

### H1 SRS AIRBAG SYSTEM

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# 1 SRS AIRBAG (DRIVER'S SEAT SIDE) 1-1 REMOVAL AND INSTALLATION

- CAUTION
- · Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 1-1-1 ARTICLES TO BE PREPARED

Tool

Long TORX® wrench T30

#### Instrument

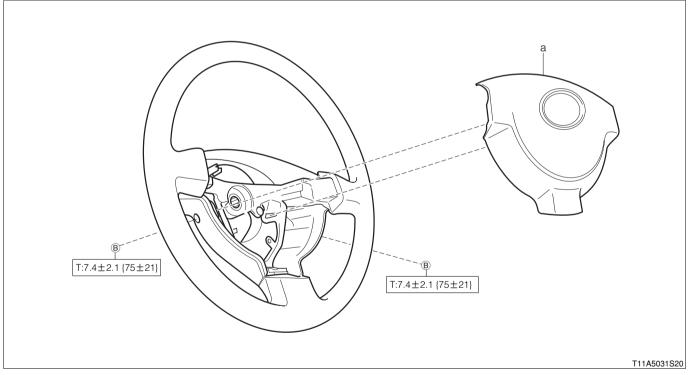
Torque wrench

### **1-1-2 OPERATION BEFORE REMOVAL**

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

#### 1-1-3 REMOVAL AND INSTALLATION PROCEDURES

#### (1) Components



Unit:N·m{kgf·cm}

#### (2) Removal and installation procedures

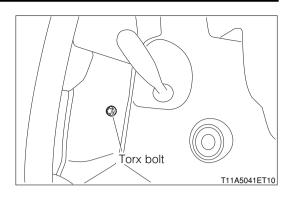
▼ ▲ 1 a Pad Ay, steering wheel

### 1-1-4 POINTS OF REMOVAL

### (1) Pad Ay, steering wheel

1.Loosen the Torx bolts located at the right and left sides of the pad Ay.

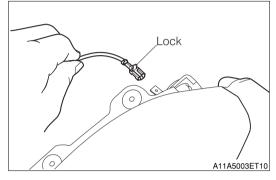
TOOL: Long TORX® wrench T30



2.Disconnect the horn connector.

3.Disconnect the connector for the airbag.

4. Remove the pad Ay.



### 1-1-5 INSPECTION

### (1) Check of steering wheel pad Ay

- 1. When the following cases have occurred, perform visual checks or system checks. If there are any faulty parts, replace them.
  - (1) Case where the vehicle is damaged, including minor collisions where the airbag has not been deployed.
  - (2) Case where problems have been found out by the diagnosis check

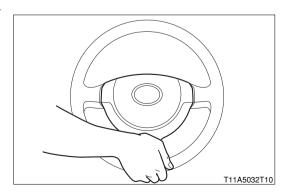
### (2) External Check of steering wheel pad Ay

- 1. When the following cases have occurred, replace the pad assembly.
  - (1) Case where the airbag has been deployed.
  - (2) Case where the airbag deploying surface has scratches or cracks.
  - (3) Case where the connector or harness has dents or chips.
  - (4) Case where grease, water, detergent or oil has got to the pad assembly in a large quantity.
  - (5) Case where the pad assembly dropped and got damaged.

### 1-1-6 POINTS OF INSTALLATION

### (1) Pad Ay, steering wheel

- 1.Insert firmly the connector for the airbag as far as it will go.
- 2. When installing the pad Ay, hold the lower side of the pad Ay.



### 1-1-7 OPERATION AFTER INSTALLATION

- 1.Connect the negative (-) terminal of the battery.
- 2.Set the IG SW to "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

### 1-2 DISPOSAL CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 1-2-1 OUTLINE

1. When scrapping a vehicle equipped with an airbag system or scrapping the airbag at the driver's seat, be sure to deploy the airbag. Then, follow the "Scrapping procedure" to scrap the airbag itself. When scrapping the airbag at the driver's seat, that has been deployed by a customer during its use, too, follow the "Scrapping procedure."

### 1-2-2 DEPLOYMENT OF STEERING WHEEL PAD AY

### (1) Articles to be prepared

SST

Shape	Part No.	Part name
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment
	09082-00760-000	Sub-harness 4,air bag deployment wire
	09082-10801-000	Sub-harness 8A,air bag deployment wire
	09082-20801-000	Sub-harness 8B,air bag deployment wire

### Lubricants, bonds and others

Wire harness (1.25mm<sup>2</sup>), Two bolts (Nominal length of 35 mm or more, pitch of 1.0 mm, nominal diameter of 6.0 mm), 12V battery for car use, 2 tires with disc wheel, 3 tires, Vinyl bag

### (2) In-vehicle deployment

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Connect the following two SSTs.

