GENERAL E9CEFD77

The supplemental restraint system (SRS) is designed to supplement the seat belt to help reduce the risk or severity of injury to the driver and passenger by activating and deploying the driver, passenger, side airbag and belt pretensioner in certain frontal or side collisions.
The SRS (Airbag) consists of : a driver side airbag module located in the center of the steering wheel, which contains the folded cushion and an inflator unit ; a passenger side airbag module located in the passenger side crash pad contains the folded cushion assembled with inflator unit ; side airbag modules located in the driver and passenger seat contain the folded cushion and an inflator unit ; curtain airbag modules located inside of the headliner which contains folded cushions and inflator units. The impact sensing function of the SRSCM is carried out by electronic accelerometer that continuously measure the vehicle's acceleration and delivers a corresponding signal through amplifying and filtering circuitry to the microprocessor.

SRSCM (SRS CONTROL MODULE)

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

1. DC/DC converter: DC/DC converter in power supply unit includes up/down transformer converter, and provide ignition voltage for 2 front airbag ignition circuits and the internal operation voltage of the SRSCM. If the internal operation voltage is below critical value setting, it will perform resetting.

2. Safety sensor: Safety sensor is located in airbag ignition circuit. Safety sensor will operate airbag circuit at any deployment condition and release airbag circuit safely at normal driving condition. Safety sensor is a double contact electro-mechanical switch that will close detecting deceleration above certain criteria.

3. Back up power supply: SRSCM has separate back up power supply, that will supply deployment energy instantly in low voltage condition or upon power failure by front crash.

4. Self diagnosis: SRSCM will constantly monitor current SRS operation status and detect system failure while vehicle power supply is on, system failure may be checked with trouble codes using scan tool. (Hi-Scan)

5. Airbag warning lamp on: Upon detecting error, the module will transmit signal to SRSCM indicator lamp located at cluster. MIL lamp will indicate driver SRS error. Upon ignition key on, SRS lamp will turn on for about six seconds.

6. Trouble code registration: Upon error occurrence in system, SRSCM will store DTC corresponding to the error. DTC can be cleared only by Hi-Scan. However, if an internal fault code is logged or if a crash is recorded the fault clearing should not happen.

7. Self diagnostic connector: Data stored in SRSCM memory will be output to Hi-Scan or other external output devices through connector located below driver side crash pad.

8. Once airbag is deployed, SRSCM should not be used again but replaced.

9. SRSCM will determine whether passenger put on seat belt by the signal from built-in switch in seat belt buckle, and deploy front seat airbag at each set crash speed.

10. Side airbag deployment will be determined by SRSCM that will detect satellite sensor impact signal upon side crash, irrespective to seat belt condition.

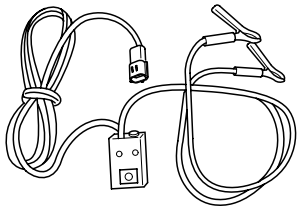
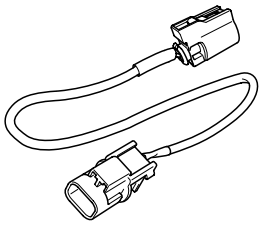
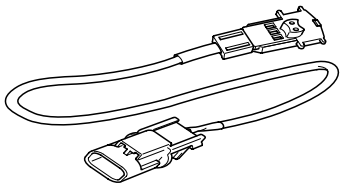
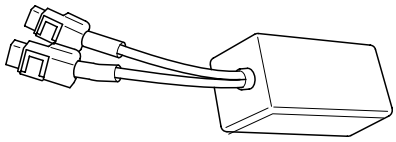
SPECIFICATION E4F9F901

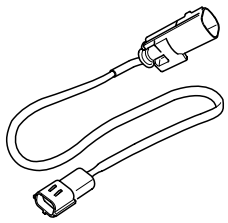
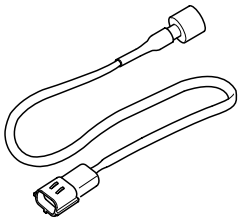
Item	Resistance (Ω)
Driver Airbag (DAB)	1.6 ~ 4.7
Passenger Airbag (PAB)	1.6 ~ 4.7
Side Airbag (SAB)	1.6 ~ 4.7
Curtain Airbag (CAB)	1.6 ~ 4.7
Seat Belt Pretensioner (BPT)	1.6 ~ 4.7
Seat Belt Buckle Pretensioner (BUPT)	1.6 ~ 4.7

TIGHTENING TORQUES E60A8832

Item	kgf·m	Nm	lb-ft
Driver Airbag (DAB)	0.8 ~ 1.1	7.9 ~ 10.8	5.8 ~ 8.0
Passenger Airbag (PAB)	Bolt : 1.2 ~ 1.3 Nut : 0.7 ~ 0.8	12.0 ~ 13.0 7.0 ~ 8.0	8.9 ~ 9.6 5.2 ~ 5.9
Curtain Airbag (CAB)	1.9 ~ 2.7	18.6 ~ 26.5	13.7 ~ 19.5
Side Airbag (SAB)	1.9 ~ 2.7	18.6 ~ 26.5	13.7 ~ 19.5
Seat Belt Anchor Bolt (BPT)	4.0 ~ 5.5	39.2 ~ 53.9	28.9 ~ 39.8
Buckle Pretensioner (BUPT)	4.0 ~ 5.5	39.2 ~ 53.9	28.9 ~ 39.8
SRSCM Mounting Bolt	1.0 ~ 1.4	9.5 ~ 13.6	7.0 ~ 10.0
Front Impact Sensor (FIS) Mounting Bolt	1.0 ~ 1.4	9.5 ~ 13.6	7.0 ~ 10.0
Side Impact Sensor (SIS) Mounting Bolt	1.0 ~ 1.4	9.5 ~ 13.6	7.0 ~ 10.0

SPECIAL SERVICE TOOLS E9DC04E3

Tool(Number and Name)	Illustration	Use
Deployment tool 0957A-34100A	 ARIE500A	Airbag deployment tool
Deployment adapter 0957A-3F100	 ERKD001F	Use with deployment tool. (PAB, SAB)
Deployment adapter 0957A-38500	 ARIE500C	Use with deployment tool. (DAB, PAB, CAB, BPT)
Dummy 0957A-38200	 ARIE500D	Simulator to check the resistance of each wiring harness

Tool(Number and Name)	Illustration	Use
Dummy adapter 0957A-3F000	 ERKD001G	Use with dummy (PAB, SAB)
Dummy adapter 0957A-1C000	 ARIE500F	Use with dummy (DAB, CAB, BPT)

DAB : Driver Airbag
PAB : Passenger Airbag
SAB : Side Airbag
CAB : Curtain Airbag
BPT : Belt Pretensioner

PRECAUTIONS E18772FB

GENERAL PRECAUTIONS

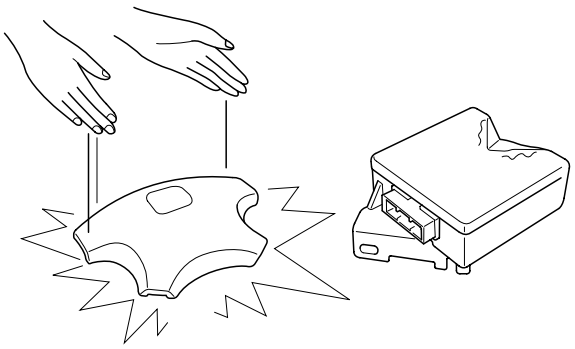
Please read the following precautions carefully before performing the airbag system service. Observe the instructions described in this manual, or the airbags could accidentally deploy and cause damage or injuries.

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

NOTE

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

- Use the replacement parts which are manufactured to the same standards as the original parts and quality. Do not install used SRS parts from another vehicle. Use only new parts when making SRS repairs.
- Carefully inspect any SRS part before you install it. Do not install any part that shows signs of being dropped or improperly handled, such as dents, cracks or deformation.



ERKD002V

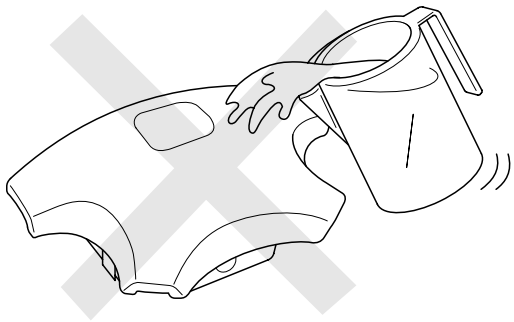
- Before removing any of the SRS parts (including the disconnection of the connectors), always disconnect the SRS connector.

AIRBAG HANDLING AND STORAGE

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

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

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



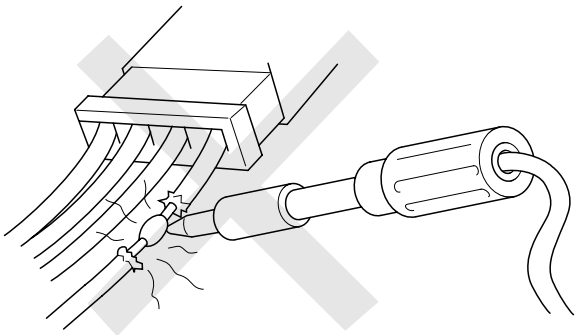
ERKD002Z

- Store the removed airbag on secure, flat surface away from any high heat source (exceeding 85°C/185°F).
- Never perform electrical inspections to the airbags, such as measuring resistance.
- Do not position yourself in front of the airbag assembly during removal, inspection, or replacement.
- Refer to the scrapping procedures for disposal of the damaged airbag.
- Be careful not to bump or impact the SRS unit or the side impact sensors whenever the ignition switch is ON, wait at least three minutes after the ignition switch is turned OFF before begin work.
- During installation or replacement, be careful not to bump (by impact wrench, hammer, etc.) the area around the SRS unit and the side impact sensor. 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 airbag, the front impact sensor 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, the front impact sensor and/or the side impact sensors.
- Do not disassemble the SRS unit, the front impact sensor or the side impact sensors
- Turn the ignition switch OFF, disconnect the battery negative cable and wait at least three minutes before beginning installation or replacement of the SRS unit.
- Be sure the SRS unit, the front impact sensor and side impact sensors are installed securely with the mounting bolts.
- Do not spill water or oil on the SRS unit,or the front impact sensor or the side impact sensors and keep them away from dust.
- Store the SRS unit, the front impact sensor and the side impact sensors in a cool (less than 40°C/104°F) and dry (less than 80% relative humidity, no moisture) area.

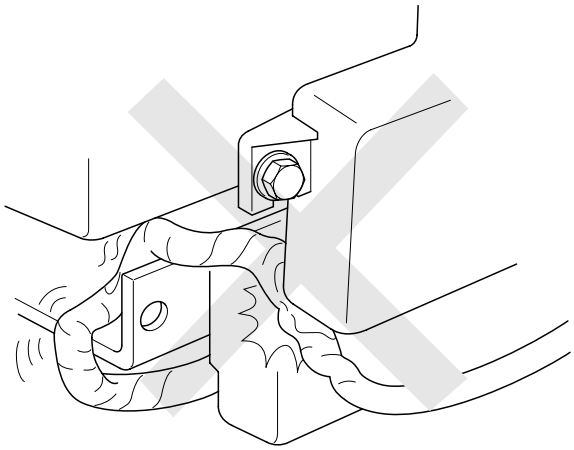
WIRING PRECAUTIONS

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.

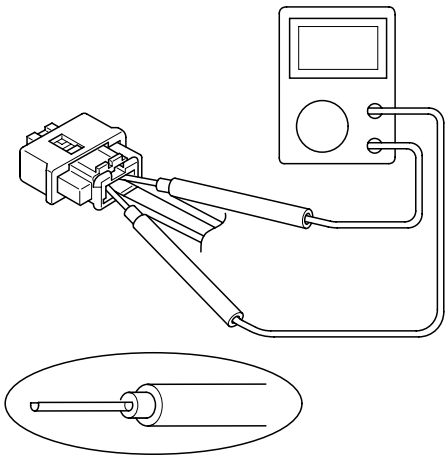


ERKD002X

- 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.

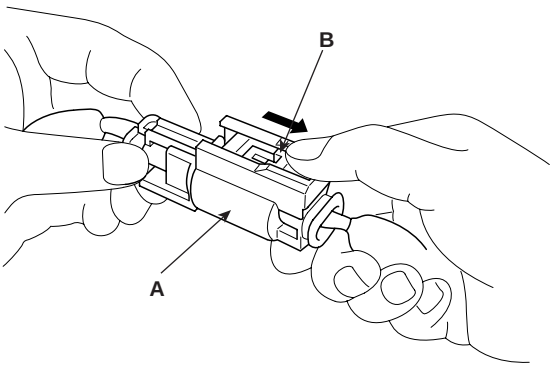
SPRING-LOADED LOCK CONNECTOR

Some SRS system connectors have a spring-loaded lock.

AIRBAG CONNECTOR

DISCONNECTING

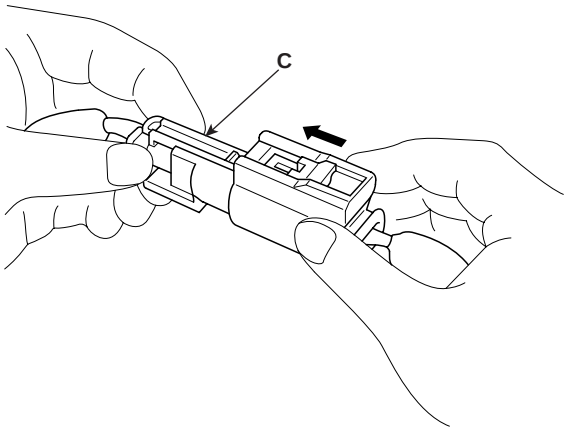
To release the lock, pull the spring-loaded sleeve (A) and the slider (B), while holding the opposite half of the connector. Pull the connector halves apart. Be sure to pull on the sleeve and not on the connector half.



ERKD511D

CONNECTING

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



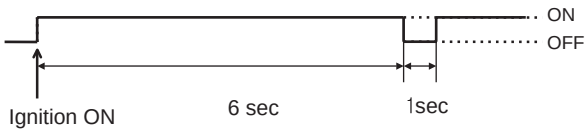
ERKD511E

WARNING LAMP ACTIVATION EAFFD845

WARNING LAMP BEHAVIOR AFTER IGNITION ON

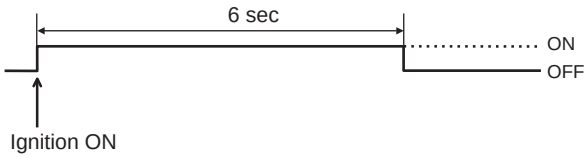
As soon as the operating voltage is applied to the SRSCM ignition input, the SRSCM activates the warning lamp for a bulb check.
The lamp shall turn on for 6 seconds during the initialization phase and be turned off afterward. However, in order to indicate the driver, the warning lamp shall turn on for 6 seconds and off for one second then on continuously after the operating voltage is applied if any active fault exists.

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



BRIF500A

2. Normal or historical fault counter is less than 10



BRIF500B

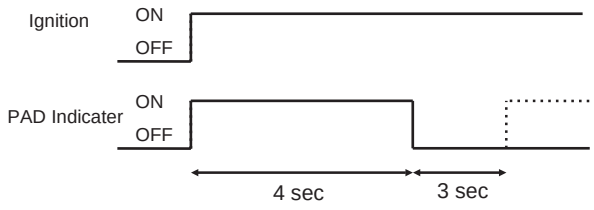
SRSCM INDEPENDENT WARNING LAMP ACTIVATION

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

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

PASSENGER AIRBAG DEACTIVATION (PAD) LAMP OPERATION

The SRSCM is designed with circuitry and software to drive a PAD lamp, which is used for depowered airbag system. For the PAD indicator circuitry to function properly, both the SRSCM and PAD indicator are sourced from the same ignition line. After ignition on, the PAD indicator will be turned on for 4 seconds and off for 3 seconds during the initialization phase. Thereafter the lamp will be turned on as long as the PAD switch is in the disabled position.



ERRF501U

PASSENGER RESTRAINTS ACTIVATION WITH PAD SWITCH

The PAD switch affects the activation of the front passenger airbag only and the switch is controlled manually. The PAD switch will be functioned as follows:

PAD Switch status	PAD Lamp	PAB
Phase-up	ON → OFF	Enable
Enabled position	OFF	Enable
Disabled position	ON	Disable
Fault	Based on PAB	Enable

COMPONENT REPLACEMENT AFTER DEPLOYMENT E2D7CCBF

NOTE

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

When the front airbag(s) deployed after a collision, replace the following items.
- SRSCM
- Deployed airbag(s)
- Seat belt pretensioner(s)
- Front impact sensors
- SRS wiring harnesses
- Inspect the clock spring for heat damage.
  If any damage found, replace the clock spring.

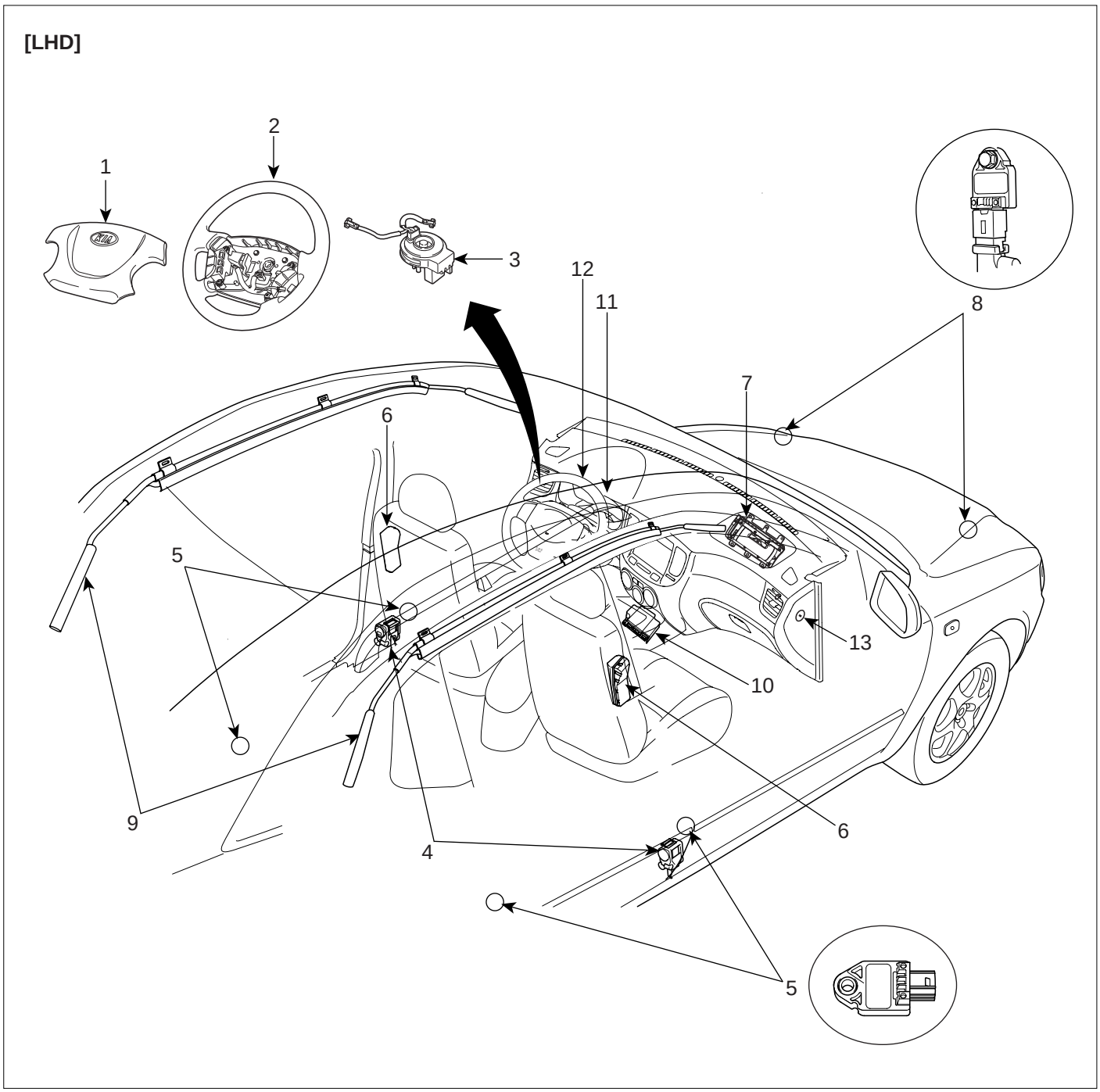
When the seat belt pretensioner(s) deployed after a collision, replace the following items.
- Seat belt pretensioner(s)
- SRSCM (if B1658 detected)
- Front impact sensors
- SRS wiring harnesses

When the side/curtain airbag(s) deployed after a collision, replace the following items.
- SRSCM
- Deployed airbag(s)
- Side impact sensor(s) for the deployed side(s)
- SRS wiring harnesses

After the vehicle is completely repaired, confirm the SRS airbag system is OK.
- Turn the ignition switch ON, the SRS indicator should come on for about 6 seconds and then go off.

COMPONENTS E8A24D4B

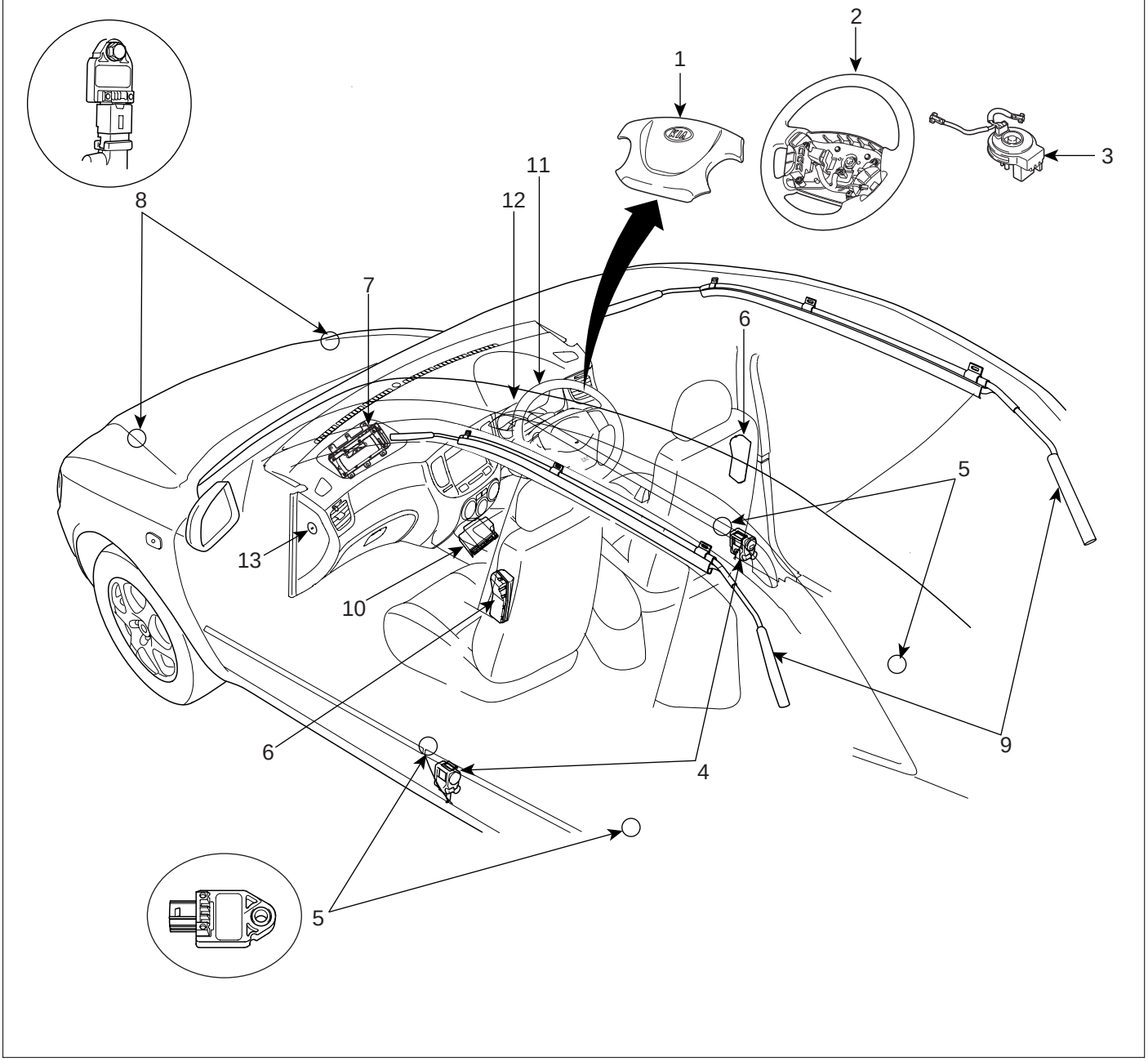
[LHD]



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

LRKG500A

[RHD]

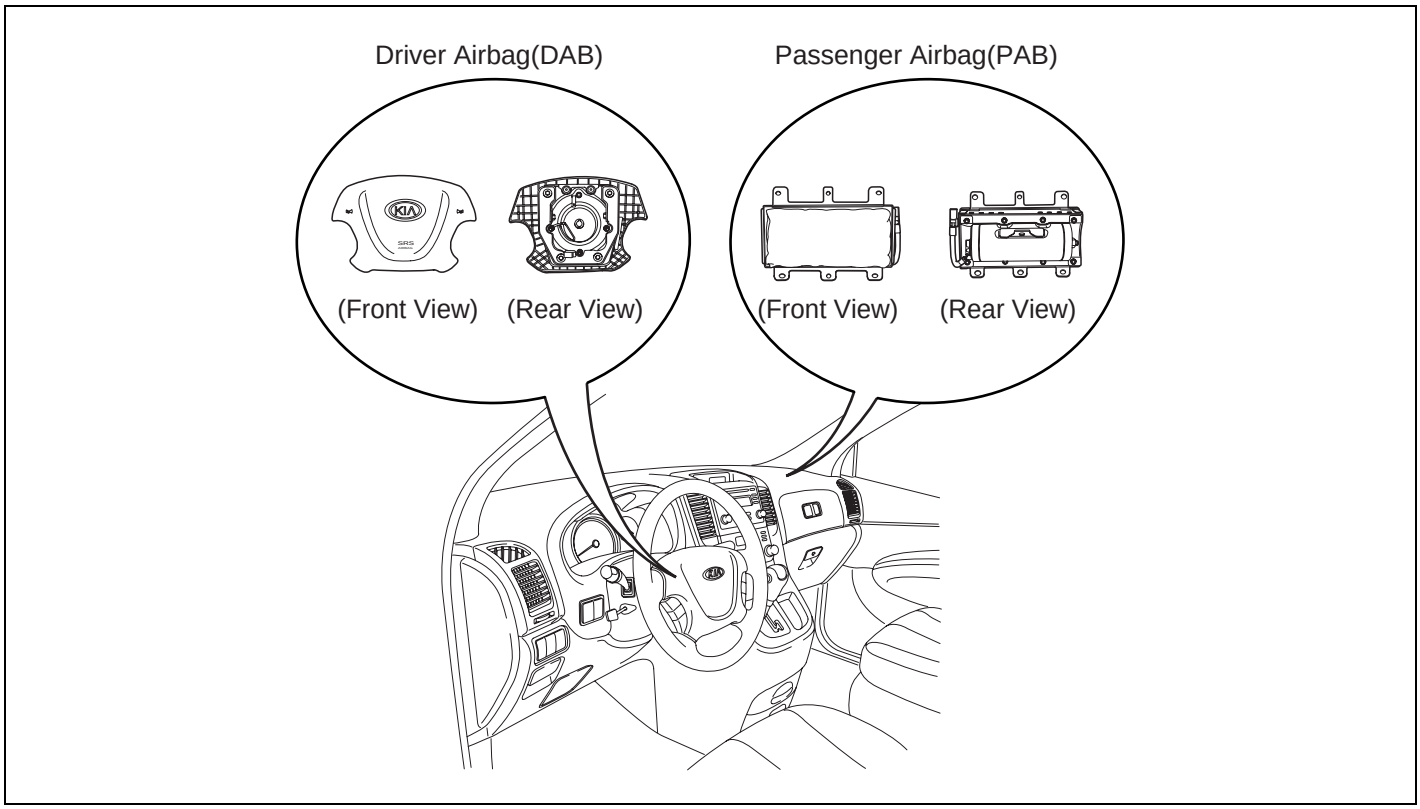


1. Driver Airbag (DAB)
2. Steering Wheel
3. Clock Spring
4. Seat Belt Pretensioner (BPT)
5. Side Impact Sensor (SIS)
6. Side Airbag (SAB)
7. Passenger Airbag (PAB)
8. Front Impact Sensor (FIS)
9. Curtain Airbag (CAB)
10. Supplemental Restraint System Control Module(SRSCM)
11. Airbag Warning Lamp
12.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

LRKG510A

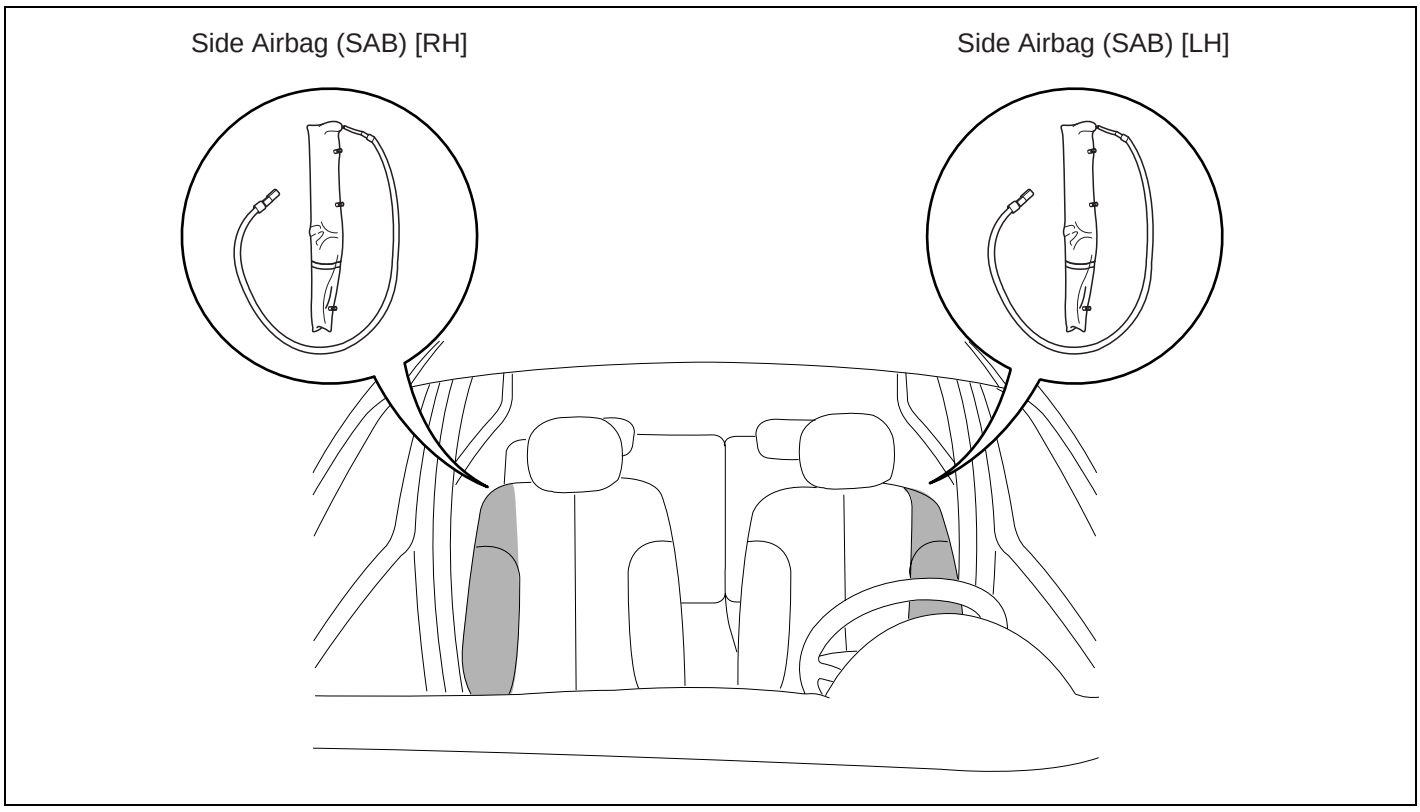
COMPONENTS LOCATION

DRIVER AIRBAG (DAB) / PASSENGER AIRBAG (PAB)



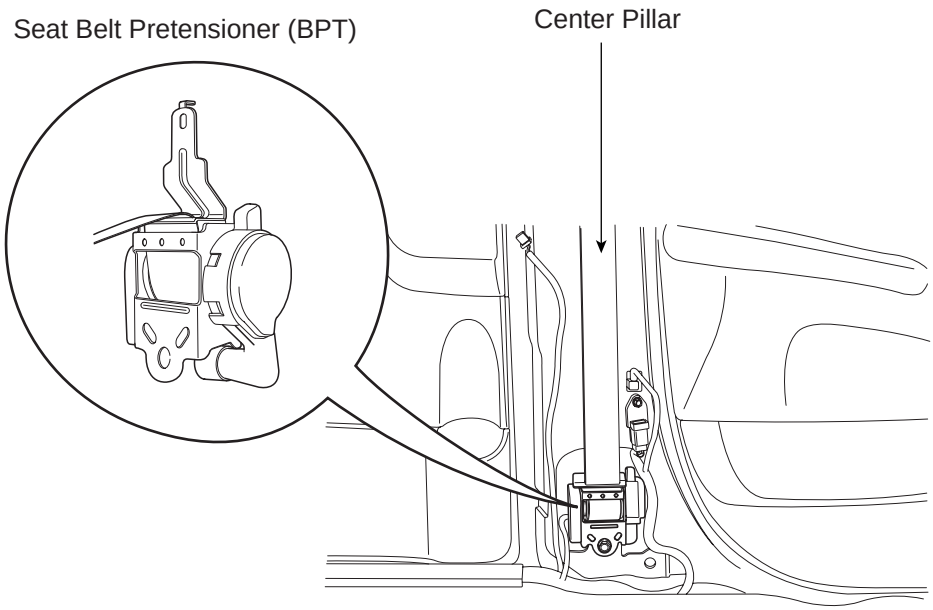
LRKG101B

SIDE AIRBAG (SAB)



LRKG101C

SEAT BELT PRETENSIONER (BPT)



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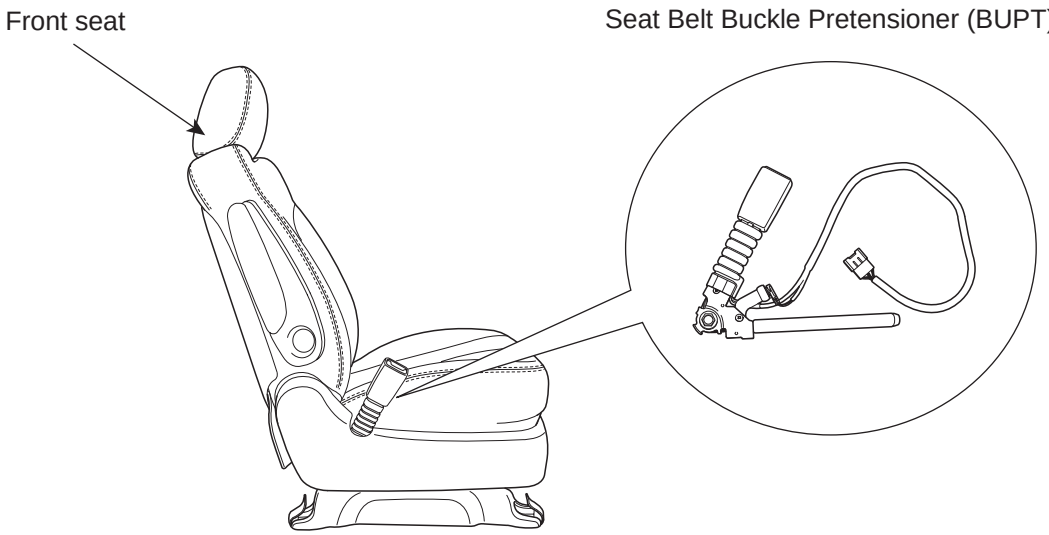
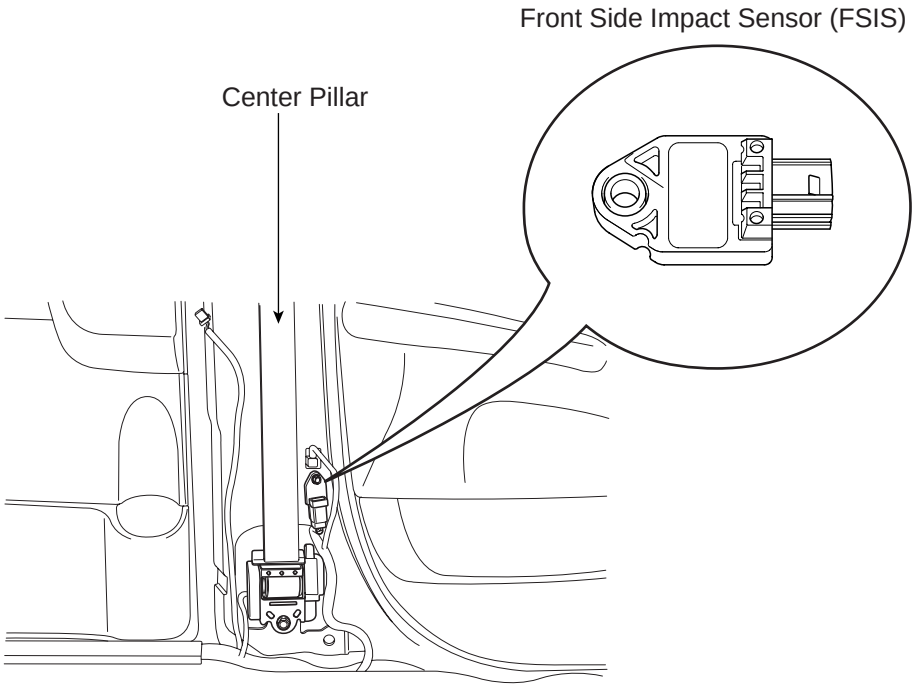
SEAT BELT BUCKLE PRETENSIONER (BUPT)



