

RT-2

Restraint

General Information

PRECAUTIONS

General Precautions

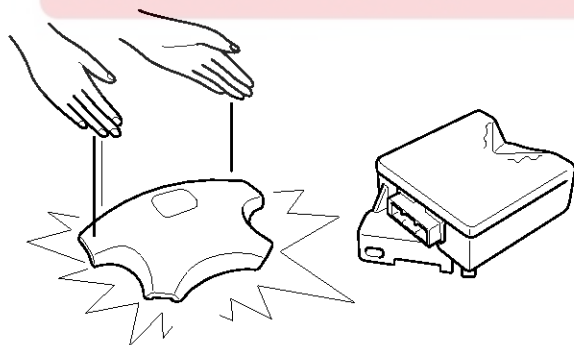
Please read the following precautions carefully before performing the airbag system service. Observe the instructions described in this manual, or the airbags could accidentally deploy and cause damage or injuries.

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

NOTICE

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

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



ERKD002V

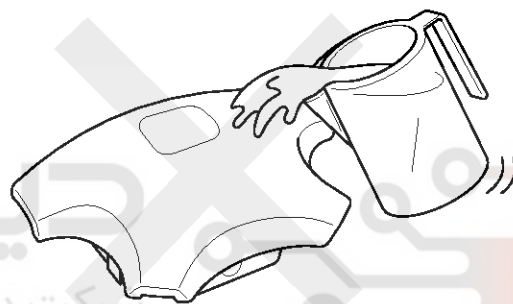
- Before removing any of the SRS parts (including the disconnection of the connectors), always disconnect the SRS connector.

Airbag Handling and Storage

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 f high heat source (exceeding 200°F/93°C).
- Never perform electrical inspections to the airbags, such as measuring resistance.
- Do not position yourself in front of the airbag assembly during removal, inspection, or replacement.
- Refer to the scrapping procedures for disposal of the damaged airbag.
- Be careful not to bump or impact the SRS unit or the side impact sensors whenever the ignition switch is ON, 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.

General Information

RT-3

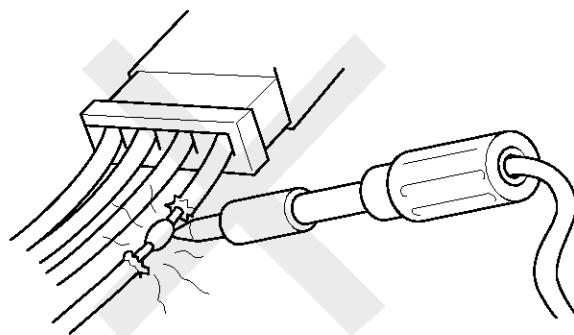
- After a collision in which the airbags were deployed, replace the front airbags and the SRS unit. After a collision in which the side airbag was deployed, replace the side airbag, the front impact sensor and side impact sensor on the side where the side airbag deployed and the SRS unit. After a collision 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 104°F/40°C) and dry (less than 80% relative humidity, no moisture) area.

Wiring Precautions

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

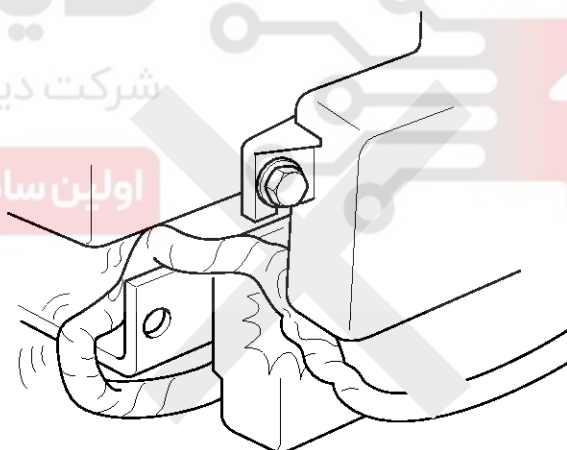
Observe the instructions described in this section.

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



ERKD002Y

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



ERKD002X

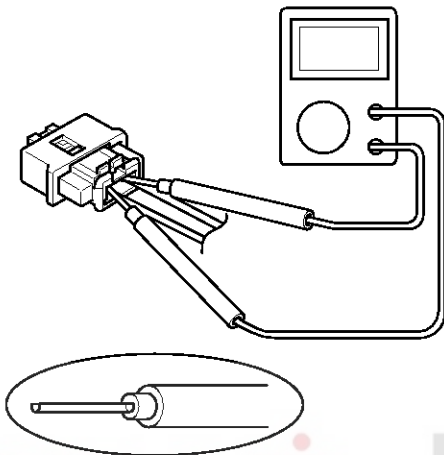
- Make sure all SRS ground locations are clean, and grounds are securely fastened for optimum metal-to-metal contact. Poor grounding can cause intermittent problems that are difficult to diagnose.

RT-4

Restraint

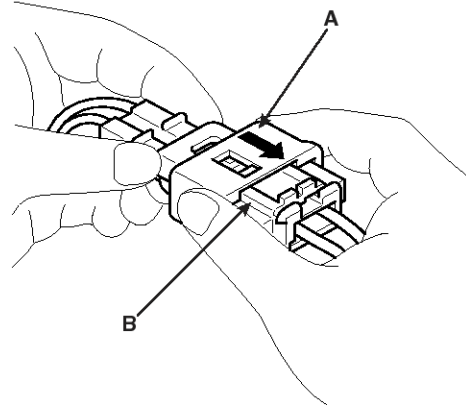
Precautions for Electrical Inspections

- 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

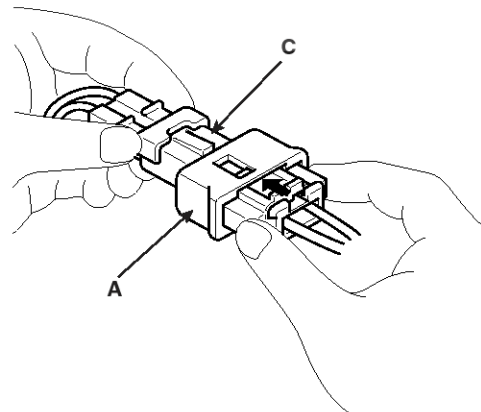
- Use a u-shaped probe. Do not insert the probe forcibly.
 - Use specified service connectors for troubleshooting.
- Using improper tools could cause an error in inspection due to poor metal contact.

**Spring-loaded Lock Connector
Airbag Connector(I)**

ERKD511A

Connecting

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

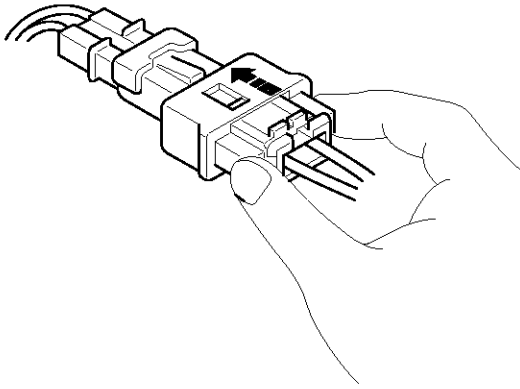


ERKD511B

General Information

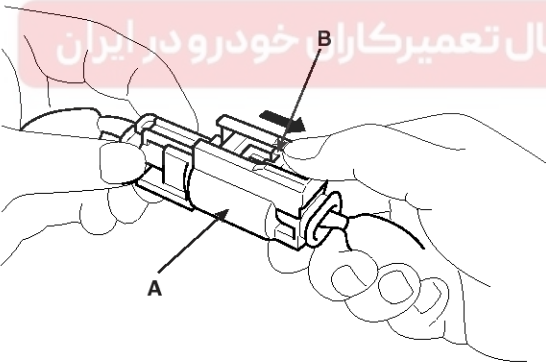
RT-5

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



ERKD511C

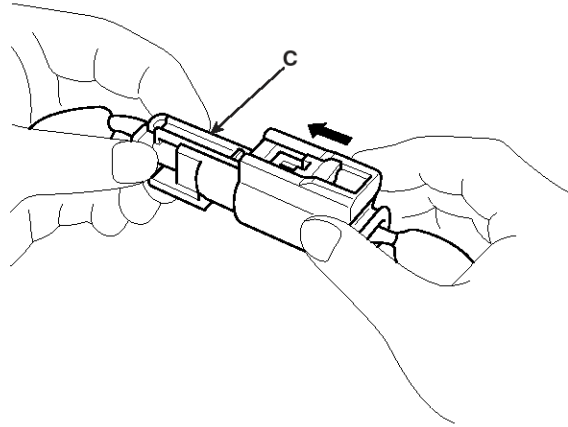
Airbag Connector(II)



ERKD511D

Connecting

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



ERKD511E

PRECAUTIONS

General Precautions

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

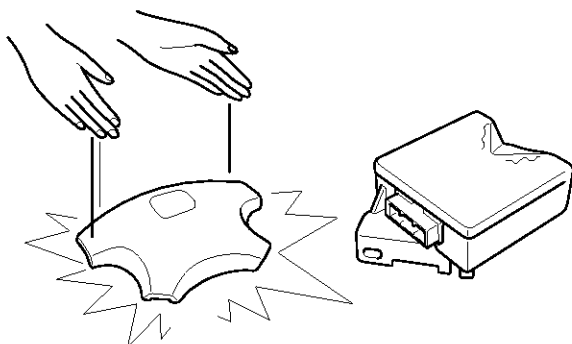
NOTICE

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

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

RT-6

Restraint



ERKD002V

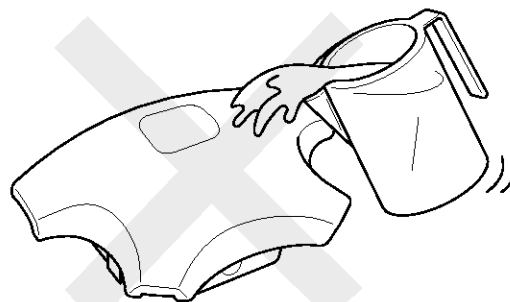
- Before removing any of the SRS parts (including the disconnection of the connectors), always disconnect the SRS connector.

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 f high heat source (exceeding 200°F/93°C).
- Never perform electrical inspections to the airbags, such as measuring resistance.
- Do not position yourself in front of the airbag assembly during removal, inspection, or replacement.
- Refer to the scrapping procedures for disposal of the damaged airbag.
- Be careful not to bump or impact the SRS unit or the side impact sensors whenever the ignition switch is ON, 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

General Information

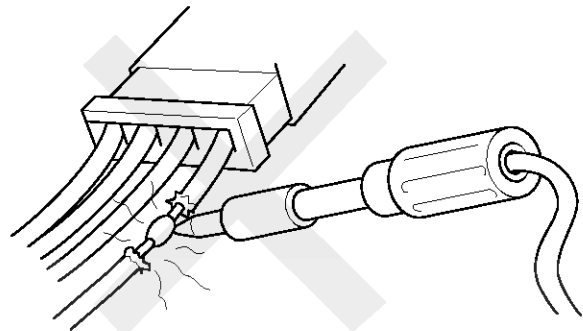
RT-7

- 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 104°F/40°C) and dry (less than 80% relative humidity, no moisture) area.

Wiring Precautions

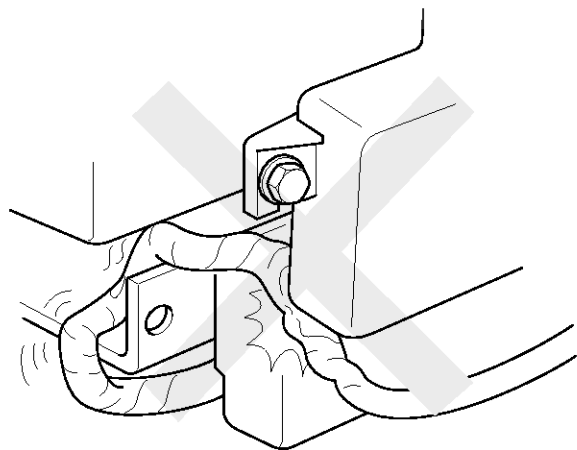
SRS wiring can be identified by special yellow outer covering (except the SRS circuits under the front seats). Observe the instructions described in this section.

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



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



ERKD002X

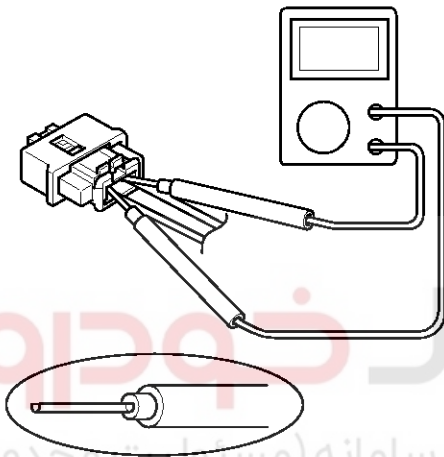
RT-8

Restraint

- 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.



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

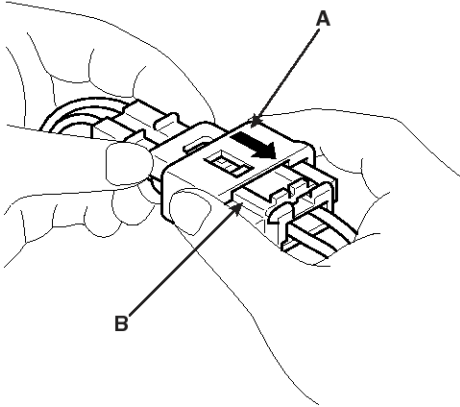
Using improper tools could cause an error in inspection due to poor metal contact.