SST: 09082-87710-000 09082-00760-000

- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000
- 4.Remove the steering column lower cover. Refer to Page G1-5.
- 5.Disconnect the harness side connector for the airbag from the spiral cable S/A.
- 6.Connect the SST connector to the connector for the airbag (Yellow 2P).

### WARNING

- Ensure that there is no excessive play around the steering wheel S/A.
- At this time, close all the doors and windows.
- 7.Extend the SST fully. Place the battery at least 5 m away from the vehicle.

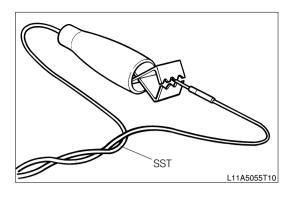
8.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to actuate the airbag.

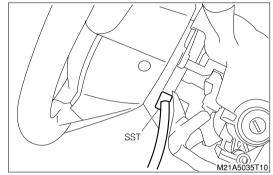
### WARNING

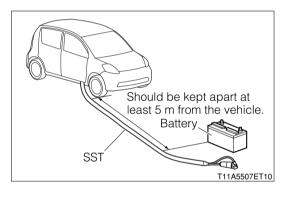
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.

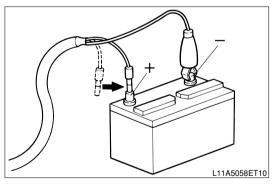
### (3) Unit deployment

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the pad Ay.

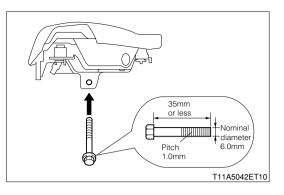




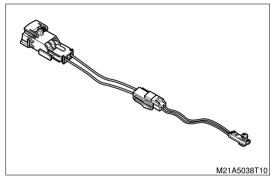




3.Attach plate washers to two bolts. By your hands, fully tighten the bolts to the two attaching holes of the pad assembly.



4.Connect the following two SSTs. SST: 09082-10801-000 09082-20801-000



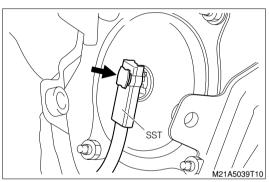
5.Connect the SST to the pad Ay.

### CAUTION

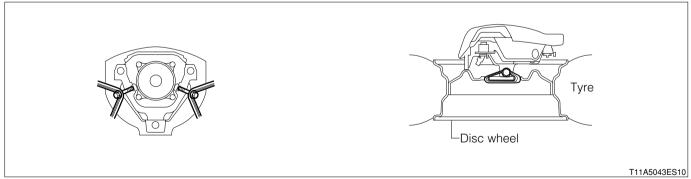
• Firmly lock the SST.

### NOTE

• The connector section of the SST, which is connected to the pad Ay directly, will melt away once it operates, due to high temperature of the pad Ay.

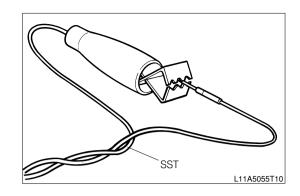


6.Secure the pad Ay to a disc wheel, using a wire harness for automotive use (Cross-sectional area of core wire: 1.25mm<sup>2</sup> or more).



- Perform the installation in such a direction that the airbag deploying surface faces upward.
- A great force will be applied to the wire harness at the time of airbag deployment. Therefore, secure the wire harness firmly by winding it triple.

7.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000



SST

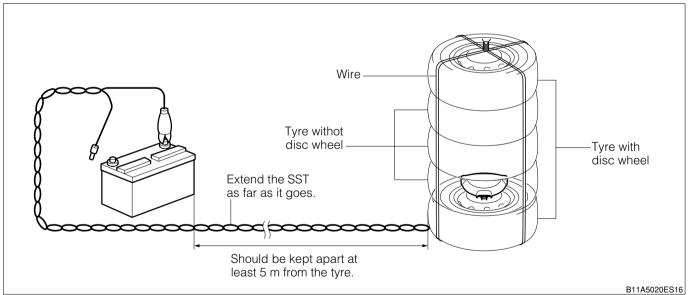
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8.Connect the SST at a point under the disc wheel.