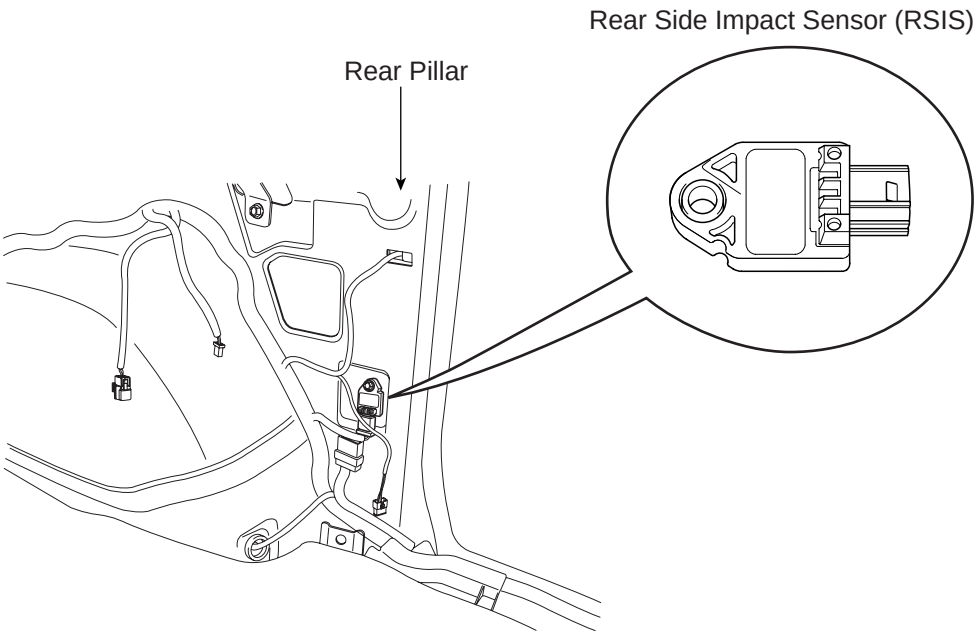
LRKG101X

SIDE IMPACT SENSOR (SIS)

[Front]



[Rear]



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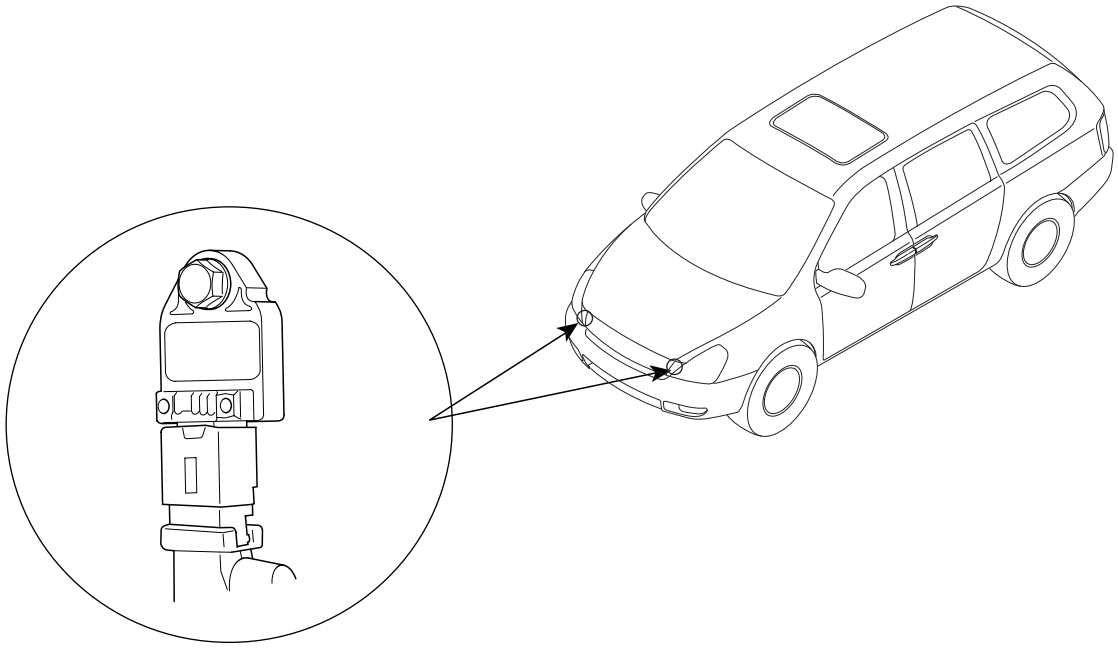
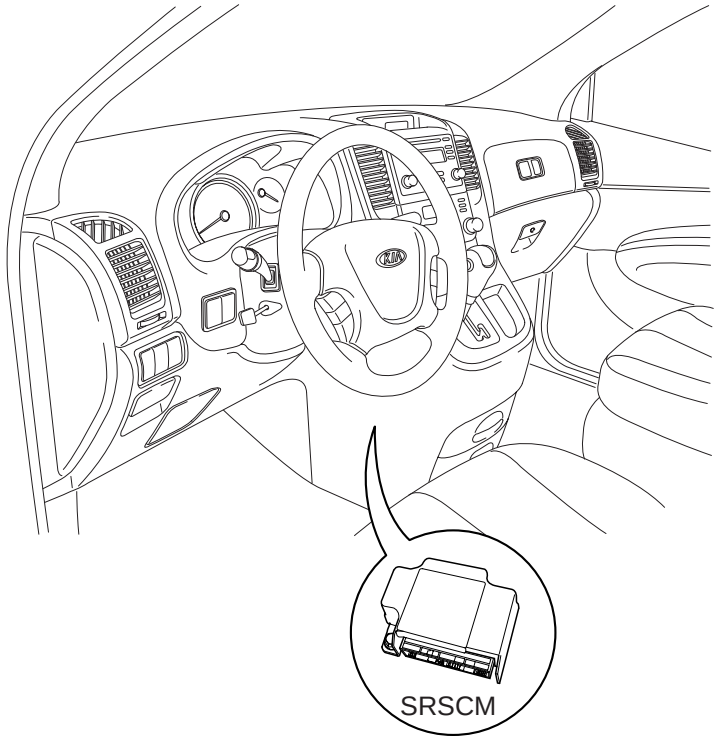
FRONT IMPACT SENSOR (FIS)



LRKG101D

SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE (SRSCM)



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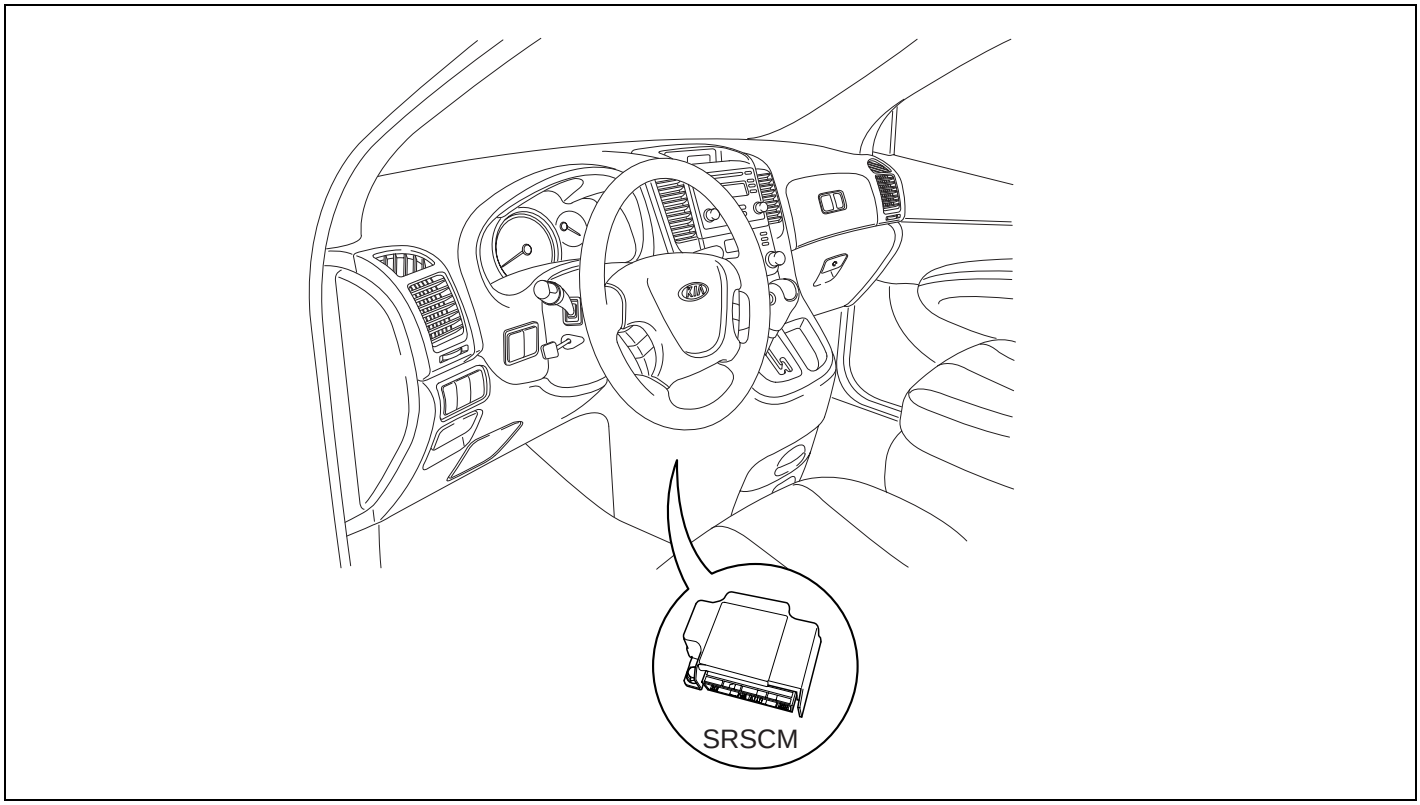
SUPPLEMENTAL RESTRAINTS SYSTEM CONTROL MODULE(SRSCM)

SRS CONTROL MODULE

DESCRIPTION EFA18E24

The primary purpose of the SRSCM (Supplemental Restraints System Control Module) is to discriminate between an event that warrants restraint system deployment and an event that does not. The SRSCM must decide whether to deploy the restraint system or not. After determining that pretensioners and/or airbag deployment is required, the SRSCM must supply sufficient power to the pretensioners and airbag igniters to initiate deployment. The SRSCM determines that an impact may require deployment of the pretensioners and airbags from data obtained from impact sensors and other components in conjunction with a safing function. The SRSCM will not be ready to detect a crash or to activate the restraint system devices until the signals in the SRSCM circuitry stabilize. It is possible that the SRSCM could activate the safety restraint devices in approximately 2 seconds but is guaranteed to fully function after prove-out is completed. The SRSCM must perform a diagnostic routine and light a system readiness indicator at key-on. The system must perform a continuous diagnostic routine and provide fault annunciation through a warning lamp indicator in the event of fault detection. A serial diagnostic communication interface will be used to facilitate servicing of the restraint control system.

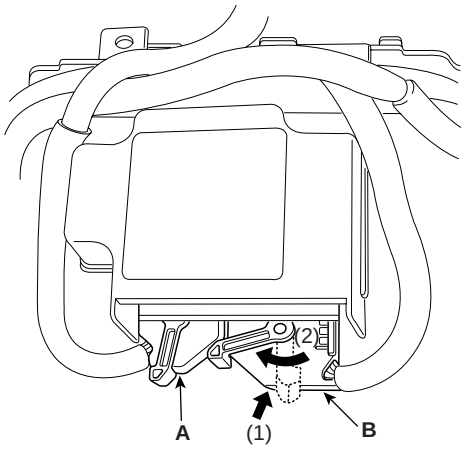
COMPONENTS EBE8C3D4



LRKG102F

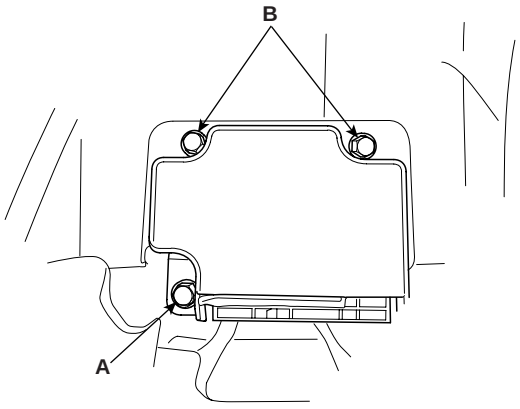
REMOVAL E8C352BC

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.
2. Remove ignition key from the vehicle.
3. Disconnect the DAB, PAB, SAB, CAB and BPT connectors.
4. Remove the floor console and heater ducts. (Refer to BD group)
5. Press the lock(1), then pull back the connector lever(2) until it clicks.



ARKF101G

6. Disconnect the SRSCM harness connector(A) and (B) from the SRSCM.
7. Remove the SRSCM mounting bolt (A) and nuts (B) from the SRSCM, then remove the SRSCM.



ARKF101H

INSTALLATION E59FBABF

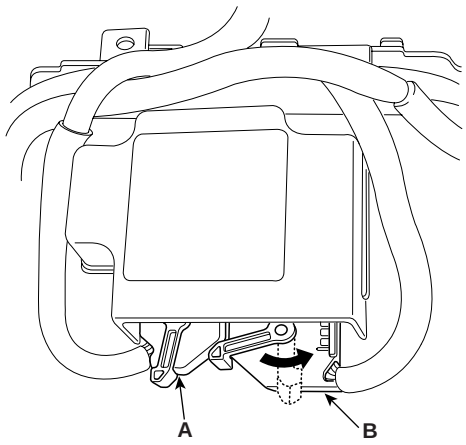
1. Disconnect the negative (-) cable from battery and wait for at least three minutes.
2. Remove ignition key from the vehicle.
3. Install the SRSCM with the SRSCM mounting bolt and nuts.

Tightening Torque
: 1.0 ~ 1.4 kgf.m (9.5 ~ 13.6 Nm, 7.0 ~ 10.0 lb.ft)

NOTE

Use new mounting bolts when replacing the SRSCM after a collision

4. Connect the SRSCM harness connector.



ARJF101I

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

AIR BAG MODULE (DRIVE SIDE)

AIR BAG MODULE AND CLOCK SPRING

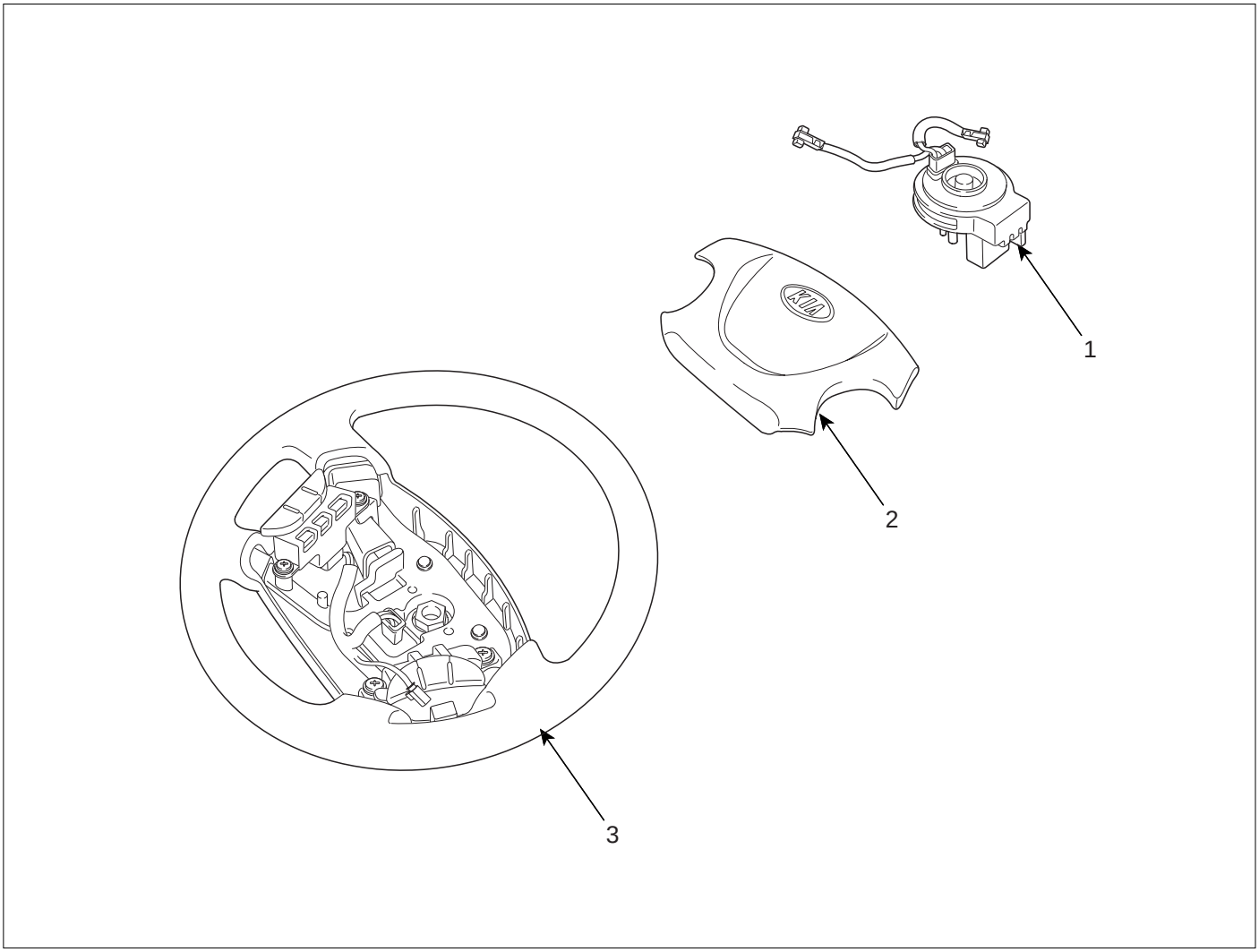
DESCRIPTION E166D00F

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

CAUTION

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

COMPONENTS ECED9E15

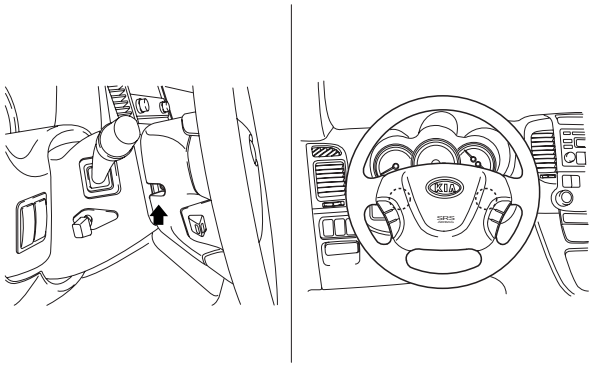


1. Clock Spring
2. Driver Airbag (DAB)
3. Steering Wheel

LRKG102A

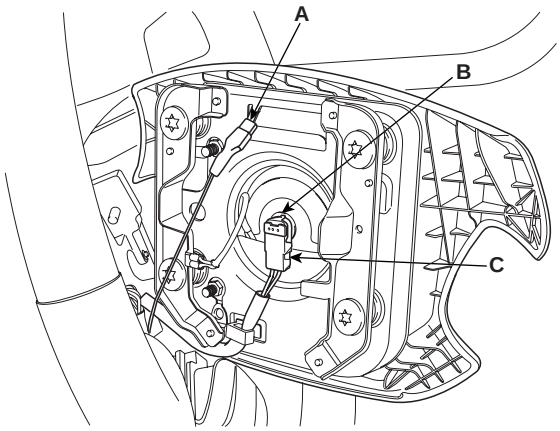
REMOVAL E438FBCC

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



ARKF102B

3. Disconnect the horn connector(A).



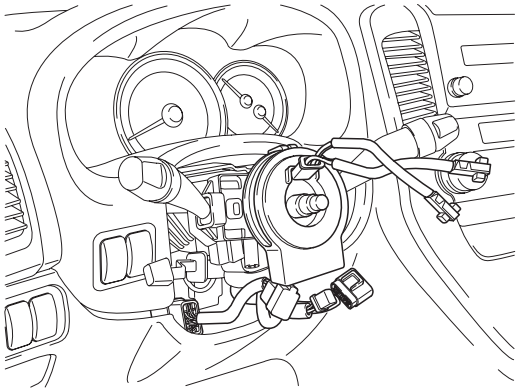
LRKG102C

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

CAUTION

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

5. Remove the steering wheel and steering wheel column cover(Refer to ST group in the Workshop Manual).
6. Disconnect the clock spring and horn connector, then remove the clock spring.



ARKF102D

INSPECTION E70CA434

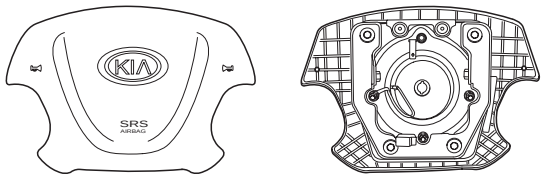
DRIVER AIRBAG (DAB)

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

CAUTION

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

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



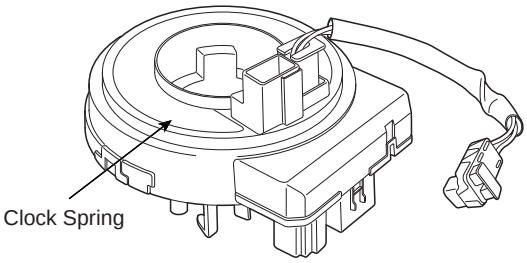
(Front View) (Rear View)

LRKG201A

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

CLOCKSPRING

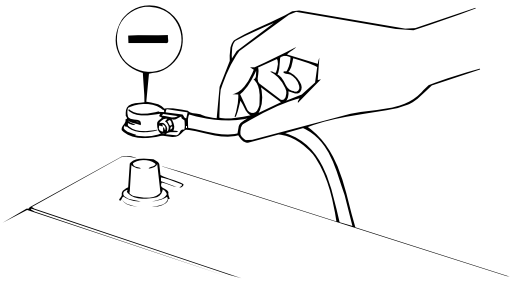
1. If, as a result of the following checks, even one abnormal point is discovered, replace the clock spring with a new one.
2. Check connectors and protective tube for damage, and terminals for deformities.



LRKG201B

INSTALLATION E808598D

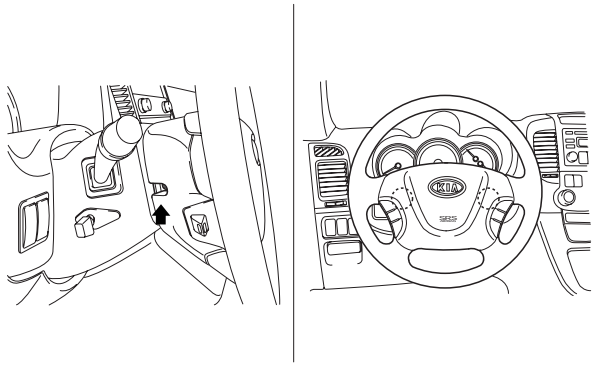
1. Disconnect the negative (-) cable from battery and wait for at least three minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Connect the clock spring harness connetor and horn harness connector to the clock spring.
4. Set the clock spring on neutral position and after turning the front wheels to the straight-ahead position, install the clock spring.
5. Install the steering wheel column cover and the steering wheel. (Refer to ST group)
6. Connect the Driver Airbag (DAB) module connector and horn connector, then install the Driver Airbag (DAB) module on the steering wheel.
7. Secure the Driver Airbag (DAB) with the new mounting bolts.

Tightening Torque (DAB Mounting Bolt)
: 0.8 ~ 1.1 kgf.m (7.9 ~ 10.8 Nm, 5.8 ~ 8.0 lb.ft)



ARKF102B

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

AIR BAG MODULE (PASSENGER SIDE)

AIR BAG MODULE

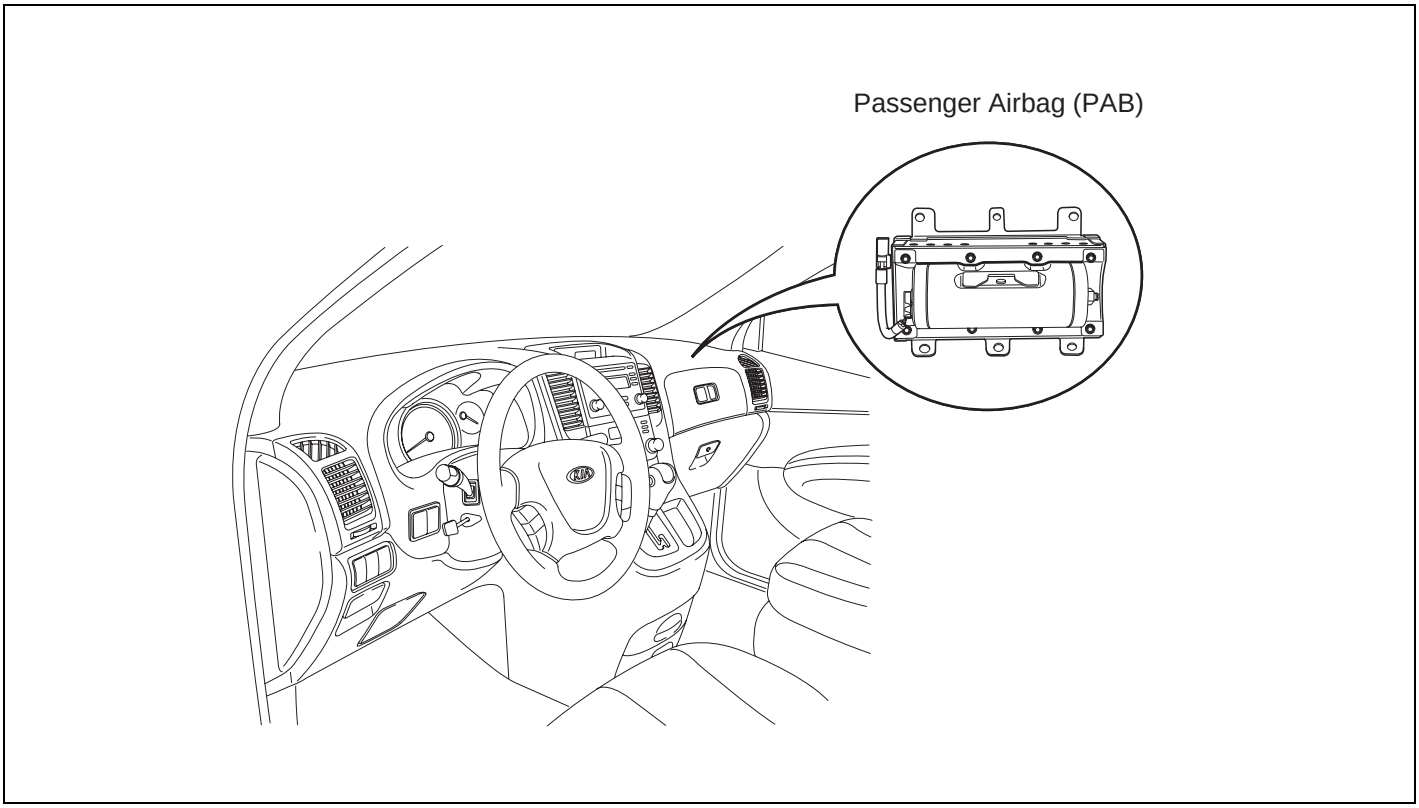
DESCRIPTION E97319CD

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

CAUTION

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

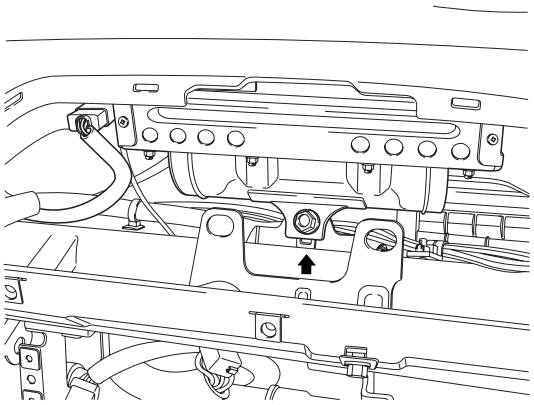
COMPONENTS EF246F25



LRKG201C

REMOVAL EB449C26

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



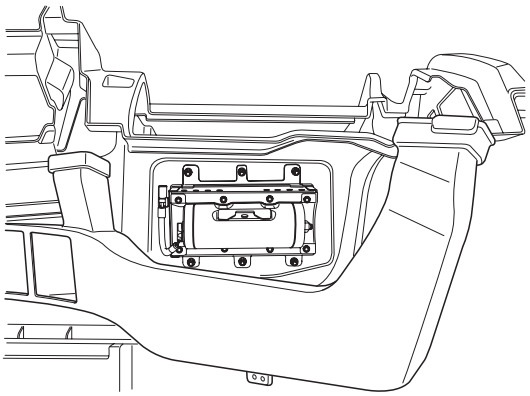
ARKF103B

4. Remove the crash pad. (Refer to BD group)

NOTE

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

5. Remove the heater duct from the crash pad.

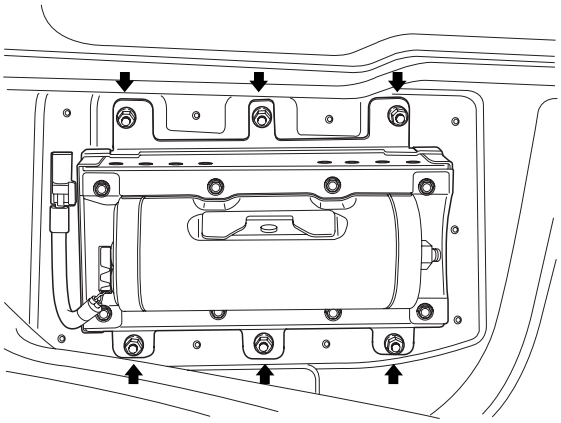


ARKF103D

6. Remove the mounting nuts from the crash pad. Then remove the passenger airbag.

CAUTION

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



ARKF103C

INSTALLATION E8056A2B

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

Tightening Torque
: 0.7 ~ 0.8 kgf.m (7.0 ~ 8.0 N.m, 5.2 ~ 5.9 lb.ft)

4. Install the heater duct to the crash pad.
5. Install the crash pad. (Refer to BD group)
6. Tighten the PAB mounting bolts.

Tightening Torque
: 1.2 ~ 1.3 kgf.m (12.0 ~ 13.0 N.m, 8.9 ~ 9.6 lb.ft)

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

AIR BAG MODULE (SIDE AIR BAG)

AIR BAG MODULE

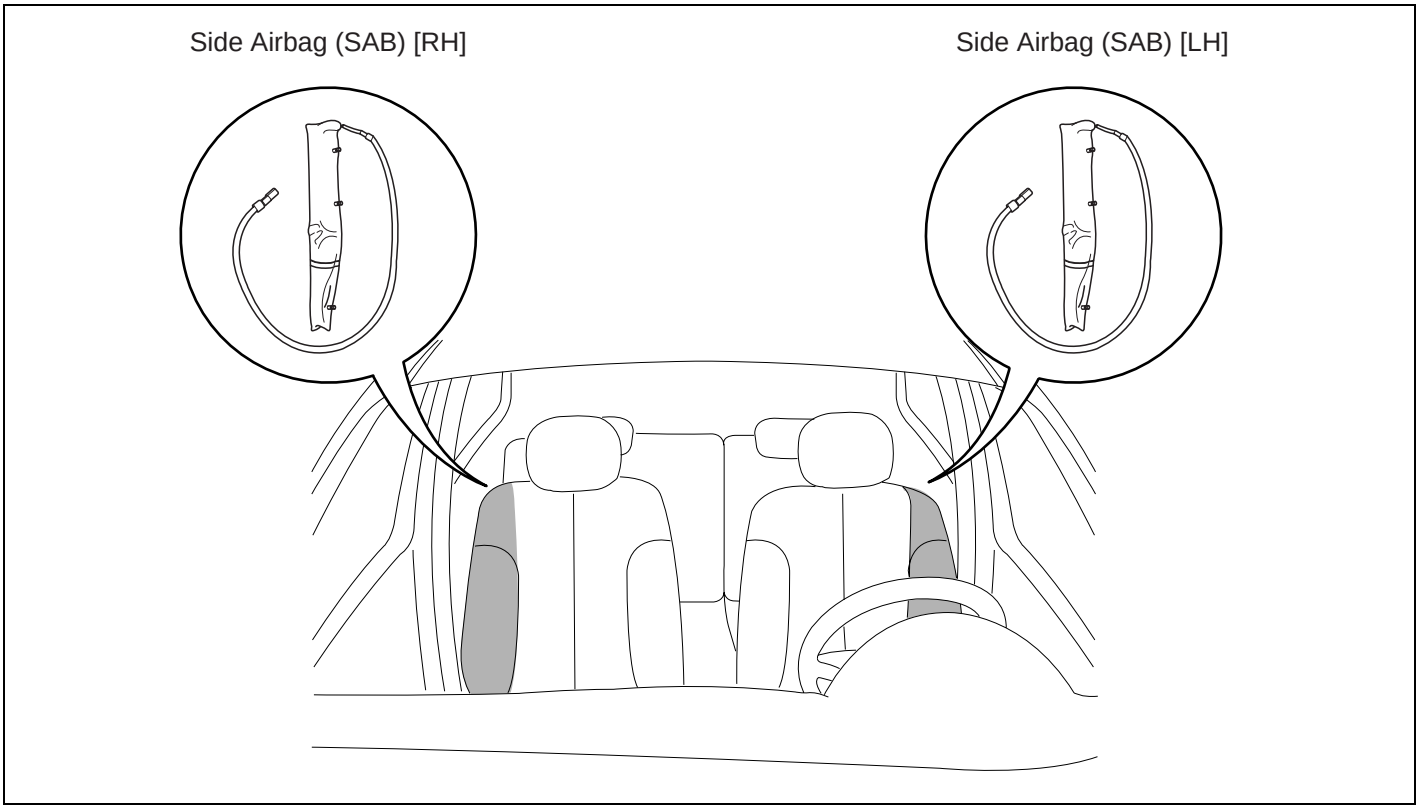
DESCRIPTION E7FF86C7

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 EB1DC78F



LRKG101C

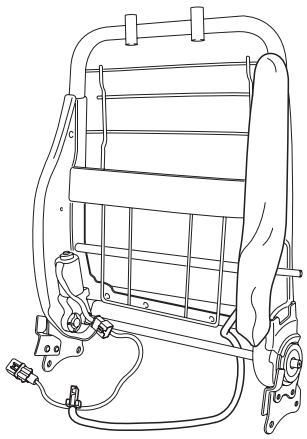
REMOVAL E0143359

1. Disconnect the battery negative cable and wait at least 3 minutes before beginning work.
2. Remove the front seat assambly.(Refer to BD group)
3. Remove the seatback cover.(Refer to BD group)

NOTE

When the side airbag depoyed after a collision, replace the seatback as an assembly.

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



ARKF104A

INSTALLATION E3E8FAAD

CAUTION

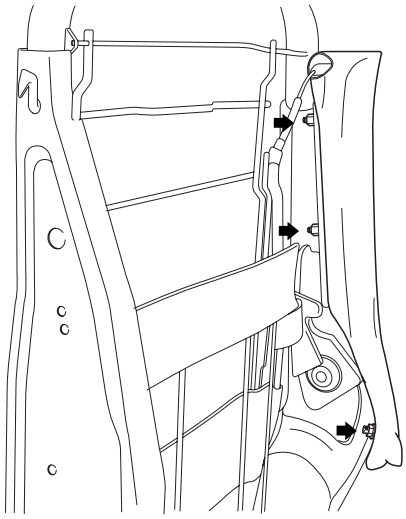
Ensure that the harness is installed and routed properly to prevent damage to the wiring.