ERKD002W

General Information

RT-9

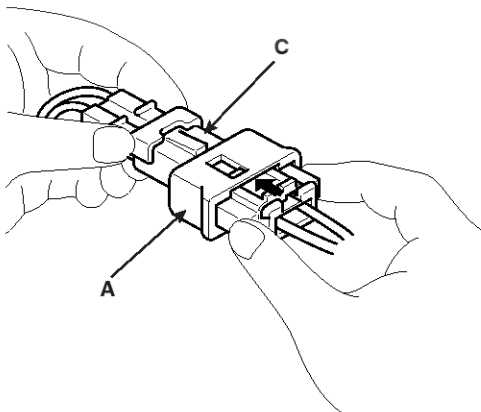
Spring-loaded Lock Connector Airbag Connector(I)



ERKD511A

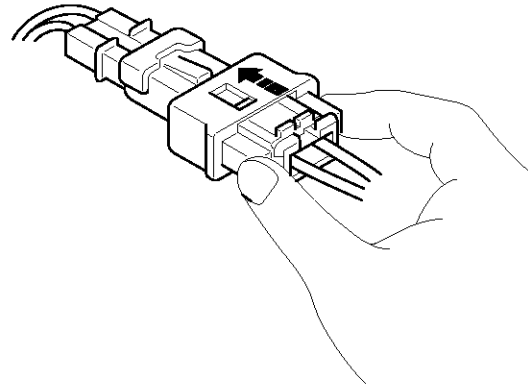
Connecting

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



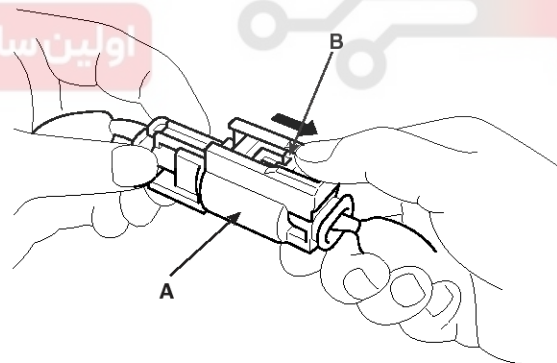
ERKD511B

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



ERKD511C

Airbag Connector(II)



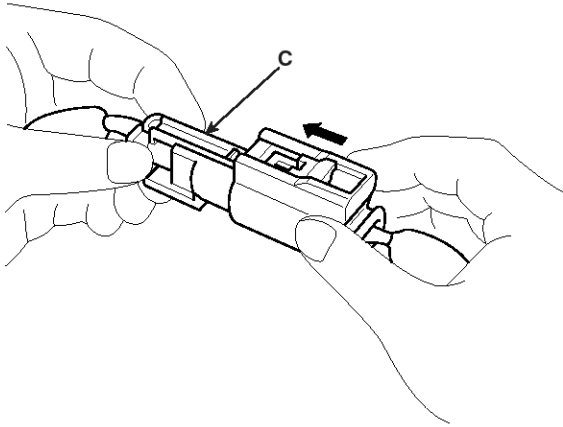
ERKD511D

RT-10

Restraint

Connecting

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



ERKD511E

GENERAL

The supplemental restraint system (SRS) is designed to supplement the seat belt to help reduce the risk or severity of injury to the driver and passenger by activating and deploying the driver, passenger, side airbag and belt pre-tensioner 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. SRSCM located on the floor under the heater core which monitors the system, an accelerometer which senses the vehicle deceleration, a spring interconnection (clock spring) located within the steering column ; system wiring and wiring connector; and a knee bolster located under the steering column. 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)

The SRS airbag system consists of electrical and electronic. Be cautious in the airbag parts.

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

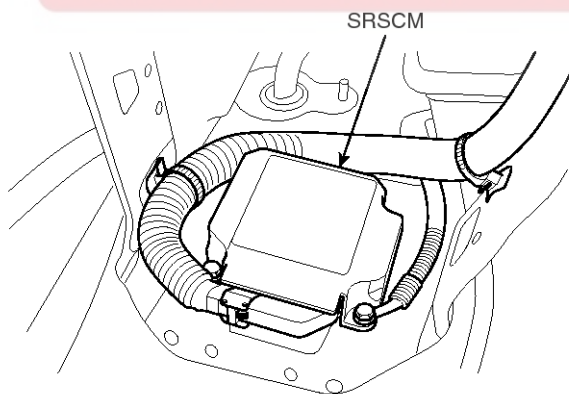
1. DC/DC converter: DC/DC converter in power supply unit includes up/down transformer converter, and provide ignition voltage for 2 front airbag ignition circuits and inside operation voltage. If inside operation voltage is below critical value setting, it will perform re-setting.
2. Safety sensor: Safety 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.

General Information

RT-11

4. Self diagnosis: SRSCM will constantly monitor current SRS operation status and detect system failure during vehicle power supply is on, system failure may be checked with trouble codes using scan too. (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 be turned on about 6 seconds, then turn off.
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.
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 seat crash pad.
8. Once airbag is deployed, SRSCM should not be used again but replaced.
9. SRSCM will determine whether passenger has put on seat belt using built-in switch signal 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.

اولین سامانه دیجیتالی تعمیرکاران خودرو در ایران



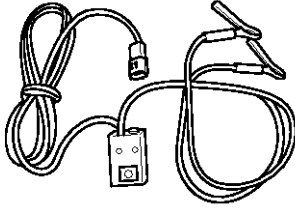
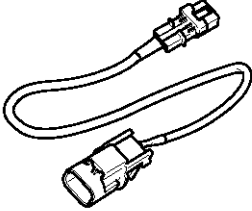
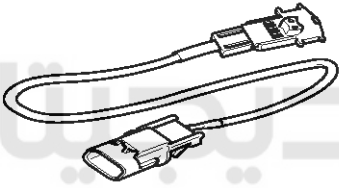
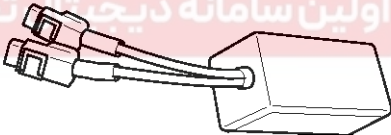
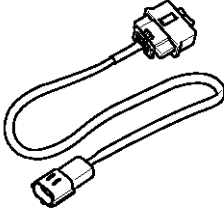
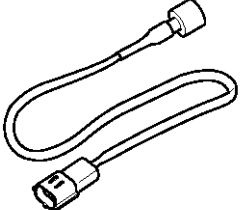
KRQE220A



RT-12

Restraint

SPECIAL SERVICE TOOLS

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

General Information

RT-13

DAB : Driver Airbag

PAB : Passenger Airbag

SAB : Side Airbag

BPT : Belt Pretensioner

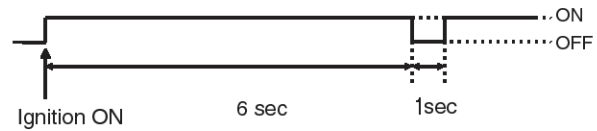
CAB : Curtain Airbag

BUPT: Buckle Pretensioner

WARNIG LAMP ACTIVATION

1. Active fault or more than 10 faults are memorized

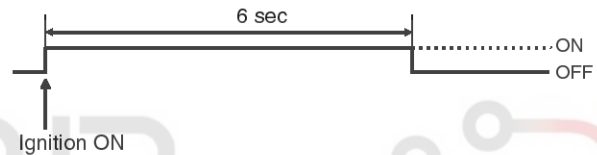
- A warning lamp turns on continuously after IG ON.
- A warning lamp turns off for 1 second.
- A warning lamp turns on continuously.



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2. No current fault or Less than 10 faults are memorized

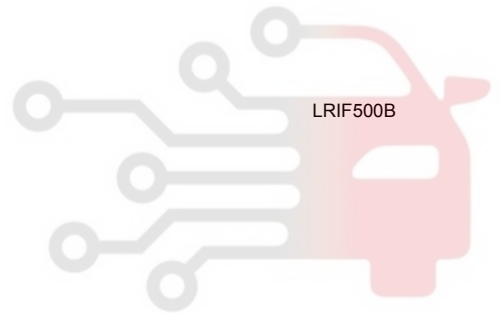
- A warning lamp turns on continuously after IG ON.
- A warning lamp turns off continuously.



LRIF500B

دیجیتال خودرو
شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



RT-14

Restraint

AIRBAG SYSTEM COMPONENTS

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



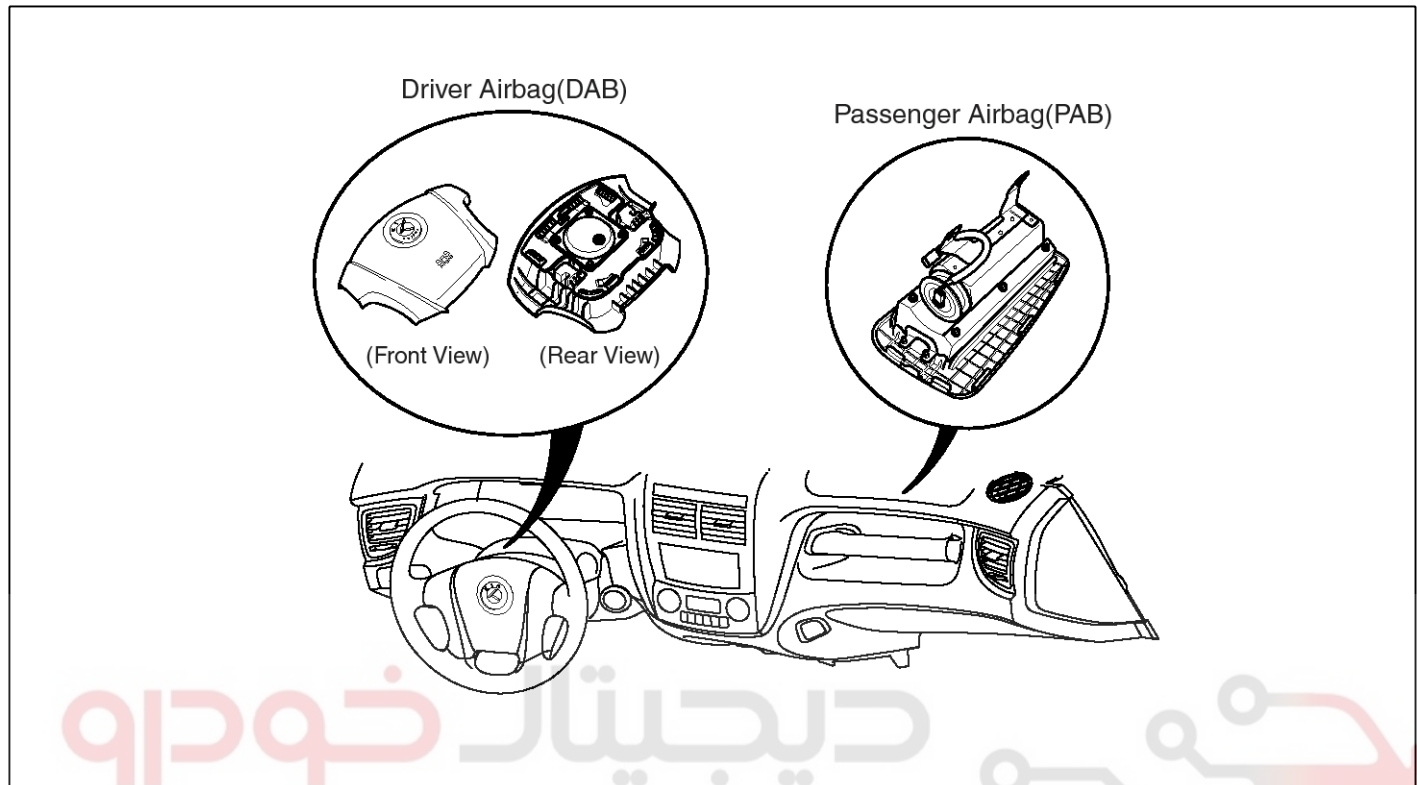
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General Information