9.Pile up at least three tires on the disc wheel to which the pad Ay has been secured. Then, place a tire with a disc wheel on the top.

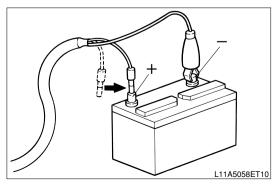
10.Connect the tires with wire so that the tires will not be scattered when the airbag is deployed.

11.Extend the SST fully. Place the battery at least 5 m away from the tire.



12.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

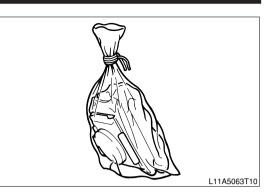
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.
- Never mount and reuse the tires and disc wheels used for the deployment on vehicles.



### (4) Scrapping procedure

1.Seal the deployed pad assembly in a plastic bag before it is scrapped.

- The temperature reaches a few hundred °C at some sections. Therefore, leave it at least 30 minutes after it is deployed.
- Do not apply water, etc.
- When handling, wear dust protective goggles and gloves.
- After completion of the operation, be sure to wash your hands with water.
- Never scrap the pad Ay that has not been deployed.



### H1-8

### 2 SPIRAL CABLE 2-1 REMOVAL AND INSTALLATION CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

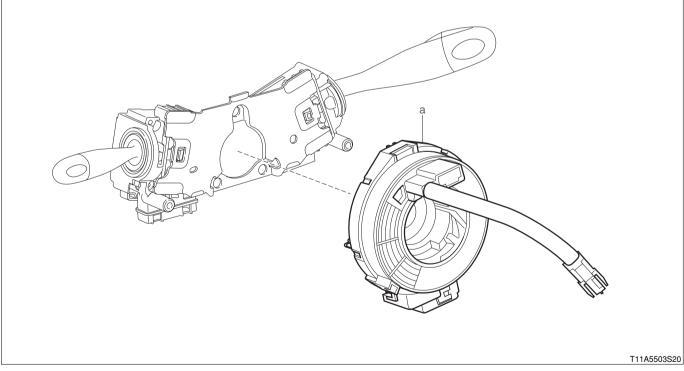
### 2-1-1 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Ensure that the steering wheel subassembly is in the straight ahead condition.
- 3.Remove the steering wheel pad assembly.

Refer to Page H1-1.

- 4.Remove the steering wheel subassembly. Refer to Page G1-3.
- 5.Lower the steering column assembly as far as it goes.
- 6.Remove the steering column upper cover and steering column lower cover. Refer to Page G1-5.

### 2-1-2 REMOVAL AND INSTALLATION PROCEDURES (1) Components



#### (2) Removal and installation procedures

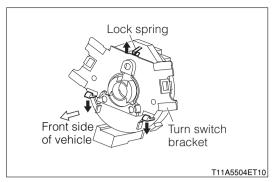
▼ ▲ 1 a Cable S/A, spiral

### 2-1-3 POINTS OF REMOVAL

### (1) Cable S/A, spiral

1.Disconnect the connector.

2.Perform the removal operation by releasing the lock spring and two pawls of the cable S/A.



### 2-1-4 INSPECTION

### (1) Check standard for spiral cable S/A

1. Check the cable S/A in the following cases. Replace it if problems are found.

(1) Case where the vehicle is involved in a collision.

### (2) Check of spiral cable S/A

1. When the following cases have occurred, replace the cable subassembly.

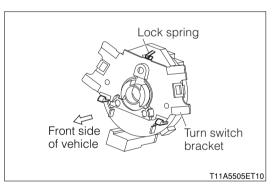
- (1) When the driver's seat airbag has been deployed:
- (2) When the cable S/A is dropped:
- (3) Case where the connector section has scratches, cracks and breakage:
- (4) Case where the cable S/A has deformation, cracks and breakage:
- (5) Case where the harness section is damaged:

### 2-1-5 POINTS OF INSTALLATION

### (1) Cable S/A, spiral

1.Ensure that the steering wheel is in the straight ahead state.

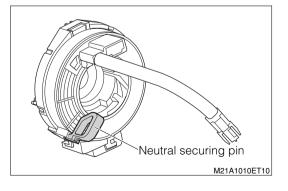
2.Perform the installation in such a way that the lock spring and two pawls are engaged.



### NOTE

• In the case of a new cable S/A, do not bend the neutral fixing pin at this moment.