NOTE

- *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 seatback cover is installed properly. Improper installation may prevent the proper deployment.*

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

Tightening torque
: 1.9 ~ 2.7 kgf.m (18.6 ~ 26.5 Nm, 13.7 ~ 19.5 lb.ft)



ARKF104B

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

AIR BAG MODULE (CURTAIN AIR BAG)

AIR BAG MODULE

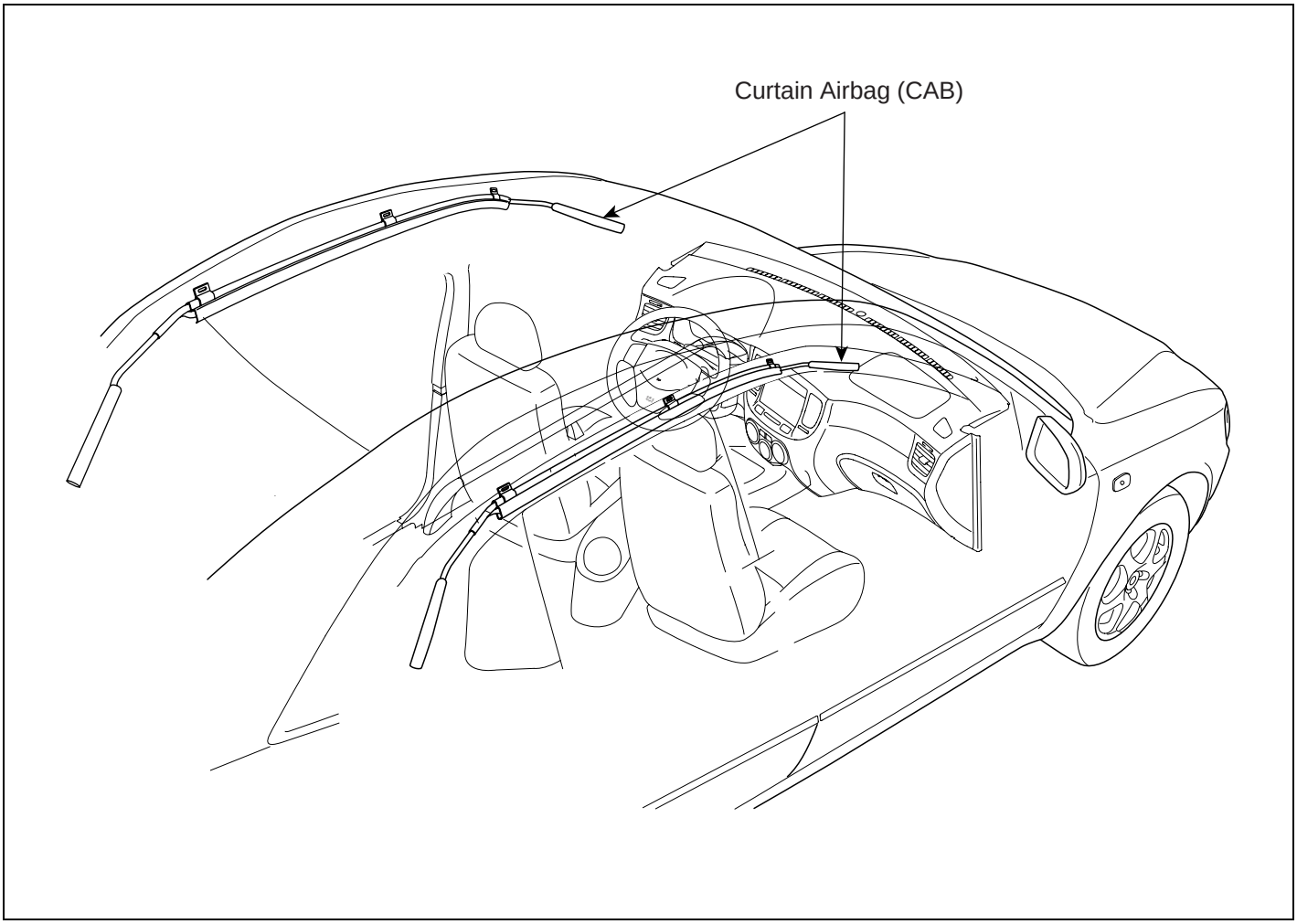
DESCRIPTION E8E0D213

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

CAUTION

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

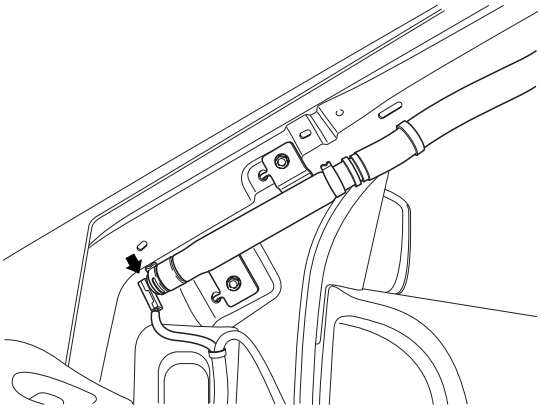
COMPONENTS EEAC07FF



LRKG105A

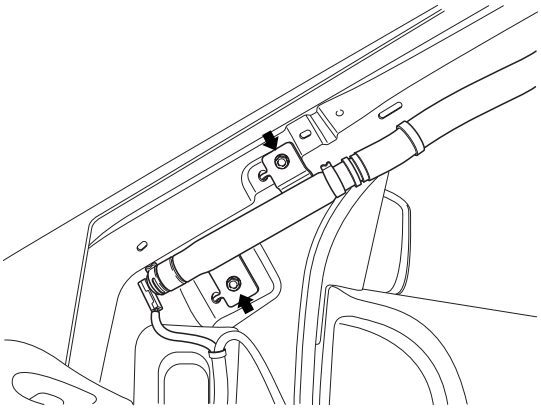
REMOVAL E0AE345D

1. Disconnect the battery negative cable and wait for at least 3 minutes before beginning work.
2. Remove the following parts. (Refer to BD group)
   - Interior trim
   - Headlining
3. Disconnect the Curtain Airbag harness connector (front & rear).



LRKG105B

4. After loosening the mounting bolts (13EA), remove the curtain airbag.



LRKG105C

INSTALLATION ECDC25CE

CAUTION

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

1. Disconnect the negative (-) cable from battery and wait for at least three minutes.
2. Remove ignition key from the vehicle.
3. Install a Curtain Airbag (CAB) on the mounting bracket.
4. Tighten the CAB mounting bolts (13EA).

Tightening Torque (CAB Mounting Bolt)
: 1.9 ~ 2.7 kgf.m(18.6 ~ 26.5 Nm, 13.7 ~ 19.5 lb.ft)

CAUTION

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

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

SEAT BELT PRETENSIONER

SEAT BELT PRETENSIONER

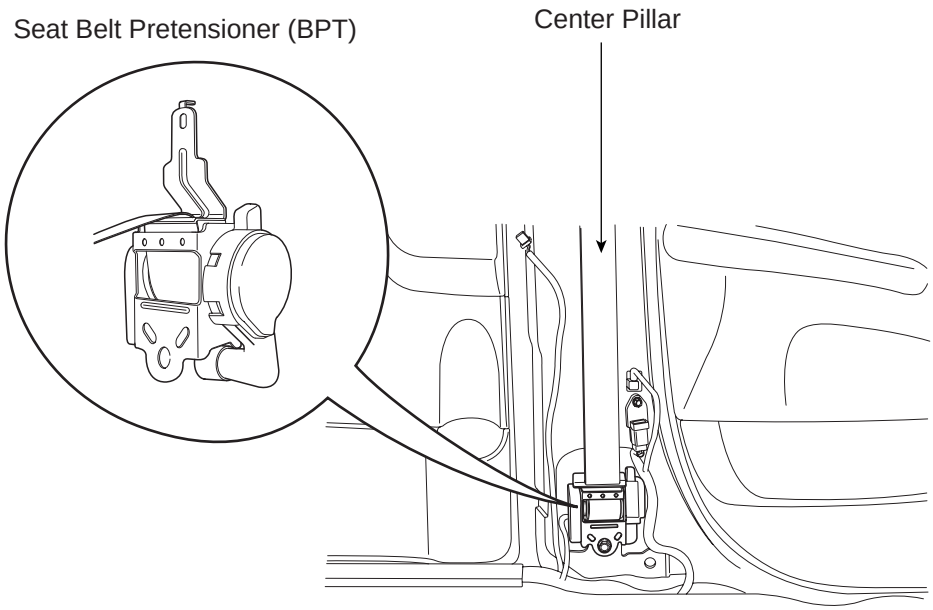
DESCRIPTION EFB4E890

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

CAUTION

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

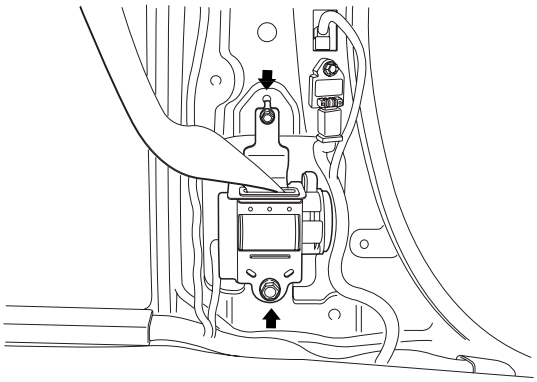
COMPONENTS E53F1F63



LRKG101E

REMOVAL E9E8DD40

1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the door scuff trim. (Refer to BD group)
3. Remove the center pillar trim. (Refer to BD group)
4. Remove the lower anchor bolt.
5. Remove the upper anchor bolt.
6. Loosen the Seat Belt Pretensioner mounting bolts and remove the Seat Belt Pretensioner.



ARKF106D

7. Disconnect the Seat Belt Pretensioner connector.

INSTALLATION E1BD7C07

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

Tightening Torque (Seat Belt Anchor Bolt)
: 4.0 ~ 5.5 kgf.m (39.2 ~ 53.9 Nm, 28.9 ~ 39.8 lb.ft)

5. Install the upper and lower anchor bolts.

Tightening Torque (Seat Belt Anchor Bolt)
: 4.0 ~ 5.5 kgf.m (39.2 ~ 53.9 Nm, 28.9 ~ 39.8 lb.ft)

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

SEAT BELT BUCKLE PRETENSIONER

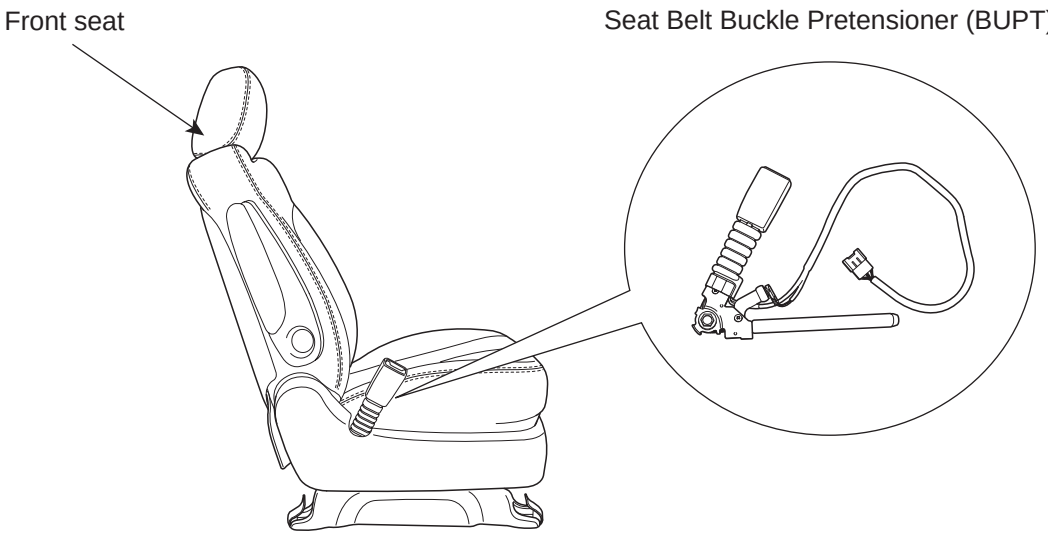
DESCRIPTION E1DBACA4

The Seat Belt Buckle Pretensioners (BUPT) are installed in the right side of the driver seat and the left side of the passenger seat. When a vehicle crashes with a certain degree of frontal impact, the seat belt buckle pretensioner helps to reduce the severity of injury to the front seat occupants by retracting the seat belt buckle. 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 Buckle Pretensioner (BUPT) 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.

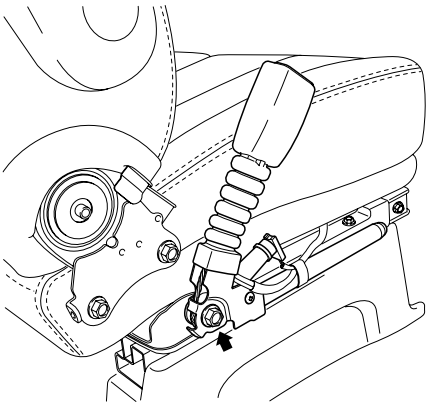
COMPONENTS ED0DA2E2



LRKG101X

REMOVAL EB1DC5BC

1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the front seat assembly. (Refer to BD group)
3. Loosen the Seat Belt Buckle Pretensioner mounting bolt and remove the Seat Belt Buckle Pretensioner.



LRKG600A

INSTALLATION EDFE7A24

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

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

4. Install the front seat assembly.

CAUTION

- ***Ensure that the harness is installed and routed properly to prevent damage to the wiring.***

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

SRS CONTROL SYSTEM

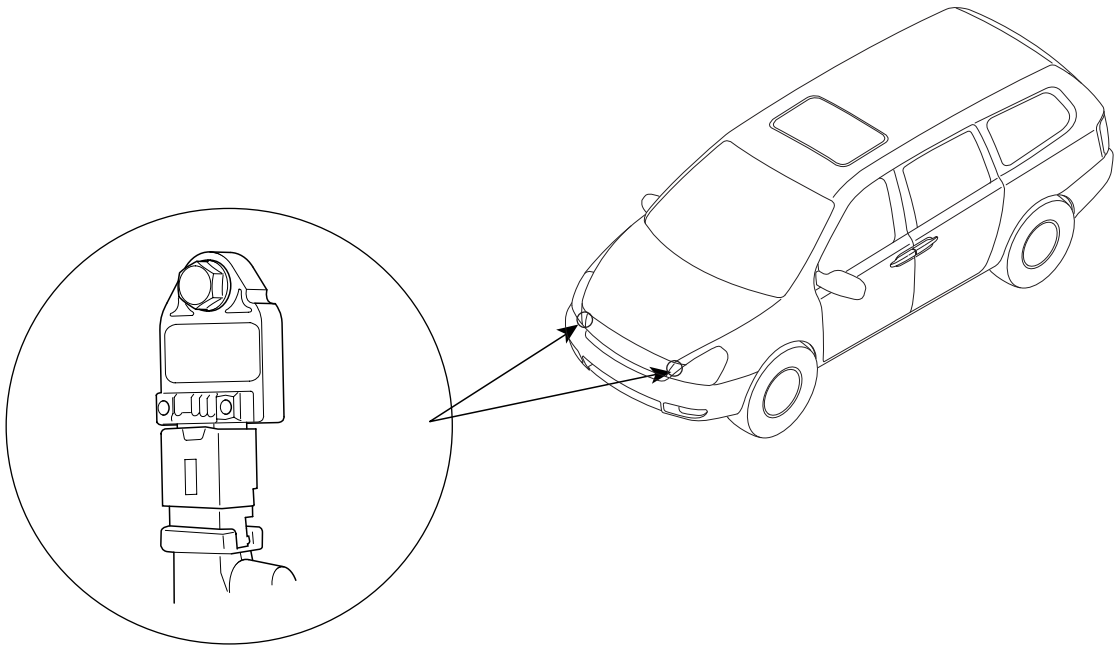
FRONT IMPACT SENSOR (FIS)

DESCRIPTION E76423E3

The front impact sensors (FIS) are installed in the side member.

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

COMPONENTS E6C6102C



Front Impact Sensor(FIS)

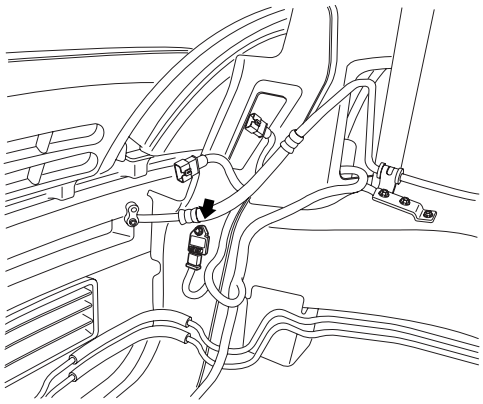
LRKG101D

REMOVAL EE1DEFD0

CAUTION

- ***Removal of the airbag must be performed according to the precautions/ procedures described previously.***
- ***Before disconnecting the front impact sensor connector, disconnect the front airbag connector(s).***
- ***Do not turn the ignition switch ON and do not connect the battery cable while replacing the front impact sensor.***

1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Disconnect Front Impact Sensor connector.
3. Remove the FIS mounting bolt then remove the Front Impact Sensor.



ARKF107A

INSTALLATION EA4F302E

CAUTION

- ***Ensure that the harness is installed and routed properly to prevent damage to the wiring.***
- ***Do not turn the ignition switch ON and do not connect the battery cable while replacing the front impact sensor.***

1. Install the new Front Impact Sensor with bolt then connect the SRS harness connector to the Front Impact Sensor.

Tightening torque
: 1.0 ~ 1.4 kgf.m (9.5 ~ 13.6 Nm, 7.0 ~ 10.0 lb.ft)

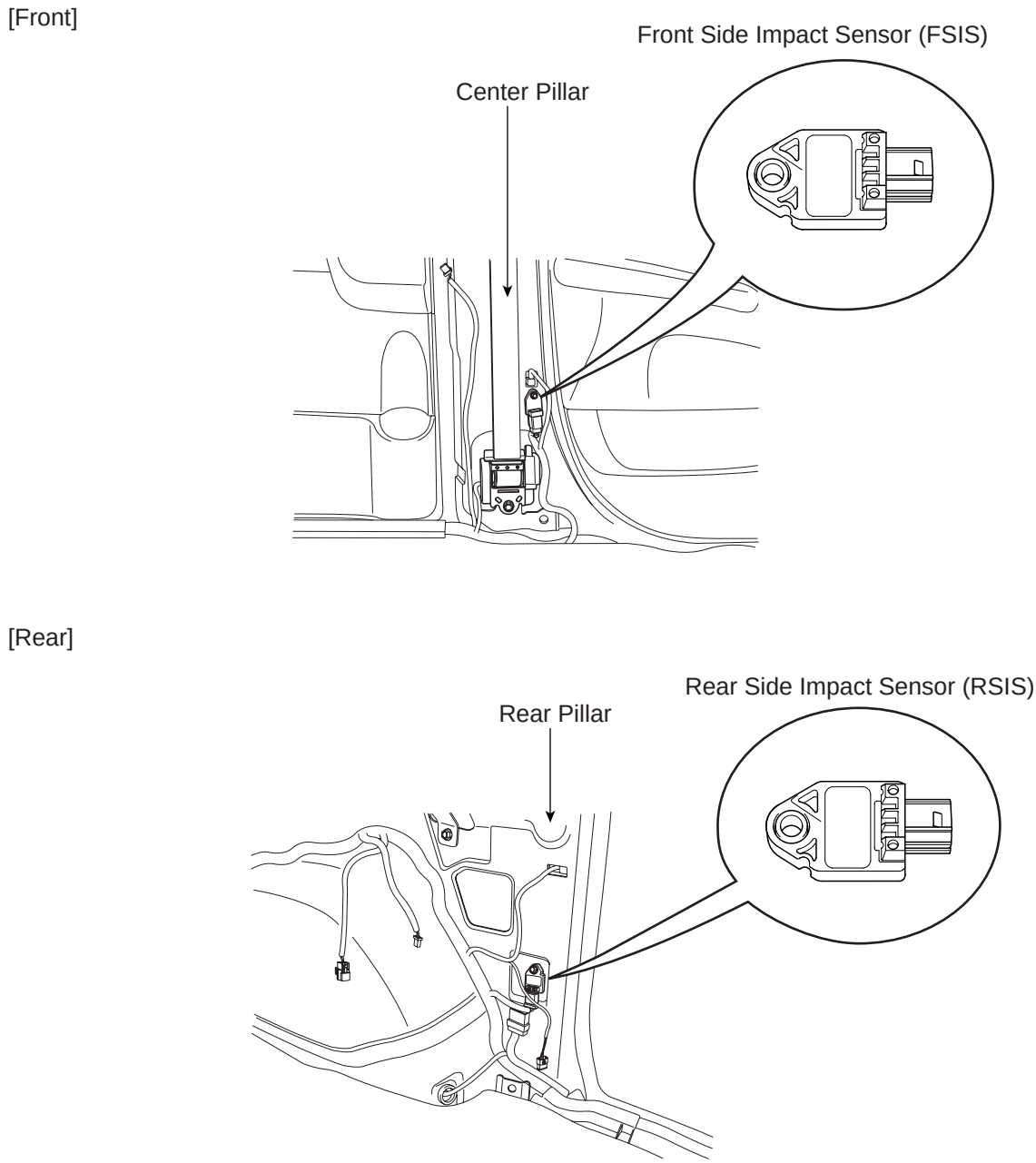
2. Reconnect the negative battery cable.
3. After installing the Front Impact Sensor, confirm proper system operation: Turn the ignition switch ON the SRS indicator light should be turned on for about six seconds and then go off.

SIDE IMPACT SENSOR (SIS)

DESCRIPTION E65F2E48

The Side Impact Sensor (SIS) system consists of two front SIS which are installed inside the Center Pillar (LH and RH) and two rear SIS which are installed in the rear pillar (LH and RH). They are remote sensors that detect acceleration due to collision at their mounting locations. The primary purpose of the Side Impact Sensor (SIS) is to provide an indication of a collision. The Side Impact Sensor (SIS) sends acceleration data to the SRSCM.

COMPONENTS E4B7276F



LRKG201D

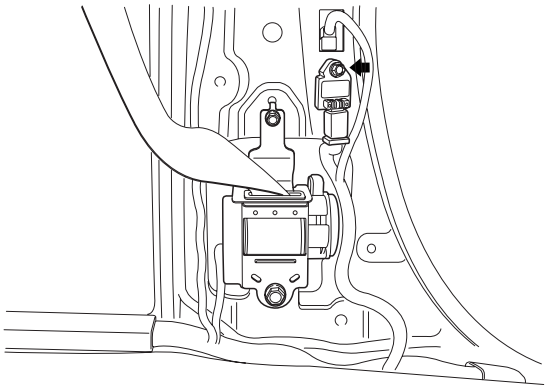
REMOVAL E23AE306

FRONT SIDE IMPACT SENSOR

CAUTION

- ***Removal of the airbag must be performed according to the precautions/procedures described previously.***
- ***Before disconnecting the side impact sensor connector(s), disconnect the side airbag connector(s).***
- ***Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.***

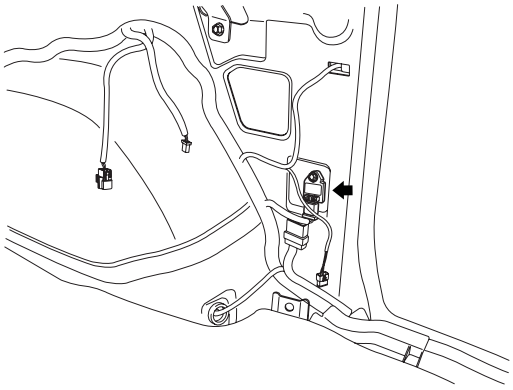
1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the door scuff trim. (Refer to BD group)
3. Remove the center pillar trim. (Refer to BD group)
4. Disconnect the Side Impact Sensor connector.
5. Remove the SIS mounting bolt then remove the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



ARKF106E

REAR SIDE IMPACT SENSOR

1. Disconnect the battery negative cable, and wait for at least three minutes before beginning work.
2. Remove the rear pillar trim. (Refer to BD group)
3. Disconnect the Side Impact Sensor connector.
4. Remove the SIS mounting bolt then remove the Side Impact Sensor.



ARKF201D

INSTALLATION EC202507

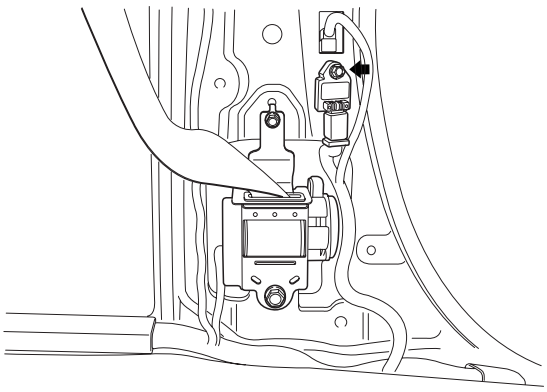
FRONT SIDE IMPACT SENSOR

CAUTION

- ***Ensure that the harness is installed and routed properly to prevent damage to the wiring.***
- ***Do not turn the ignition switch ON and do not connect the battery cable while replacing the side impact sensor.***

1. Install the new Side Impact Sensor with the bolt then connect the SRS harness connector to the Side Impact Sensor.

Tightening torque
: 1.0 ~ 1.4 kgf.m (9.5 ~ 13.6 Nm, 7.0 ~ 10.0 lb.ft)



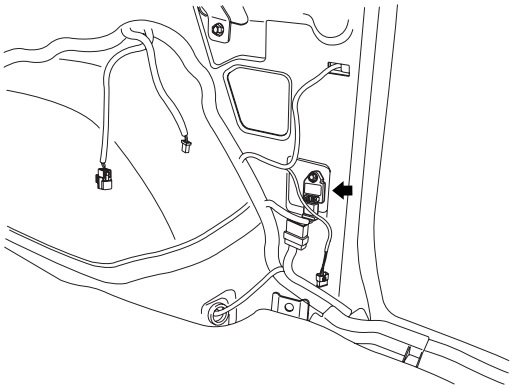
ARKF106E

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

REAR SIDE IMPACT SENSOR

1. Be sure that the battery negative cable is disconnected.
2. Install the new Side Impact Sensor with the bolt then connect the SRS harness connector to the Side Impact Sensor.

Tightening torque
: 1.0 ~ 1.4 kgf.m (9.5 ~ 13.6 Nm, 7.0 ~ 10.0 lb.ft)



ARKF201D

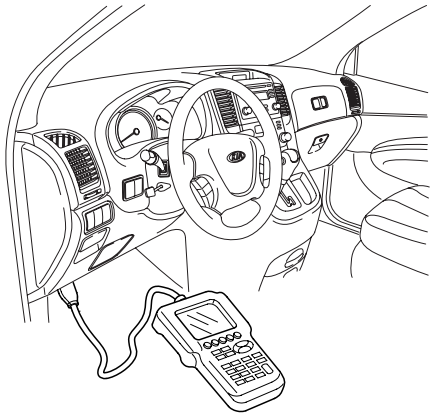
3. Install the rear pillar trim. (Refer to BD group)
4. Reconnect the battery negative cable.
5. After installing the Side Impact Sensor, confirm proper system operation: Turn the ignition switch ON, the SRS indicator light should be turned on for about six seconds and then go off.

TROUBLESHOOTING

DESCRIPTION ECADE9EF

HI-SCAN CHECK

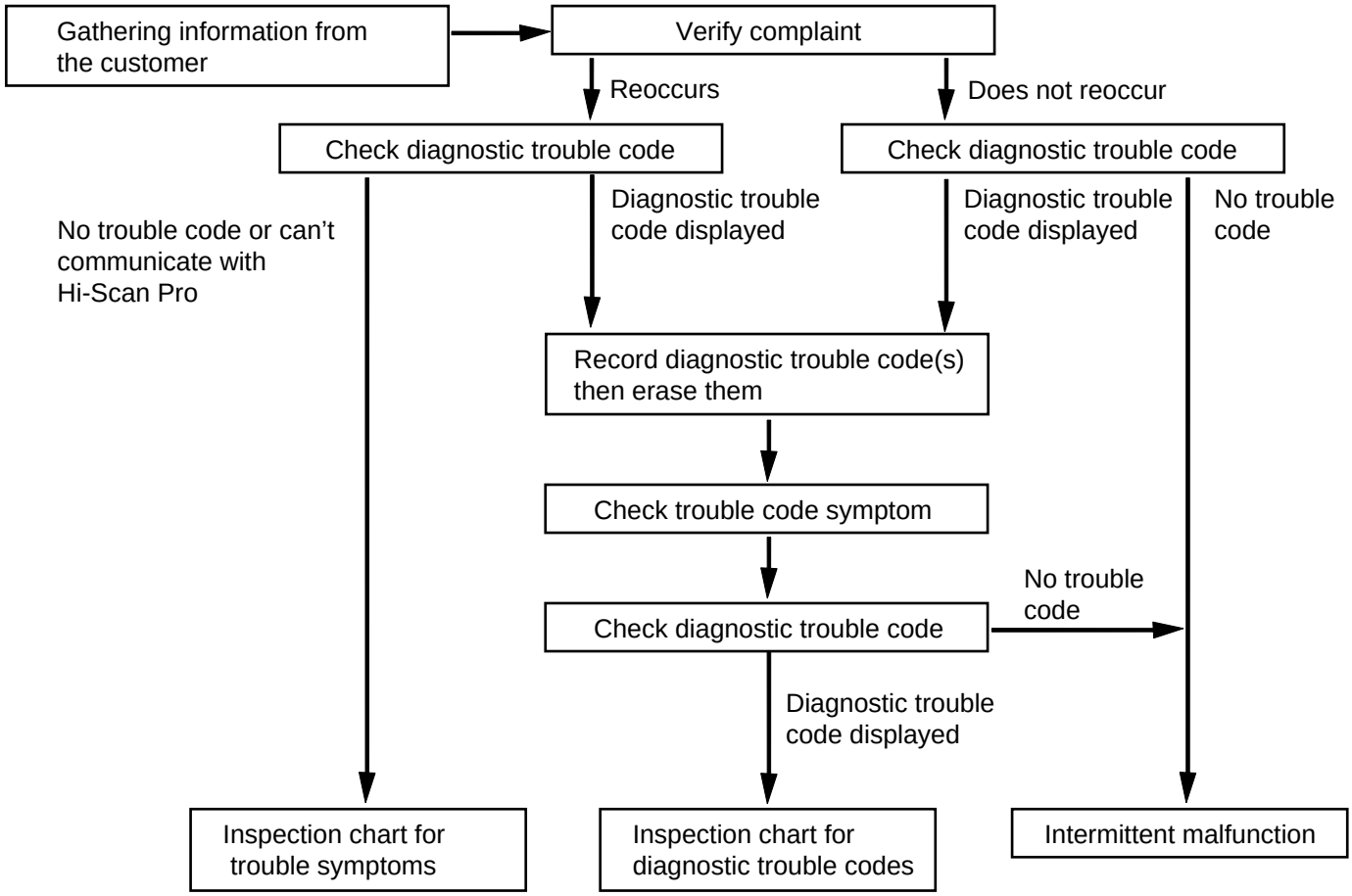
1. Turn the ignition switch off.
2. Connect the Hi-Scan Pro connector to the data link connector located under the crash pad.



ARKF500A

3. Turn the ignition switch on and power on the Hi-Scan Pro.
4. Read DTCs.
5. Find and repair the trouble, and clear the DTCs using Hi-Scan Pro.
6. Disconnect the Hi-Scan Pro.

DIAGNOSTIC TROUBLESHOOTING FLOW



ERA9035A

TERMINAL & CONNECTOR INSPECTION

Be sure to perform "TERMINAL & CONNECTOR INSPECTION" before doing "INSPECTION PROCEDURE" for troubleshooting of each DTC.

1. Visually inspect all connectors related to the affected circuit for damage and secure connection.
2. Inspect terminals for damage and corrosion.

CAUTION

Avoid damaging connectors during the inspection process.

3. Are any problems found?

NO

▶ Go to next step (INSPECTION PROCEDURE).

YES

▶ After repairing the trouble part, check whether DTC occurs or not.

PREPARATION OF INSPECTION

Refer to the following steps while doing "INSPECTION PROCEDURE" which is described in the DTC troubleshooting section

1. Turn the ignition switch to LOCK.
2. Disconnect the battery negative cable 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, BUPT, FIS and SIS.
5. Disconnect the SRSCM connector.

CHECKING OF SHORT OR OPEN CIRCUIT

Refer to the following tips for checking of short or open circuit.

1. Shorting bar is located between the upper and lower side pins of SRSCM connector.
2. When checking the short circuit shorting bar must be opened. Use a plastic clip to put into as a shorting bar opener for disconnecting shorting bar.
3. Use SST Dummy adapter (0957A-1C000) to measure resistance or voltage for checking of short or open circuit.
   Plug it into DAB (CAB, BPT) connector to avoid enlarging or damaging the connector pins.

CLEAR THE DTC AND CHECK THE VEHICLE AGAIN

1. Install the DAB module and connect the DAB connector.
2. Connect the connector of the PAB, SAB, CAB, BPT, BUPT, FIS and SIS.
3. Connect the SRSCM connector.
4. Connect the battery negative cable 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?

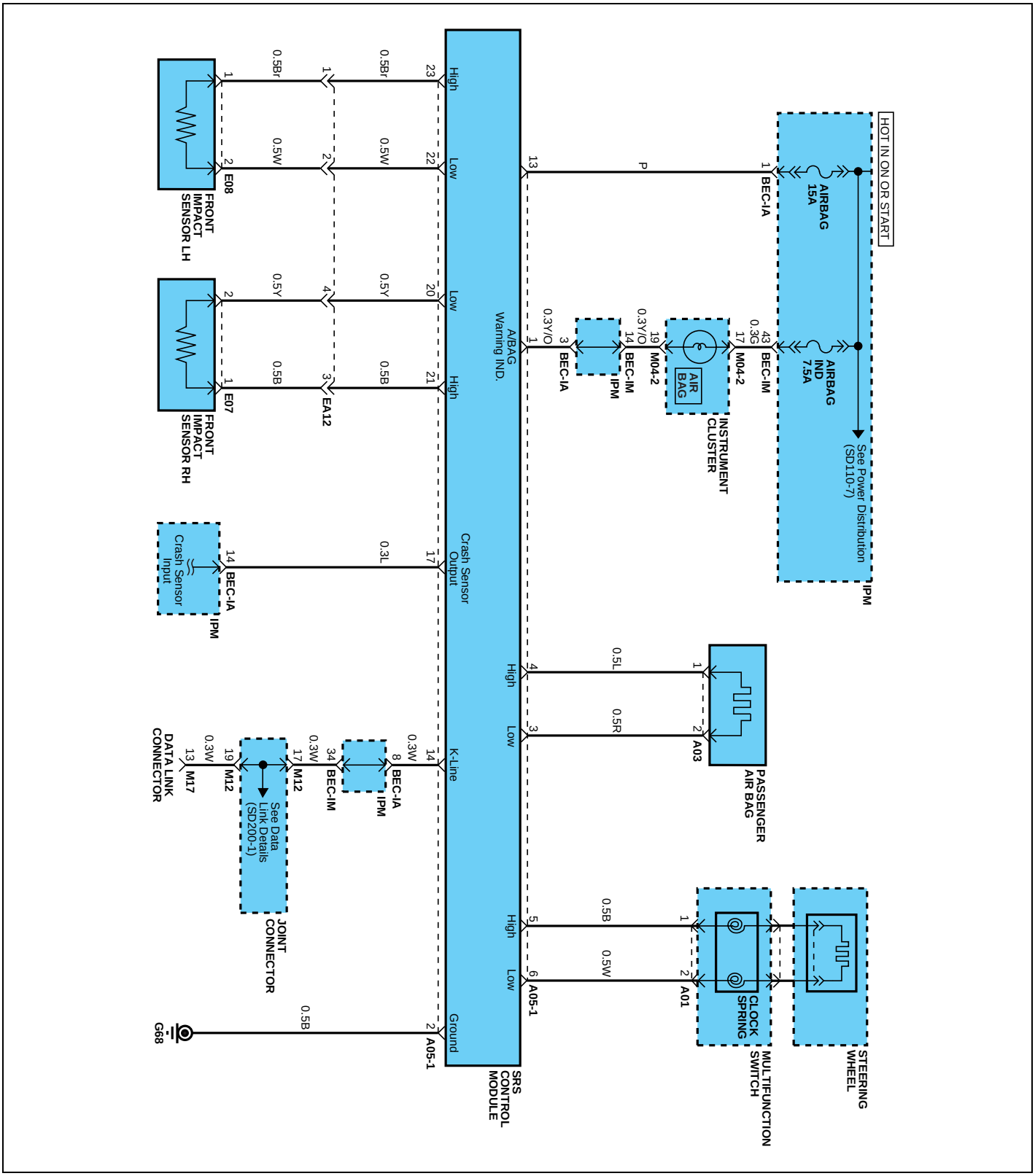
YES

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

NO

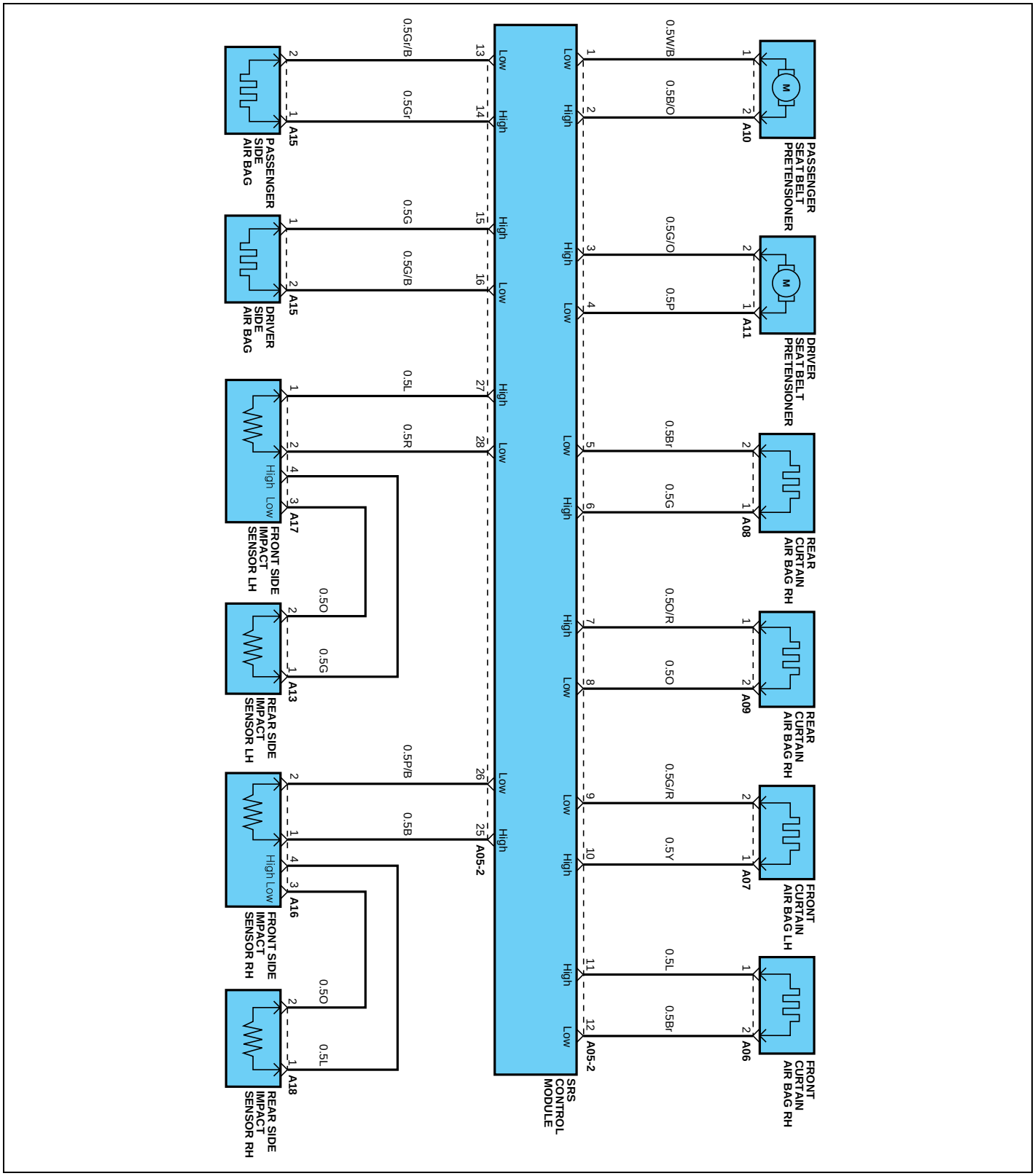
▶ Replace the SRSCM with a new one and then check the vehicle again. At this time, if the vehicle normally operates with a new one, the fault may be the SRSCM. Replace the SRSCM.