RT-15

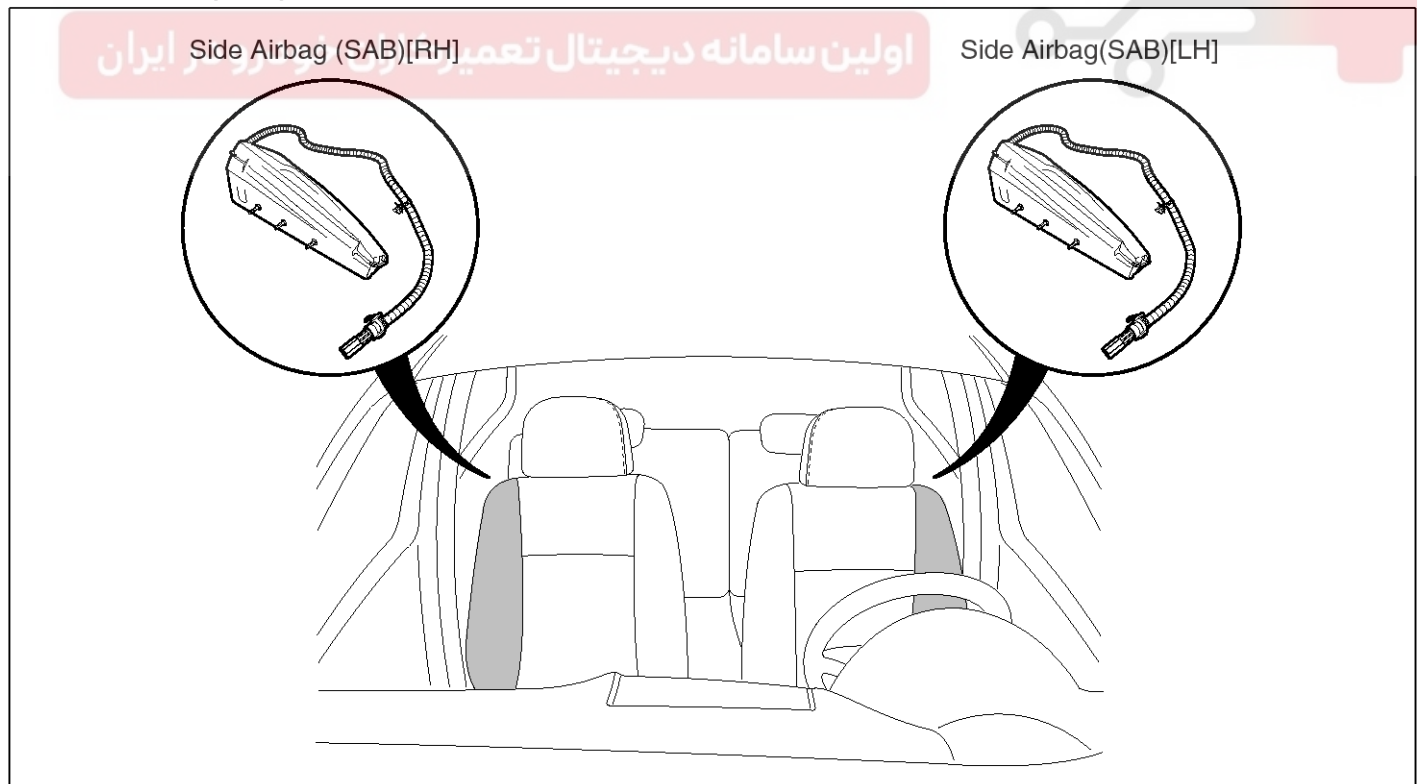
COMPONENTS LOCATION

DRIVER AIRBAG(DAB)/PASSENGER AIRBAG(PAB)



LRIF500D

SIDE AIRBAG (SAB)

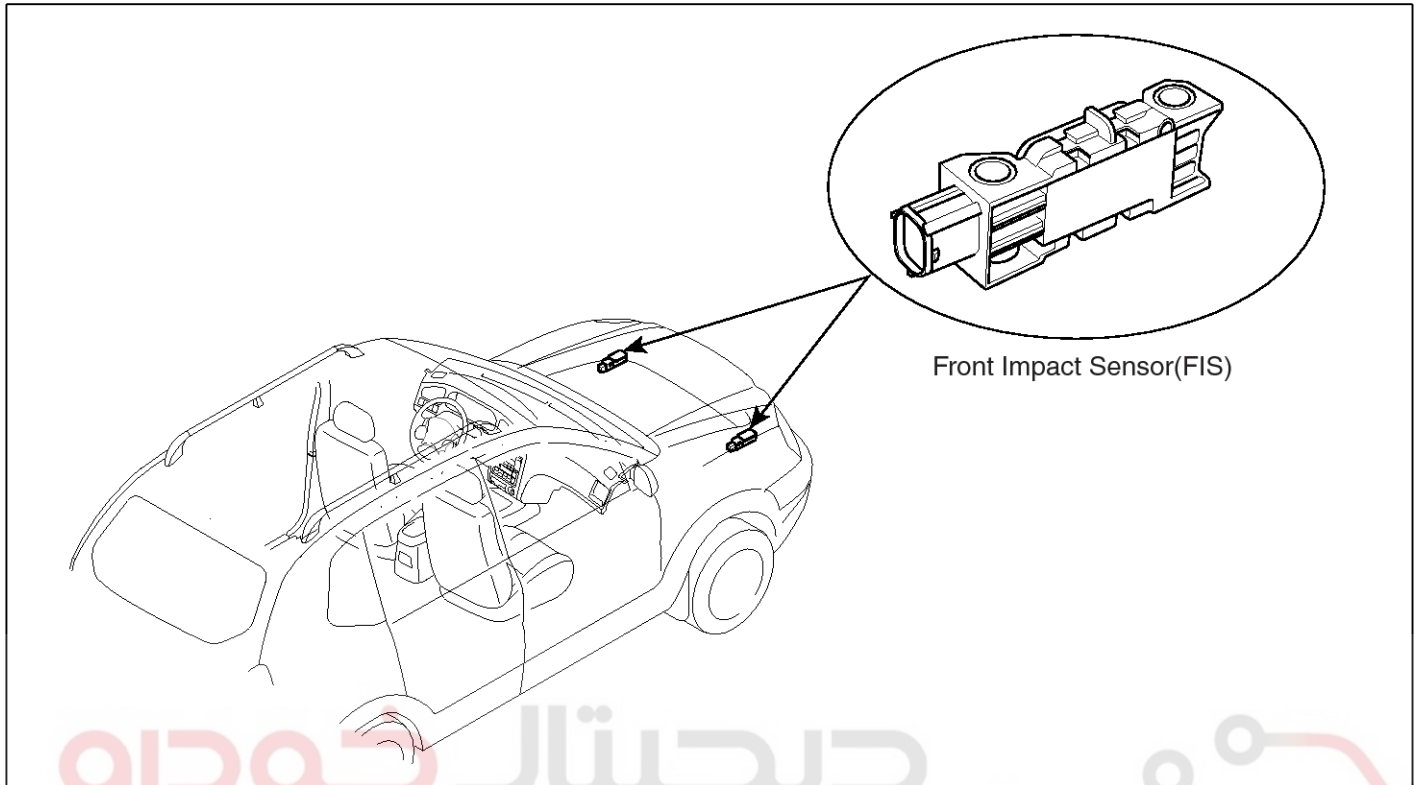


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RT-16

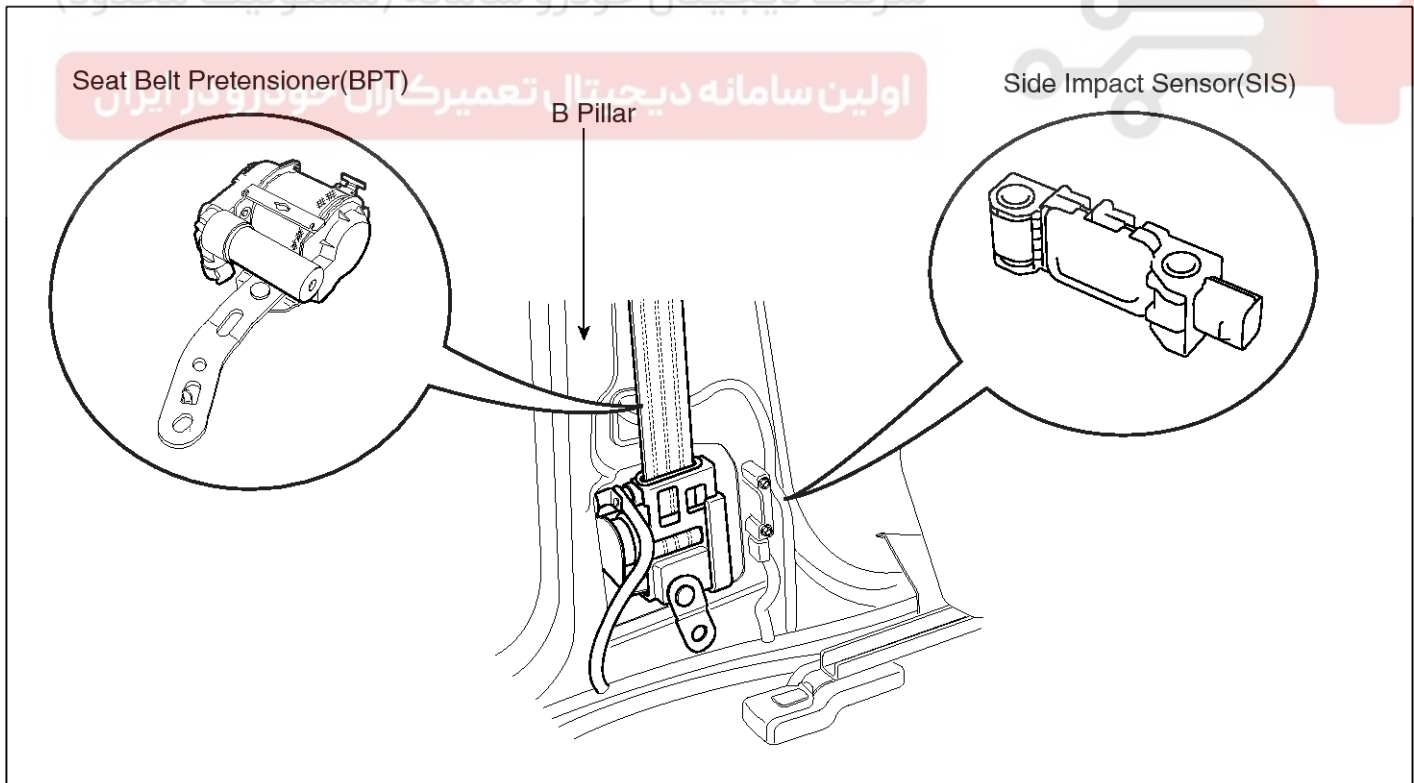
Restraint

FRONT IMPACT SENSOR(FIS)



LRIF500F

SEAT BELT PRETENSIONER(BPT) / SIDE IMPACT SENSOR(SIS)

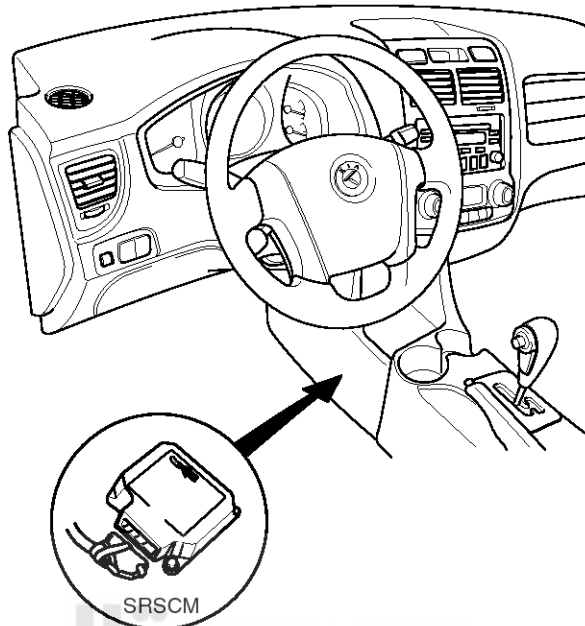


LRIF500G

General Information

RT-17

SRSCM



ARIE102E

SPECIFICATION

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

TIGHTENING TORQUES

ITEM	kgf.m	N.m	lbf.ft
Driver Airbag (DAB)	0.8 ~ 1.1	7.84 ~ 10.79	5.79 ~ 7.96
Passenger Airbag(PAB)	1.9 ~ 2.7	18.63 ~ 26.48	13.74 ~ 19.53
Side Airbag(SAB)	0.6 ~ 1	5.88 ~ 9.8	4.34 ~ 7.23
Curtain Airbag(CAB)	0.7 ~ 0.9	6.86 ~ 8.83	5.06 ~ 6.51
Seat Belt Lower Anchor Bolt (BPT)	4.0 ~ 5.5	39.22 ~ 53.94	28.93 ~ 39.78
SRSCM Mounting Bolt	0.7 ~ 0.9	6.86 ~ 8.83	5.06 ~ 6.51
Front Impact Sensor(FIS) Mounting Bolt	0.9 ~ 1.1	8.83 ~ 10.79	6.51 ~ 7.96
Side Impact Sensor(SIS) Mounting Bolt	0.9 ~ 1.1	8.83 ~ 10.79	6.51 ~ 7.96

RT-18

Restraint

SRSCM

Hi-SCAN CHECK

1. Turn the ignition switch off.
2. Connect the Hi-Scan Pro connector to the datalink connector located under the crash pad.
3. Connect the Hi-Scan Pro power cable.
4. Turn the ignition switch on and power on the Hi-Scan Pro.
5. Read DTCs.
6. Find and repair the trouble, and clear the DTCs using Hi-Scan Pro.
7. Disconnect the Hi-Scan Pro.