3.Connect the connector.



### 2-1-6 OPERATION AFTER INSTALLATION

- 1.Install the steering column upper cover and steering column lower cover. Refer to Page G1-5.
- 2.Install the steering wheel S/A to the steering column Ay. Refer to Page G1-3.
- 3.Install the steering wheel pad assembly. Refer to Page H1-1.
- 4. Ensure that the steering wheel subassembly is in the straight ahead condition.
- 5.Connect the negative (-) terminal of the battery.
- 6.Set the IG SW to "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

### 3 SRS AIRBAG (FRONT PASSENGER SEAT SIDE)

### 3-1 REMOVAL AND INSTALLATION

### CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 3-1-1 ARTICLES TO BE PREPARED

#### Instrument

Torque wrench

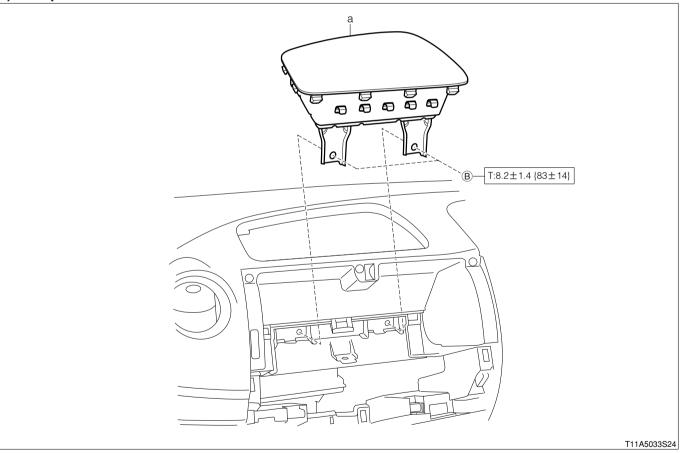
### 3-1-2 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the instrument panel box No. 1.

Refer to Page I2-23.

### 3-1-3 REMOVAL AND INSTALLATION PROCEDURES

### (1) Components



Unit:N·m{kgf·cm}

### (2) Removal and installation procedures

▼ ▲ 1 a Airbag Ay, instrument panel passenger

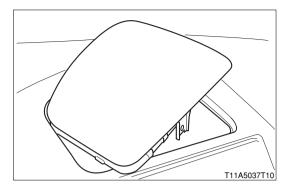
### 3-1-4 POINTS OF REMOVAL

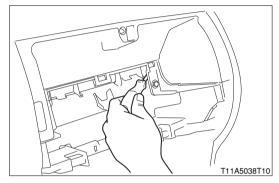
### (1) AIRBAG AY, INSTRUMENT PANEL PASSENGER

1.Remove the bolt retaining the instrument panel reinforcement S/A and airbag Ay.

2.Disconnect the connector under a condition that the airbag Ay is floated from the instrument panel.

3.With a flat screwdriver or the like, remove the clamp of the airbag Ay harness from the instrument panel reinforcement S/A through the installation section of the instrument





### 3-1-5 INSPECTION

panel box No. 1.

#### (1) Check of instrument panel passenger airbag Ay

- 1. When the following cases have occurred, perform checks. If there are any faulty parts, replace them.
  - (1) Case where the vehicle is damaged, including minor collisions where the airbag has not been deployed.
  - (2) Case where problems have been found out by the diagnosis check

### (2) External check of Instrument panel passenger airbag Ay

- 1. When the following cases have occurred, replace the airbag assembly.
  - (1) Case where the airbag has been deployed.
  - (2) Case where the airbag deploying surface has scratches or cracks.
  - (3) Case where the connector or harness has dents or chips.
  - (4) Case where grease, water, detergent or oil has got to the airbag assembly in a large quantity.
  - (5) Case where the airbag assembly dropped and got damaged.

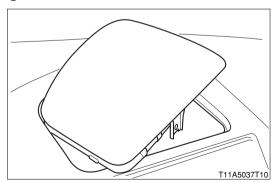
### 3-1-6 POINTS OF INSTALLATION

### (1) Airbag Ay, instrument panel passenger

- 1.Connect the connector and harness under a condition that the airbag Ay is floated.
- 2.Fit the airbag Ay into the instrument panel. Then, tighten the attaching bolts.

### 3-1-7 OPERATION AFTER INSTALLATION

- 1.Install the instrument panel box No. 1. Refer to Page I2-23.
- 2.Connect the negative (-) terminal of the battery.
- 3.Set the IG SW to "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.