CIRCUIT DIAGRAM(1) E478BE9E



LRKG500K

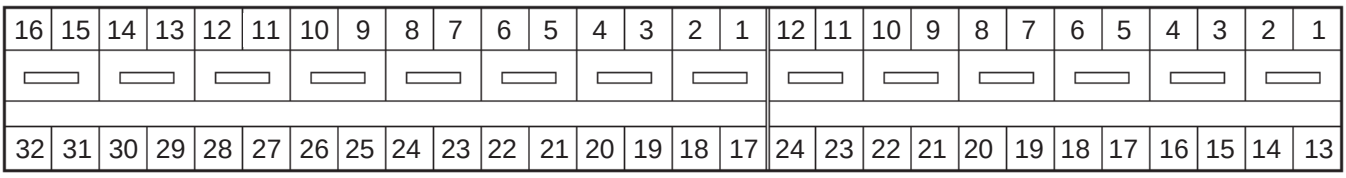
CIRCUIT DIAGRAM(2)



LRKG500L

SRSCM CONNECTOR TERMINAL E895FEC1

SRSCM HARNESS CONNECTOR



CONNECTOR B (A05-2) CONNECTOR A (A05-1)

Shorting bar (▭) : located between the upper side and lower side pins of SRSCM connector.
Note : For short circuit check, shorting bar must be opened. Use a plastic clip as a shorting bar opener for disconnecting shorting bar.

Pin	Function (Connector A)	Pin	Function (Connector B)
1	Airbag Warning Lamp	1	Seat Belt Pretensioner [Front-Passenger] Low
2	Ground	2	Seat Belt Pretensioner [Front-Passenger] High
3	Passenger Airbag Low	3	Seat Belt Pretensioner [Front-Driver] High
4	Passenger Airbag High	4	Seat Belt Pretensioner [Front-Driver] Low
5	Driver Airbag High	5	Curtain Airbag [Rear-Passenger] Low
6	Driver Airbag Low	6	Curtain Airbag [Rear-Passenger] High
7	-	7	Curtain Airbag [Rear-Driver] High
8	-	8	Curtain Airbag [Rear-Driver] Low
9	-	9	Curtain Airbag [Front-Driver] Low
10	-	10	Curtain Airbag [Front-Driver] High
11	-	11	Curtain Airbag [Front-Passenger] High
12	-	12	Curtain Airbag [Front-Passenger] Low
13	Ignition	13	Side Airbag [Front-Passenger] Low
14	K-Line Diagnostic	14	Side Airbag [Front-Passenger] High
15	-	15	Side Airbag [Front-Driver] High
16	-	16	Side Airbag [Front-Driver] Low
17	Crash Output	17	Buckle Pretensioner [Passenger] Low
18	PAD Lamp	18	Buckle Pretensioner [Passenger] High
19	-	19	Buckle Pretensioner [Driver] High
20	Front Impact Sensor [Passenger] Low	20	Buckle Pretensioner [Driver] Low
21	Front Impact Sensor [Passenger] High	21	-
22	Front Impact Sensor [Driver] Low	22	-
23	Front Impact Sensor [Driver] High	23	-
24	PAD Switch	24	-
		25	Side Impact Sensor [Passenger] High
		26	Side Impact Sensor [Passenger] Low
		27	Side Impact Sensor [Driver] High
		28	Side Impact Sensor [Driver] Low
		29	-
		30	-
		31	-
		32	-

LRKG500M

DIAGNOSTIC TROUBLE CODES (DTC)

DTC	FAULT DESCRIPTION	PAGE
B1101	Battery Voltage too High	RT - 46
B1102	Battery Voltage too Low	RT - 46
B1328	Front Impact Sensor [Driver] Defect	RT - 49
B1329	Front Impact Sensor [Driver] Communication Error	RT - 49
B1333	Front Impact Sensor [Passenger] Defect	RT - 49
B1334	Front Impact Sensor [Passenger] Communication Error	RT - 49
B1346	Driver Airbag Resistance too High	RT - 52
B1347	Driver Airbag Resistance too Low	RT - 52
B1348	Driver Airbag Circuit Short to Ground	RT - 55
B1349	Driver Airbag Circuit Short to Battery	RT - 58
B1352	Passenger Airbag Resistance too High	RT - 61
B1353	Passenger Airbag Resistance too Low	RT - 61
B1354	Passenger Airbag Circuit Short to Ground	RT - 64
B1355	Passenger Airbag Circuit Short to Battery	RT - 66
B1361	Seat Belt Pretensioner [Front-Driver] Resistance too High	RT - 68
B1362	Seat Belt Pretensioner [Front-Driver] Resistance too Low	RT - 68
B1363	Seat Belt Pretensioner [Front-Driver] Circuit Short to Ground	RT - 71
B1364	Seat Belt Pretensioner [Front-Driver] Circuit Short to Battery	RT - 73
B1367	Seat Belt Pretensioner [Front-Passenger] Resistance too High	RT - 68
B1368	Seat Belt Pretensioner [Front-Passenger] Resistance too Low	RT - 68
B1369	Seat Belt Pretensioner [Front-Passenger] Circuit Short to Ground	RT - 71
B1370	Seat Belt Pretensioner [Front-Passenger] Circuit Short to Battery	RT - 73
B1378	Side Airbag [Front-Driver] Resistance too High	RT - 76
B1379	Side Airbag [Front-Driver] Resistance too Low	RT - 76
B1380	Side Airbag [Front-Driver] Circuit Short to Ground	RT - 79
B1381	Side Airbag [Front-Driver] Circuit Short to Battery	RT - 81
B1382	Side Airbag [Front-Passenger] Resistance too High	RT - 76
B1383	Side Airbag [Front-Passenger] Resistance too Low	RT - 76
B1384	Side Airbag [Front-Passenger] Circuit Short to Ground	RT - 79
B1385	Side Airbag [Front-Passenger] Circuit Short to Battery	RT - 81
B1398	Squib Interconnection Fault	RT - 83
B1400	Side Impact Sensor [Front-Driver] Defect	RT - 84
B1403	Side Impact Sensor [Front-Passenger] Defect	RT - 84
B1409	Side Impact Sensor [Front-Driver] Communication Error	RT - 84
B1410	Side Impact Sensor [Front-Passenger] Communication Error	RT - 84
B1412	Side Impact Sensor [Rear-Driver] Communication Error	RT - 87
B1413	Side Impact Sensor [Rear-Passenger] Communication Error	RT - 87

DTC	FAULT DESCRIPTION	PAGE
B2500	SRS Warning Lamp Fault	RT - 133
B2505	Passenger Airbag Deactivation Lamp Fault	RT - 137

DTC B1101 BATTERY VOLTAGE TOO HIGH
DTC B1102 BATTERY VOLTAGE TOO LOW

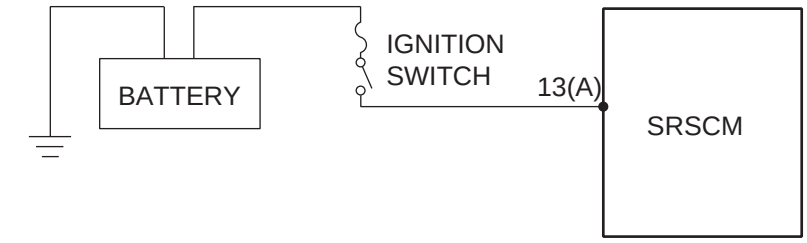
DTC DESCRIPTION E806CDA0

The SRSCM sets above DTC(s) if it detects that the battery voltage of restraints system is too high or too low. When the voltage returns to normal, the SRS warning light automatically goes off and a malfunction is no longer indicated.

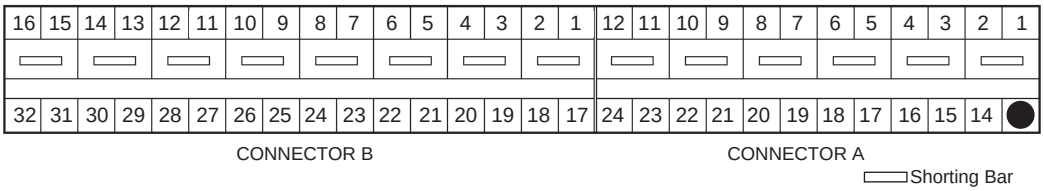
DTC DETECTING CONDITION E4C8D9EC

DTC	Condition	Probable cause
B1101	Battery Voltage > 16.0 V for 4 seconds after IG ON	• Battery • Generator • Wiring Harness • SRSCM
B1102	Battery Voltage < 9.0 V for 4 seconds after IG ON	

SCHEMATIC DIAGRAM E721E674



[HARNESS CONNECTORS]



SRSCM

LRJF500N

SPECIFICATION E28A1D31

Voltage : 9.0 ~ 16.0 V

TERMINAL & CONNECTOR INSPECTION E4AA57E4

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E23B343C

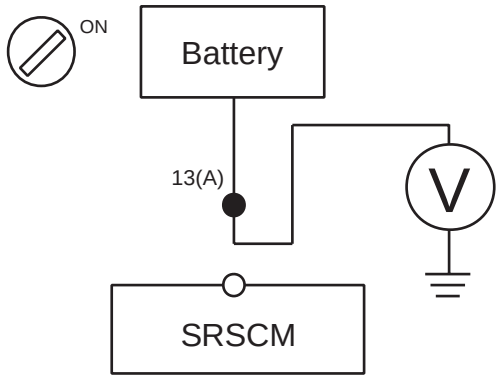
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SOURCE VOLTAGE

   1) Turn the ignition switch to ON.

   2) Measure voltage between the terminal 13(A) of SRSCM harness connector and chassis ground.

Specification (voltage) : 9.0 ~ 16.0 V



ERRF500Q

   3) Is the measured voltage within specification?

NO

▶ Check the battery.

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 THE BATTERY

   1) Check the battery.
   ● Refer to "EE" group in this SERVICE MANUAL.
   Is the battery normal?

YES

▶ Check the generator.

NO

▶ Repair or replace the battery.(Refer to "EE" group in this SERVICE MANUAL)

4. CHECK GENERATOR

1) Check the generator.
● Refer to "EE" group in this SERVICE MANUAL.
Is the generator normal?

YES

▶ Check wiring harness.

NO

▶ Repair or replace the generator.(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

▶ Check the DTC again.

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 cable 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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?

YES

▶ Perform the troubleshooting procedures associated with those codes.

NO

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

DTC B1328 FRONT IMPACT SENSOR [DRIVER] DEFECT
DTC B1329 FRONT IMPACT SENSOR [DRIVER] COMMUNICATION ERROR
DTC B1333 FRONT IMPACT SENSOR [PASSENGER] DEFECT
DTC B1334 FRONT IMPACT SENSOR [PASSENGER] COMMUNICATION ERROR

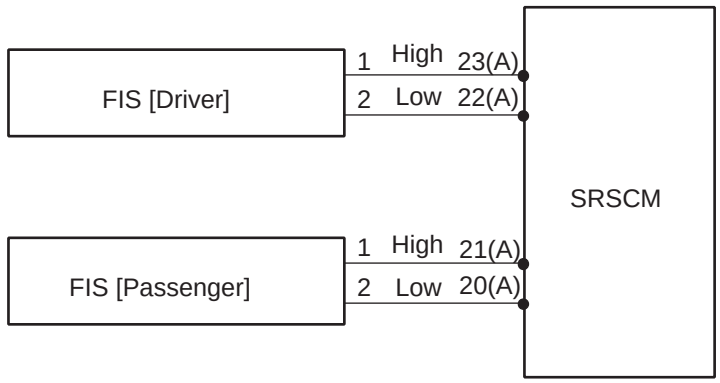
DTC DESCRIPTION E3C9A3D8

The detecting system for front crash consists of the SRSCM and two Front Impact Sensors (FIS). The SRSCM sets above DTC(s) if it detects that any FIS is defective or there is communication error between any FIS and the SRSCM.

DTC DETECTING CONDITION EDF95682

DTC	Condition	Probable cause
B1328 B1329 B1333 B1334	• Open between FIS and SRSCM • Front Impact Sensor(FIS) Malfunction • SRSCM Malfunction	• Wiring Harness • Front Impact Sensor(FIS) • SRSCM

SCHEMATIC DIAGRAM E84C2F5D



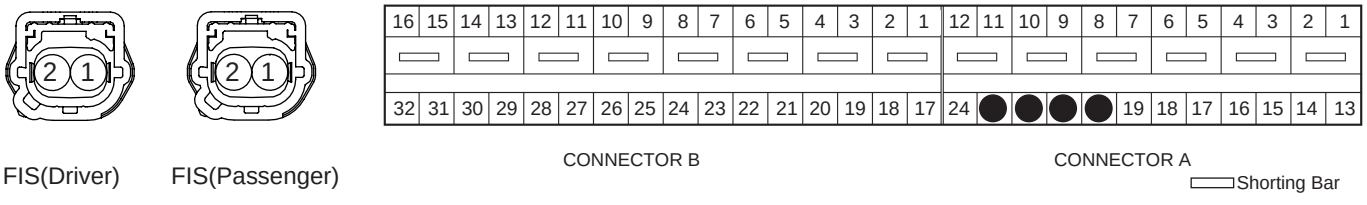
FIS [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 23(A)	FIS High
2	SRSCM Terminal 22(A)	FIS Low

FIS [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 21(A)	FIS High
2	SRSCM Terminal 20(A)	FIS Low

[HARNESS CONNECTOR]



LRJF200A

TERMINAL & CONNECTOR INSPECTION E4AE69D7

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E20F9245

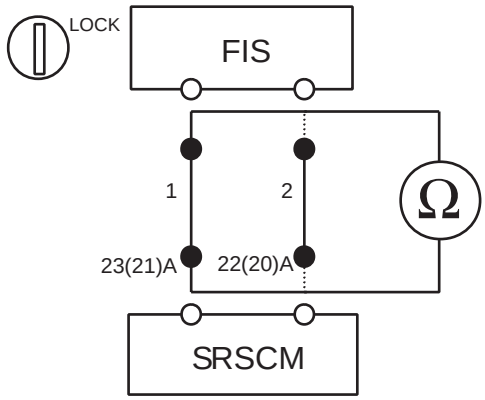
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK FIS CIRCUIT

   1) Measure resistance between the terminal 1 of FIS harness connector and the terminal A 23(21) of SRSCM harness connector.

   2) Measure resistance between the terminal 2 of FIS harness connector and the terminal A 22(20) of SRSCM harness connector.

Specification (resistance) : below 1 Ω



KRRE500W

   3) Is the measured resistance within specification?

YES

▶Check Front Impact Sensor.

NO

▶ Repair or replace the wiring harness between the FIS and the SRSCM.

3. CHECK FRONT IMPACT SENSOR

   1) Replace the front impact sensor(FIS) with a new one.
   ● Refer to "Front Impact Sensor(FIS)" 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 FIS?

YES

▶ Go to next step.

NO

▶ Replace the Front Impact Sensor(FIS).

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1346 DRIVER AIRBAG RESISTANCE TOO HIGH
DTC B1347 DRIVER AIRBAG RESISTANCE TOO LOW

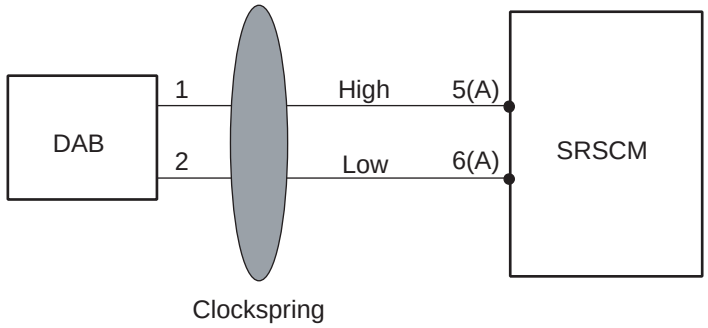
DTC DESCRIPTION ED4E8E6B

The Driver Airbag circuit consists of the SRSCM, Clockspring and the Driver Airbag (DAB). The SRSCM sets above DTC(s) if it detects that the resistance of DAB squib is too high or low.

DTC DETECTING CONDITION E60056B5

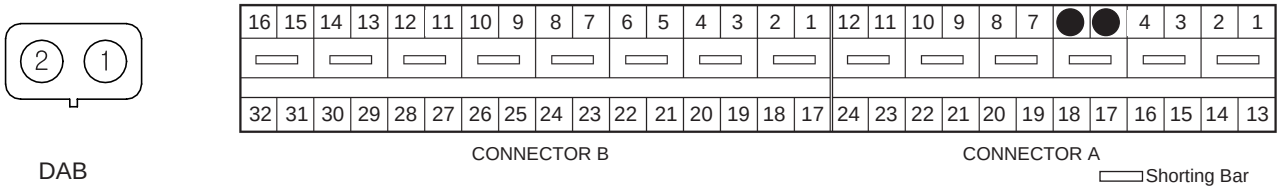
DTC	Condition	Probable cause
B1346 B1347	• Too high or low resistance between DAB high(+) and DAB low (-) • Driver Airbag (DAB) Malfunction • Clockspring Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Driver Airbag (DAB) squib • Clockspring • SRSCM

SCHEMATIC DIAGRAM E48B9398



Terminal	Connected to	Function
1	SRSCM Terminal 5(A)	DAB High
2	SRSCM Terminal 6(A)	DAB Low

[HARNESS CONNECTOR]



LRJF200B

SPECIFICATION E9EE5FD7

DAB resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION E176CAA9

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E0451518

1. PREPARATION
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK DAB RESISTANCE

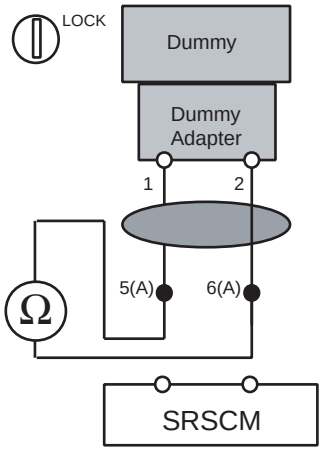
CAUTION

Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

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 5 and 6 of SRSCM harness connector(A).

Specification (resistance) : 1.6 ~ 4.7 Ω



ERRF500T

3) Is the measured resistance within specification?

NO

▶ Check open circuit.

YES

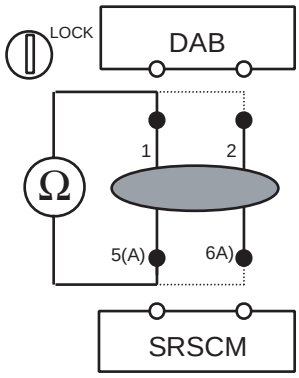
▶ Replace the Driver Airbag(DAB) module.

3. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 1 of DAB harness connector and the terminal 5 of SRSCM harness connector(A).

2) Measure resistance between the terminal 2 of DAB harness connector and the terminal 6 of SRSCM harness connector(A).

Specification (resistance) : below 1 Ω



ERRF501X

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

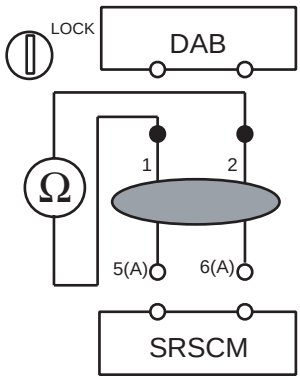
NO

▶ 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) : ∞ Ω



ERRF501Y

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1348 DRIVER AIRBAG CIRCUIT SHORT TO GROUND

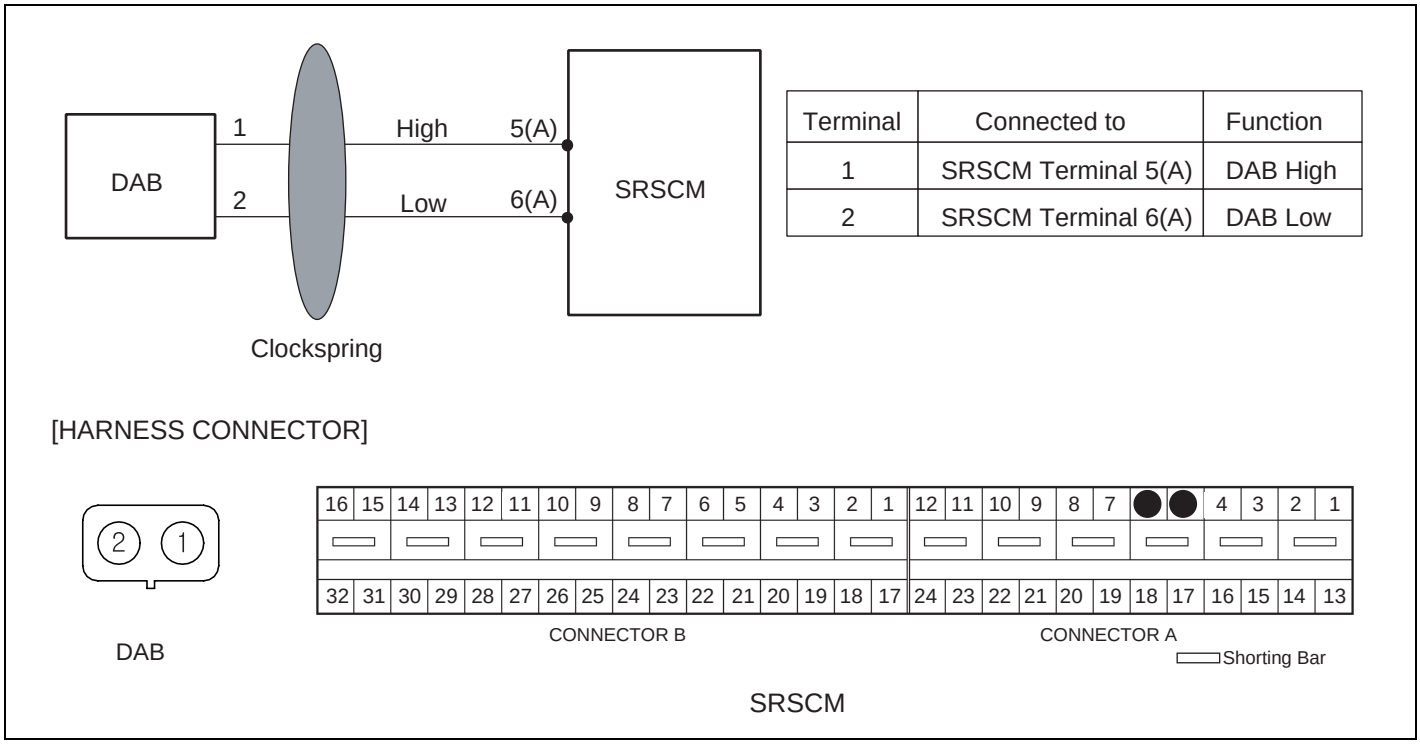
DTC DESCRIPTION E198A298

The Driver Airbag circuit consists of the SRSCM, Clockspring and the Driver Airbag (DAB). The SRSCM sets above DTC(s) if it detects short to ground on the DAB circuit.

DTC DETECTING CONDITION EB9A6FB9

DTC	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 E655CAC8



Terminal	Connected to	Function
1	SRSCM Terminal 5(A)	DAB High
2	SRSCM Terminal 6(A)	DAB Low

LRJF200B

TERMINAL & CONNECTOR INSPECTION E5050E08

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

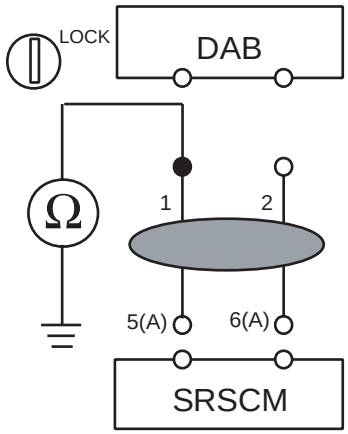
INSPECTION PROCEDURE ED7EBBE0

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

   1) Measure resistance between the terminal 1 of DAB harness connector and chassis ground.

Specification (resistance) : infinite



KRRE501B

   2) Is the measured resistance within specification?

YES

▶Check the DAB Module.

NO

▶ Repair or replace the wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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

▶ Check the clockspring.

NO

▶ Replace the Driver Airbag(DAB).

4. CHECK THE CLOCKSPRING

1) Check the clockspring.
Is the clockspring normal?

YES

▶ Go to next step.

NO

▶ Replace the clockspring.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1349 DRIVER AIRBAG CIRCUIT SHORT TO BATTERY

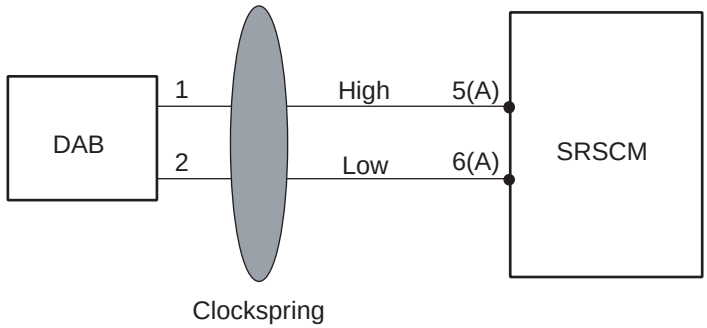
DTC DESCRIPTION EB558E8F

The Driver Airbag circuit consists of the SRSCM, Clockspring and the Driver Airbag (DAB). The SRSCM sets above DTC(s) if it detects short to battery line on the DAB circuit.

DTC DETECTING CONDITION EB2657C9

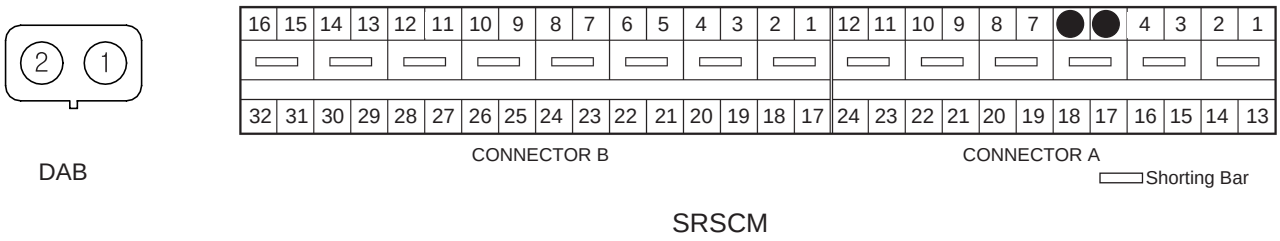
DTC	Condition	Probable cause
B1349	• Short to battery line between DAB and clockspring • Short to battery line between clockspring and SRSCM • Driver Airbag (DAB) Malfunction • Clockspring Malfunction • SRSCM Malfunction	• Short to battery line on wiring harness • Driver Airbag (DAB) squib • Clockspring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

SCHEMATIC DIAGRAM E16C7422



Terminal	Connected to	Function
1	SRSCM Terminal 5(A)	DAB High
2	SRSCM Terminal 6(A)	DAB Low

[HARNESS CONNECTOR]



LRJF200B

TERMINAL & CONNECTOR INSPECTION E793011B

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EAECCDAF

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

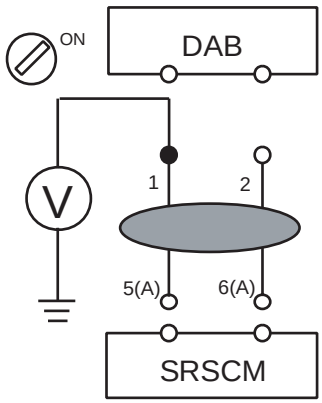
2. CHECK SHORT TO BATTERY LINE

   1) Connect the battery negative cable 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 0 V



KRRE501C

   4) Is the measured voltage within specification?

YES

▶ Check the DAB module.

NO

▶ Repair or replace the wiring harness between the DAB and the clockspring or between the clockspring and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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

▶ Check the clockspring.

NO

▶ Replace the Driver Airbag(DAB).

4. CHECK THE CLOCKSPRING

1) Check the clockspring.
Is the clockspring normal?

YES

▶ Go to next step.

NO

▶ Replace the clockspring.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1352 PASSENGER AIRBAG RESISTANCE TOO HIGH
DTC B1353 PASSENGER AIRBAG RESISTANCE TOO LOW

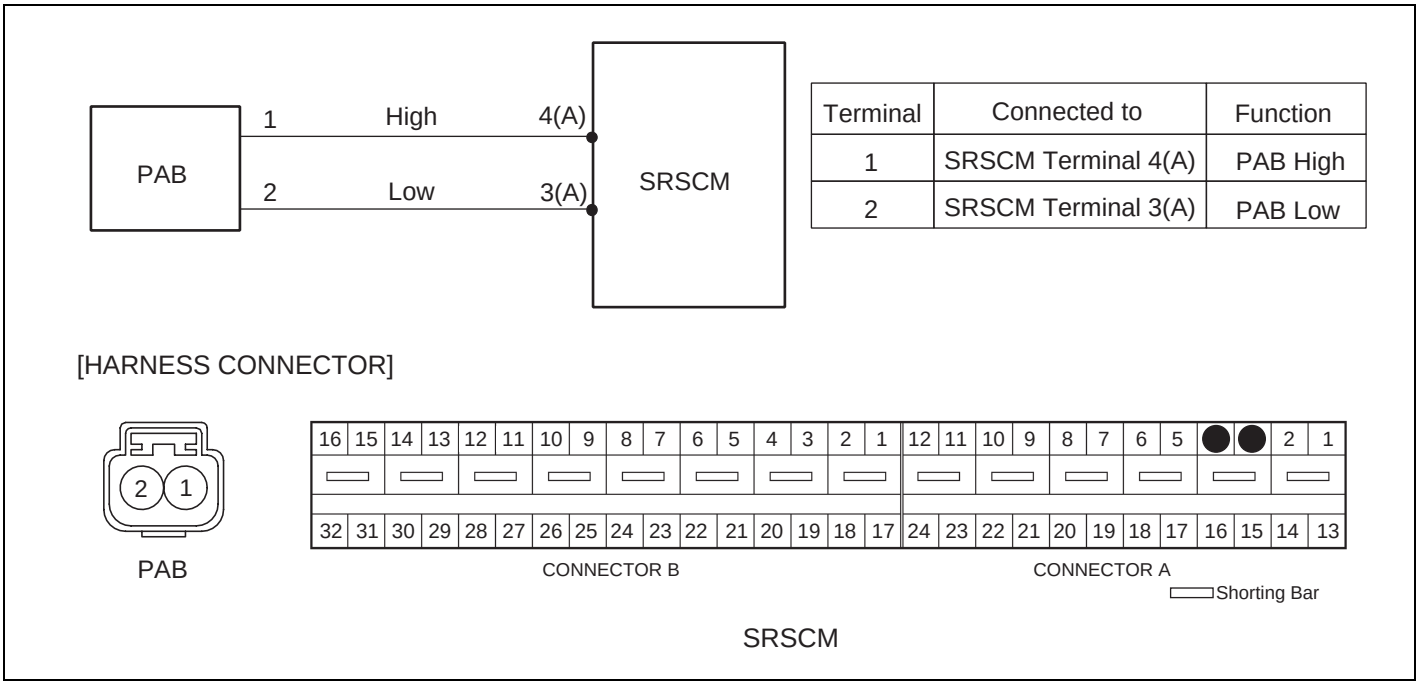
DTC DESCRIPTION E5DCAD68

The Passenger Airbag circuit consists of the SRSCM and the Passenger Airbag (PAB). The SRSCM sets above DTC(s) if it detects that the resistance of PAB squib is too high or low.

DTC DETECTING CONDITION E7C2F927

DTC	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 E53AEBA1



Terminal	Connected to	Function
1	SRSCM Terminal 4(A)	PAB High
2	SRSCM Terminal 3(A)	PAB Low

ERNF200C

SPECIFICATION EFC88DFD

PAB resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION E70084DB

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E26AA0E9

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK PAB RESISTANCE

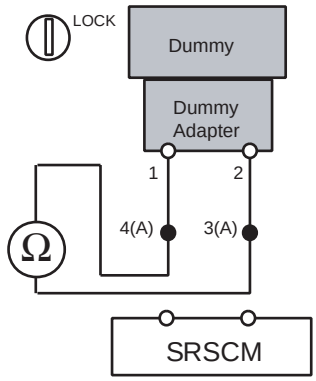
   CAUTION

   Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

   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 4 and 3 of SRSCM harness connector(A).

Specification (resistance) : 1.6 ~ 4.7 Ω



ERNF200D

   3) Is the measured resistance within specification?

YES

▶ Replace the Passenger Airbag(PAB) module.

NO

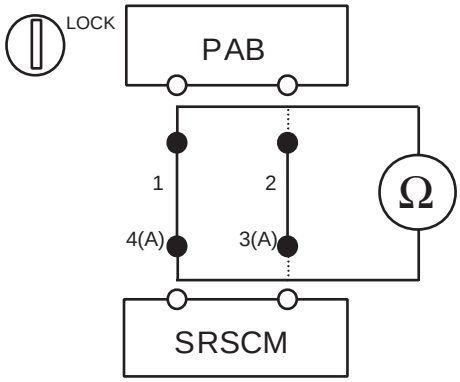
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

   1) Measure resistance between the terminal 1 of PAB harness connector and the terminal 4 of SRSCM harness connector(A).

   2) Measure resistance between the terminal 2 of PAB harness connector and the terminal 3 of SRSCM harness connector(A).