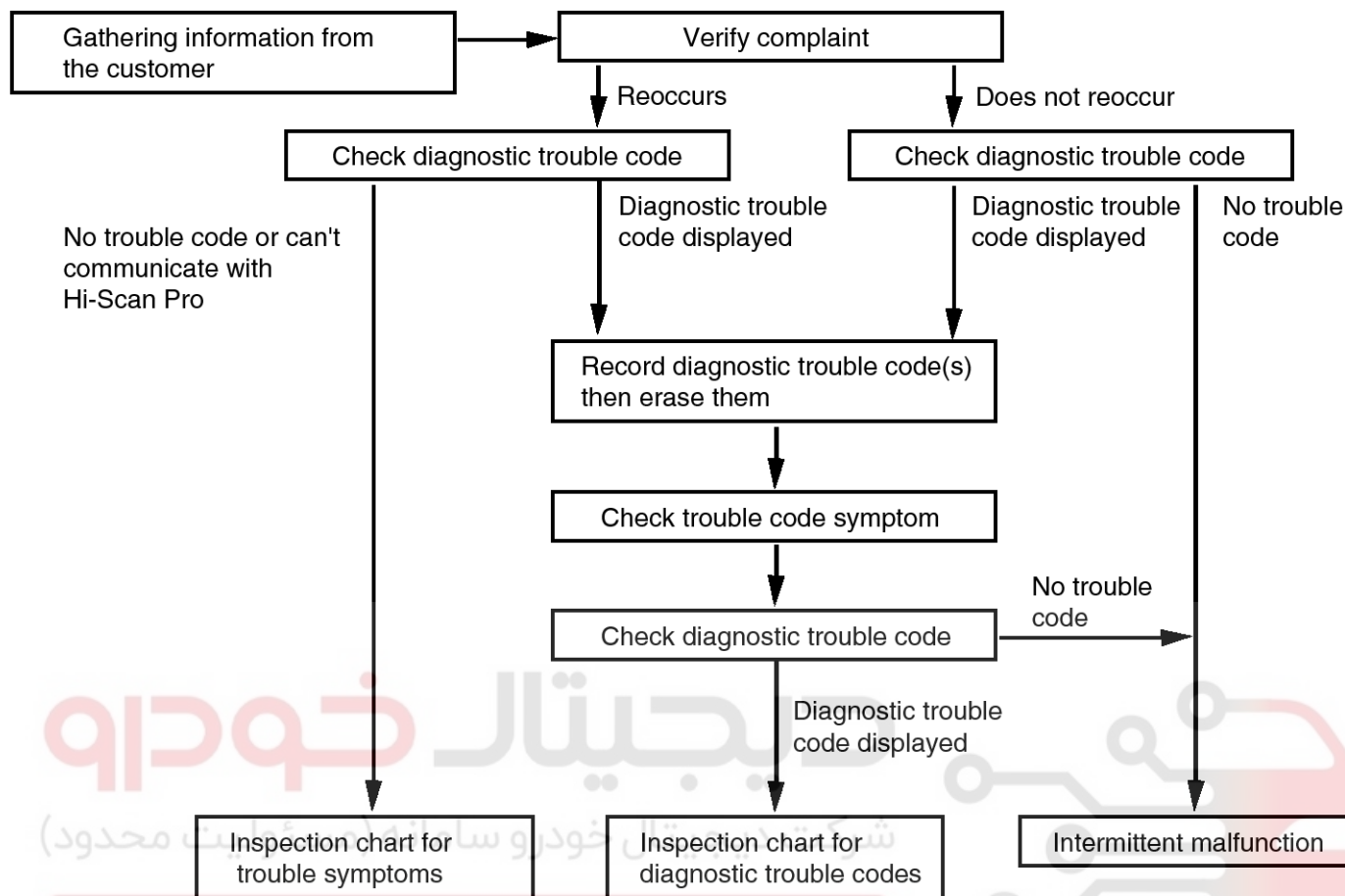


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SRSCM

RT-19

DIAGNOSTIC TROUBLESHOOTING FLOW



ERA9035A

RT-20

Restraint

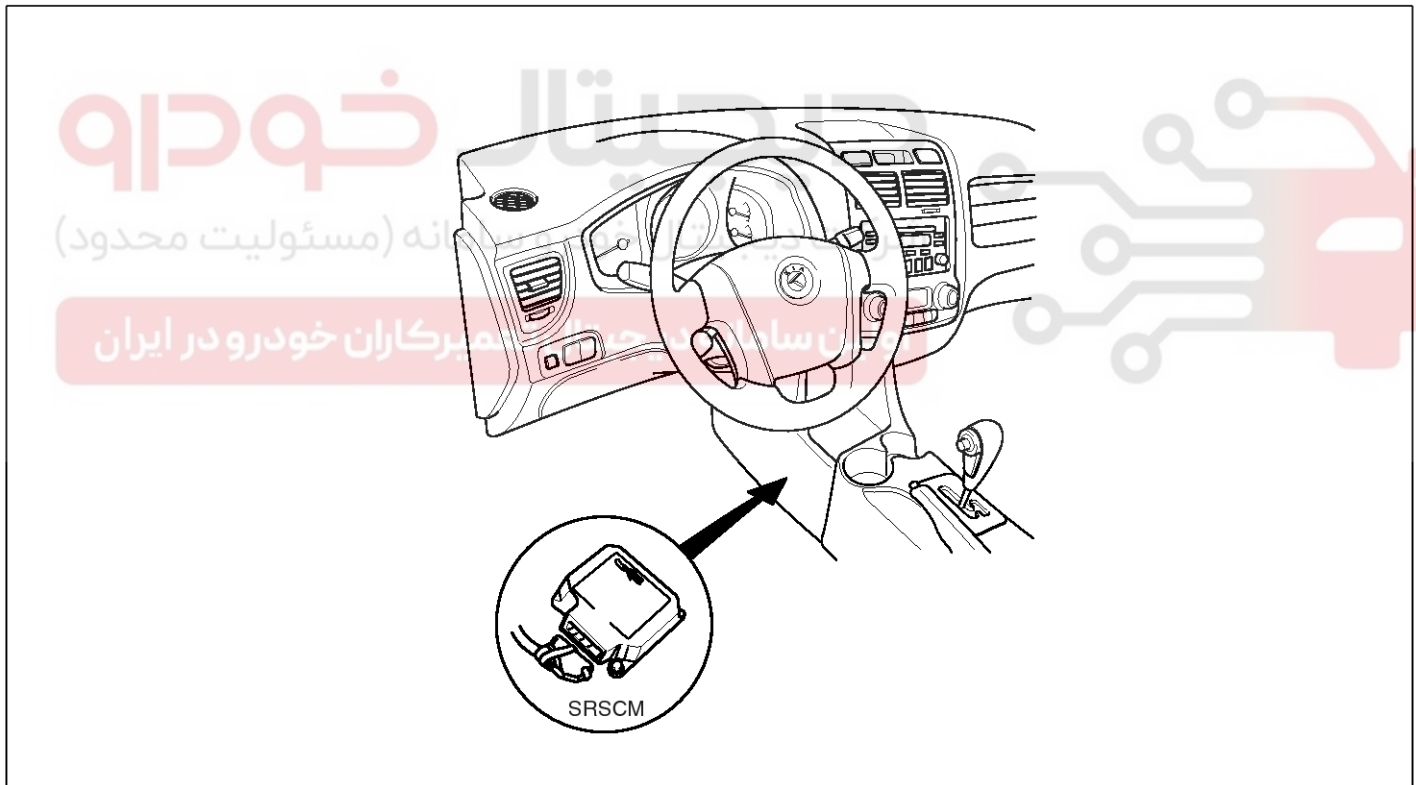
SRS Control Module (SRSCM)

DESCRIPTION

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

The SRSCM determines that an impact may require deployment of the pretensioners and airbags from data obtained from 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



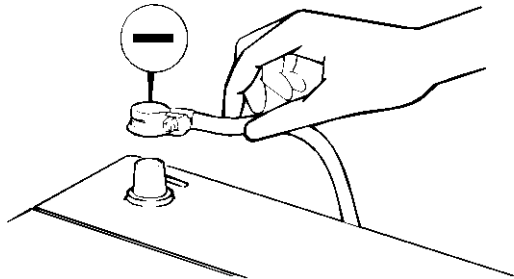
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SRSCM

RT-21

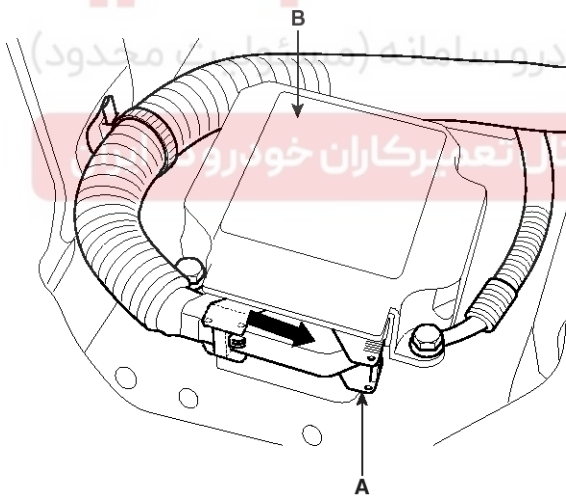
REMOVAL

1. Disconnect the negative(-) cable from battery and wait for at least 3 minutes.



ARCD512A

2. Remove ignition key from the vehicle.
3. Remove the center console.(Refer to "BD" group in this Workshop Manual).
4. Disconnect the SRSCM harness connector (A) from the SRSCM(B).Then remove the SRSCM(B).



LRIF501W

SRSCM mounting bolt :

0.7~0.9 kgf.m(6.86~8.83N.m ,5.06~6.51lb.ft)

INSTALLATION

1. Install the new SRSCM.
2. Install the console.
3. Reconnect the airbag connectors.
4. Reconnect the battery negative cable.
5. After installing the SRSCM, confirm proper system operation :
 - Turn the ignition switch ON; the SRS indicator light should turn on about six seconds and then go off.

RT-22

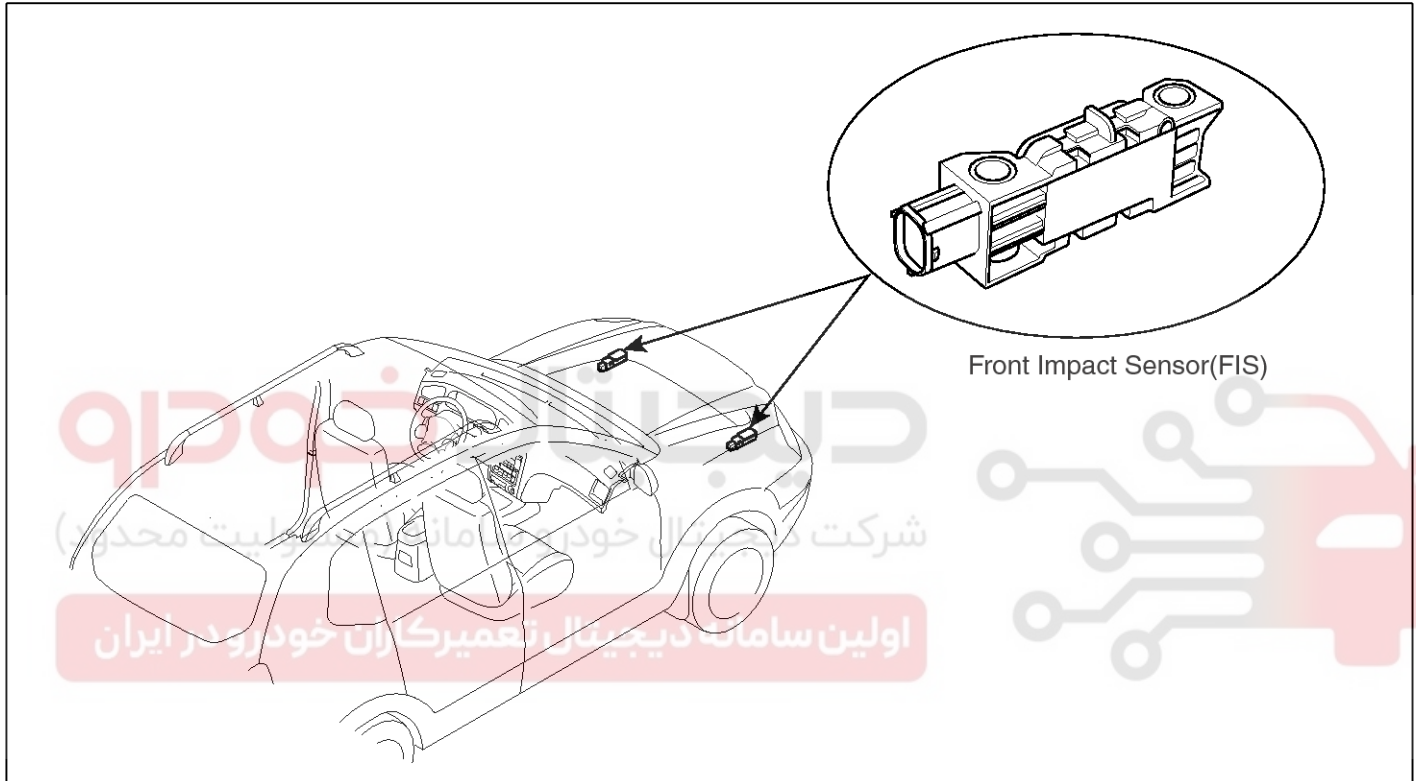
Restraint

Front Impact Sensor (FIS)

DESCRIPTION

The front impact sensors are installed inside the member inner. They are remote sensor that detect acceleration due to 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



LRIF500S

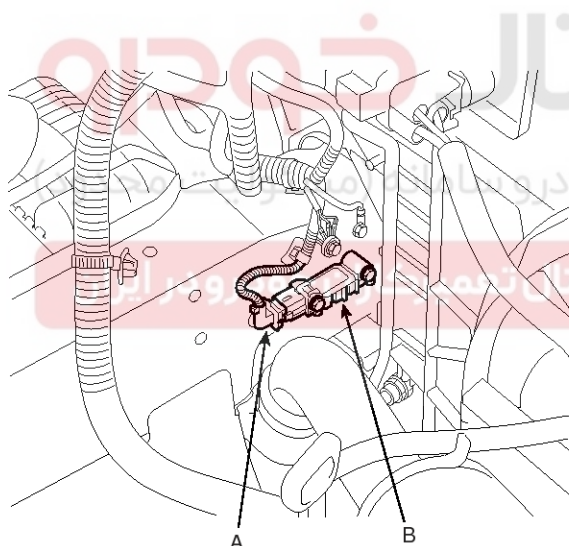
SRSCM

RT-23

REMOVAL

⚠ CAUTION

- Removal of the airbag must be performed according to the precautions/ procedures described previously.
 - Before disconnecting the front impact sensor connector, disconnect the front airbag connector(s).
 - Do not turn the ignition switch ON and do not connect the battery cable while replacing the front impact sensor.
1. Disconnect the negative battery cable, and wait at least three minutes before beginning work.
 2. Remove the radiator guard (Refer to BD group-exterior).
 3. Remove the bolt then remove the front impact sensor.
 4. Disconnect the SRS harness connector (A) from the front impact sensor (B).