### H1-13

### 3-2 DISPOSAL CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 3-2-1 OUTLINE

1. When scrapping a vehicle equipped with an airbag system or scrapping the airbag at the passenger seat, be sure to deploy the airbag. Then, follow the "Scrapping procedure" to scrap the airbag itself. When scrapping the airbag at the passenger seat, that has been deployed by a customer during its use, too, follow the "Scrapping procedure."

### 3-2-2 DEPLOYMENT OF INSTRUMENT PANEL PASSENGER AIRBAG AY

### (1) Articles to be prepared

SST

Shape	Part No.	Part name
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment
	09082-00760-000	Sub-harness 4,air bag deployment wire

### Lubricants, bonds and others

Wire harness (1.25mm<sup>2</sup>),12V battery for car use,1 tire with disc wheel,4 tires,Vinyl bag

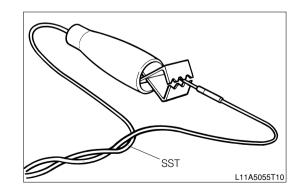
### (2) In-vehicle deployment

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Connect the following two SSTs.

SST: 09082-87710-000 09082-00760-000

3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000



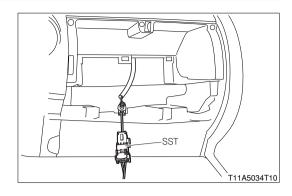
- 4.Remove the instrument panel box No. 1. Refer to Page I2-23.
- 5.Disconnect the connector at the airbag harness side. Refer to Page H1-11.
- 6.Install the airbag Ay to the instrument panel reinforcement S/A.

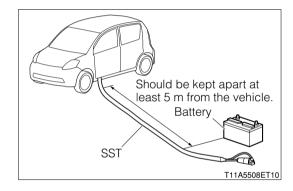
Refer to Page H1-11.

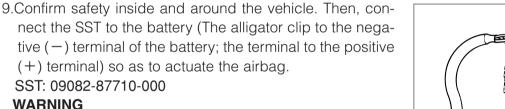
7.Connect the SST connector to the connector for the airbag (Yellow 2P). SST: 09082-00760-000

### WARNING

- Ensure that there is no excessive play at the airbag assembly.
- At this time, close all the doors and windows.
- 8.Extend the SST fully. Place the battery at least 5 m away from the vehicle.





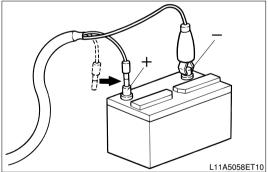


- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.

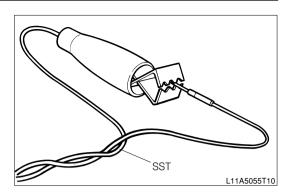
### (3) Unit deployment

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the following two SSTs.

SST: 09082-87710-000 09082-00760-000



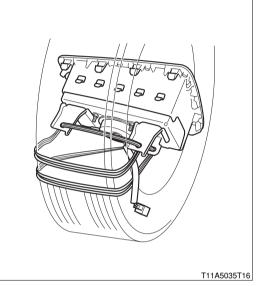
- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000
- 4.Remove the airbag Ay from the instrument main panel.



5.Secure the airbag Ay to a tire, using a wire harness for automotive use (Cross-sectional area of core wire: 1.25mm<sup>2</sup> or more).

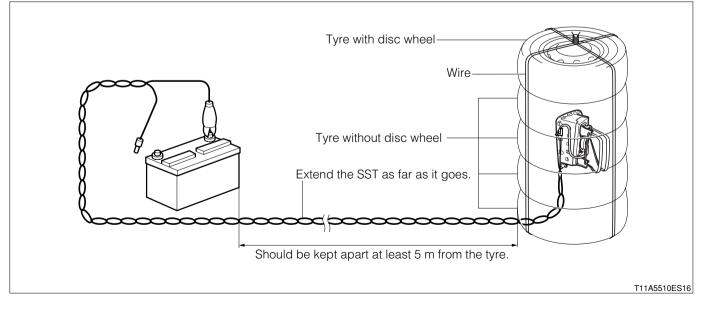
### WARNING

- Install the airbag assembly in such a way that the airbag deploying surface faces toward the center of the tire.
- A great force will be applied to the wire harness at the time of airbag deployment. Therefore, secure the wire harness firmly by winding it triple.



6.Connect the SST connector to the connector for the airbag (Yellow 2P).