Specification (resistance) : below 1 Ω



ERNF200E

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

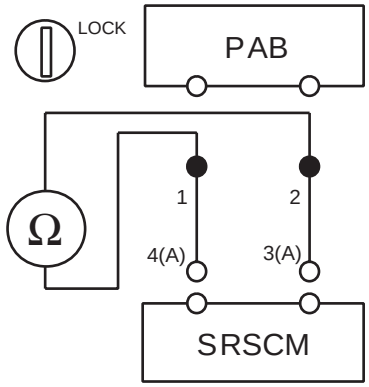
NO

▶ 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



ERNF200F

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the PAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1354 PASSENGER AIRBAG CIRCUIT SHORT TO GROUND

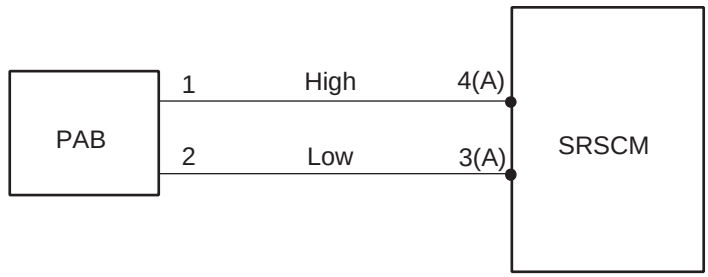
DTC DESCRIPTION E4976BC2

The Passenger Airbag circuit consists of the SRSCM and the Passenger Airbag (PAB). The SRSCM sets above DTC(s) if it detects short to ground on the PAB circuit.

DTC DETECTING CONDITION E5A3D171

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

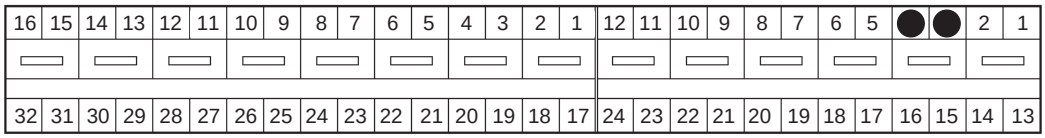
SCHEMATIC DIAGRAM E75FE0DC



Terminal	Connected to	Function
1	SRSCM Terminal 4(A)	PAB High
2	SRSCM Terminal 3(A)	PAB Low

[HARNESS CONNECTOR]

PAB



CONNECTOR B CONNECTOR A

Shorting Bar

SRSCM

ERNF200C

TERMINAL & CONNECTOR INSPECTION E9351A83

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

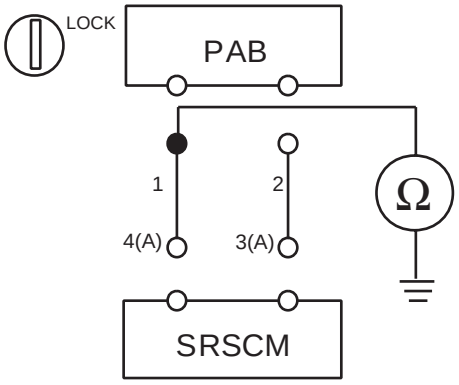
INSPECTION PROCEDURE E61736A9

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

1) Measure resistance between the terminal 1 of PAB harness connector and chassis ground.

Specification (resistance) : infinite



ERNF500O

2) Is the measured resistance within specification?

YES

▶ Check the PAB Module.

NO

▶ Repair or replace the wiring harness between the PAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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

▶ Go to next step.

NO

▶ Replace PAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1355 PASSENGER AIRBAG CIRCUIT SHORT TO BATTERY

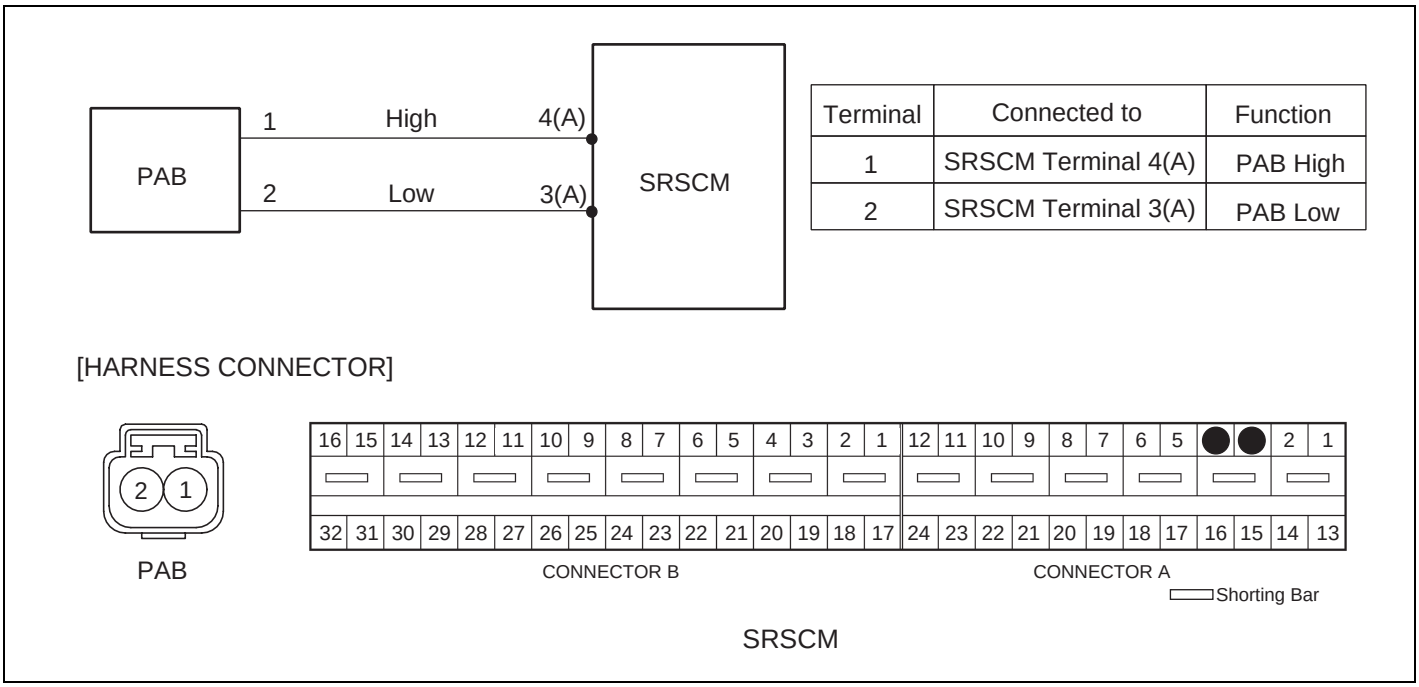
DTC DESCRIPTION E4EB381D

The Passenger Airbag circuit consists of the SRSCM and the Passenger Airbag (PAB). The SRSCM sets above DTC(s) if it detects short to battery line on the PAB circuit.

DTC DETECTING CONDITION EA224A99

DTC	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 E159BD39



Terminal	Connected to	Function
1	SRSCM Terminal 4(A)	PAB High
2	SRSCM Terminal 3(A)	PAB Low

ERNF200C

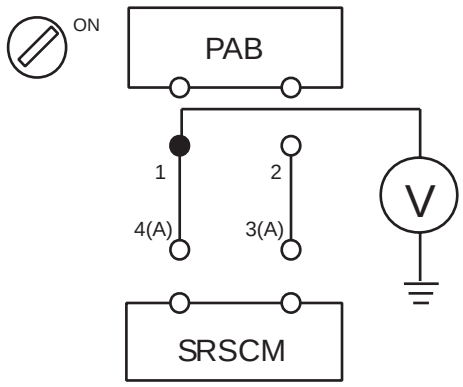
TERMINAL & CONNECTOR INSPECTION E2662691

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EE356797

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)
2. CHECK SHORT TO BATTERY LINE
   1) Connect the battery negative cable 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 0 V



ERNF500P

4) Is the measured voltage within specification?

YES

▶ Check the PAB Module.

NO

▶ Repair the short to battery line circuit on wiring harness between the PAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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

▶ Go to next step.

NO

▶ Replace PAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1361 SEAT BELT PRETENSIONER [FRONT-DRIVER] RESISTANCE TOO HIGH
DTC B1362 SEAT BELT PRETENSIONER [FRONT-DRIVER] RESISTANCE TOO LOW
DTC B1367 SEAT BELT PRETENSIONER [FRONT-PASSENGER] RESISTANCE TOO HIGH
DTC B1368 SEAT BELT PRETENSIONER [FRONT-PASSENGER] RESISTANCE TOO LOW

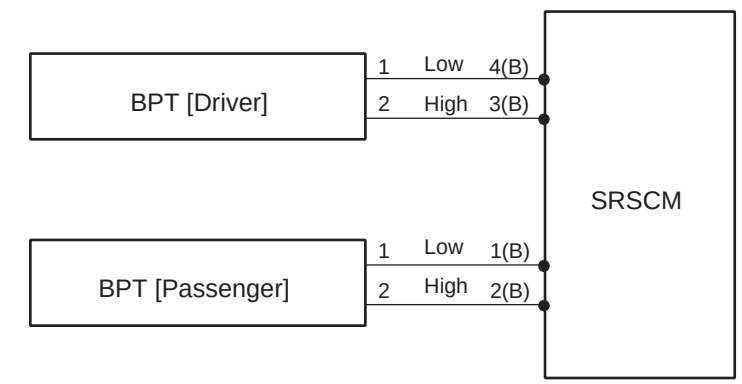
DTC DESCRIPTION E398BED6

The Seat Belt Pretensioner circuit consists of the SRSCM and two Seat Belt Pretensioners (BPT).
The SRSCM sets above DTC(s) if it detects that the resistance of BPT squib is too high or low.

DTC DETECTING CONDITION E81E9730

DTC	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 E3442069



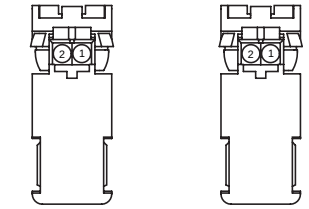
BPT [Driver]

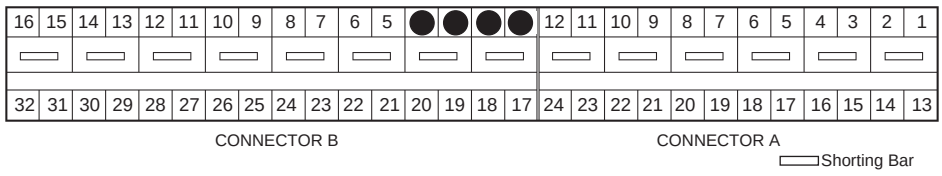
Terminal	Connected to	Function
1	SRSCM Terminal 4(B)	BPT Low
2	SRSCM Terminal 3(B)	BPT High

BPT [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 1(B)	BPT Low
2	SRSCM Terminal 2(B)	BPT High

[HARNESS CONNECTOR]





SRSCM

BRKG500Q

SPECIFICATION E697ADE1

BPT resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION EDFD8655

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE ECB18D29

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK BPT RESISTANCE

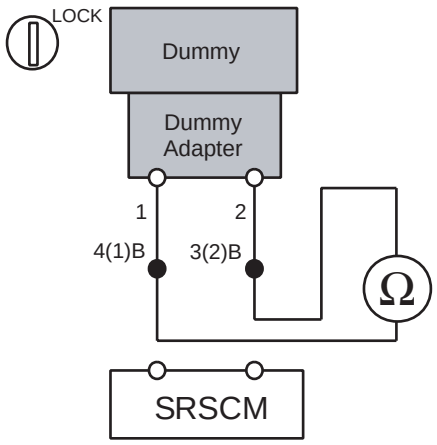
   CAUTION

   Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

   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 3(2) and 4(1) of SRSCM harness connector(B).

Specification (resistance) : 1.6 ~ 4.7 Ω



LRKG500X

   3) Is the measured resistance within specification?

YES

▶ Replace the Seat Belt Pretensioner(BPT) module.

NO

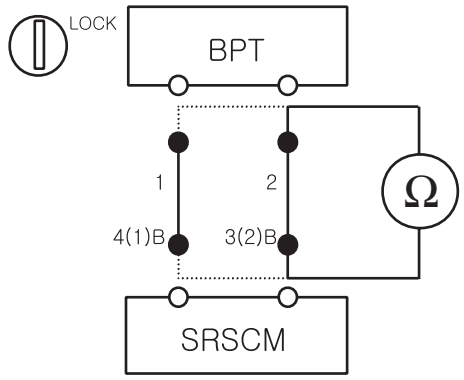
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

   1) Measure resistance between the terminal 2 of BPT harness connector and the terminal 3(2) of SRSCM harness connector(B).

   2) Measure resistance between the terminal 1 of BPT harness connector and the terminal 4(1) of SRSCM harness connector(B).

Specification (resistance) : below 1 Ω



ARKF205C

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

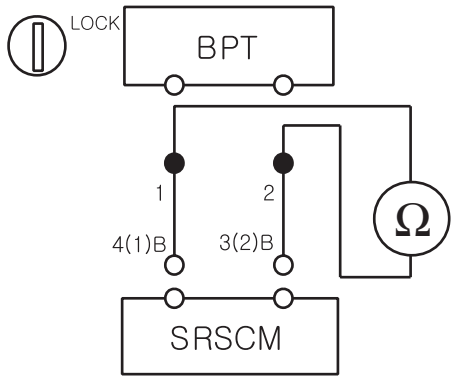
NO

▶ 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



ARKF205D

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the BPT and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1363 SEAT BELT PRETENSIONER [FRONT-DRIVER] CIRCUIT SHORT TO GROUND
DTC B1369 SEAT BELT PRETENSIONER [FRONT-PASSENGER] CIRCUIT SHORT TO GROUND

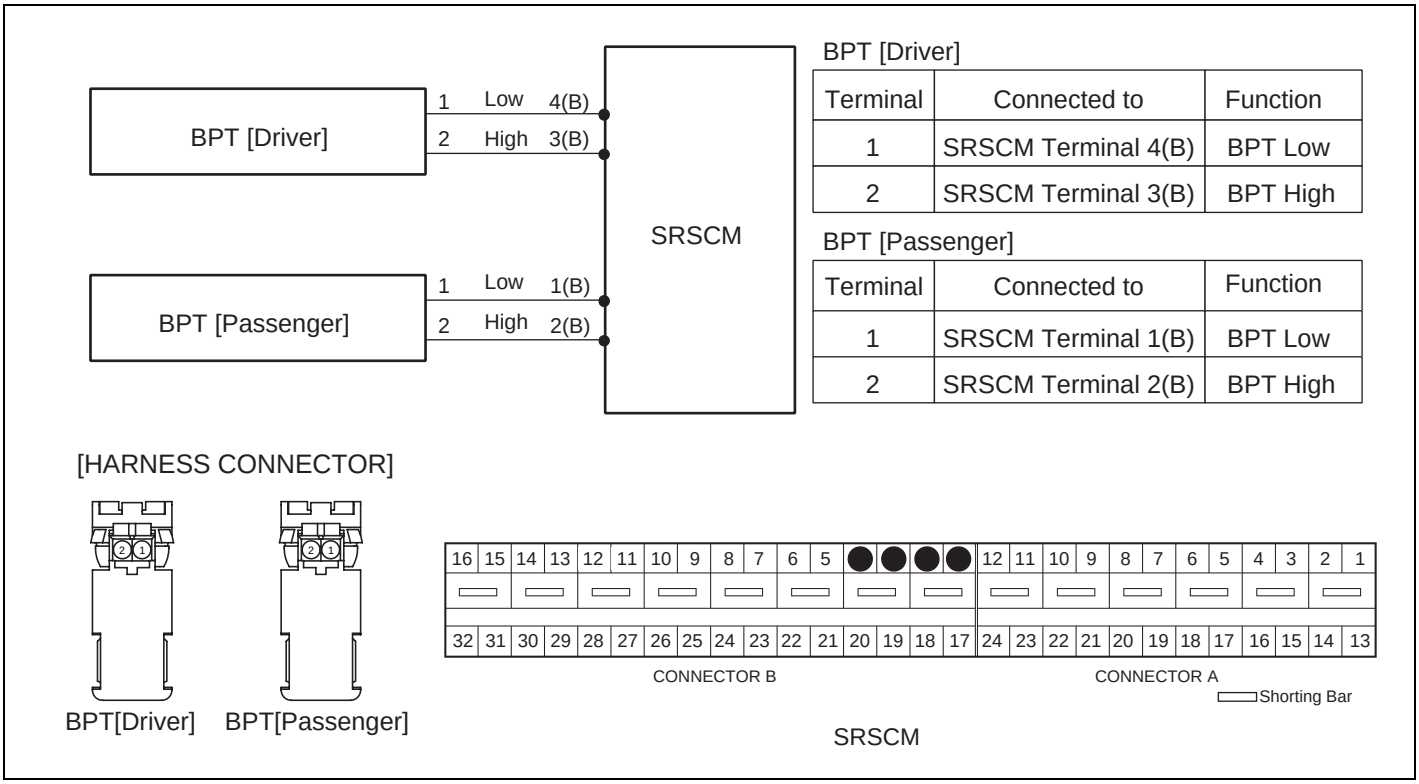
DTC DESCRIPTION E945F662

The Seat Belt Pretensioner consists of the SRSCM and two Seat Belt Pretensioners (BPT). The SRSCM sets above DTC(s) if it detects short to ground on the BPT circuit.

DTC DETECTING CONDITION E3D1AF72

DTC	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 E1953BC7



BRKG500Q

TERMINAL & CONNECTOR INSPECTION E00E64F5

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EA96CAAE

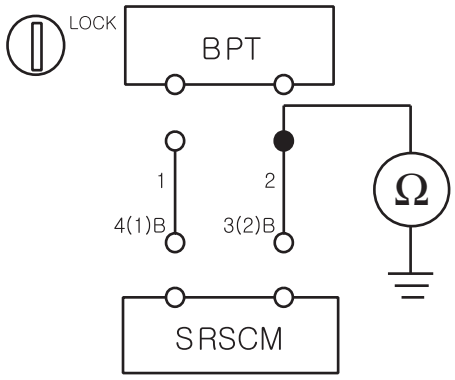
1. PREPARATION

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

1) Measure resistance between the terminal 2 of BPT harness connector and chassis ground.

Specification (resistance) : infinite



ARKF205E

2) Is the measured resistance within specification?

YES

▶Check the BPT Module.

NO

▶ Repair or replace the wiring harness between the BPT and the SRSCM.

3. CHECK THE BPT MODULE

1) Replace the Belt Pretensioner (BPT) with a new one.
● Refer to "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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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 Belt Pretensioner (BPT)?

YES

▶Go to next step.

NO

▶Replace BPT module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1364 SEAT BELT PRETENSIONER [FRONT-DRIVER] CIRCUIT SHORT TO BATTERY
DTC B1370 SEAT BELT PRETENSIONER [FRONT-PASSENGER] CIRCUIT SHORT TO BATTERY

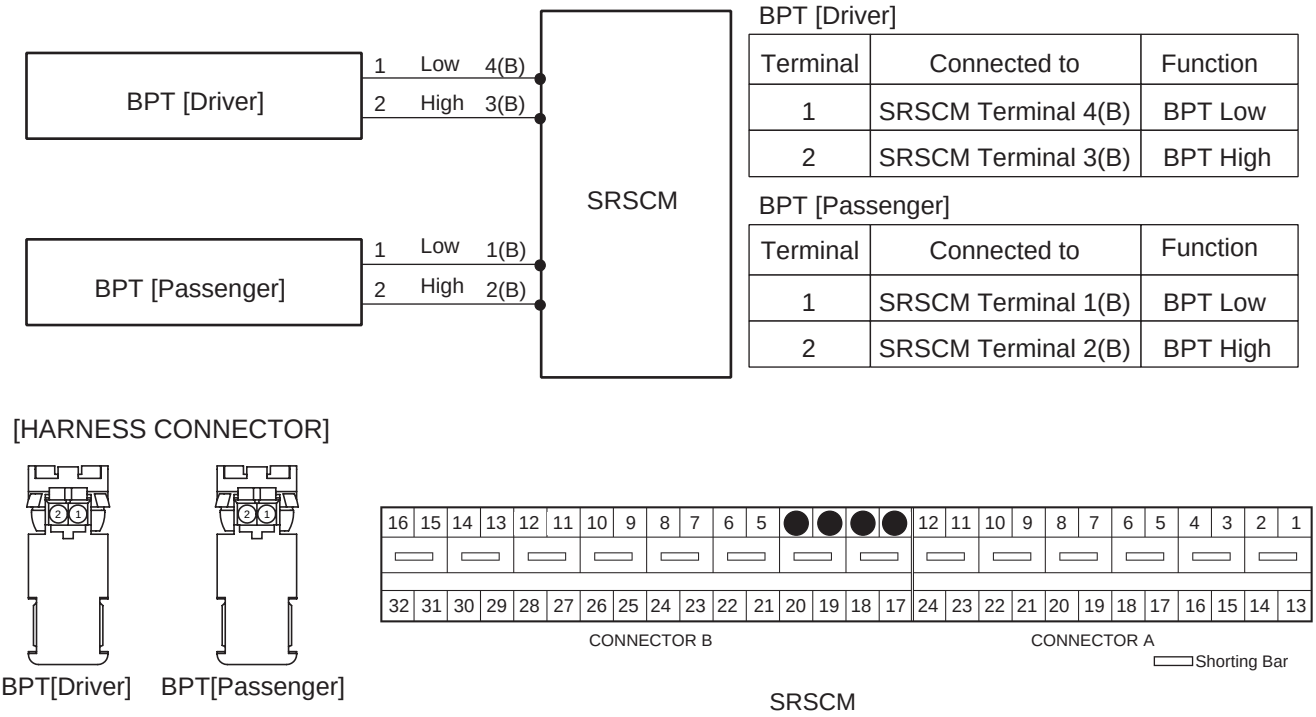
DTC DESCRIPTION E1D174AC

The Seat Belt Pretensioner consists of the SRSCM and two Seat Belt Pretensioners (BPT). The SRSCM sets above DTC(s) if it detects short to battery line on the BPT circuit.

DTC DETECTING CONDITION EEADAF3D

DTC	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 E0BCAD6B



BPT [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 4(B)	BPT Low
2	SRSCM Terminal 3(B)	BPT High

BPT [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 1(B)	BPT Low
2	SRSCM Terminal 2(B)	BPT High

BRKG500Q

TERMINAL & CONNECTOR INSPECTION EA92B5AC

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E07A4F22

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

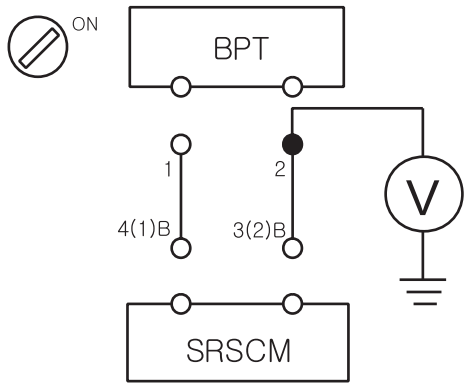
2. CHECK SHORT TO BATTERY LINE

   1) Connect the battery negative cable to the battery.

   2) Turn the ignition switch to ON.

   3) Measure voltage between the terminal 2 of BPT harness connector and chassis ground.

Specification (voltage) : Approximately 0 V



ARKF205F

   4) Is the measured voltage within specification?

YES

▶Check the BPT Module.

NO

▶Repair the short to battery line circuit on wiring harness between the BPT and the SRSCM.

3. CHECK THE BPT MODULE

   1) Replace the Belt Pretensioner (BPT) with a new one.
      ● Refer to "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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Belt Pretensioner (BPT)?

YES

▶ Go to next step.

NO

▶ Replace BPT module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1378 SIDE AIRBAG [FRONT-DRIVER] RESISTANCE TOO HIGH
DTC B1379 SIDE AIRBAG [FRONT-DRIVER] RESISTANCE TOO LOW
DTC B1382 SIDE AIRBAG [FRONT-PASSENGER] RESISTANCE TOO HIGH
DTC B1383 SIDE AIRBAG [FRONT-PASSENGER] RESISTANCE TOO LOW

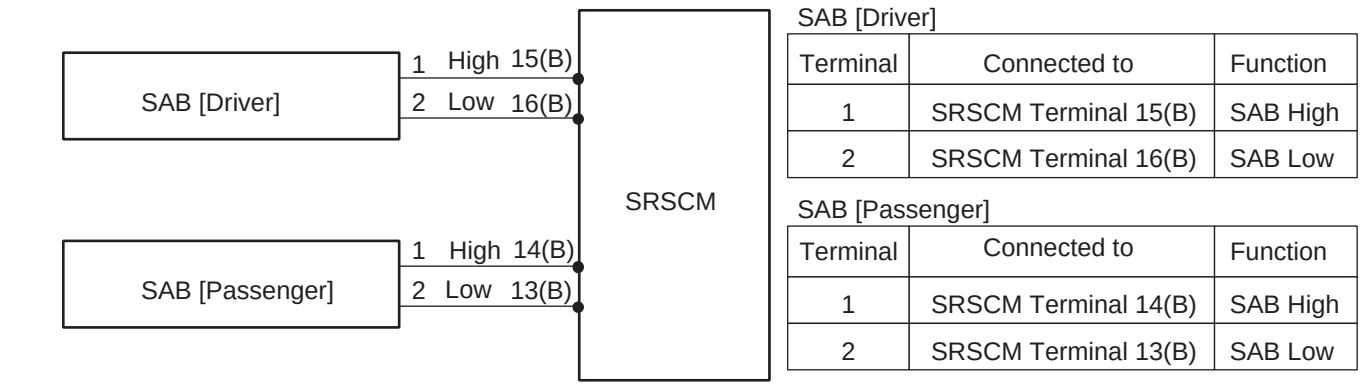
DTC DESCRIPTION E0056552

The Side Airbag circuit consists of the SRSCM and two Side Airbags (SAB). The SRSCM sets above DTC(s) if it detects that the resistance of SAB squib is too high or low.

DTC DETECTING CONDITION EDEBA76E

DTC	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 E0DF2DD3



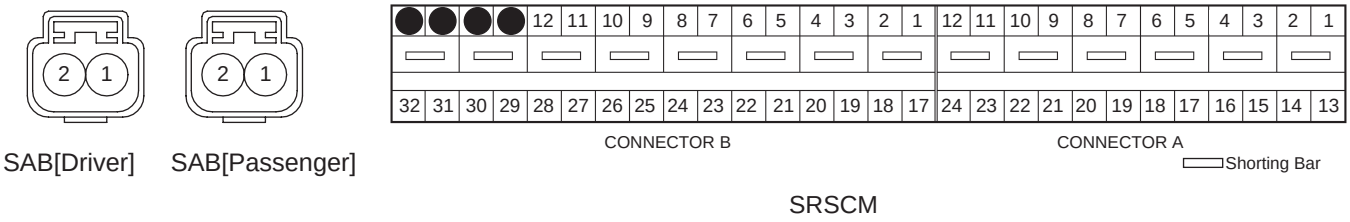
SAB [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 15(B)	SAB High
2	SRSCM Terminal 16(B)	SAB Low

SAB [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 14(B)	SAB High
2	SRSCM Terminal 13(B)	SAB Low

[HARNESS CONNECTOR]



LRKG500S

SPECIFICATION EE2D7B8A

SAB resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION E0F82460

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EA703F3D

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SAB RESISTANCE

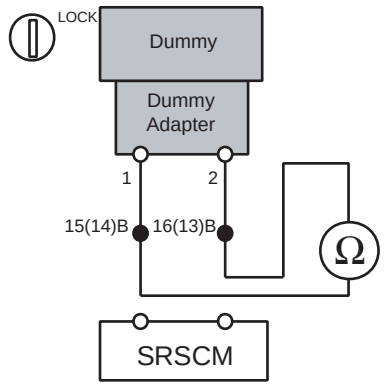
   CAUTION

   Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

   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 15(14) and 16(13) of SRSCM harness connector(B).

Specification (resistance) : 1.6 ~ 4.7 Ω



LRKG500Y

   3) Is the measured resistance within specification?

YES

▶ Replace the Side Airbag(SAB) module.

NO

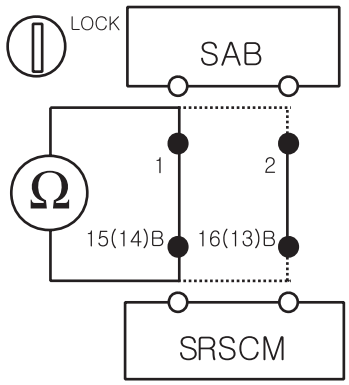
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

   1) Measure resistance between the terminal 1 of SAB harness connector and the terminal 15(14) of SRSCM harness connector(B).

   2) Measure resistance between the terminal 2 of SAB harness connector and the terminal 16(13) of SRSCM harness connector(B).

Specification (resistance) : below 1 Ω



ARKF206C

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

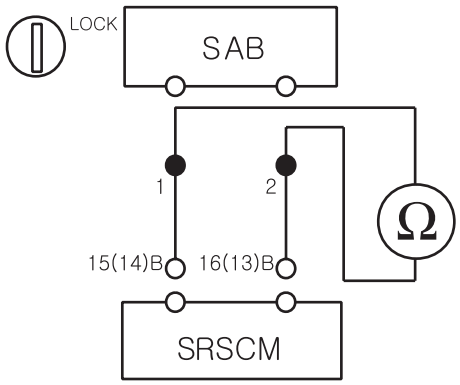
NO

▶ 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



ARKF206D

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the SAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1380 SIDE AIRBAG [FRONT-DRIVER] CIRCUIT SHORT TO GROUND
DTC B1384 SIDE AIRBAG [FRONT-PASSENGER] CIRCUIT SHORT TO GROUND

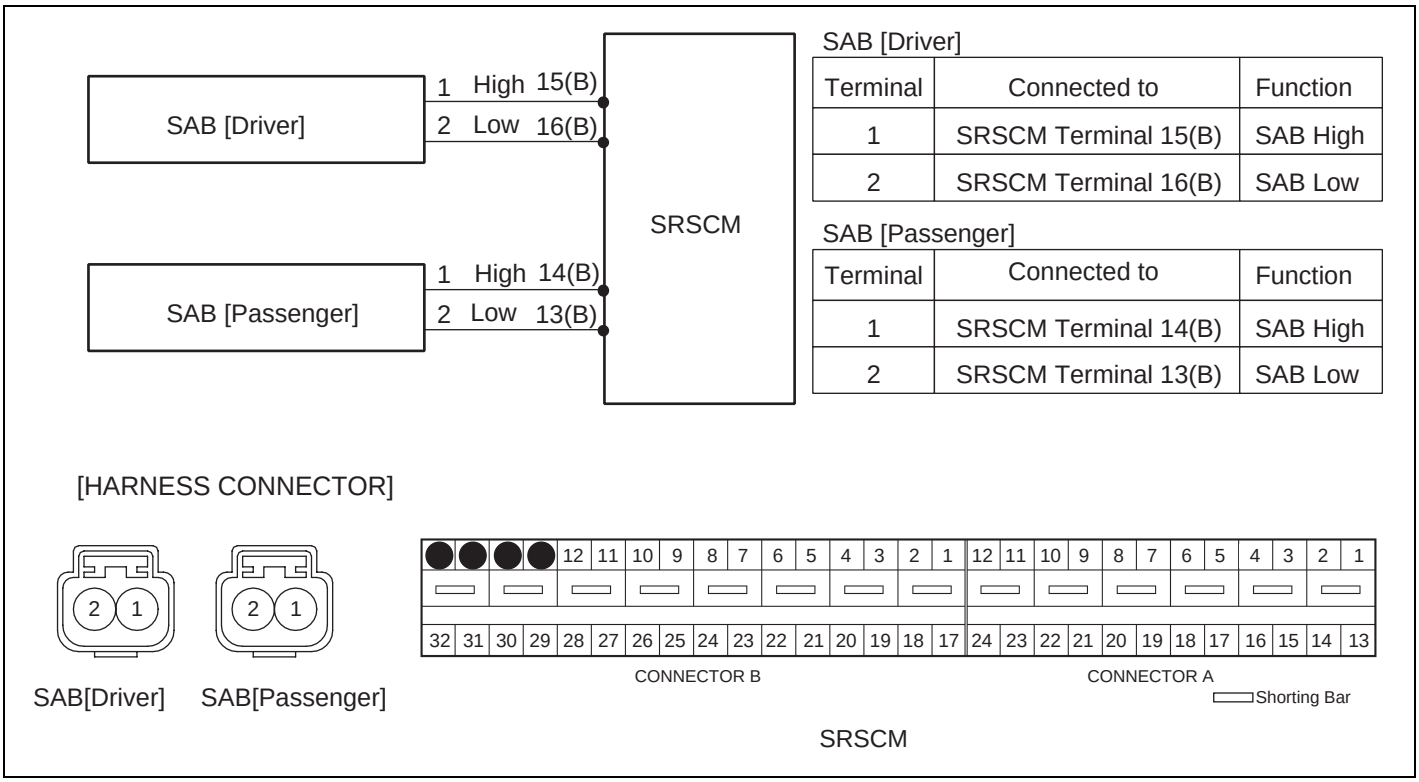
DTC DESCRIPTION EDD2CCFC

The Side Airbag circuit consists of the SRSCM and two Side Airbags (SAB). The SRSCM sets above DTC(s) if it detects short to ground on the SAB circuit.

DTC DETECTING CONDITION E25AA178

DTC	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 E5095B11



LRKG500S

TERMINAL & CONNECTOR INSPECTION EF1D618E

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

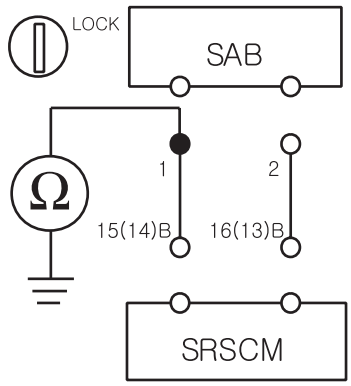
INSPECTION PROCEDURE EF4C2B3F

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

1) Measure resistance between the terminal 1 of SAB harness connector and chassis ground.

Specification (resistance) : infinite



ARKF206E

2) Is the measured resistance within specification?

YES

▶ Check the SAB Module.

NO

▶ Repair or replace the wiring harness between the SAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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 Side Airbag(SAB)?

YES

▶Go to next step.

NO

▶Replace SAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1381 SIDE AIRBAG [FRONT-DRIVER] CIRCUIT SHORT TO BATTERY
DTC B1385 SIDE AIRBAG [FRONT-PASSENGER] CIRCUIT SHORT TO BATTERY

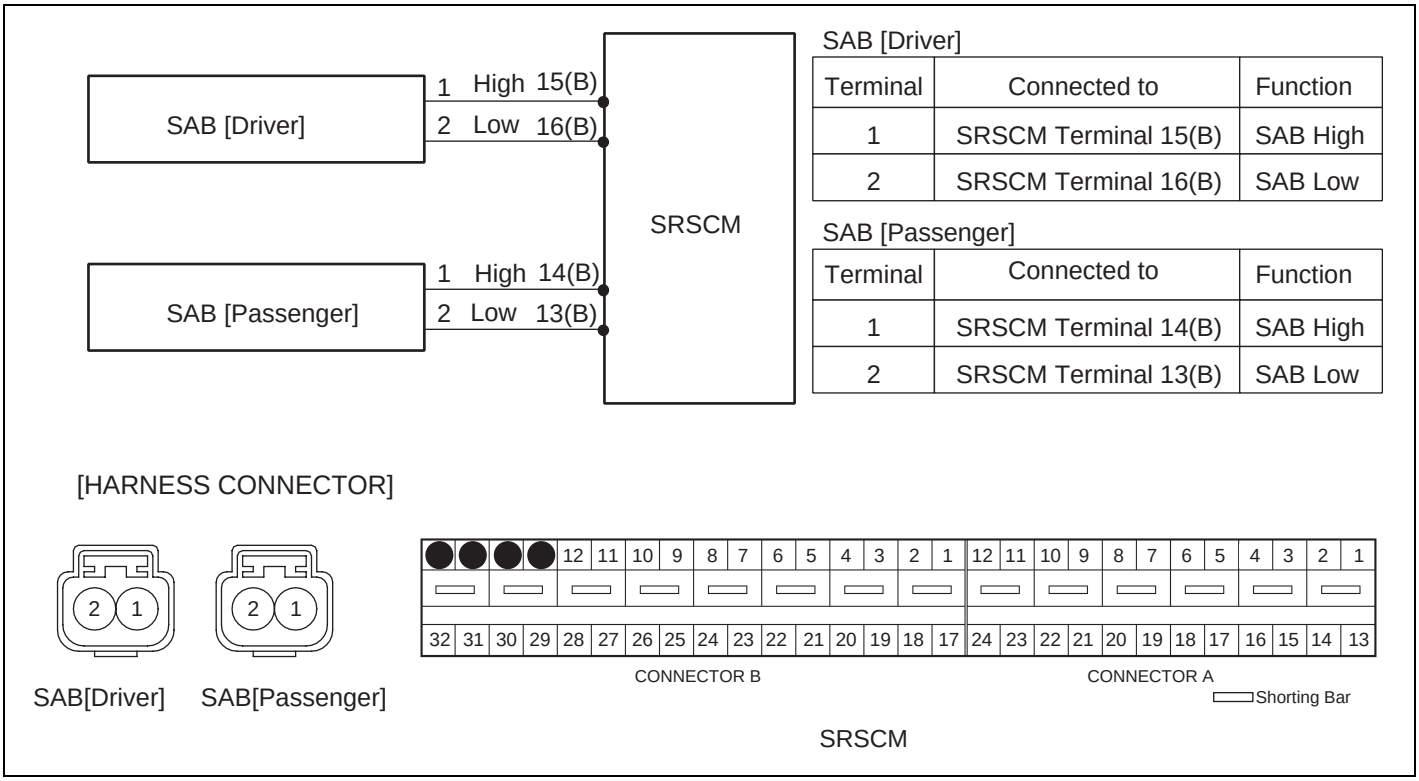
DTC DESCRIPTION E3D1451F

The Side Airbag circuit consists of the SRSCM and two Side Airbags (SAB). The SRSCM sets above DTC(s) if it detects short to battery line on the SAB circuit.