LRIF501S

INSTALLATION

⚠ CAUTION

- Be sure to install the harness wire so that they are not pinched or interfere with other parts.
 - Do not turn the ignition switch ON and do not contact the battery cable while replacing the front impact sensor.
1. Install the new front impact sensor with bolt then connect the SRS harness connector to the front impact sensor.
 2. Install the radiator guard.
 3. Reconnect the negative battery cable.
 4. After installing the front impact sensor, confirm proper system operation: Turn the ignition switch ON: the SRS indicator light should turn on about six seconds and then go off.

RT-24

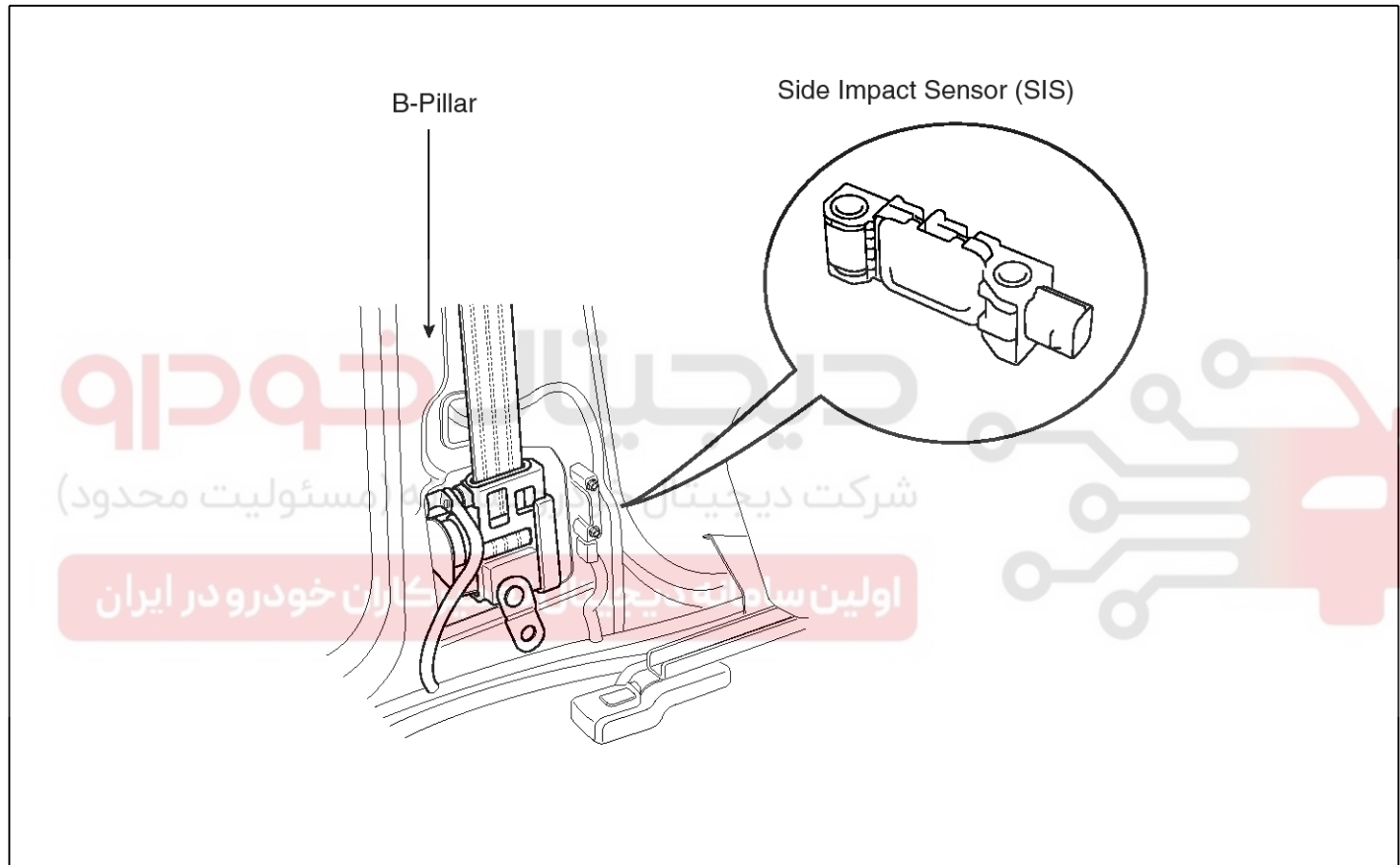
Restraint

Side Impact Sensor (SIS)

DESCRIPTION

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

COMPONENTS



LRIF500T

SRSCM

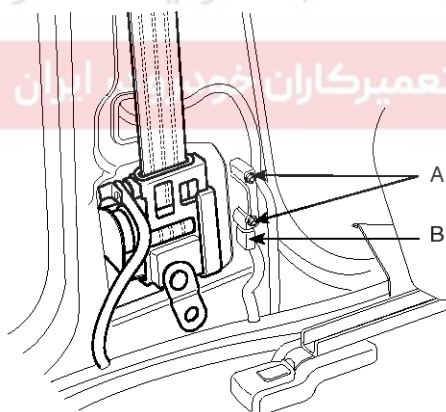
RT-25

REMOVAL

⚠ 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 negative battery cable, and wait at least three minutes before beginning work.
2. Remove the seat assembly (Refer to BD group - seat).
3. Remove the front door sill trim (Refer to BD group - interior).
4. Remove the center pillar trim (Refer to BD group - interior).
5. Remove the lower anchor bolt (Refer to BD group - belt).
6. Remove the belt pretensioner.
7. Remove the two bolts(A) then remove the side impact sensor.



ARIE102N

8. Disconnect the SRS harness connector(B) from the side impact sensor.

INSTALLATION

⚠ CAUTION

- Be sure to install the harness wires so that they are not pinched or interfere with other parts.
 - 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 two bolts then connect the SRS harness connector to the side impact sensor.
 2. Reinstall belt pretensioner.
 3. Reconnect the negative battery cable.
 4. After installing the side impact sensor, confirm proper system operation: Turn the ignition switch ON: the SRS indicator light should turn on about six seconds and then go off.

RT-26

Restraint

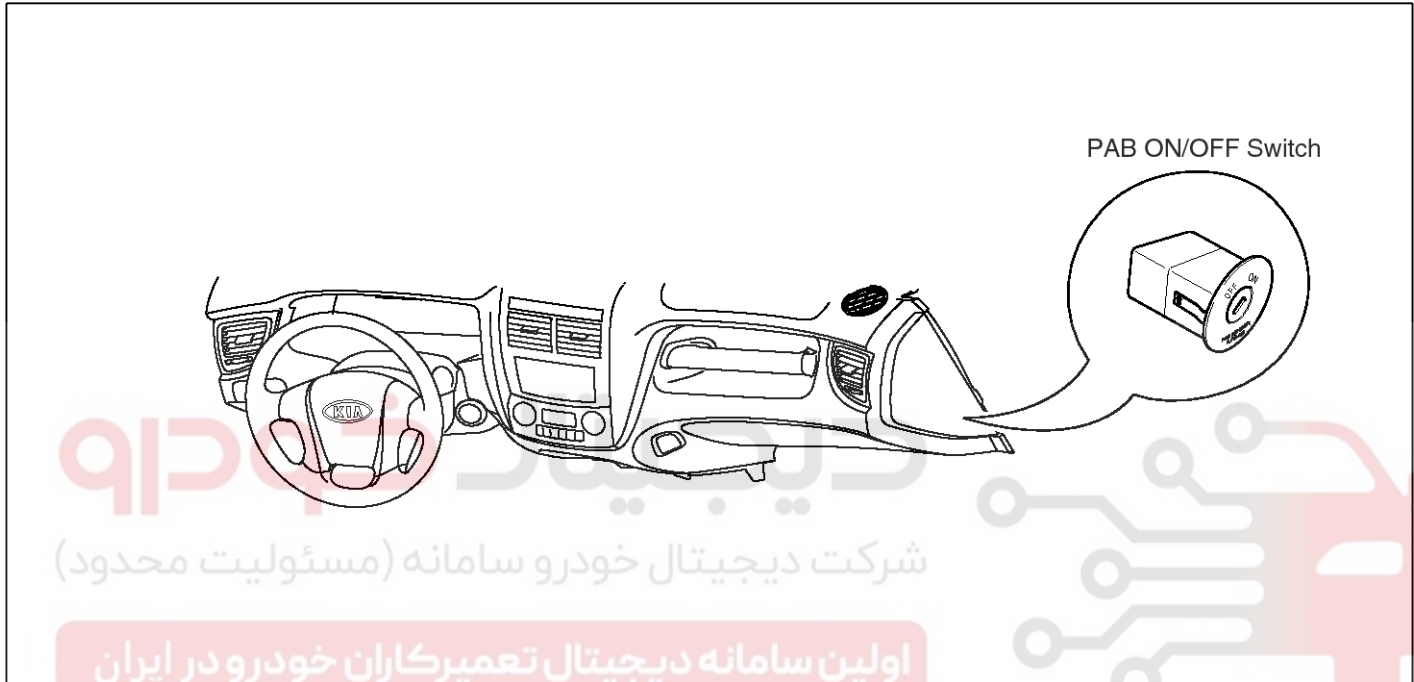
PAB ON/OFF Switch

Description

Driver can control the passenger airbag operating Condition (Enable or Disable) by using this PAB ON/OFF switch.

Passenger Airbag (PAB) ON/OFF Switch is installed in the crash pad side cover.

Components



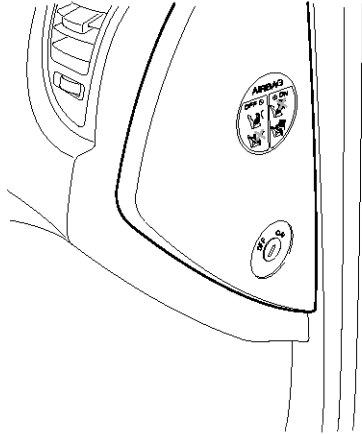
SKMRT9170L

SRSCM

RT-27

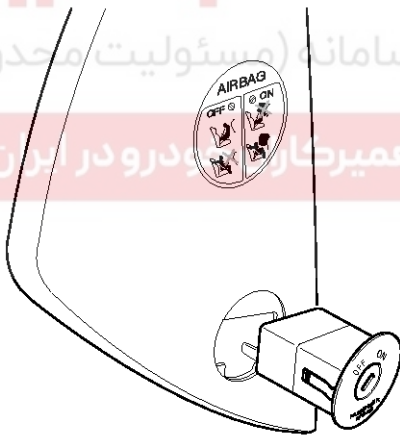
Removal

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
3. Remove the crash pad side cover. (Refer to the Body group – crash pad)