DTC DETECTING CONDITION E28663A5

DTC	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 E815B0C0



SAB [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 15(B)	SAB High
2	SRSCM Terminal 16(B)	SAB Low

SAB [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 14(B)	SAB High
2	SRSCM Terminal 13(B)	SAB Low

LRKG500S

TERMINAL & CONNECTOR INSPECTION E9BC710C

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EAA7DD0F

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

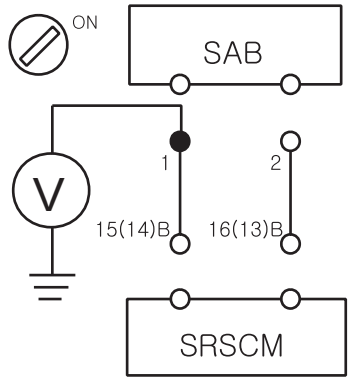
2. CHECK SHORT TO BATTERY LINE

1) Connect the battery negative cable 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 0 V



ARKF206F

4) Is the measured voltage within specification?

YES

▶ Check the SAB Module.

NO

▶ Repair the short to battery line circuit on wiring harness between the SAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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 Side Airbag(SAB)?

YES

▶ Go to next step.

NO

▶Replace SAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1395 SQUIB INTERCONNECTION FAULT

DTC DESCRIPTION EA478944

While start up phase, SRSCM will measure cross link of squibs. If one of them is failed during interconnection test, then SRSCM will store interconnection fault. Once the interconnection fault is detected, it remains active continuously till the fault is erased. Only one fault code is assigned for all interconnection fault.

TERMINAL & CONNECTOR INSPECTION E3F5FF52

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EF2B4473

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)
2. CHECK SHORT CIRCUIT
   1) Measure resistance between following squibs.(DAB - PAB, DAB - SAB, DAB - CAB, DAB - BPT, DAB - BUPT, PAB - SAB, PAB - CAB, PAB - BPT, PAB - BUPT, SAB - PAB, SAB - CAB, SAB - BPT, SAB - BUPT, CAB - BPT, CAB - BUPT, BPT - BUPT)

Specification (resistance) : infinite

   2) Is the measured resistance within specification?

   YES

   ▶ Go to next stetp.

   NO

   ▶ Repair or replace the wiring harness between two squibs.
3. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1400 SIDE IMPACT SENSOR [FRONT-DRIVER] DEFECT
DTC B1403 SIDE IMPACT SENSOR [FRONT-PASSENGER] DEFECT
DTC B1409 SIDE IMPACT SENSOR [FRONT-DRIVER] COMMUNICATION ERROR
DTC B1410 SIDE IMPACT SENSOR [FRONT-PASSENGER] COMMUNICATION ERROR

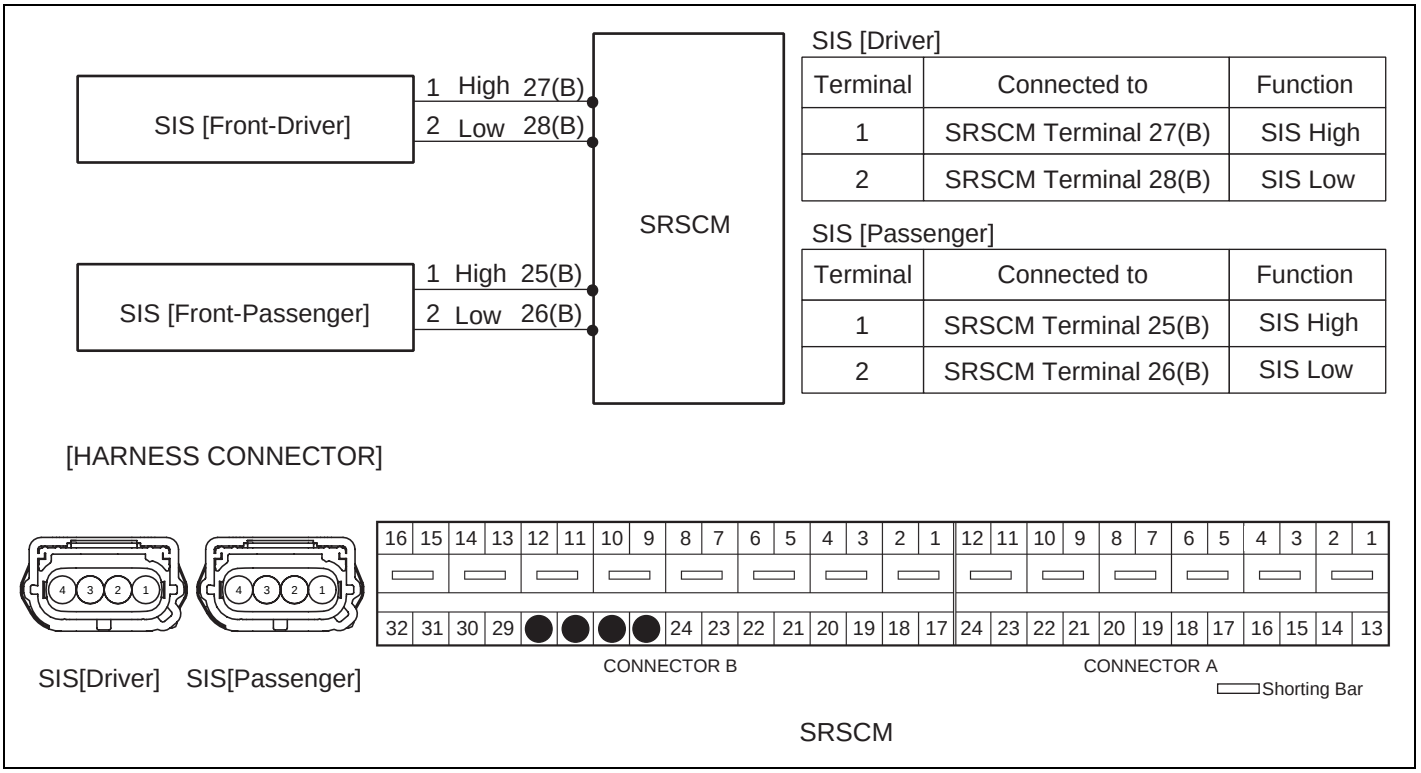
DTC DESCRIPTION E8AE7BEA

The detecting system for side crash consists of the SRSCM and four Side Impact Sensors (SIS). The SRSCM sets above DTC(s) if it detects that any SIS is defective or there is communication error between any SIS and the SRSCM.

DTC DETECTING CONDITION E89E6C19

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

SCHEMATIC DIAGRAM E4B63A5E



SIS [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 27(B)	SIS High
2	SRSCM Terminal 28(B)	SIS Low

SIS [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 25(B)	SIS High
2	SRSCM Terminal 26(B)	SIS Low

LRKG200L

TERMINAL & CONNECTOR INSPECTION E927F37D

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E8F1C1AE

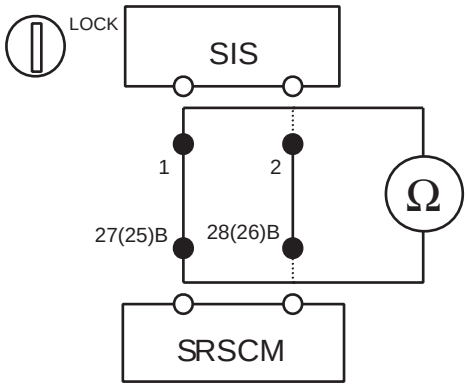
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SIS CIRCUIT

   1) Measure resistance between the terminal 1 of SIS harness connector and the terminal 27(25) of SRSCM harness connector(B).

   2) Measure resistance between the terminal 2 of SIS harness connector and the terminal 28(26) of SRSCM harness connector(B).

Specification (resistance) : below 1 Ω



ERRF502E

   3) Is the measured resistance within specification?

   YES

   ▶ Check Side Impact Sensor.

   NO

   ▶ Repair or replace the wiring harness between the SIS and the SRSCM.

3. CHECK THE SIDE IMPACT SENSOR

   1) Replace the 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Side Impact Sensor(SIS)?

YES

▶ Go to next step.

NO

▶ Replace SIS.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1412 SIDE IMPACT SENSOR [REAR-DRIVER] DEFECT
DTC B1413 SIDE IMPACT SENSOR [REAR-PASSENGER] DEFECT
DTC B1418 SIDE IMPACT SENSOR [REAR-DRIVER] COMMUNICATION ERROR
DTC B1419 SIDE IMPACT SENSOR [REAR-PASSENGER] COMMUNICATION ERROR

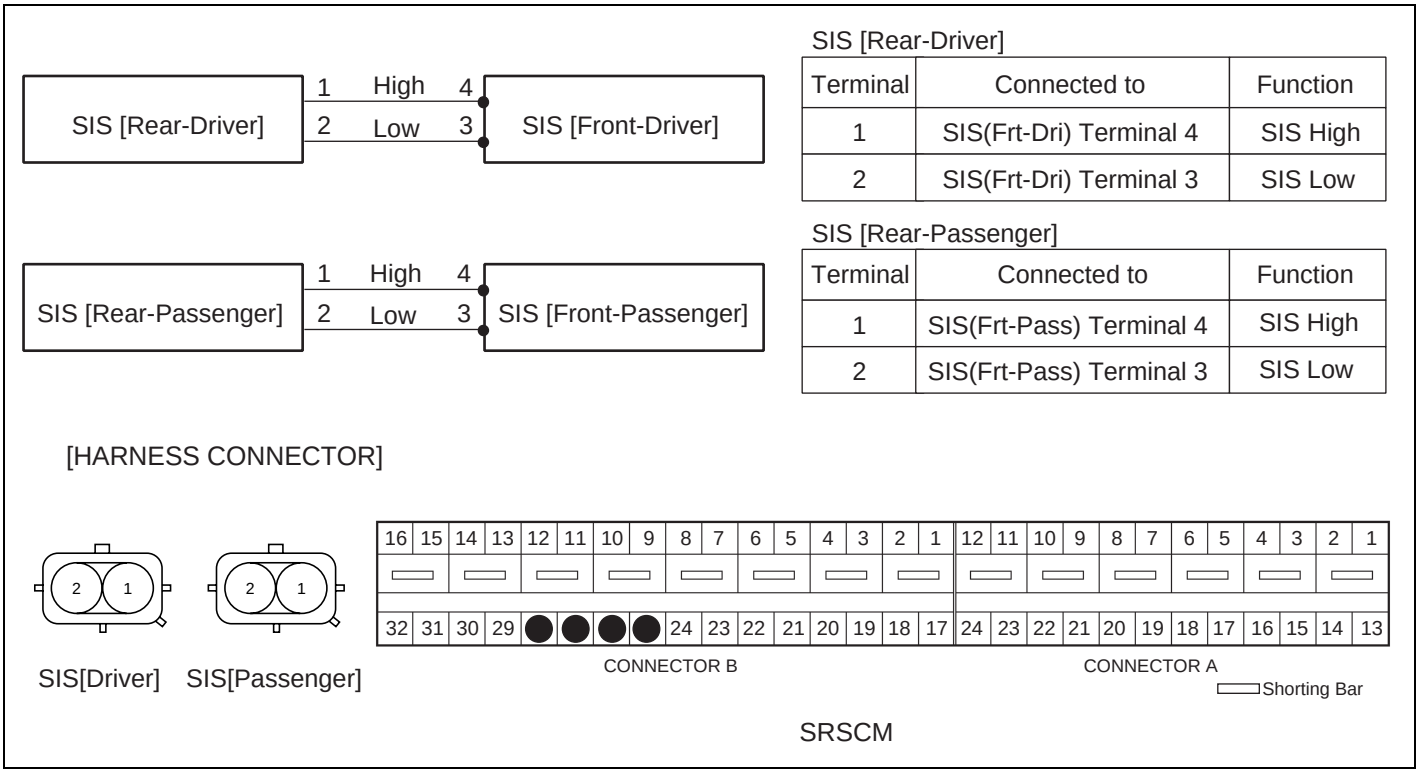
DTC DESCRIPTION E9FE6075

The detecting system for side crash consists of the SRSCM and four Side Impact Sensors (SIS). The SRSCM sets above DTC(s) if it detects that any SIS is defective or there is communication error between any SIS and the SRSCM.

DTC DETECTING CONDITION E16F4FBA

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

SCHEMATIC DIAGRAM EF3DBB01



SIS [Rear-Driver]

Terminal	Connected to	Function
1	SIS(Frt-Dri) Terminal 4	SIS High
2	SIS(Frt-Dri) Terminal 3	SIS Low

SIS [Rear-Passenger]

Terminal	Connected to	Function
1	SIS(Frt-Pass) Terminal 4	SIS High
2	SIS(Frt-Pass) Terminal 3	SIS Low

LRKG201L

TERMINAL & CONNECTOR INSPECTION ECAADFF9

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E6D3EFBA

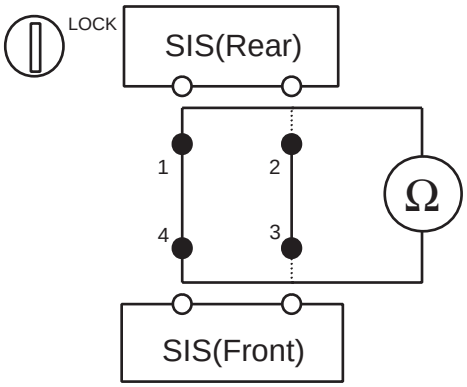
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

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 rearSIS harness connector and the terminal 3 of front SIS harness connector.

Specification (resistance) : below 1 Ω



LRKG502F

   3) Is the measured resistance within specification?

YES

▶Check rear Side Impact Sensor.

NO

▶ Repair or replace the wiring harness between the rear SIS and front SIS.

3. CHECK THE SIDE IMPACT SENSOR

   1) Replace the 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Side Impact Sensor(SIS)?

YES

▶ Go to next step.

NO

▶ Replace SIS.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1473 CURTAIN AIRBAG [DRIVER] RESISTANCE TOO HIGH
DTC B1474 CURTAIN AIRBAG [DRIVER] RESISTANCE TOO LOW
DTC B1477 CURTAIN AIRBAG [PASSENGER] RESISTANCE TOO HIGH
DTC B1478 CURTAIN AIRBAG [PASSENGER] RESISTANCE TOO LOW

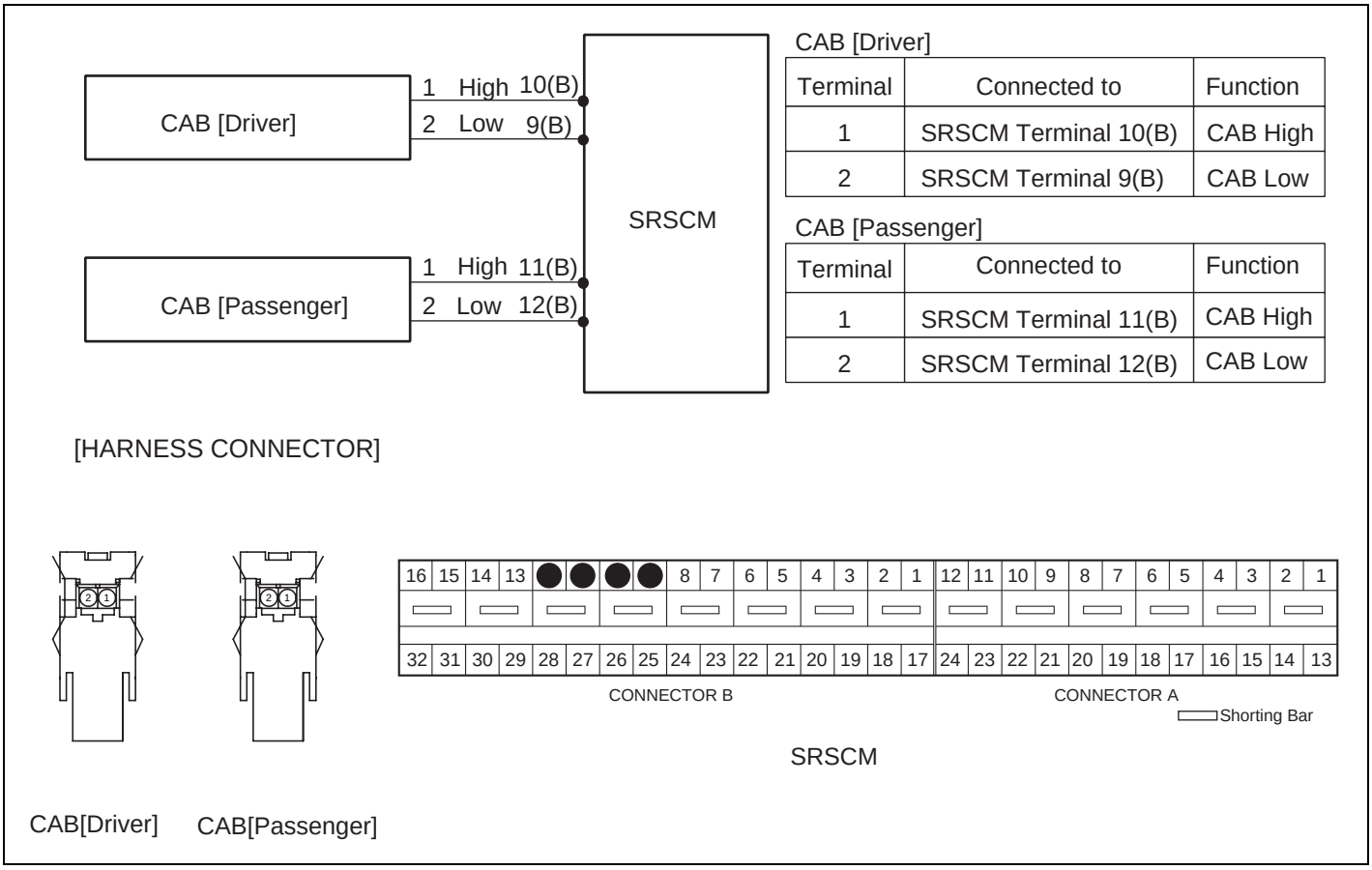
DTC DESCRIPTION E14B4871

The CAB squib circuit consists of the SRSCM and two Curtain Airbags(CAB). It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when the CAB resistance too high or low is detected in the CAB squib circuit.

DTC DETECTING CONDITION E8B8E4E1

DTC	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 EFD73D36



CAB [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 10(B)	CAB High
2	SRSCM Terminal 9(B)	CAB Low

CAB [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 11(B)	CAB High
2	SRSCM Terminal 12(B)	CAB Low

LRKG200M

SPECIFICATION E0969CCE

CAB resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION E437DD5F

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EC23451F

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK CAB RESISTANCE

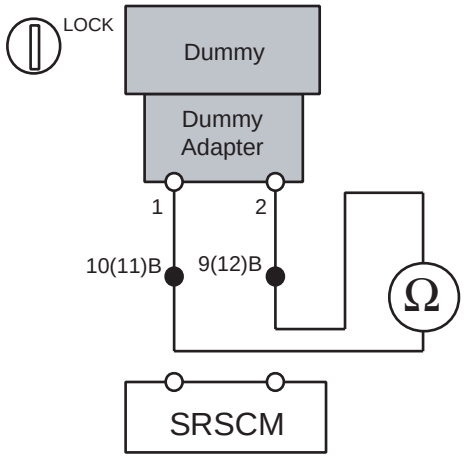
CAUTION

Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

1) Connect the Dummy and the Dummy Adapter on CAB 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 10(11) and 9(12) of SRSCM harness connector(B).

Specificaton (resistance) : 1.6 ~ 4.7 Ω



LRKG200O

3) Is the measured resistance within specification?

YES

▶ Replace the Curtain Airbag(CAB) module.

NO

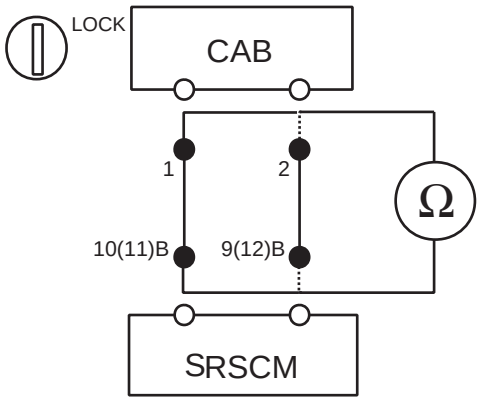
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 1 of CAB harness connector and the terminal 10(11) of SRSCM harness connector(B).

2) Measure resistance between the terminal 2 of CAB harness connector and the terminal 9(12) of SRSCM harness connector(B).

Specification (resistance) : below 1 Ω



LRKG200P

3) Is the measured resistance within specification?

YES

▶Check short circuit.

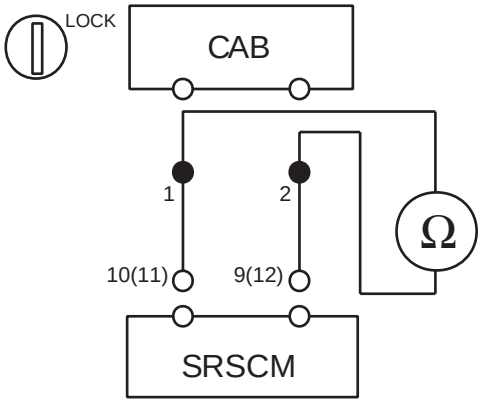
NO

▶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



LRKG200Q

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the CAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1475 CURTAIN AIRBAG [DRIVER] CIRCUIT SHORT TO GROUND
DTC B1479 CURTAIN AIRBAG [PASSENGER] CIRCUIT SHORT TO GROUND

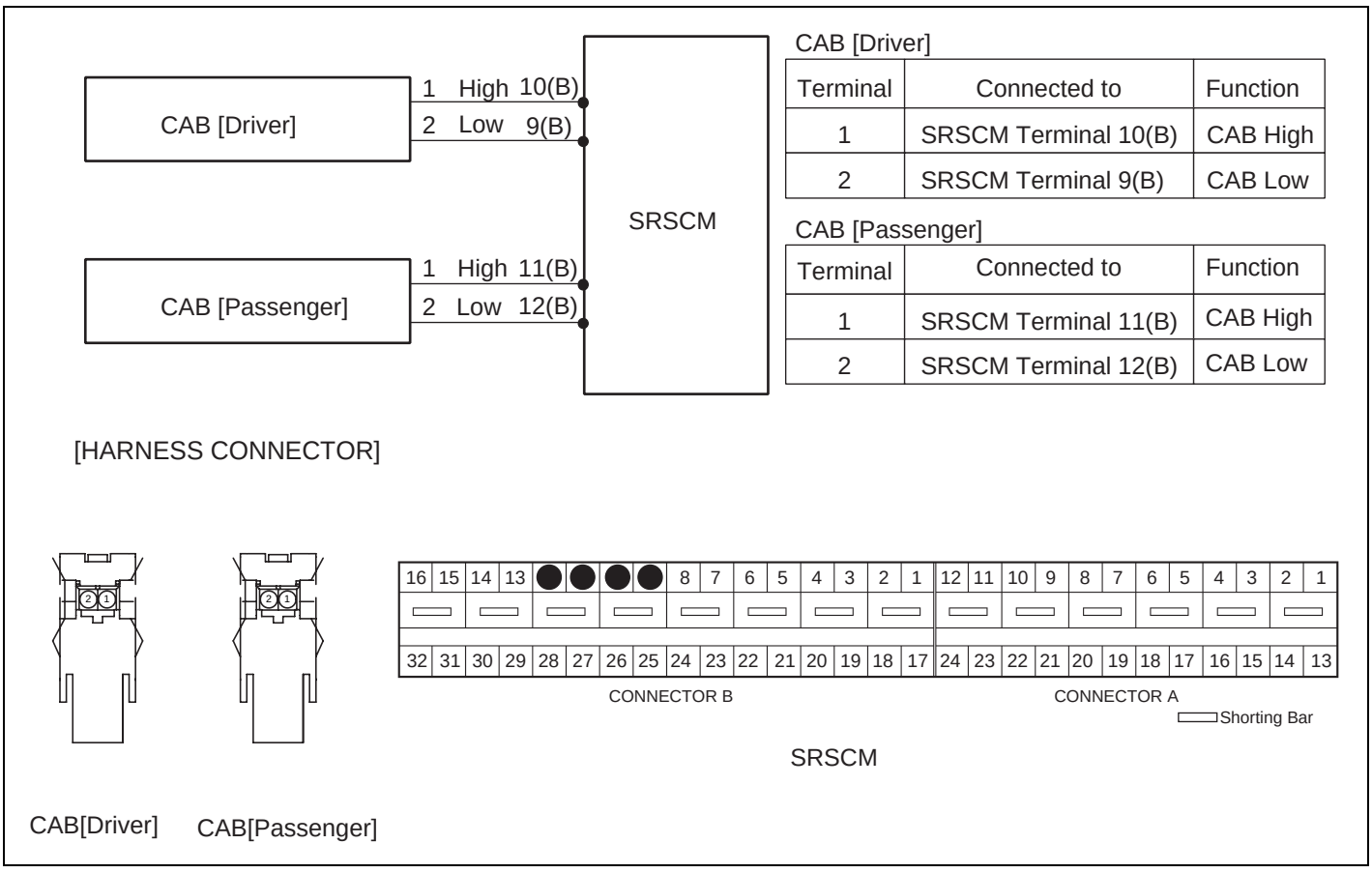
DTC DESCRIPTION E02CE82C

The CAB squib circuit consists of the SRSCM and CAB. It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when short to ground is detected in the CAB squib circuit.

DTC DETECTING CONDITION EA22D052

DTC	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 EAE1EE8C



CAB [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 10(B)	CAB High
2	SRSCM Terminal 9(B)	CAB Low

CAB [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 11(B)	CAB High
2	SRSCM Terminal 12(B)	CAB Low

LRKG200M

TERMINAL & CONNECTOR INSPECTION E2D54EF2

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

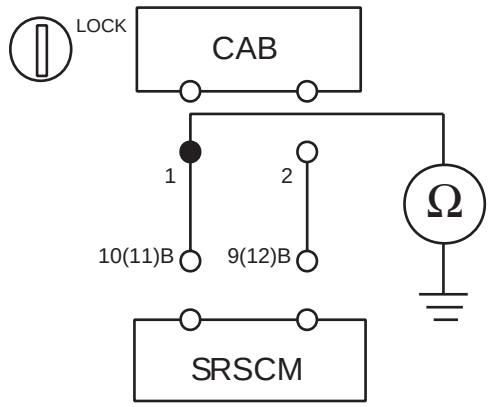
INSPECTION PROCEDURE E15A2404

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

   1) Measure resistance between the terminal 1 of CAB harness connector and chassis ground.

Specification (resistance) : infinite



LRKG200R

   2) Is the measured resistance within specification?

YES

▶ Check the CAB Module.

NO

▶ Repair or replace the wiring harness between the CAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Curtain Airbag(CAB)?

YES

▶ Go to next step.

NO

▶ Replace CAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1476 CURTAIN AIRBAG [DRIVER] CIRCUIT SHORT TO BATTERY
DTC B1480 CURTAIN AIRBAG [PASSENGER] CIRCUIT SHORT TO BATTERY

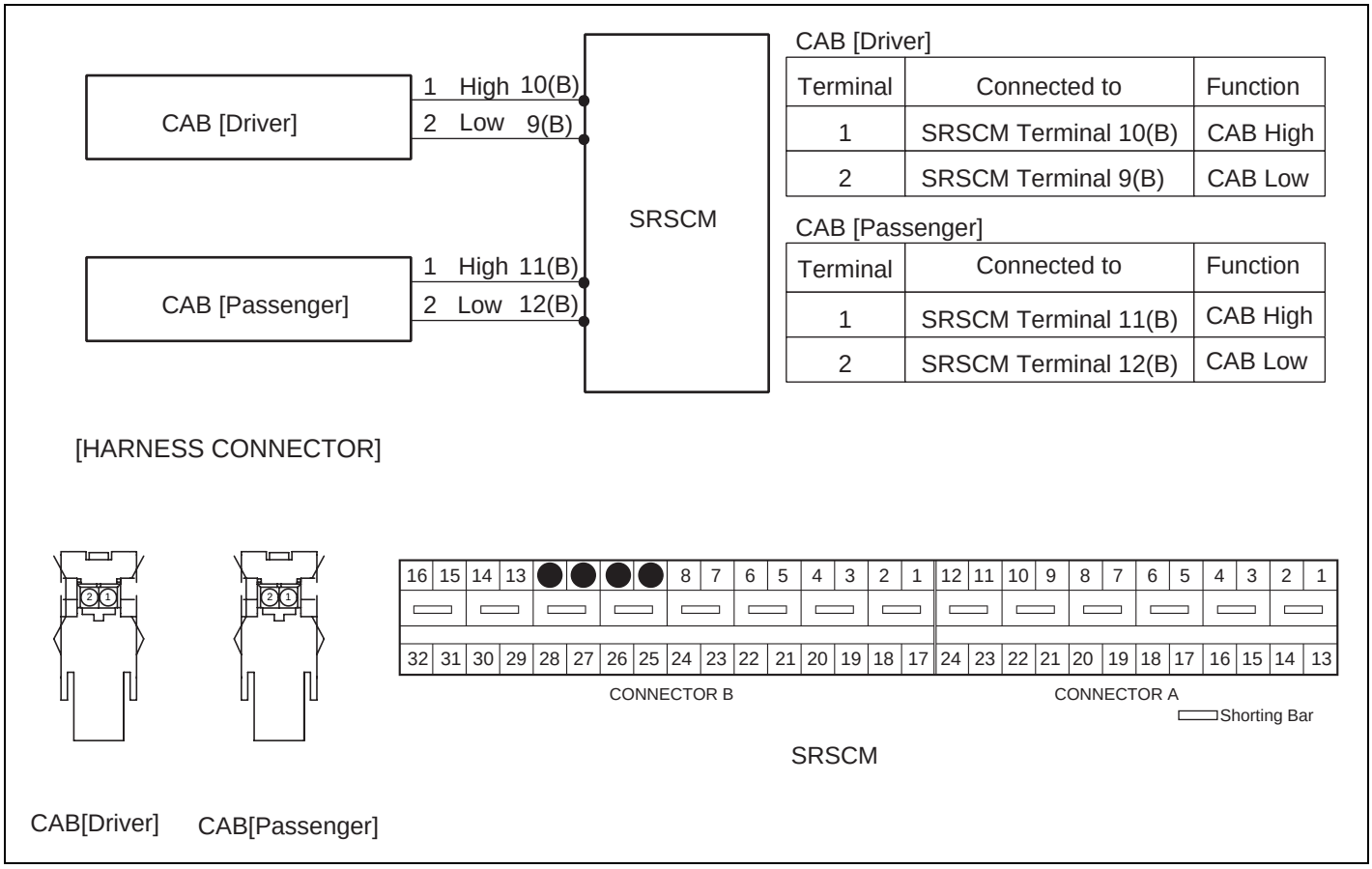
DTC DESCRIPTION E38287DC

The CAB squib circuit consists of the SRSCM and CAB. It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when short to battery is detected in the CAB squib circuit.

DTC DETECTING CONDITION ED167D08

DTC	Condition	Probable cause
B1476 B1480	• Short to battery 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 E31D7D5A



CAB [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 10(B)	CAB High
2	SRSCM Terminal 9(B)	CAB Low

CAB [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 11(B)	CAB High
2	SRSCM Terminal 12(B)	CAB Low

LRKG200M

TERMINAL & CONNECTOR INSPECTION E4FDE6F0

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EA8E4274

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

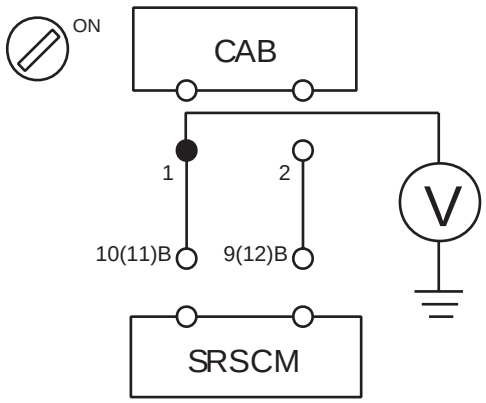
2. CHECK SHORT TO BATTERY LINE

   1) Connect the battery negative cable 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 0 V



LRKG200S

   4) Is the measured voltage within specification?

YES

▶ Check the CAB Module.

NO

▶ Repair the short to battery line circuit on wiring harness between the CAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Curtain Airbag(CAB)?

YES

▶ Go to next step.

NO

▶ Replace CAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1527 PASSENGER AIRBAG DEACTIVATION SWITCH OPEN OR SHORT TO BATTERY

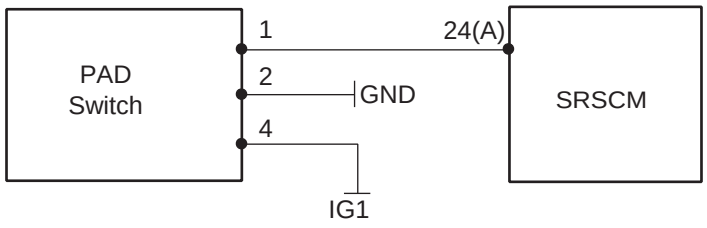
DTC DESCRIPTION E1D5D6A9

The deactication system for the passenger airbag consists of the SRSCM and the Passenger Airbag Deactivation(PAD) switch. The above DTC is recored when PAD switch open or short to battery is detected in the PAD circuit.

DTC DETECTING CONDITION E5D70D59

DTC	Condition	Probable cause
B1527	• Short to battery line between PAD switch and SRSCM • SRSCM malfunction • PAD switch malfunction	• PAD switch • Wiring harness • SRSCM

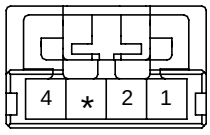
SCHEMATIC DIAGRAM E536DF43



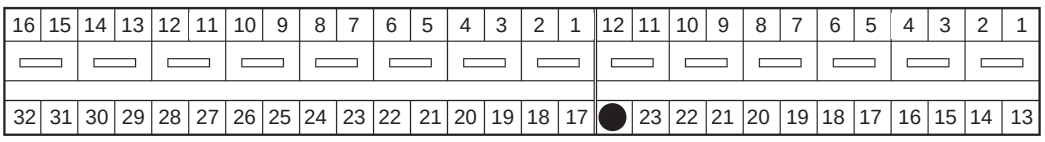
[PAD Switch]

Terminal	Connected to	Function
1	SRSCM Terminal 24(A)	PAD Switch
2	Ground	
4	IG1	Battery Voltage

[HARNESS CONNECTOR]



PAD SWITCH



SRSCM

LRJF500T

SPECIFICATION EF7E0AD8

PAD Switch Status	Current (mA)	Related DTC
Open or Short to Battery	< 2.71	B1527
PAB Enabled Position	2.96 ~ 5.01	
Defect	5.46 ~ 6.68	B1529
PAB Disabled Position	7.28 ~ 12.73	
Short or Short to Ground	> 13.87	B1528

TERMINAL & CONNECTOR INSPECTION EBF7AADF

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E9B16395

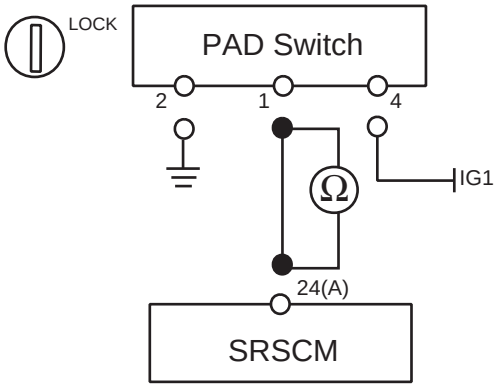
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK OPEN CIRCUIT

   1) Disconnect the connector of the PAD switch.

   2) Measure resistance between the terminal 24 of the SRSCM harness connector(A) and 1 of PAD switch connector.

Specification (resistance) : below 1 Ω



LRJF500Z

   3) Is the measured resistance within specification?

YES

▶ Check short to battery line.

NO

▶ Replace the harness between the SRSCM and the PAD switch.

3. CHECK SHORT TO BATTERY LINE

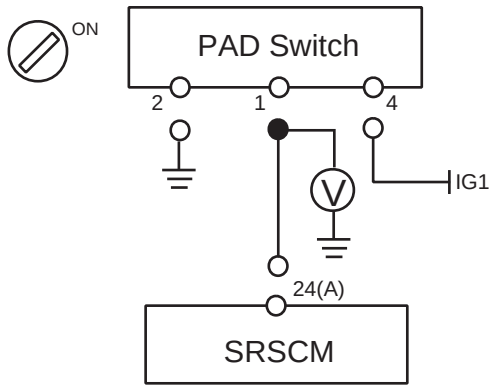
1) Connect the battery negative cable to the battery.

2) Turn the ignition switch to ON.

3) Turn the ignition switch to LOCK, and wait for 30 seconds.

4) Measure voltage between the terminal 1 of PAD switch harness connector and chassis ground.

Specification (voltage) : Approximately 0 V



LRJF501A

5) Is the measured voltage within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the PAD switch and the SRSCM.

4. CHECK THE PAD SWITCH

1) Connect the SRSCM connector.

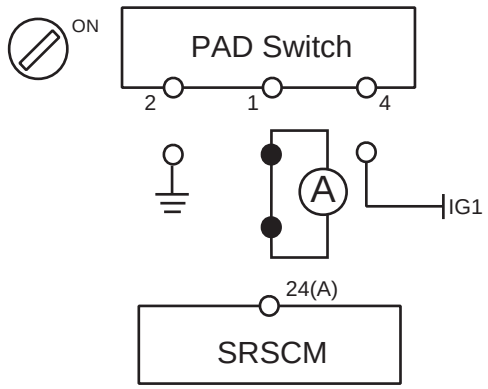
2) Connect the PAD switch.

3) Connect the battery negative cable to the battery.

4) Turn the ignition switch to ON.

5) Measure current between the terminal 24 of the SRSCM harness connector(A) and 1 of PAD switch connector.

Specification (current) :
PAD switch (Enabled position) : 2.96 ~ 5.01 mA
PAD switch (Disabled position) : 7.28 ~ 12.73 mA



LRJF501B

6) Is the measured current within specification?

YES

▶ Go to next step.

NO

▶ Replace the PAD switch.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1528 PASSENGER AIRBAG DEACTIVATION SWITCH SHORT OR SHORT TO GROUND

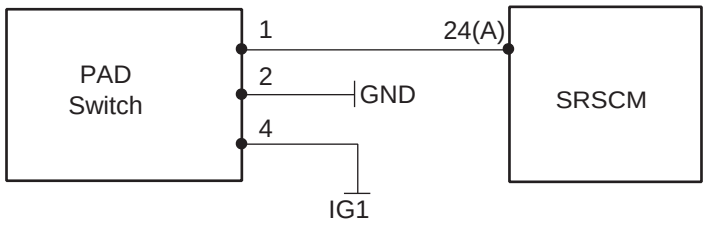
DTC DESCRIPTION E45B275C

The deactivation system for the passenger airbag consists of the SRSCM and the Passenger Airbag Deactivation(PAD) switch. The above DTC is recored when PAD switch short or short to ground is detected in the PAD system circuit.

DTC DETECTING CONDITION E2A88B03

DTC	Condition	Probable cause
B1528	• Short to ground between PAD switch and SRSCM • PAD switch malfunction • SRSCM malfunction	• PAD switch • Wiring harness • SRSCM

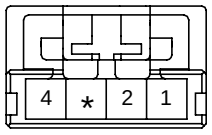
SCHEMATIC DIAGRAM E5831580



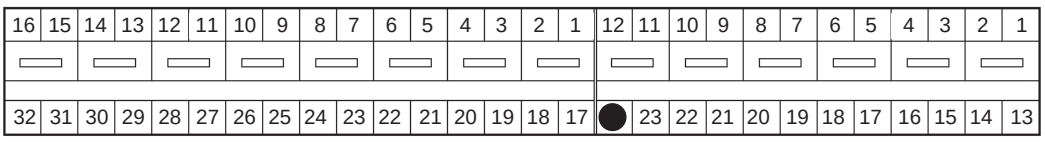
[PAD Switch]

Terminal	Connected to	Function
1	SRSCM Terminal 24(A)	PAD Switch
2	Ground	
4	IG1	Battery Voltage

[HARNESS CONNECTOR]



PAD SWITCH



SRSCM

LRJF500T

SPECIFICATION E3048475

PAD Switch Status	Current (mA)	Related DTC
Open or Short to Battery	< 2.71	B1527
PAB Enabled Position	2.96 ~ 5.01	
Defect	5.46 ~ 6.68	B1529
PAB Disabled Position	7.28 ~ 12.73	
Short or Short to Ground	> 13.87	B1528

TERMINAL & CONNECTOR INSPECTION E5D631A2

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EC6B0301

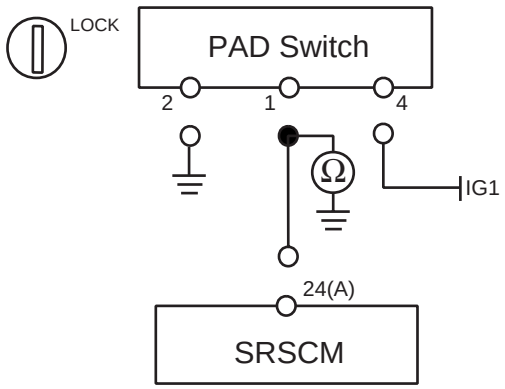
1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

   1) Disconnect the connector of the PAD switch.

   2) Measure resistance between the terminal 1 of PAD switch connector and chassis ground.

Specification (resistance) : infinite



LRJF501C

   3) Is the measured resistance within specification?

YES

▶ Check short circuit.

NO

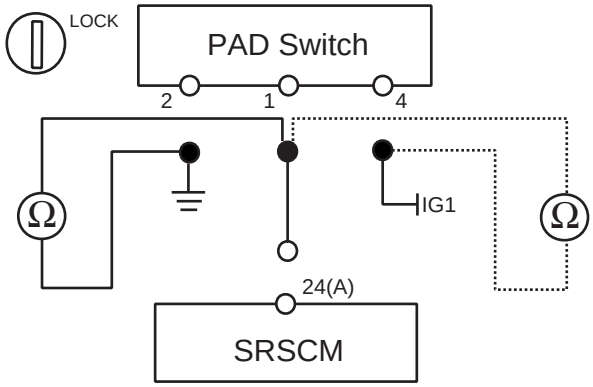
▶ Replace the harness between the SRSCM and the PAD switch.

3. CHECK SHORT CIRCUIT

   1) Measure resistance between 1 and 2 of PAD switch connector.

   2) Measure resistance between 1 and 4 of PAD switch connector.

Specification (resistance) : infinite



LRJF501D

3) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the PAD switch and the SRSCM.

4. CHECK THE PAD SWITCH

1) Connect the SRSCM connector.

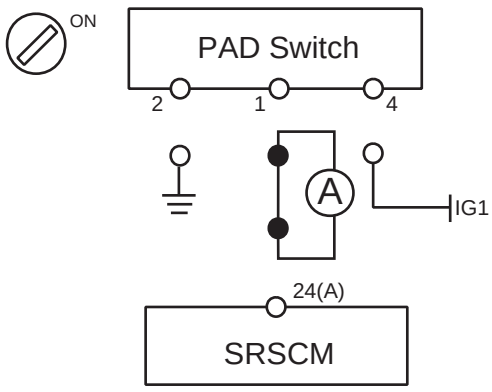
2) Connect the PAD switch.

3) Connect the battery negative cable to the battery.

4) Turn the ignition switch to ON.

5) Measure current between the terminal 24 of the SRSCM harness connector(A) and 1 of PAD switch connector.

Specification (current) :
PAD switch (Enabled positon) : 2.96 ~ 5.01 mA
PAD switch (Disabled positon) : 7.28 ~ 12.73 mA



LRJF501E

6) Is the measured current within specification?

YES

▶ Go to next step.

NO

▶ Replace the PAD switch.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1529 PASSENGER AIRBAG DEACTIVATION SWITCH DEFECT
DTC B1530 PASSENGER AIRBAG DEACTIVATION SWITCH INSTABILITY

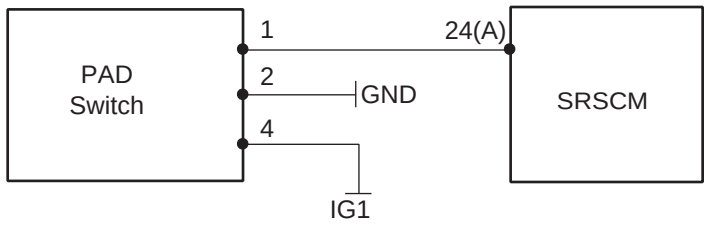
DTC DESCRIPTION E93F913D

The deactivation system for the passenger airbag consists of the SRSCM and the Passenger Airbag Deactivation(PAD) switch. The above DTC is recored when the defect or instability of PAD switch is detected in the PAD system circuit.

DTC DETECTING CONDITION E0DA1574

DTC	Condition	Probable cause
B1529 B1530	• PAD switch malfunction • SRSCM Malfunction	• PAD switch • Wiring harness • SRSCM

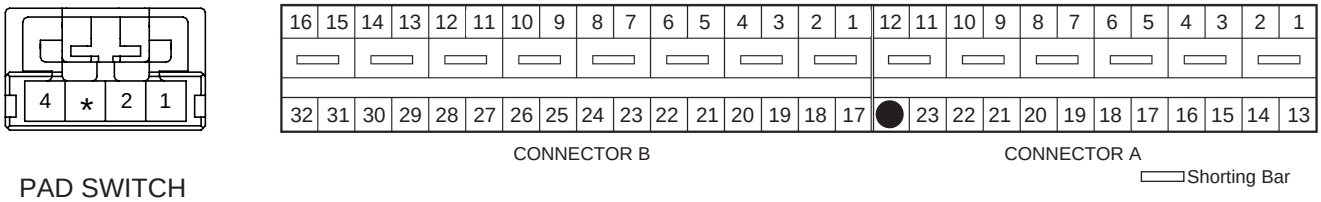
SCHEMATIC DIAGRAM E2D3CB53



[PAD Switch]

Terminal	Connected to	Function
1	SRSCM Terminal 24(A)	PAD Switch
2	Ground	
4	IG1	Battery Voltage

[HARNESS CONNECTOR]



PAD SWITCH

SRSCM

LRJF500T

SPECIFICATION E94FE925

PAD Switch Status	Current (mA)	Related DTC
Open or Short to Battery	< 2.71	B1527
PAB Enabled Position	2.96 ~ 5.01	
Defect	5.46 ~ 6.68	B1529
PAB Disabled Position	7.28 ~ 12.73	
Short or Short to Ground	> 13.87	B1528

TERMINAL & CONNECTOR INSPECTION E5D6C715

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E1677313

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

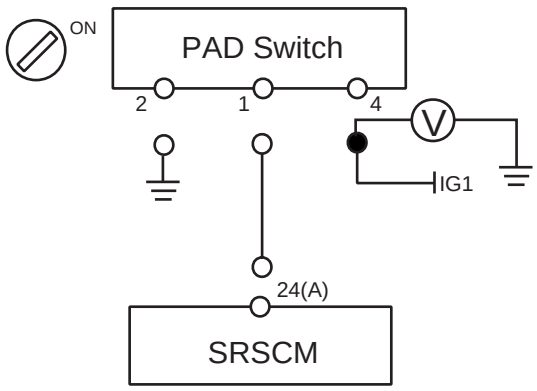
2. CHECK POWER SUPPLY

   1) Connect the battery negativecable to the battery.

   2) Turn the ignition switch to ON.

   3) Measure voltage between the terminal and 4 of PAD switch connector and chassis ground.

Specification (voltage) : 9 ~ 16 V



LRJF501F

   4) Is the measured voltage within specification?

YES

▶ Check ground circuit.

NO

▶ Replace the harness between the battery line and the PAD switch.

3. CHECK GROUND CIRCUIT

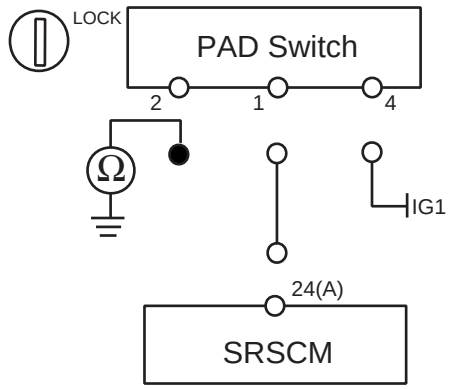
1) Turn the ignition switch to OFF.

2) Disconnect the battery negative cable from the battery.

3) Disconnect the connector of the PAD switch.

4) Measure resistance between the terminal 2 of PAD switch connector and chassis ground.

Specification (resistance) : 0 Ω



LRJF501G

5) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the PAD switch and the chassis ground.

4. CHECK THE PAD SWITCH

1) Connect the SRSCM connector.

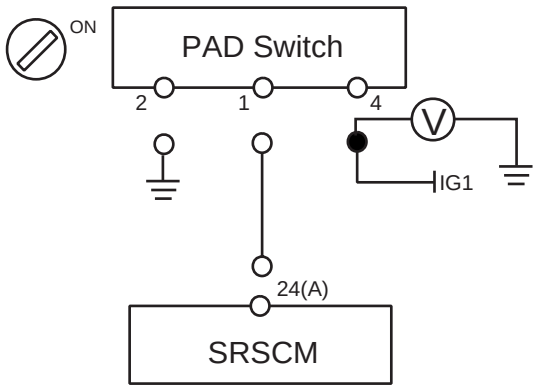
2) Connect the PAD switch.

3) Connect the battery negative cable to the battery.

4) Turn the ignition switch to ON.

5) Measure current between the terminal 24 of the SRSCM harness connector(A) and 1 of PAD switch connector.

Specification (current) :
PAD switch (Enabled positon) : 2.96 ~ 5.01 mA
PAD switch (Disabled positon) : 7.28 ~ 12.73 mA



LRJF501F

6) Is the measured current within specification?

YES

▶ Go to next step.

NO

▶ Replace the PAD switch.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1620 SUPPLEMENTAL RESTRAINT SYSTEM CONTROL MODULE INTERNAL FAULT (REPLACE SRSCM)

DTC DESCRIPTION E2A27131

The Supplemental Restraint System Control Module (SRSCM) runs diagnostics to monitor the condition of its internal circuits and all external components in the restraint system. If a fault is detected in the electronic accelerometor or in the microprocessor, the SRSCM will inhibit deployment to minimize the risk of inadvertent deployments.
Once an internal fault is qualified, the internal fault is latched and warning lamp will be turned on. If an internal fault is qulified, the SRSCM must be replaced. The Hi-Scan tool can't clear an internal fault. All internal faults are DTC B1620.

DTC DETECTING CONDITION E29CDD22

DTC	Condition	Probable cause
B1620	• SRSCM internal fault : acceleration sensor, microcomputer power supply, watchdog etc	• SRSCM

INSPECTION PROCEDURE E5F53E4E

If the above mentioned DTC is confirmed it can't be cleared by Hi-Scan tool, the SRSCM should be replaced.

DTC B1650 CRASH RECORDED - FRONTAL (REPLACE SRSCM)
DTC B1651 CRASH RECORDED - DRIVER SIDE (REPLACE SRSCM)
DTC B1652 CRASH RECORDED - PASSENGER SIDE (REPLACE SRSCM)
DTC B1655 CRASH RECORDED - PASSENGER SIDE WITH PAB INHIBITED (REPLACE SRSCM)
DTC B1657 CRASH RECORDED - BELT PRETENSIONER ONLY
DTC B1658 BELT PRETENSIONER 6 TIMES DEPLOYMENT (REPLACE SRSCM)

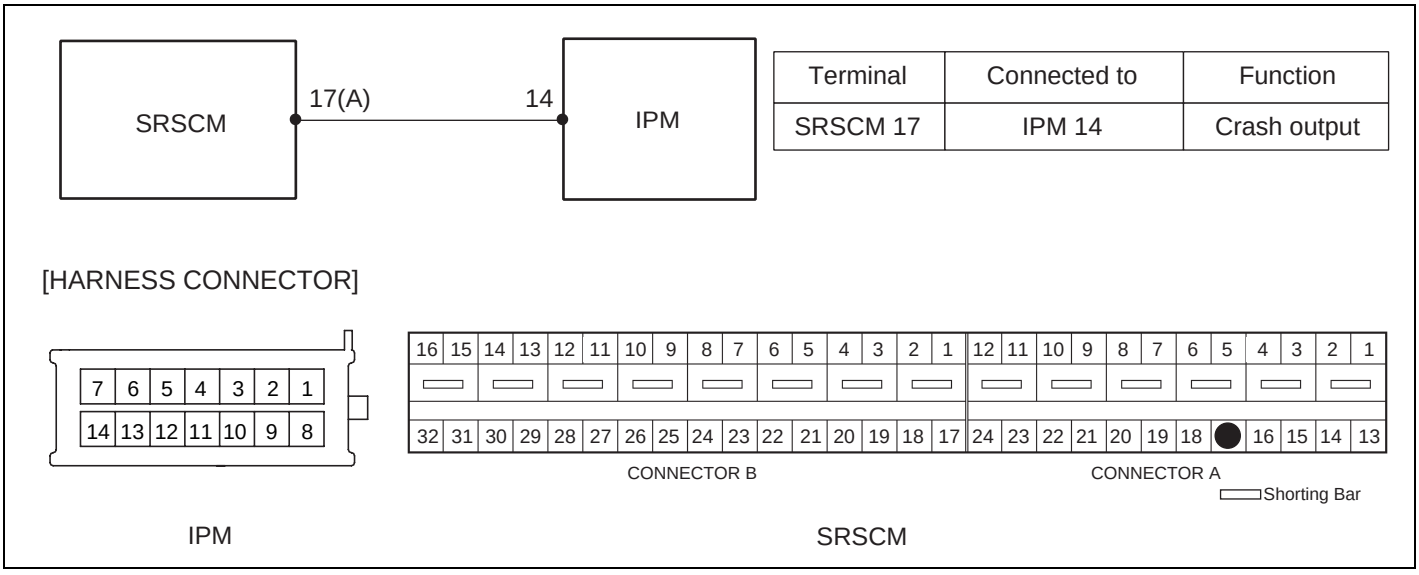
DTC DESCRIPTION E00B7017

When a deployment of any restraint system for seat belt pretensioner and frontal and side air bags occurs, or when a rear crash is detected, the crash output is activated. The purpose of this output is to signal the IPM(Instrument Panel Module) in the vehicle to unlock the vehicle doors. If a crash output is in progress, a second crash output signal will not be sent unless the first one is completed. The SRSCM doesn't perform diagnostics on the crash output function. After a frontal or side crash event is sensed and algorithm makes firing decision, above mentioned crash record is stored after squib deployment.

DTC DETECTING CONDITION E25E84B7

DTC	Condition	Probable cause
B1650 B1651 B1652 B1655 B1657 B1658	• Frontal crash • Side crash • Seat belt pretensioner only deployed	• SRSCM • Front Impact Sensor • Side Impact Sensor • Seat Belt Pretensioner

SCHEMATIC DIAGRAM E3C796D4



Terminal	Connected to	Function
SRSCM 17	IPM 14	Crash output

LRKG500U

INSPECTION PROCEDURE EEE0DD1E

If the above mentioned DTC is confirmed it can't be cleared by Hi-Scan tool except for the B1657, and the SRSCM should be replaced. However, for the DTC B1657, Belt pretensioner only deployment, it can be erased for 5 times and the SRSCM can be reusable. If the deployment of Belt pretensioner reaches to 6 times, the SRSCM will set DTC B1658 and the SRSCM should be replaced accordingly.

DTC B1701 BUCKLE PRETENSIONER [DRIVER] RESISTANCE TOO HIGH
DTC B1702 BUCKLE PRETENSIONER [DRIVER] RESISTANCE TOO LOW
DTC B1706 BUCKLE PRETENSIONER [PASSENGER] RESISTANCE TOO HIGH
DTC B1707 BUCKLE PRETENSIONER [PASSENGER] RESISTANCE TOO LOW

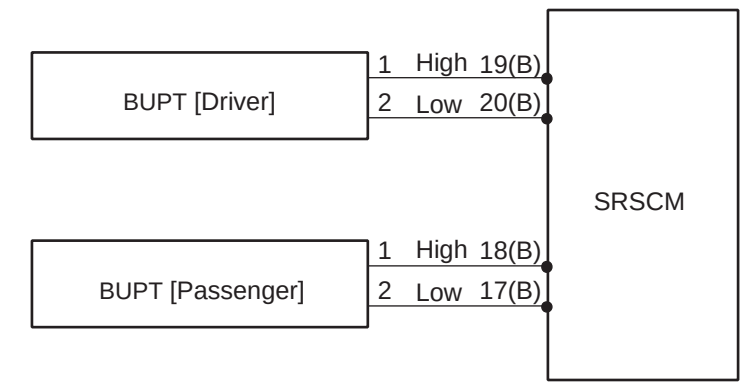
DTC DESCRIPTION EDD2FCB6

The Buckle Pretensioner circuit consists of the SRSCM and two Buckle Pretensioners (BUPT). The SRSCM sets above DTC(s) if it detects that the resistance of BUPT squib is too high or low.

DTC DETECTING CONDITION E0402854

DTC	Condition	Probable cause
B1701 B1702 B1706 B1707	• Too high or low resistance between BUPT high(+) and BUPT low (-) • Seat Buckle Pretensioner (BUPT) Malfunction • SRSCM Malfunction	• Open or short circuit on wiring harness • Seat Buckle Pretensioner (BUPT) squib • SRSCM

SCHEMATIC DIAGRAM E4E4C894



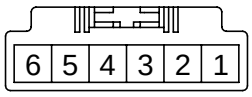
BUPT [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 19(B)	BUPT High
2	SRSCM Terminal 20(B)	BUPT Low

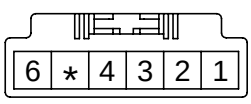
BUPT [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 18(B)	BUPT High
2	SRSCM Terminal 17(B)	BUPT Low

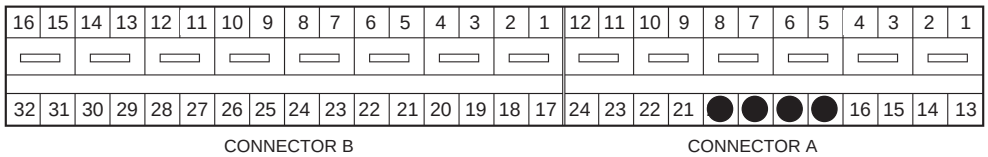
[HARNESS CONNECTOR]



BUPT [Driver]



BUPT [Passenger]



SRSCM

LRKG502X

SPECIFICATION E82105F0

BUPT resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION E090E462

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E00D2056

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK BUPT RESISTANCE

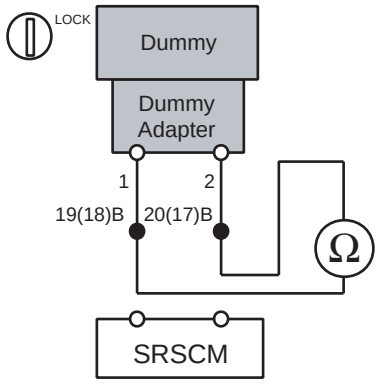
   CAUTION

   Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

   1) Connect the Dummy and the Dummy Adapter on BUPT 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 19(18) and 20(19) of SRSCM harness connector.

BUPT resistance : 1.6 ~ 4.7 Ω



LRKG502T

   3) Is the measured resistance within specification?

YES

▶ Replace the Buckle Pretensioner(BUPT) module.

NO

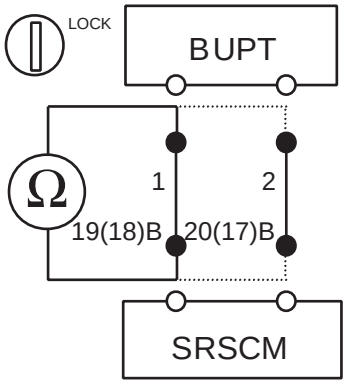
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 1 of BUPT harness connector and the terminal 19(18) of SRSCM harness connector.

2) Measure resistance between the terminal 2 of BUPT harness connector and the terminal 20(17) of SRSCM harness connector.

specification(resistance) : below 1 Ω



LRKG502M

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

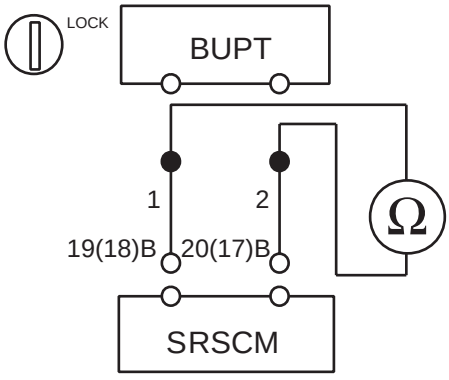
NO

▶ Repair or replace the wiring harness between the BUPT and the SRSCM.

4. CHECK SHORT CIRCUIT

1) Measure resistance between the terminal 1 and 2 of BUPT harness connector.

specification(resistance) : infinite



LRKG502N

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the BUPT and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1703 BUCKLE PRETENSIONER [DRIVER] SHORT TO GROUND
DTC B1708 BUCKLE PRETENSIONER [PASSENGER] SHORT TO GROUND

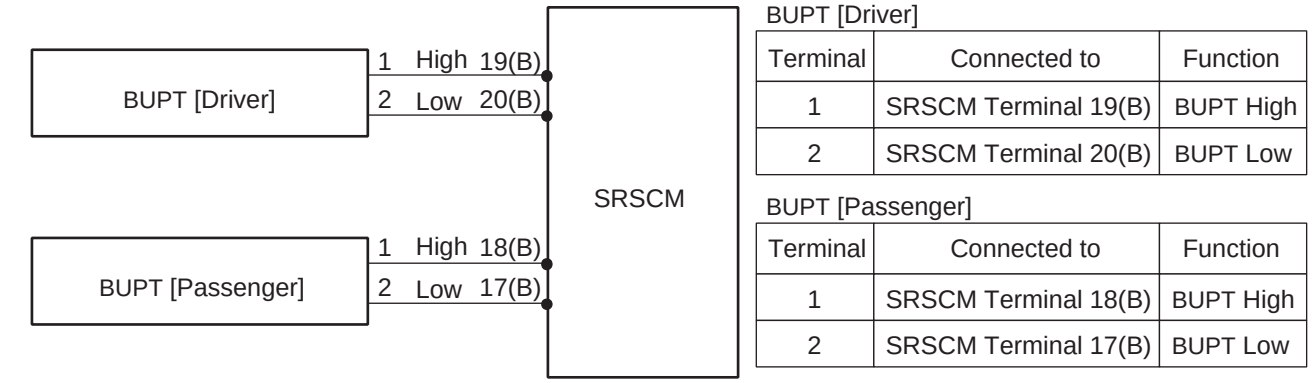
DTC DESCRIPTION EECF9D1C

The Buckle Pretensioner circuit consists of the SRSCM and two Buckle Pretensioners (BUPT). The SRSCM sets above DTC(s) if it detects short to ground on the BUPT circuit.

DTC DETECTING CONDITION E257D1EF

DTC	Condition	Probable cause
B1703 B1708	• Short to ground between BUPT and SRSCM • Seat Buckle Pretensioner (BUPT) Malfunction • SRSCM Malfunction	• Short to ground circuit on wiring harness • Seat Buckle Pretensioner (BUPT) squib • SRSCM

SCHEMATIC DIAGRAM ED43DB18



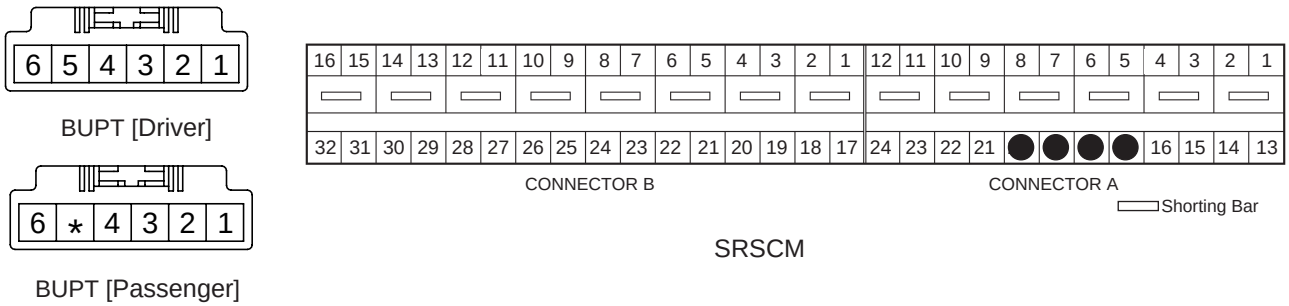
BUPT [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 19(B)	BUPT High
2	SRSCM Terminal 20(B)	BUPT Low

BUPT [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 18(B)	BUPT High
2	SRSCM Terminal 17(B)	BUPT Low

[HARNESS CONNECTOR]



LRKG502X

TERMINAL & CONNECTOR INSPECTION EA41B954

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E932C16A

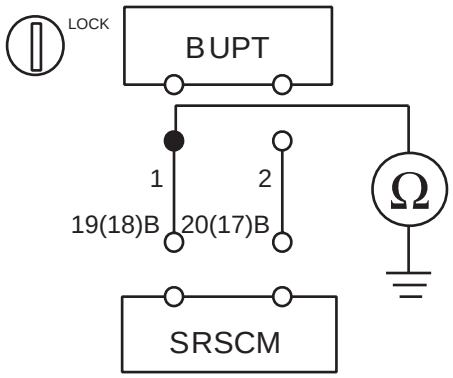
1. PREPARATION

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

1) Measure resistance between the terminal 1 of BUPT harness connector and chassis ground.

specification(resistance) : infinite



LRKG005F

2) Is the measured resistance within specification?

YES

▶ Check the BUPT Module.

NO

▶ Repair or replace the wiring harness between the BUPT and the SRSCM.

3. CHECK THE BUPT MODULE

1) Replace the Buckle Pretensioner(BUPT) with a new one.
● Refer to "Buckle Pretensioner(BUPT)" 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable 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 Buckle Pretensioner(BUPT)?

YES

▶ Go to next step.

NO

▶ Replace BUPT module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1704 BUCKLE PRETENSIONER [DRIVER] SHORT TO BATTERY
DTC B1709 BUCKLE PRETENSIONER [PASSENGER] SHORT TO BATTERY

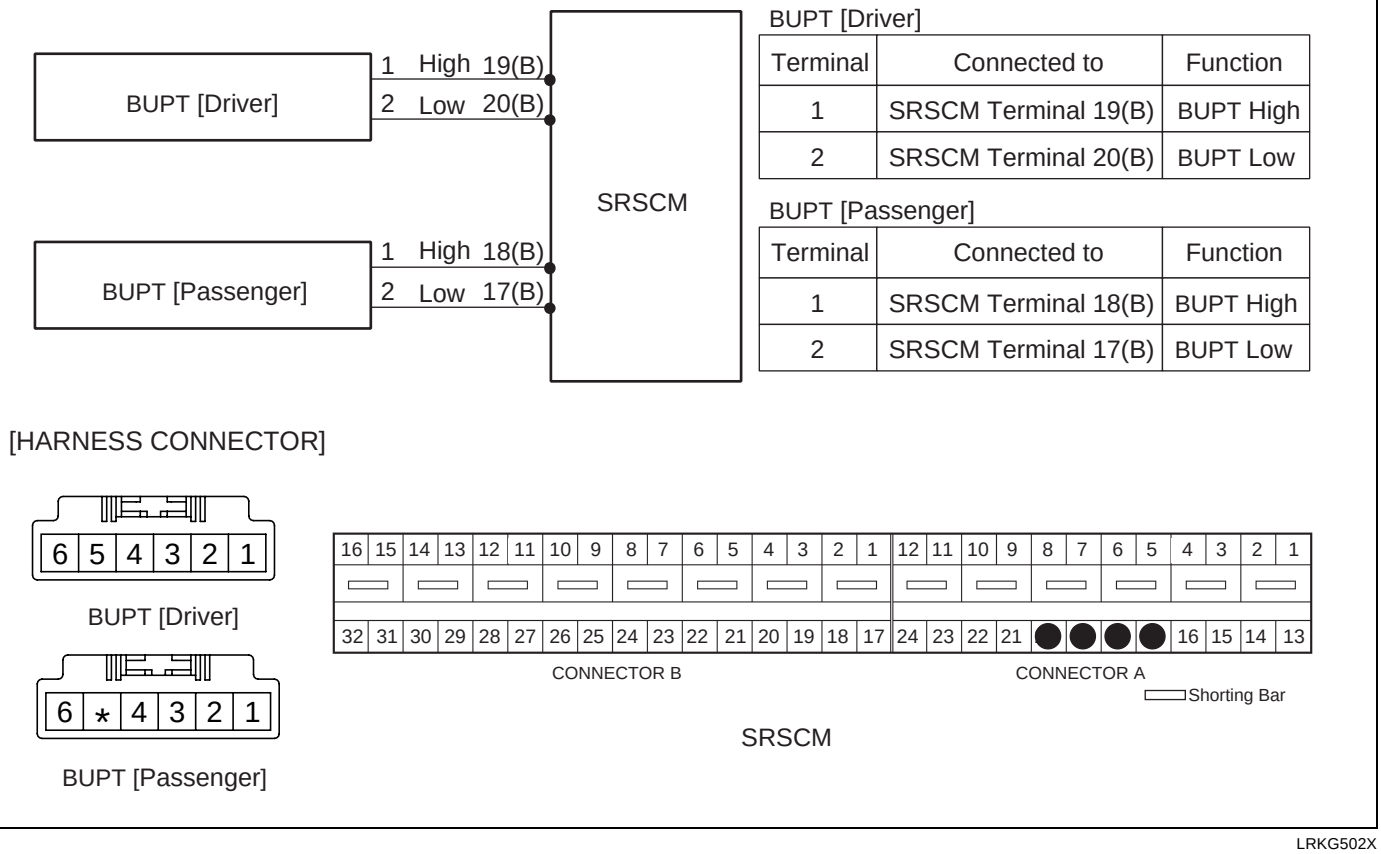
DTC DESCRIPTION EA6F7FDF

The Buckle Pretensioner circuit consists of the SRSCM and two Buckle Pretensioners (BUPT). The SRSCM sets above DTC(s) if it detects short to battery on the BUPT circuit.

DTC DETECTING CONDITION E3F29A0B

DTC	Condition	Probable cause
B1704 B1709	• Short to battery between BUPT and SRSCM • Seat Buckle Pretensioner (BUPT) Malfunction • SRSCM Malfunction	• Short to battery line circuit on wiring harness • Buckle Pretensioner(BUPT) squib • SRSCM

SCHEMATIC DIAGRAM E8570000



BUPT [Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 19(B)	BUPT High
2	SRSCM Terminal 20(B)	BUPT Low

BUPT [Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 18(B)	BUPT High
2	SRSCM Terminal 17(B)	BUPT Low

LRKG502X

TERMINAL & CONNECTOR INSPECTION EA78D28A

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EE32514B

1. PREPARATION

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

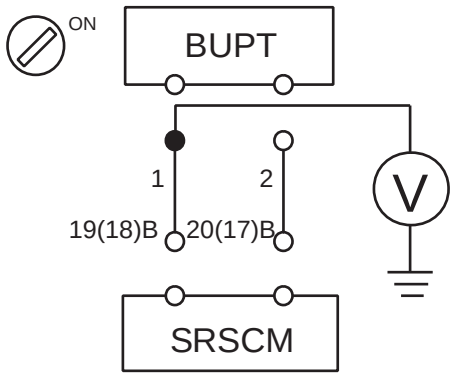
2. CHECK SHORT TO BATTERY LINE

1) Connect the battery negative cable to the battery.

2) Turn the ignition switch to ON.

3) Measure voltage between the terminal 1 of BUPT harness connector and chassis ground.

specification(voltage) : Approximately 0 V



LRKG501P

4) Is the measured voltage within specification?

YES

▶ Check the BUPT Module.

NO

▶ Repair the short to battery line circuit on wiring harness between the BUPT and the SRSCM.

3. CHECK THE BUPT MODULE

1) Replace the Buckle Pretensioner(BUPT) with a new one.
● Refer to "Buckle Pretensioner(BUPT)" 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, BUPT, FIS and SIS.

4) Connect the SRSCM connector.

5) Connect the battery negative cable to the battery.

6) Connect a Hi-Scan(Pro) to the data link connector.

7) Connect a Hi-Scan(Pro) to the data link connector.
Does Hi-Scan (Pro) indicate any DTC related to Buckle Pretensioner(BUPT)?

YES

▶ Go to next step.