SKMRT9171L

4. Disconnect the PAB ON/OFF switch connector.
5. Remove the PAB ON/OFF switch.



SKMRT9172L

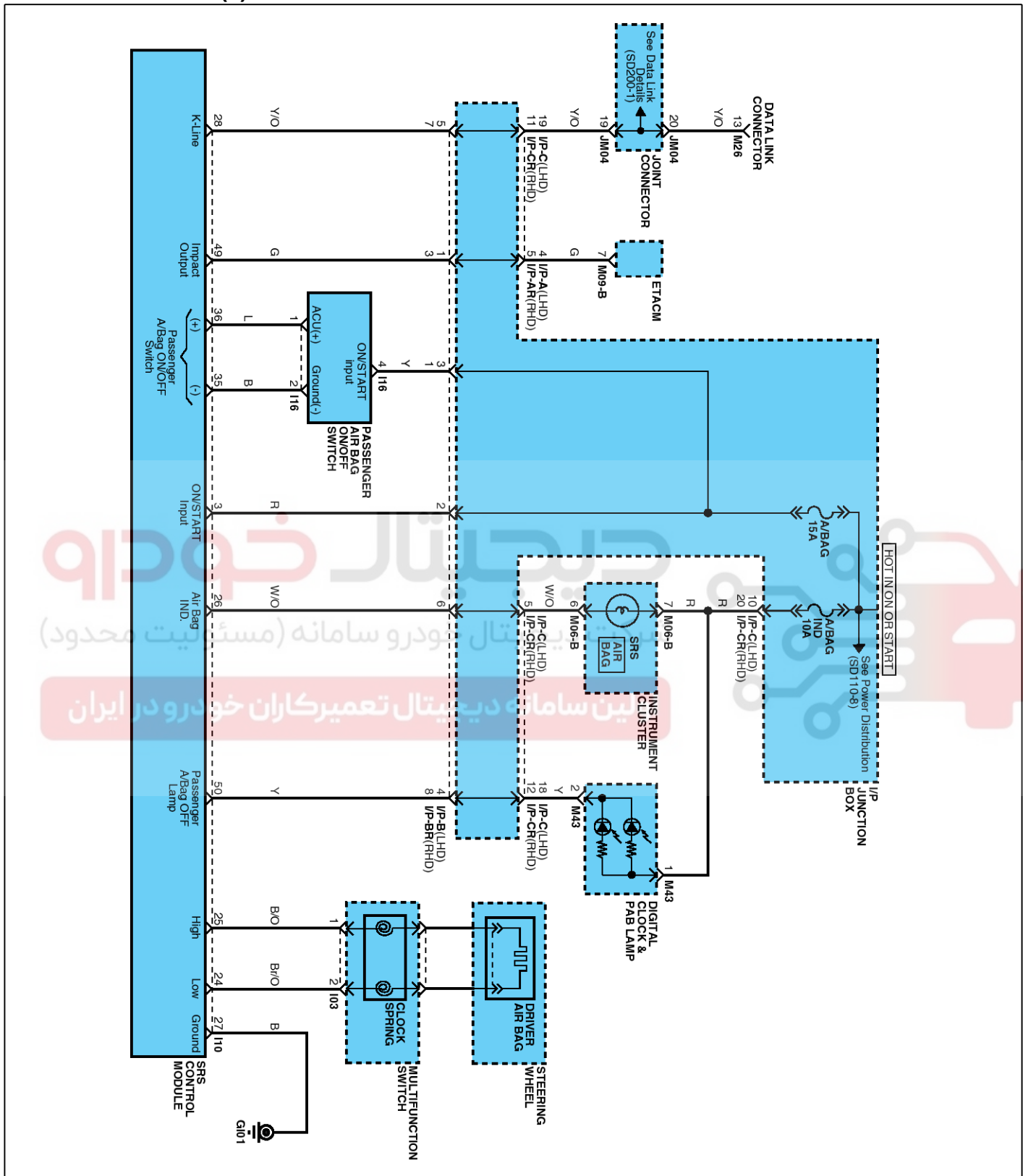
Installation

1. Remove the ignition key from the vehicle.
2. Disconnect the battery negative cable and wait for at least three minutes before beginning work.
3. Install the PAB ON/OFF switch to the crash pad side cover.
4. Connect the PAB ON/OFF switch connector to the crash pad side cover.
5. Install the crash pad side cover. (Refer to the Body group – crash pad)
6. 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.

RT-28

Restraint

CIRCUIT DIAGRAM (1)

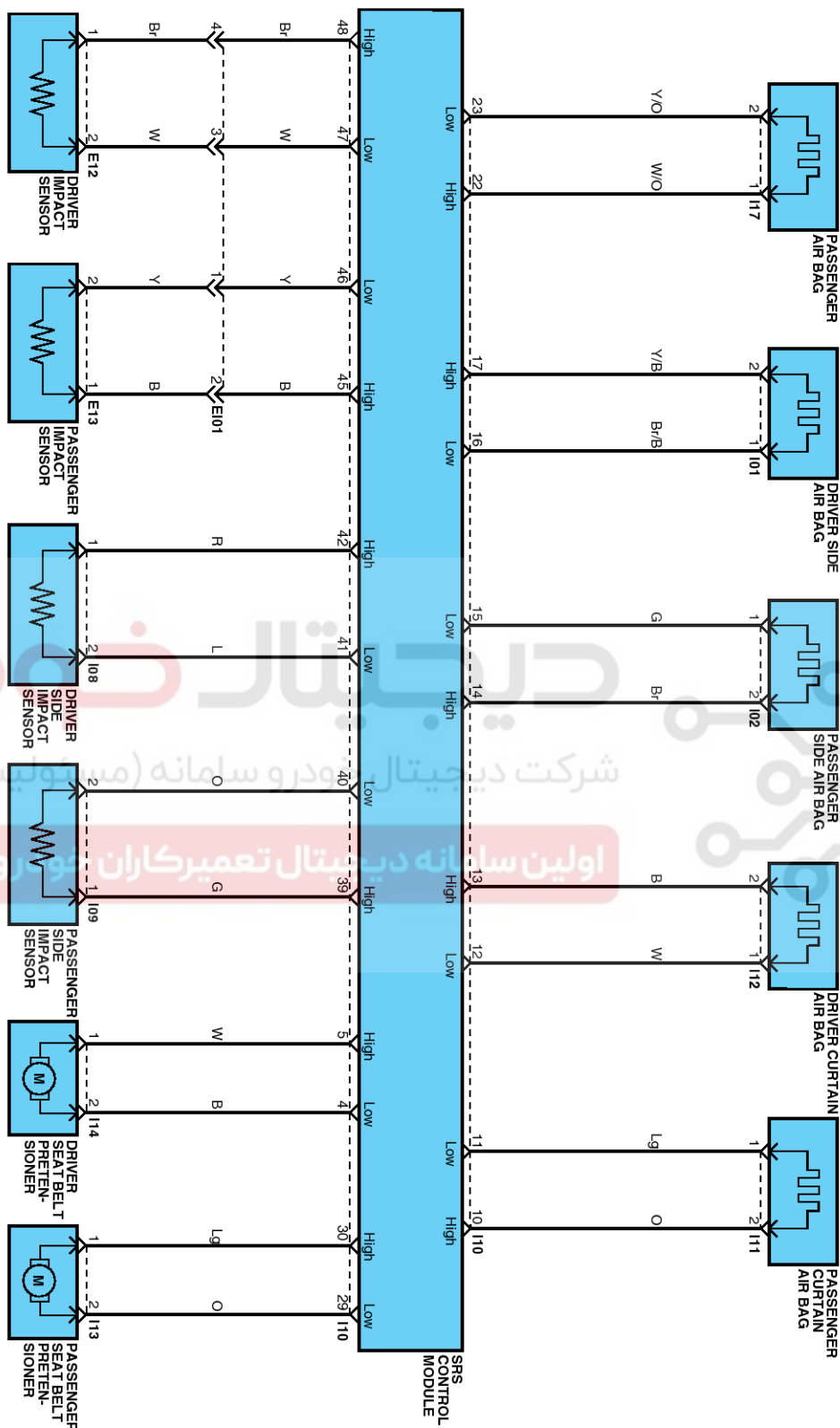


SKMRT9491L

SRSCM

RT-29

CIRCUIT DIAGRAM (2)



SKMRT9492L

RT-30

Restraint

SRSCM CONNECTOR TERMINAL

SRSCM CONNECTOR

25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3		
50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26

 Shorting Bar

LRIF500V

PIN	Function	Input/Output	PIN	Function	Input/Output
1	Shorting Bar	-	26	Warning Lamp	Output
2	Shorting Bar	-	27	Ground	-
3	Battery Supply(Vbat)	Input	28	Diagnosis Line (K-Line)	Input/Output
4	Seat Belt Pretensioner [Driver] (-)	Output	29	Seat Belt Pretensioner [Passenger] (-)	Output
5	Seat Belt Pretensioner [Driver] (+)	Output	30	Seat Belt Pretensioner [Passenger] (+)	Output
6	-	-	31	-	-
7	-	-	32	-	-
8	-	-	33	-	-
9	-	-	34	-	-
10	Curtain Airbag [Right] (+)	Output	35	PAB ON/OFF Switch (-)	Input
11	Curtain Airbag [Right] (-)	Output	36	PAB ON/OFF Switch (+)	Input
12	Curtain Airbag [Left] (-)	Output	37	-	-
13	Curtain Airbag [Left] (+)	Output	38	-	-
14	Side Airbag [Passenger] (+)	Output	39	Side Impact Sensor [Right] (+)	Input
15	Side Airbag [Passenger] (-)	Output	40	Side Impact Sensor [Right] (-)	Input
16	Side Airbag [Driver] (-)	Output	41	Side Impact Sensor [Left] (-)	Input
17	Side Airbag [Driver] (+)	Output	42	Side Impact Sensor [Left] (+)	Input
18	-	-	43	-	-
19	-	-	44	-	-
20	-	-	45	Front Impact Sensor [Right] (+)	Input
21	-	-	46	Front Impact Sensor [Right] (-)	Input
22	Passenger Airbag (+)	Output	47	Front Impact Sensor [Left] (-)	Input
23	Passenger Airbag (-)	Output	48	Front Impact Sensor [Left] (+)	Input
24	Driver Airbag (-)	Output	49	Crash Output (to ETACS)	Output
25	Driver Airbag(+)	Output	50	PAB Lamp	Output

Airbag Module

RT-31

Airbag Module

AIRBAG DISPOSAL

Special Tool Required

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 are securely mounted.
3. Confirm that the special tool is functioning properly by following the check procedure.

Driver's Airbag :

4. Remove the driver's airbag , then disconnect driver's airbag connector.
Then install the SST(0957A-38500).

Passenger's Airbag :

5. Remove the passenger's airbag, then disconnect passenger's airbag connector.
Then install the SST(0957A-38500).

Side Airbag :

6. Remove the side airbag, then disconnect side airbag connector.
Then install the SST(0957A-3F100).

Curtain Airbag :

7. Remove the curtain airbag, then disconnect curtain airbag connector.
Then instal the SST(0957A-38500).

Belt pretensioner :

8. Remove the belt pretensioner, then disconnect belt pretensioner connector.
Then instal the SST(0957A-38500).

Buckle pretensioner :

9. Remove the buckle pretensioner, then disconnect buckle pretensioner connector.
Then instal the SST(0957A-2E210).
10. Connect a 12 volt battery to the tool.
11. Push the tool's deployment switch. The airbag should deploy (deployment is both highly audible and visible: a loud noiseand rapid inflation of the bag, followed by slow deflection)
12. Dispose of the complete airbag. No part of it can be reused. Place it in a sturdy plastic bag and seal it securely.