NO

▶ Replace BUPT module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1722 CURTAIN AIRBAG [REAR-DRIVER] RESISTANCE TOO HIGH
DTC B1723 CURTAIN AIRBAG [REAR-DRIVER] RESISTANCE TOO LOW
DTC B1726 CURTAIN AIRBAG [REAR-PASSENGER] RESISTANCE TOO HIGH
DTC B1727 CURTAIN AIRBAG [REAR-PASSENGER] RESISTANCE TOO LOW

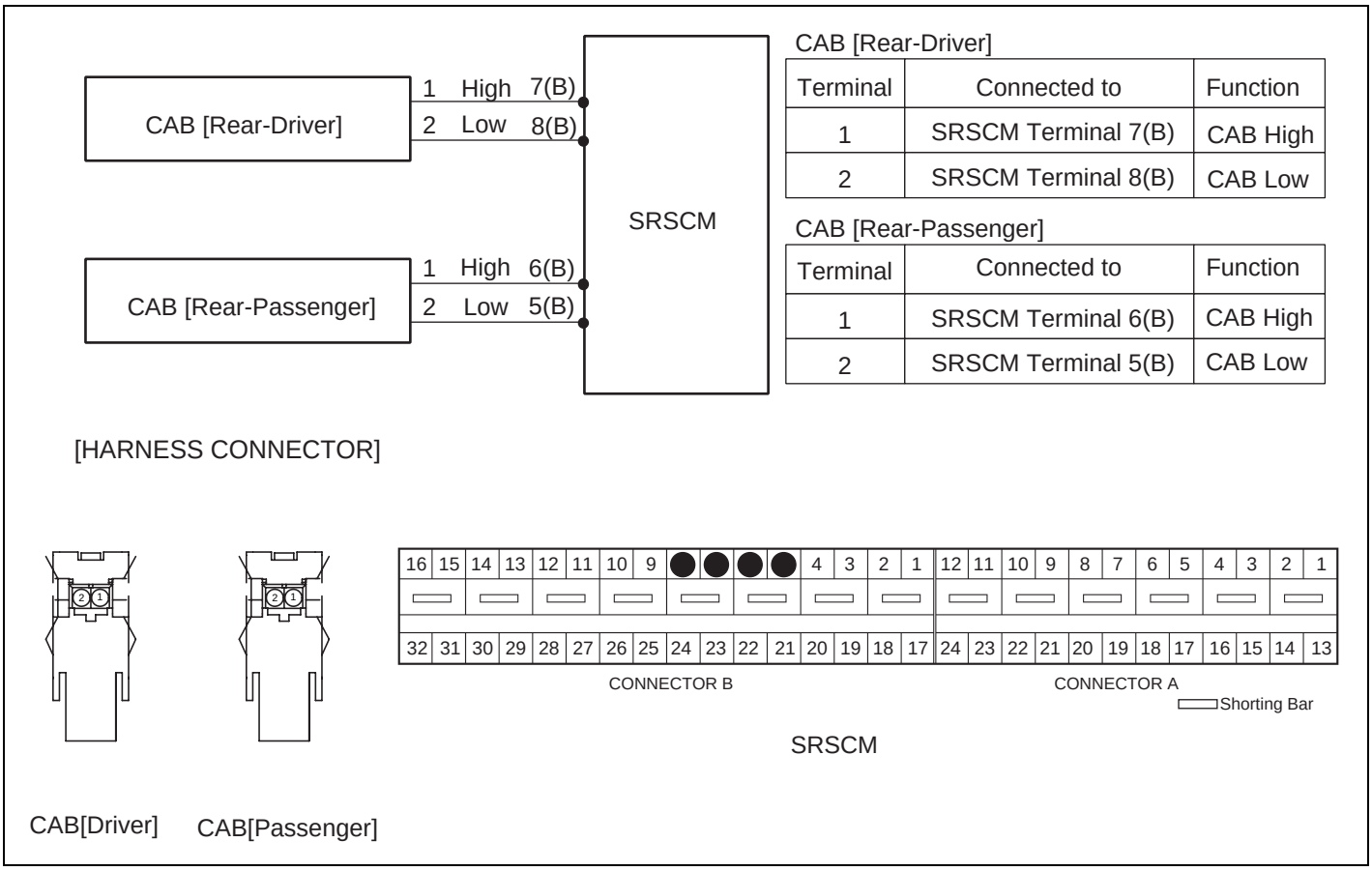
DTC DESCRIPTION E5EBF3EC

The CAB squib circuit consists of the SRSCM and two Curtain Airbags(CAB). It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when the CAB resistance too high or low is detected in the CAB squib circuit.

DTC DETECTING CONDITION EA7A809B

DTC	Condition	Probable cause
B1722 B1723 B1726 B1727	• 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 E9CECED1



CAB [Rear-Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 7(B)	CAB High
2	SRSCM Terminal 8(B)	CAB Low

CAB [Rear-Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 6(B)	CAB High
2	SRSCM Terminal 5(B)	CAB Low

LRKG210M

SPECIFICATION E7ED9DEB

CAB resistance : 1.6 ~ 4.7 Ω

TERMINAL & CONNECTOR INSPECTION EC0FD999

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E0D100F8

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK CAB RESISTANCE

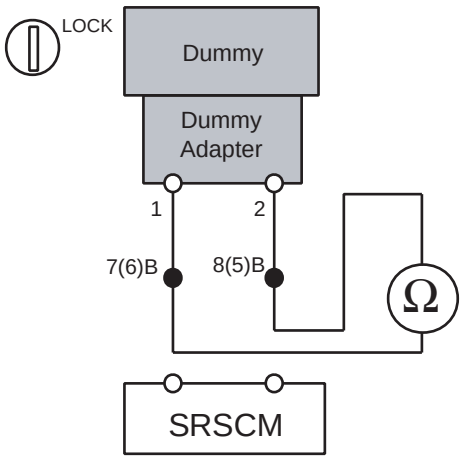
   CAUTION

   Never attempt to measure the circuit resistance of the airbag module(squib) even if you are using the specified tester.

   1) Connect the Dummy and the Dummy Adapter on CAB 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 7(6) and 8(5) of SRSCM harness connector(B).

Specificaton (resistance) : 1.6 ~ 4.7 Ω



LRKG210O

   3) Is the measured resistance within specification?

YES

▶ Replace the Curtain Airbag(CAB) module.

NO

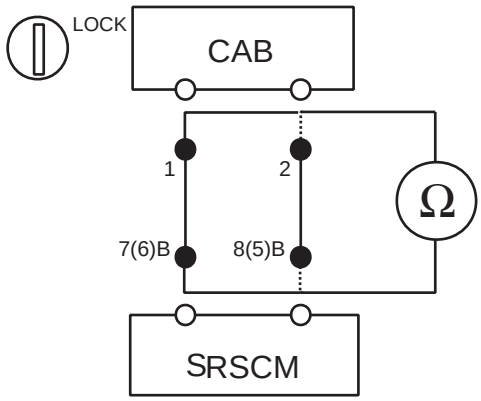
▶ Check open circuit.

3. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 1 of CAB harness connector and the terminal 7(6) of SRSCM harness connector(B).

2) Measure resistance between the terminal 2 of CAB harness connector and the terminal 8(5) of SRSCM harness connector(B).

Specification (resistance) : below 1 Ω



LRKG210P

3) Is the measured resistance within specification?

YES

▶ Check short circuit.

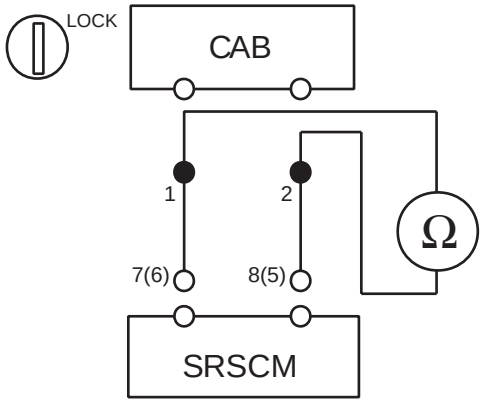
NO

▶ 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



LRKG210Q

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair or replace the wiring harness between the CAB and the SRSCM.

5. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1724 CURTAIN AIRBAG [REAR-DRIVER] CIRCUIT SHORT TO GROUND
DTC B1728 CURTAIN AIRBAG [REAR-PASSENGER] CIRCUIT SHORT TO GROUND

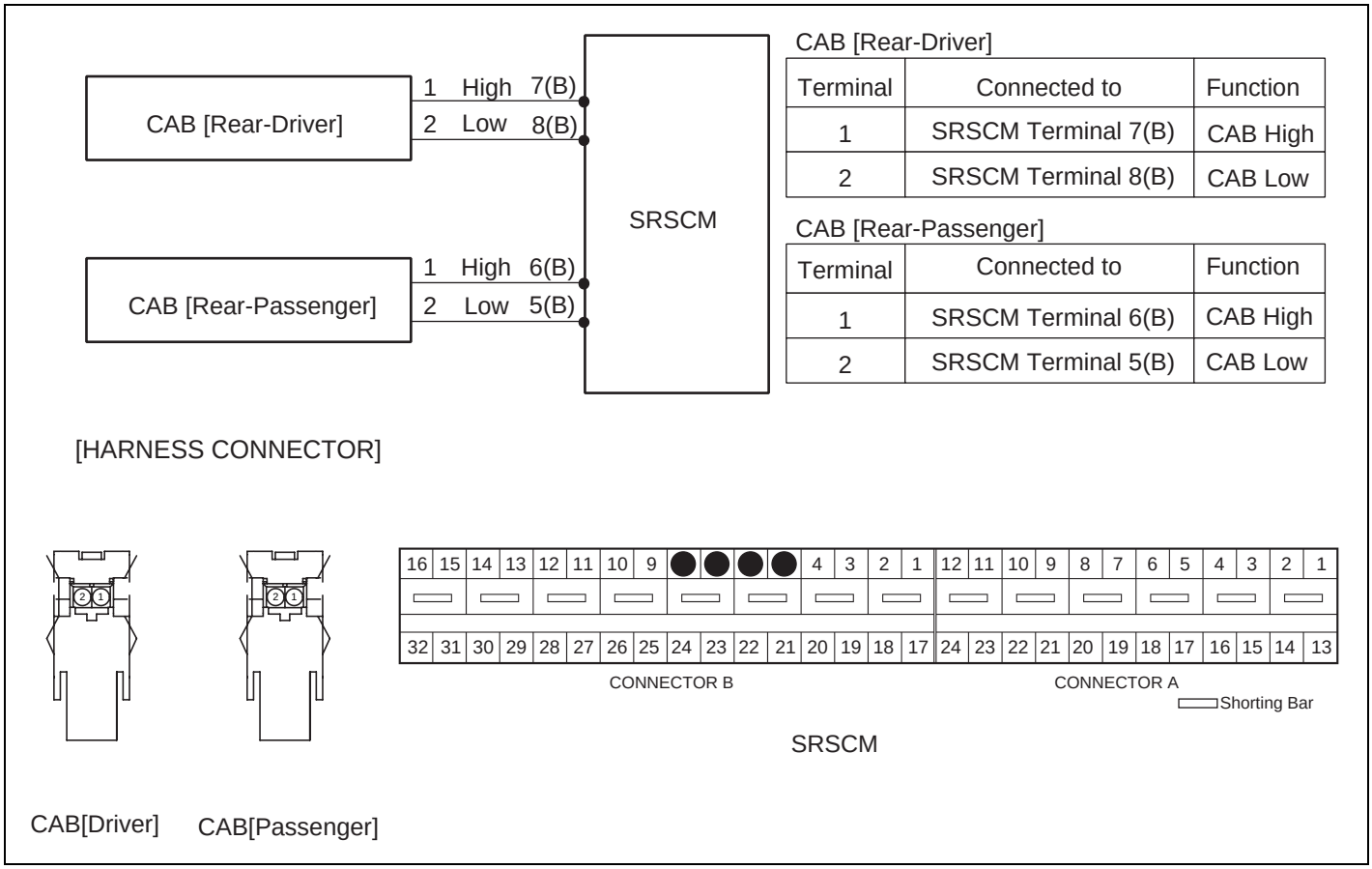
DTC DESCRIPTION E065DB54

The CAB squib circuit consists of the SRSCM and CAB. It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when short to ground is detected in the CAB squib circuit.

DTC DETECTING CONDITION EF9BEE7E

DTC	Condition	Probable cause
B1724 B1728	• 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 E6558DAD



CAB [Rear-Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 7(B)	CAB High
2	SRSCM Terminal 8(B)	CAB Low

CAB [Rear-Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 6(B)	CAB High
2	SRSCM Terminal 5(B)	CAB Low

LRKG210M

TERMINAL & CONNECTOR INSPECTION EDEB0B8B

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

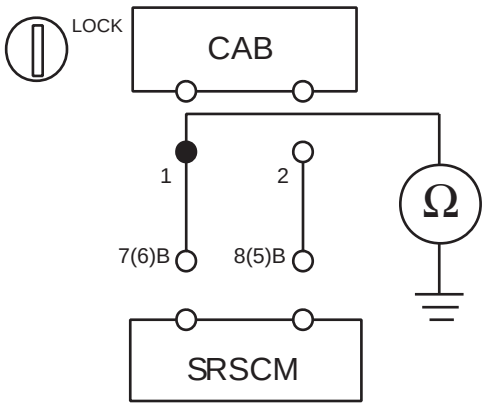
INSPECTION PROCEDURE E28D0ACA

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK SHORT TO GROUND

   1) Measure resistance between the terminal 1 of CAB harness connector and chassis ground.

Specification (resistance) : infinite



LRKG210R

   2) Is the measured resistance within specification?

YES

▶ Check the CAB Module.

NO

▶ Repair or replace the wiring harness between the CAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Curtain Airbag(CAB)?

YES

▶ Go to next step.

NO

▶ Replace CAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B1725 CURTAIN AIRBAG [REAR-DRIVER] CIRCUIT SHORT TO BATTERY
DTC B1729 CURTAIN AIRBAG [REAR-PASSENGER] CIRCUIT SHORT TO BATTERY

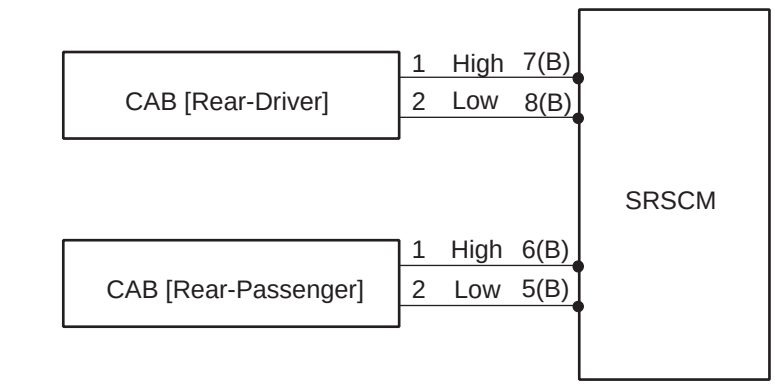
DTC DESCRIPTION EB8C82B7

The CAB squib circuit consists of the SRSCM and CAB. It causes the SRS to deploy when the SRS deployment conditions are satisfied. The above DTC is recorded when short to battery is detected in the CAB squib circuit.

DTC DETECTING CONDITION E00019F6

DTC	Condition	Probable cause
B1725 B1729	• Short to battery 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 E99F9E73



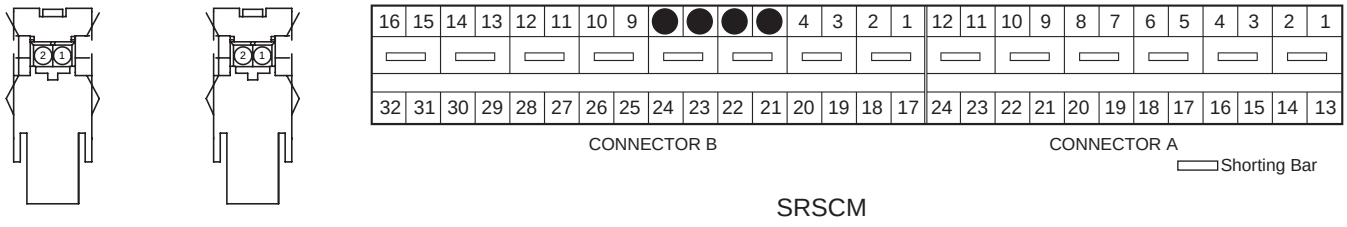
CAB [Rear-Driver]

Terminal	Connected to	Function
1	SRSCM Terminal 7(B)	CAB High
2	SRSCM Terminal 8(B)	CAB Low

CAB [Rear-Passenger]

Terminal	Connected to	Function
1	SRSCM Terminal 6(B)	CAB High
2	SRSCM Terminal 5(B)	CAB Low

[HARNESS CONNECTOR]



LRKG210M

TERMINAL & CONNECTOR INSPECTION E9D1CAE8

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EBA050E4

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

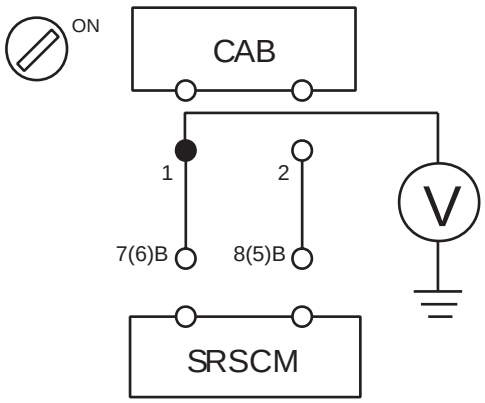
2. CHECK SHORT TO BATTERY LINE

   1) Connect the battery negative cable 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 0 V



LRKG210S

   4) Is the measured voltage within specification?

YES

▶ Check the CAB Module.

NO

▶ Repair the short to battery line circuit on wiring harness between the CAB and the SRSCM.

3. CHECK THE 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, BUPT, FIS and SIS.

   4) Connect the SRSCM connector.

   5) Connect the battery negative cable 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 Curtain Airbag(CAB)?

YES

▶ Go to next step.

NO

▶ Replace CAB module.

4. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B2500 SRS WARNING LAMP FAULT

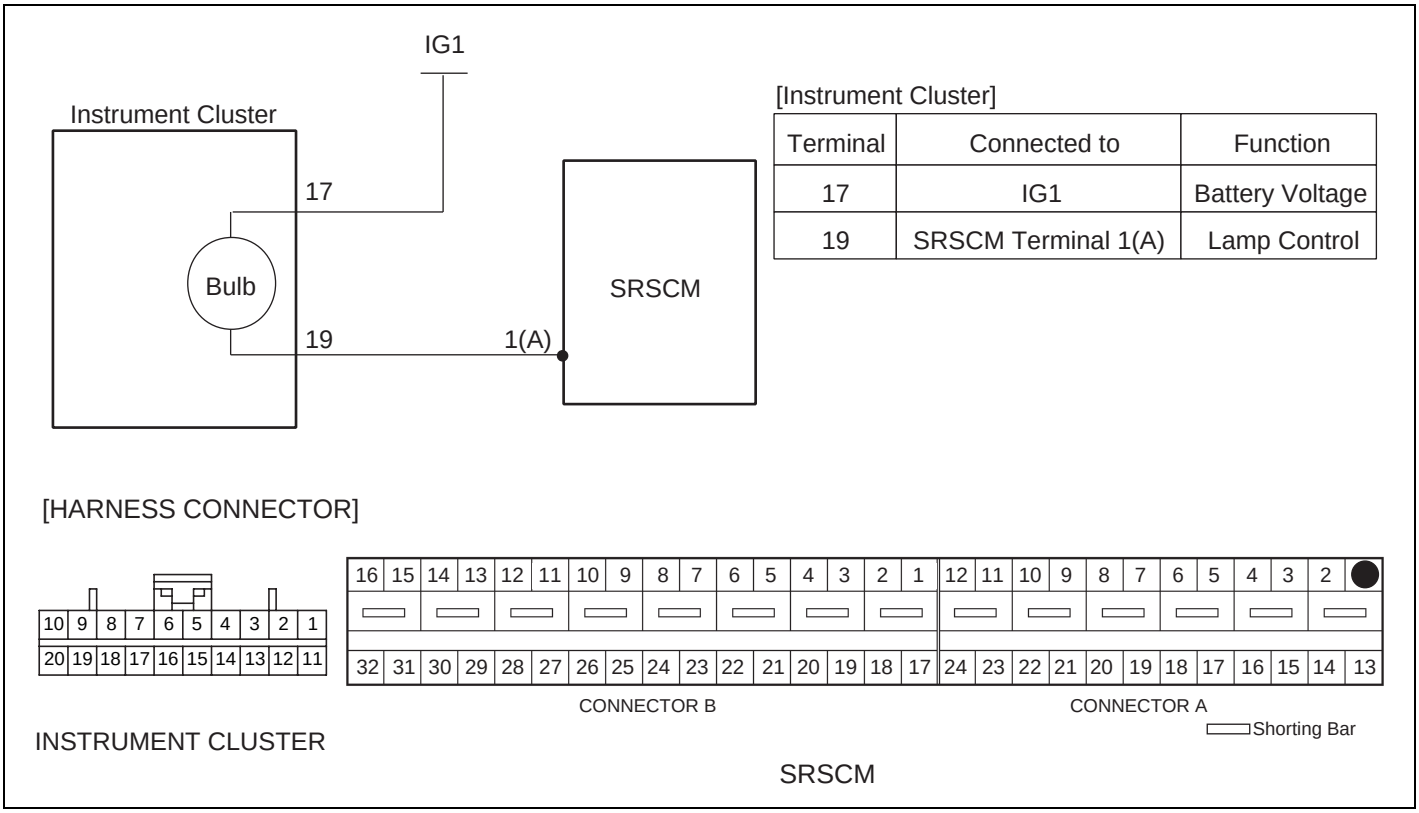
DTC DESCRIPTION E93A47DD

The SRS warning lamp is located in the cluster. When the airbag system is normal, the SRS warning lamp turns on for approx. 6 seconds after the ignition switch is turned to ON, and then turns off automatically. If there is a malfunction in the airbag system, the SRS warning lamp lights up to inform the driver of the abnormality. The SRSCM shall measure the voltage at the SRS warning lamp output pin, both when the lamp is on and when the lamp is off, to detect whether the commanded state matches the actual state.

DTC DETECTING CONDITION EEDFA188

DTC	Condition	Probable cause
B2500	• 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 EF6831ED



LRKG210A

TERMINAL & CONNECTOR INSPECTION E776A8E9

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE EE1A67BA

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

2. CHECK THE FUSE

   1) Remove the airbag fuse and the airbag warning lamp fuse from junction box.

   2) Inspect the fuses. Are the fuses normal?

   YES

   ▶ Check the warning lamp bulb.

   NO

   ▶ Repair or replace the fuses.

3. CHECK THE WARNING LAMP BULB

   1) Remove the bulb from the instrument cluster.

   2) Inspect the bulb. Is the bulb normal?

   YES

   ▶ Check source voltage.

   NO

   ▶ Repair or replace the bulb.

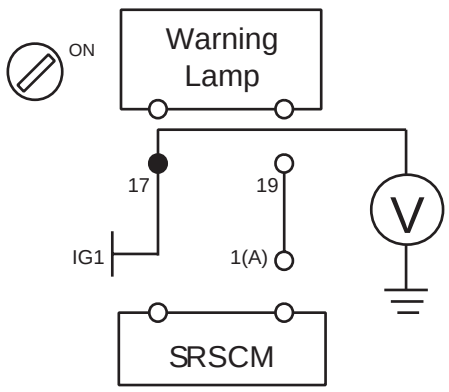
4. CHECK SOURCE VOLTAGE

   1) Connect the battery negative cable to the battery.

   2) Turn the ignition switch to ON.

   3) Measure voltage between the terminal 17 of the Instrument Cluster harness connector and chassis ground.

Specification (voltage) : 9 ~ 16 V



LRKG210B

4) Is the measured voltage within specification?

YES

▶ Check short to battery line.

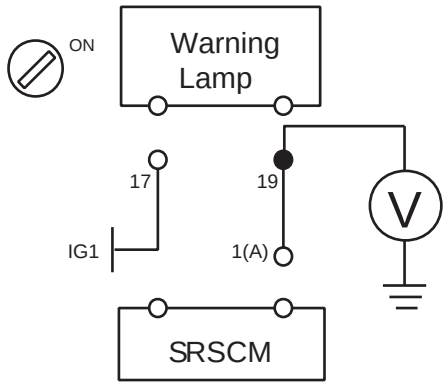
NO

▶ 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 19 of the Instrument Cluster harness connector and chassis ground.

Specification (voltage) : Approximately 0 V



LRKG210C

2) Is the measured voltage within specification?

YES

▶ Check short or short to ground.

NO

▶ Repair the short to battery line circuit on wiring harness between the SRSCM and the Warning Lamp.

6. CHECK SHORT OR SHORT TO GROUND

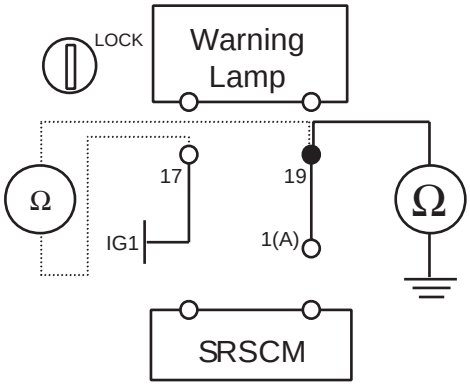
1) Turn the ignition switch to LOCK.

2) Disconnect the battery negative cable from the battery.

3) Measure resistance between the terminal 19 of the Instrument Cluster harness connector and chassis ground.

4) Measure resistance between the terminal 19 and 17 of the Instrument Cluster harness connector.

Specification (resistance) : infinite



LRKG210D

5) Is the measured resistance within specification?

YES

▶ Check open circuit.

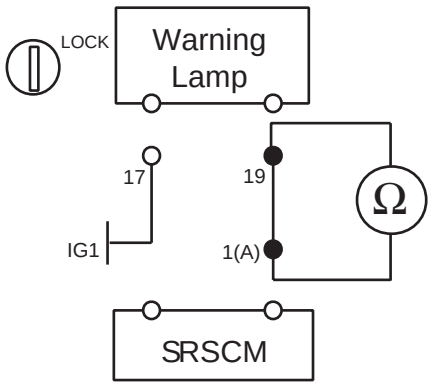
NO

▶ Repair the short or short to ground circuit on wiring harness between the SRSCM and the Warning Lamp.

7. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 19 of the Instrument Cluster connector and the terminal 1 of SRSCM harness connector(A).

Specification (resistance) : below 1 Ω



LRKG210E

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair the open circuit on wiring harness between the SRSCM and the Warning Lamp.

8. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

DTC B2505 PASSENGER AIRBAG DEACTIVATION LAMP FAULT

DTC DESCRIPTION E87912EA

The SRSCM shall detect and record the following situations. And a single fault code shall be assigned as PAD Lamp Fault for all PAD lamp fault conditions. This fault code shall be set whenever either of the fault conditions is detected. If both fault conditions are not detected, the fault code shall not be detected.

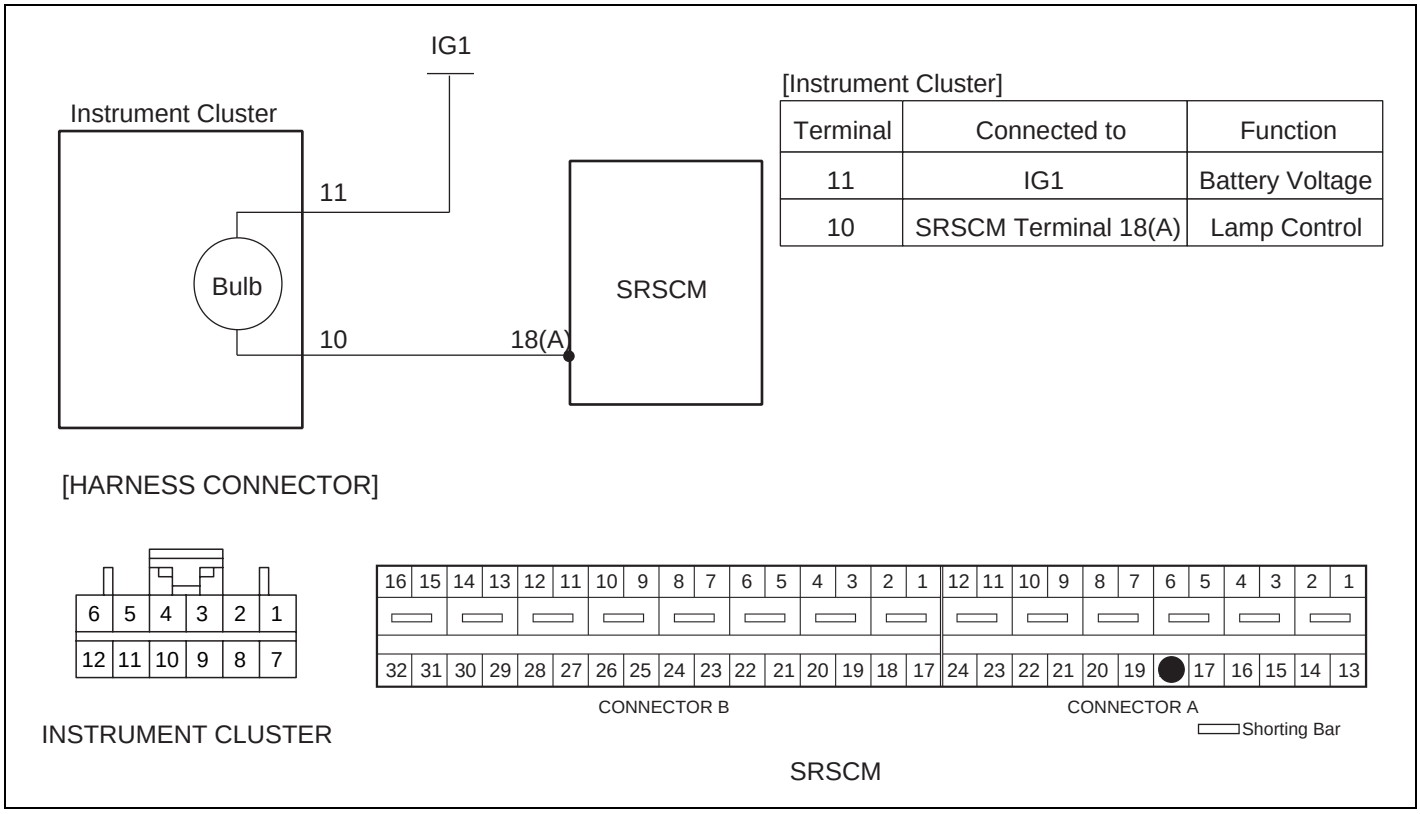
1. The bulb is short, or there is a short to battery condition on the PAD lamp input connection to the SRSCM. This condition is only detectable while the PAD lamp is commanded ON. If a short to battery condition is detected, the PAD lamp shall be commanded OFF for 15 seconds to protect the circuit.

2. The bulb is open, or there is a short to ground condition. This condition is only detectable while the PAD lamp is commanded OFF. If the PAD lamp is ON and a short to ground condition is present, the SRSCM shall command the PAD lamp OFF for a maximum of 1ms during each diagnostic cycle.

DTC DETECTING CONDITION EDA9E9E1

DTC	Condition	Probable cause
B2505	• PAD lamp bulb open or short • Open between PAD lamp and SRSCM • Short to ground or battery line between PAD lamp and SRSCM • SRSCM malfunction	• Fuse • PAD lamp bulb • Wiring Harness • SRSCM

SCHEMATIC DIAGRAM EDCC89AC



LRKG500V

TERMINAL & CONNECTOR INSPECTION ECC4E017

Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

INSPECTION PROCEDURE E7DDFA27

1. PREPARATION
   Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)
2. CHECK THE FUSE
   1) Remove the airbag fuse and the PAD lamp fuse from junction box.
   2) Inspect the fuses. Are the fuses normal?

      YES

      ▶ Check the PAD lamp bulb.

      NO

      ▶ Repair or replace the fuses.
3. CHECK THE PAD LAMP BULB
   1) Remove the bulb from the instrument cluster.
   2) Inspect the bulb. Is the bulb normal?

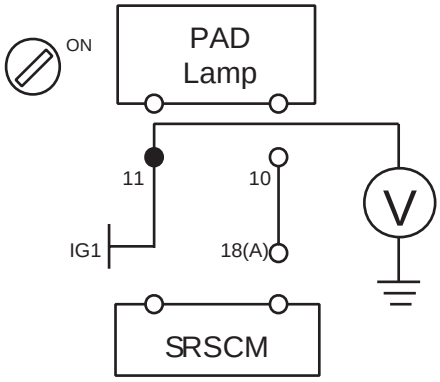
      YES

      ▶Check source voltage.

      NO

      ▶ Repair or replace the bulb.
4. CHECK SOURCE VOLTAGE
   1) Connect the battery negative cable to the battery.
   2) Turn the ignition switch to ON.
   3) Measure voltage between the terminal 11 of the Instrument Cluster harness connector and chassis ground.

Specification (voltage) : 9 ~ 16 V



LRKG510C

4) Is the measured voltage within specification?

YES

▶ Check short to battery line.

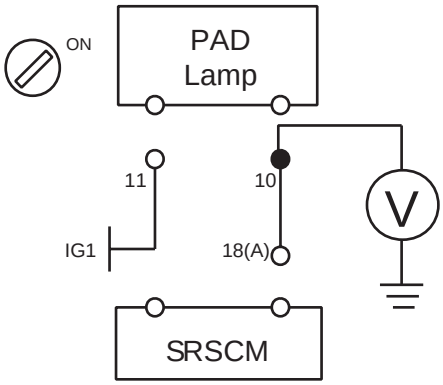
NO

▶ Repair or replace the wiring harness between ignition switch and the PAD Lamp.

5. CHECK SHORT TO BATTERY LINE

1) Measure voltage between the terminal 10 of the Instrument Cluster harness connector and chassis ground.

Specification (voltage) : Approximately 0 V



LRKG510D

2) Is the measured voltage within specification?

YES

▶ Check short or short to ground.

NO

▶ Repair the short to battery line circuit on wiring harness between the SRSCM and the PAD Lamp.

6. CHECK SHORT OR SHORT TO GROUND

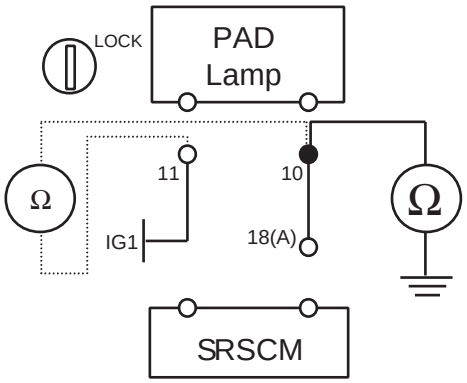
1) Turn the ignition switch to LOCK.

2) Disconnect the battery negative cable from the battery.

3) Measure resistance between the terminal 10 of the Instrument Cluster harness connector and chassis ground.

4) Measure resistance between the terminal 11 and 2 of the Instrument Cluster harness connector.

Specification (resistance) : infinite



LRKG510E

5) Is the measured resistance within specification?

YES

▶ Check open circuit.

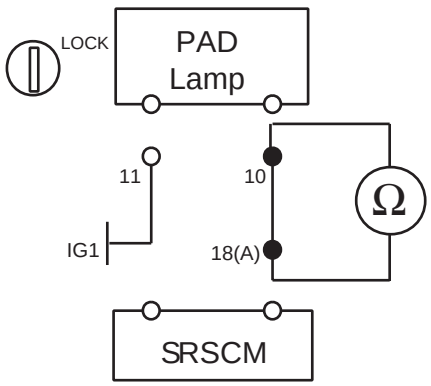
NO

▶ Repair the short or short to ground circuit on wiring harness between the SRSCM and the PAD Lamp.

7. CHECK OPEN CIRCUIT

1) Measure resistance between the terminal 10 of the Instrument Cluster connector and the terminal 18 of SRSCM harness connector(A).

Specification (resistance) : below 1 Ω



LRKG510F

2) Is the measured resistance within specification?

YES

▶ Go to next step.

NO

▶ Repair the open circuit on wiring harness between the SRSCM and the PAD Lamp.

8. CLEAR THE DTC AND CHECK THE VEHICLE AGAIN
Refer to the DESCRIPTION in this TROUBLESHOOTING part. (See page RT - 39)

AIR BAG MODULE DISPOSAL

AIRBAG DISPOSAL E18FBAF3

SPECIAL TOOL REQUIRED

Deployment tool 0957A-34100A

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

DEPLOYING AIRBAGS IN THE VEHICLE

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

1. Turn the ignition switch OFF, and disconnect the battery negative cable and wait at least three minutes.
2. Confirm that each airbag or side airbag is securely mounted.
3. Confirm that the special tool is functioning properly by following the check procedure.

DRIVER'S AIRBAG :

1. Remove the driver's airbag and install the SST(0957A-38500).
2. Install the driver's airbag on the steering wheel.

FRONT PASSENGER'S AIRBAG :

1. Remove the glove box, then disconnect the 2P connector between the front passenger's airbag and SRS main harness.
2. Install the SST(0957A-3F100).

SIDE AIRBAG :

1. Disconnect the 2P connector between the side airbag and side wire harness.
2. Install the SST (0957A-3F100).

CURTAIN AIRBAG :

1. Disconnect the 2P connector between the curtain airbag and wire harness.
2. Install the SST(0957A-38500).

SEAT BELT PRETENSIONER :

1. Disconnect the 2P connector from the seat belt pretensioner.
2. Install the SST(0957A-38500).
3. Place the deployment tool at least thirty feet (10 meters) away from the airbag.
4. Connect a 12 volt battery to the tool.
5. Push the tool's deployment switch. The airbag should deploy (deployment is both highly audible and visible: a loud noise and rapid inflation of the bag, followed by slow deflection)
6. Dispose of the complete airbag. No part of it can be reused. Place it in a sturdy plastic bag and seal it securely.

ERKD002U

DEPLOYING THE AIRBAG OUT OF THE VEHICLE

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

1. Position the airbag face up, outdoors on flat ground at least thirty feet (10meters) from any obstacles or people.

DISPOSAL OF DAMAGED AIRBAG

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