ERKD002U

RT-32

Restraint

Deploying the Airbag Out of the vehicle

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

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

Disposal of Damaged Airbag

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

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Airbag Module

RT-33

Driver Airbag (DAB) Module and Clock Spring

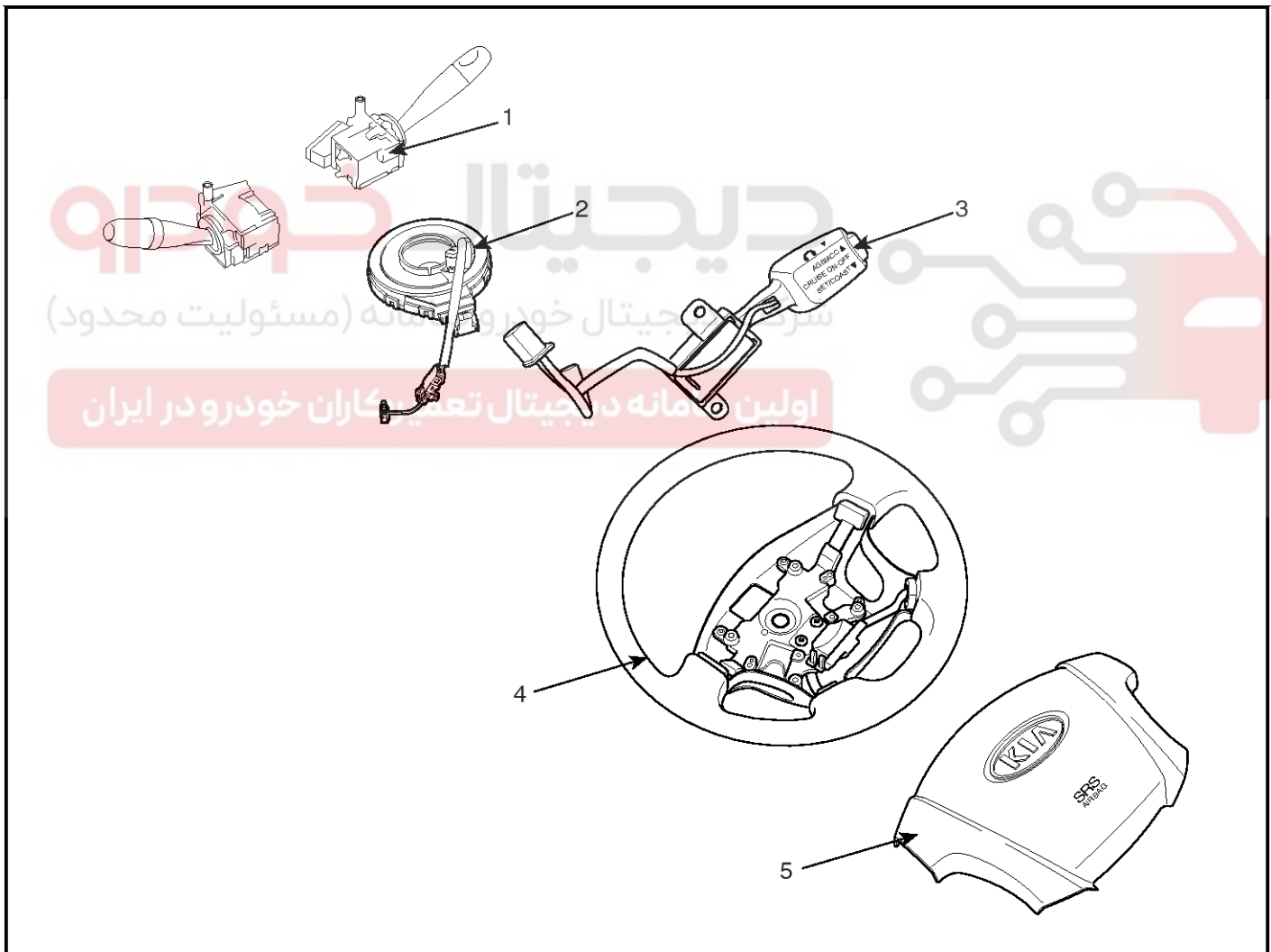
DESCRIPTION

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

⚠ CAUTION

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

COMPONENTS



1. Multi-Function Switch
2. Clock Spring
3. Auto Cruise Switch

4. Steering Wheel
5. Driver Airbag(DAB)

LRIF500I

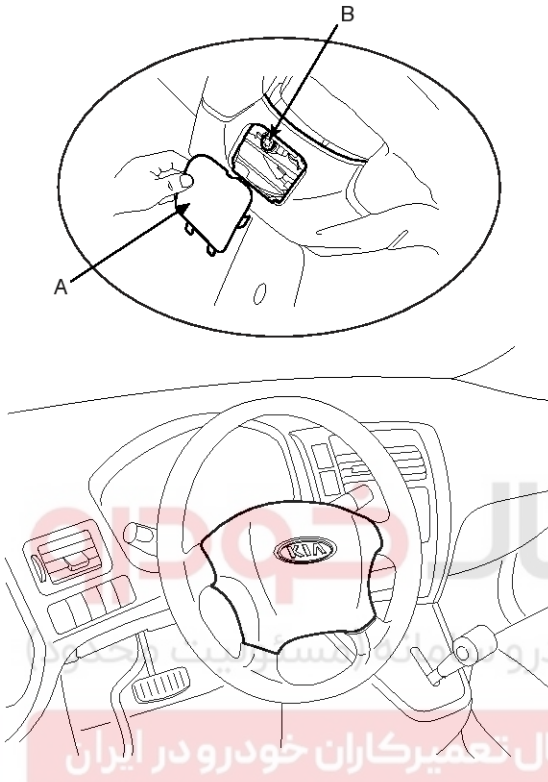
RT-34

Restraint

REMOVAL

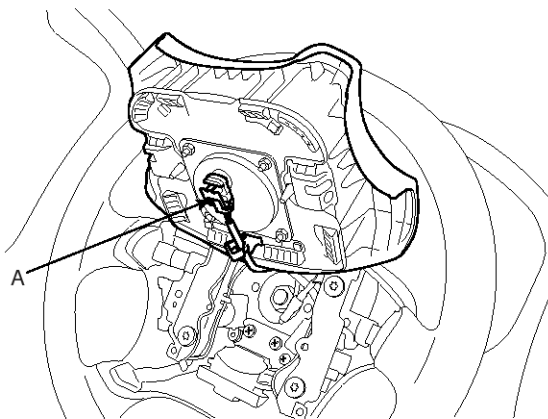
DAB REMOVAL

1. Disconnect the battery negative cable and wait at least three minutes before beginning work.
2. After removing the cover (A), then loosen the two Torx bolt (B).



LRIF500J

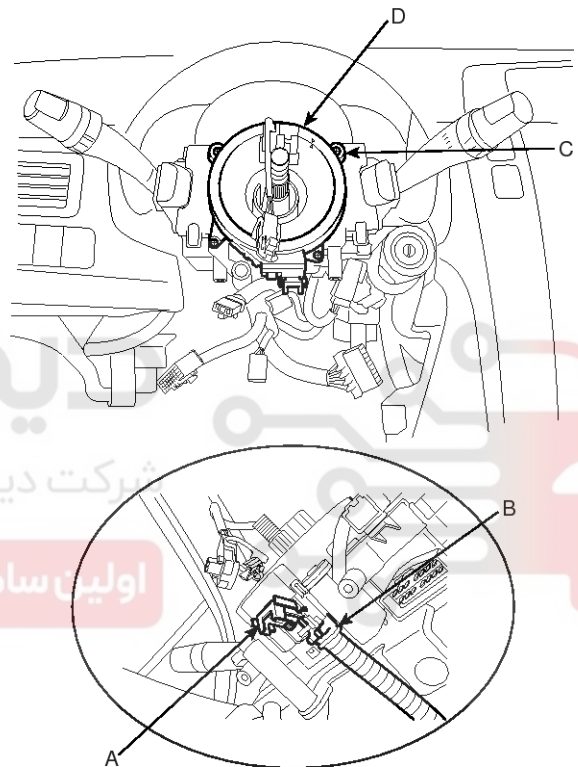
3. Remove the driver's airbag from the steering wheel, then disconnect the driver's airbag connectors(A).



LRIF500K

CLOCK SPRING REPLACEMENT

1. Disconnect the negative battery cable, and wait at least 3 minutes before beginning work.
2. Remove the DAB (See page RT- 18).
3. Remove the steering wheel (Refer to ST- Steering wheel group).
4. After disconnecting the lock pin (A), disconnect the connector (B).
5. Loosen the mounting screw (C), then remove the clock spring (D).



LRIF500L

6. Installation is the reverse of removal.

NOTICE

After installing the clock spring, confirm proper system operation; Turn the ignition switch ON: the SRS indicator light should turn on about 6 seconds and then go off.

Airbag Module

RT-35

INSTALLATION

1. Connect the driver's airbag connectors, then install the driver's airbag on the steering wheel.
2. Secure the airbag with the new Torx bolts.
3. Connect the battery negative cable.
4. After installing the airbag, confirm proper system operation:
 - Turn the ignition switch ON; the SRS indicator light should turn on about six seconds and then go off.
 - Make sure both horn buttons work.
5. Enter the customer's preset radio stations.

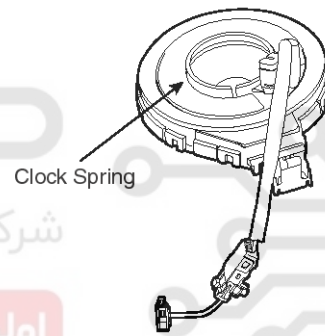
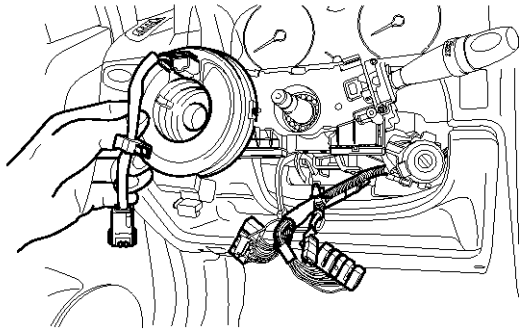
INSPECTION

⚠CAUTION

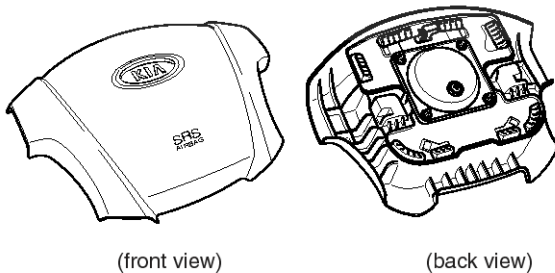
Never attempt to measure the circuit resistance of the airbag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental airbag deployment will result in serious personal injury.

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

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



LRIF501R



LRIF500M

RT-36

Restraint

Passenger Airbag (PAB) Module

DESCRIPTION

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

⚠CAUTION

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

COMPONENTS

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



SKMRT7490L

Airbag Module

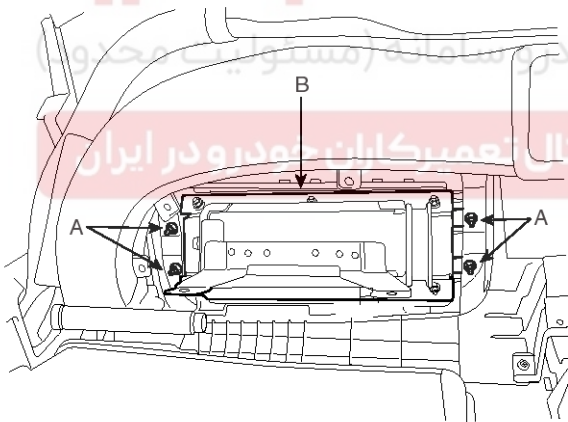
RT-37

REMOVAL

1. Disconnect the battery negative cable and wait at least three minutes before beginning work.
2. Remove the center facia panel (Refer to the Body group - Crash pad), then disconnect the passenger's airbag connector (A).

SKMRT7491L

3. Remove the crash pad. (Refer to the Body group - Crash pad)
4. Remove the mounting nuts (A) from the crash pad. Then remove the passenger's airbag (B).



SKMRT7492L

5. Installation is the reverse of removal.

NOTICE

After installing the clock spring, confirm proper system operation; Turn the ignition switch ON: the SRS indicator light should turn on about 6 seconds and then go off.

RT-38

Restraint

Side Airbag (SAB) Module

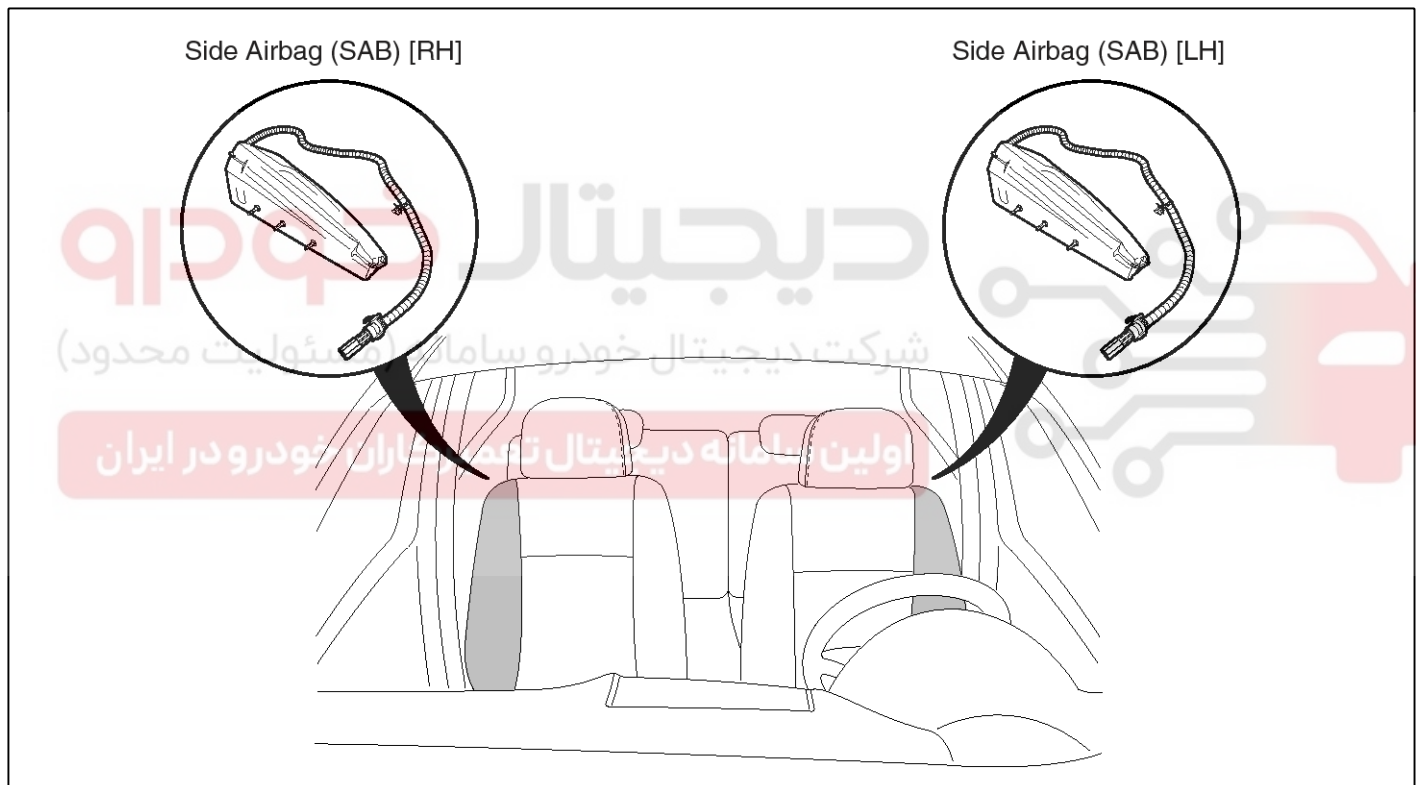
DESCRIPTION

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

⚠CAUTION

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

COMPONENTS



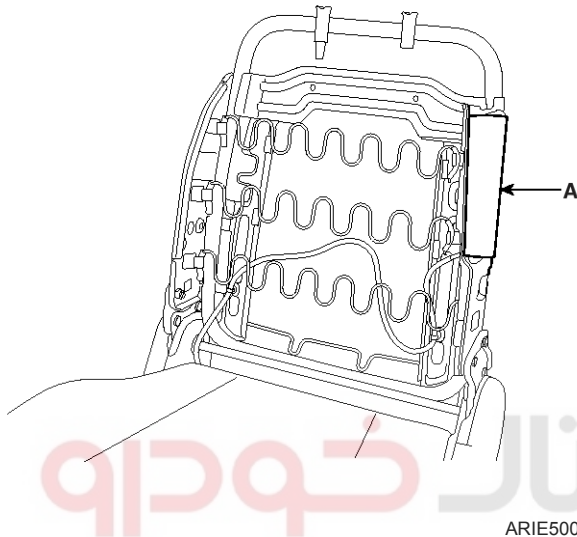
LRHE102B

Airbag Module

RT-39

REMOVAL

1. Disconnect the battery negative cable and wait at least 3 minutes before beginning work.
2. Remove the front seat assembly(Refer to BD-Front Seat)
3. Remove the seat-back cover.(Refer to BD-Front Seat)
4. Loosen the nuts and remove the SAB(A) module.



5. Installation is the reverse of removal.

NOTICE

After installing the side airbag, confirm proper system operation: Turn the ignition switch ON; the SRS indicator light should turn on about six seconds and then go off.



RT-40

Restraint

Curtain Airbag (CAB) Module

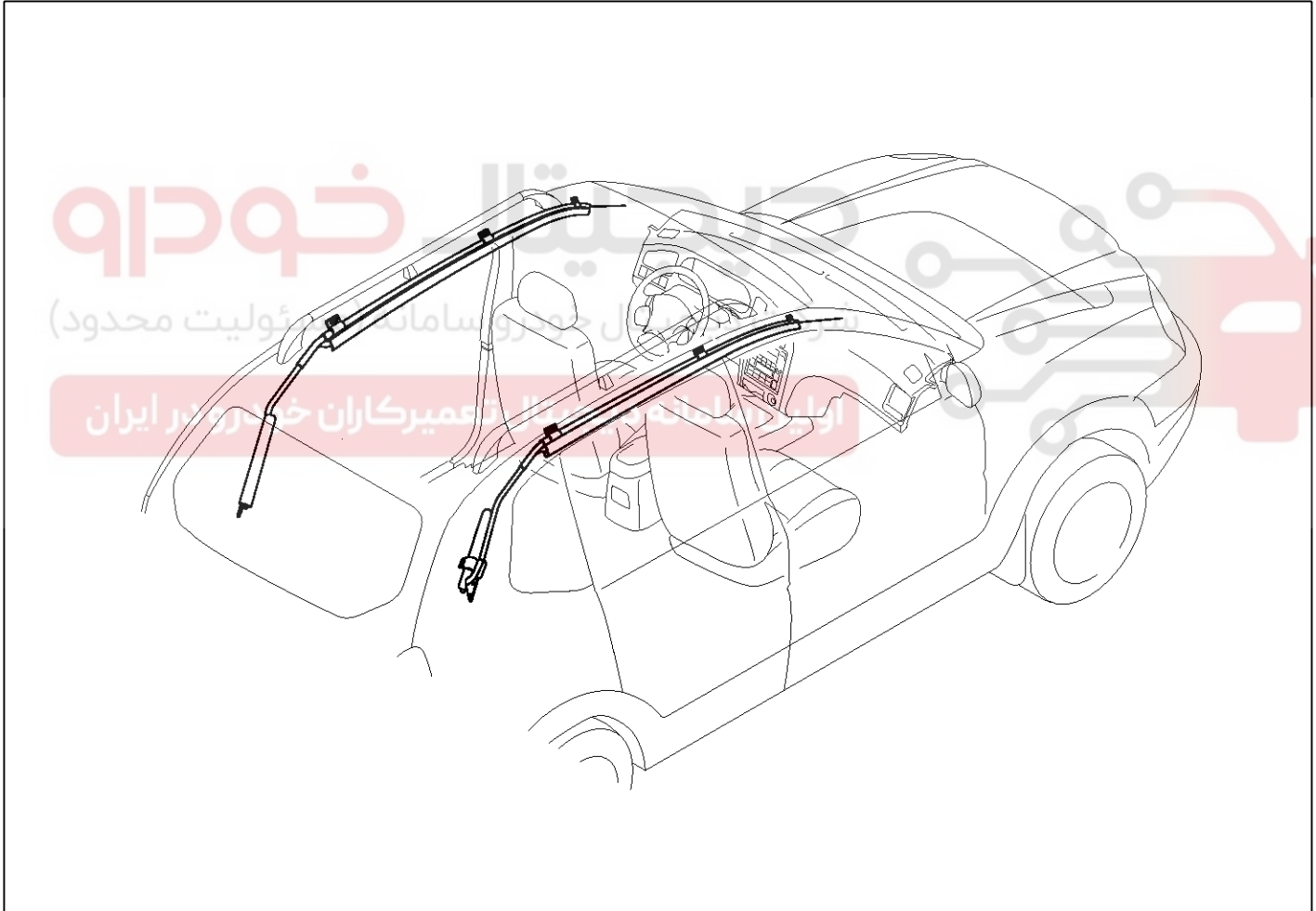
DESCRIPTION

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

⚠CAUTION

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

COMPONENTS



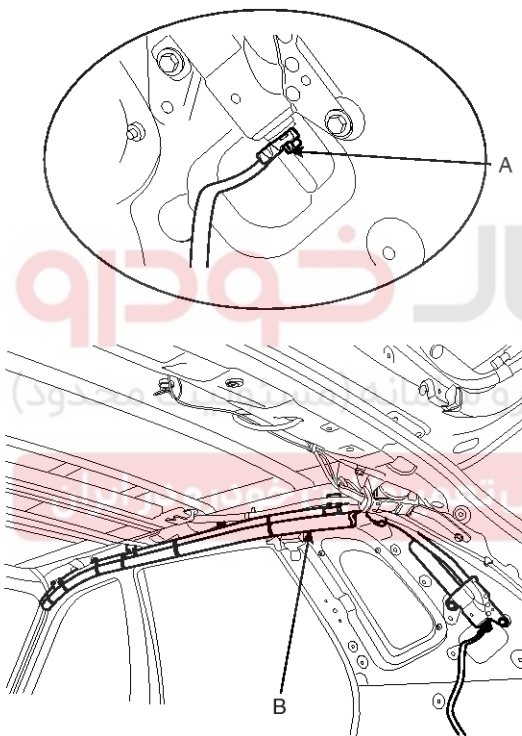
ARIE102J

Airbag Module

RT-41

REMOVAL

1. Disconnect the battery negative cable and wait of least 3 minutes before beginning work.
2. Remove the following parts (Refer to BD- group).
 - Front and rear seat
 - Interior trim
 - Trunk trim
 - Headlining
3. Disconnect the connector (A).
4. After loosening the mounting bolts, remove the curtain airbag (B).



LRIF500Q

5. Installation is the reverse of removal

NOTICE

After installing the curtain airbag, confirm proper system operation: Turn the ignition switch ON; the SRS indicator light should turn on about seconds and then go off.

RT-42

Restraint

Seat Belt Pretensioner

Seat Belt Pretensioner (BPT)

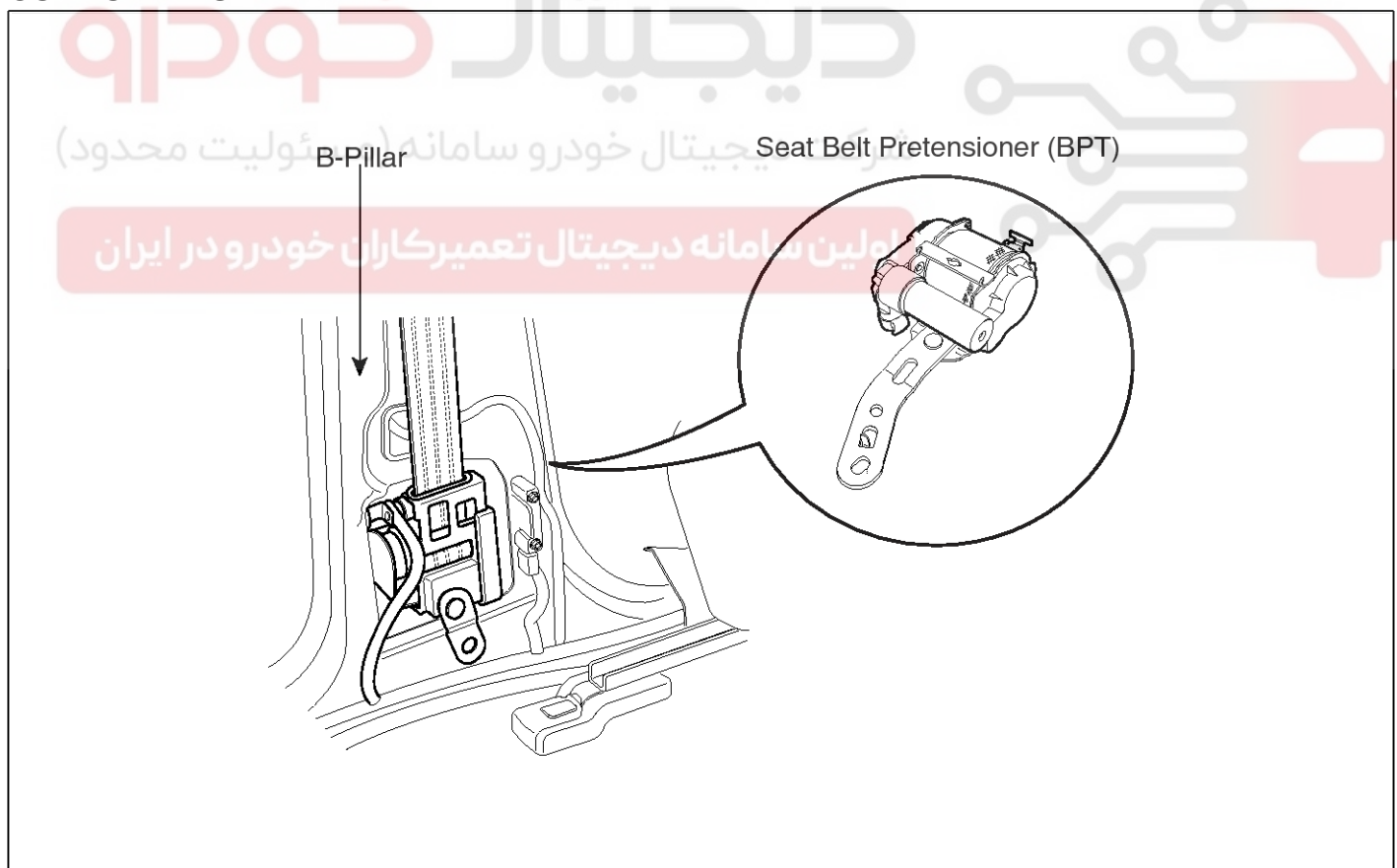
DESCRIPTION

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

⚠ CAUTION

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

COMPONENTS



LRIF500R

Seat Belt Pretensioner

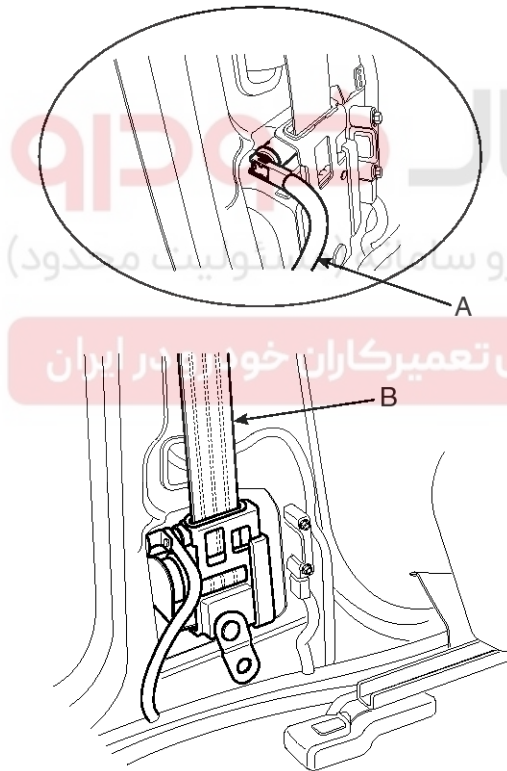
RT-43

REMOVAL

1. Disconnect the battery negative cable, and wait at least three minutes before beginning work.
 2. Remove the seat assembly (Refer to BD group - seat)
 3. Remove the front door scuff trim (Refer to BD group - interior)
 4. Remove the center pillar trim (Refer to BD group - interior)
 5. Remove the lower anchor bolt (Refer to BD group - belt)
 6. Remove the upper anchor bolt (Refer to BD group - belt)
 7. Disconnect the connector (A).
 8. Loosen the mounting bolt.
- Remove the pretensioner (B).

INSTALLATION

1. Install the new belt pretensioner with bolt.
2. Install the upper anchor bolt.
3. Install the lower anchor bolt.
4. Install the center pillar trim.
5. Install the front door scuff trim.
6. Install the seat assembly.
7. Reconnect the negative battery cable.
8. After installing the belt pretensioner, confirm proper system operation: Turn the ignition switch ON: the SRS indicator light should turn on about six seconds and then go off.



ARIE102L