- 7.Place a tire tied with the airbag Ay to two tires stacked vertically. Then, place one or more tires on these tires. Finally place a tire with a disc wheel on the top.
- 8.Connect the tires with wire so that the tires will not be scattered when the airbag is deployed.
- 9.Extend the SST fully. Place the battery at least 5 m away from the tire.



10.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

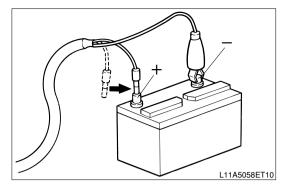
### WARNING

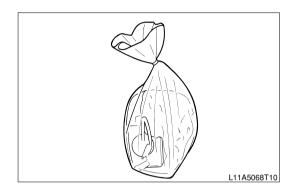
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.
- Never mount and reuse the tires and disc wheels used for the deployment on vehicles.

### (4) Scrapping procedure

1.Seal the deployed airbag assembly in a plastic bag before it is scrapped.

- The temperature reaches a few hundred °C at some sections. Therefore, leave it at least 30 minutes after it is deployed.
- Do not apply water, etc.
- When handling, wear dust protective goggles and gloves.
- After completion of the operation, be sure to wash your hands with water.
- Never scrap the pad Ay that has not been deployed.





### 4 FRONT SEAT OUTER BELT (EQUIPPED WITH PRETENSIONER AND FORCE LIMITER MECHANISM)

### 4-1 REMOVAL AND INSTALLATION

CAUTION

Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

Refer to Page I2-42.

### 4-2 DISPOSAL

### CAUTION

Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 4-2-1 OUTLINE

1. When scrapping a vehicle equipped with a pretensioner or scrapping the front seat outer belt itself, be sure to actuate the pretensioner. Then, follow the "Scrapping procedure" to scrap the front seat outer belt itself. When scrapping the front seat outer belt that has been actuated by a customer during its use, too, follow the "Scrapping procedure."

NOTE

• The pretensioner is actuated even if the seat belt is not fastened.

### 4-2-2 CONFIRMATION OF ACTUATED PRETENSIONER

1. The pretensioner is actuated together with the airbag. Therefore if the airbag has been deployed in an accident, the pretensioner also has been actuated.

### 4-2-3 ACTUATION OF PRETENSIONER

### (1) Articles to be prepared

SST

Shape	Part No.	Part name
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment
	09082-97201-000	Sub-harness D1,air bag deployment wire

### Lubricants, bonds and others

12V battery for car use,2 tires with disc wheel,A steel sheet(a thickness t = 1 to 2mm),Vinyl bag

### (2) In-vehicle actuation

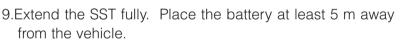
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the following two SSTs.

SST: 09082-87710-000 09082-97201-000

- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000
- 4.Remove the front door scuff plate RH/LH. Refer to Page I2-48.
- 5.Remove the rear door scuff plate RH/LH. Refer to Page I2-48.
- 6.Remove the center pillar lower garnish RH/LH. Refer to Page I2-48.
- 7.Disconnect the connector for the pretensioner.
- 8.Connect the connector of the SST to the pretensioner. SST: 09082-97201-000

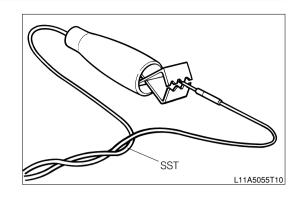
### WARNING

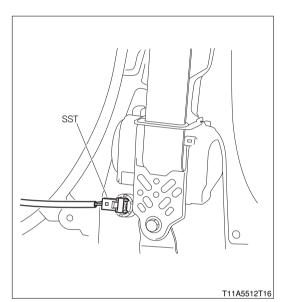
- Ensure that there is no excessive play at the pretensioner installing section.
- Check that the belt section of the outside (Front) belt Ay has no looseness.
- Do not cut the belt of the outside (Front) belt Ay before the actuation is completed.
- At this time, close all the doors and windows.

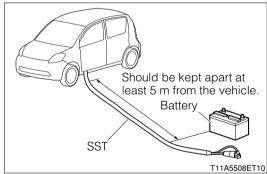


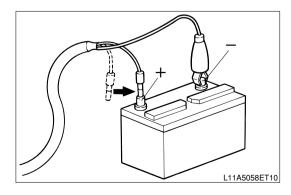
10.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to actuate the pretensioner.

- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before actuating the pretensioner.





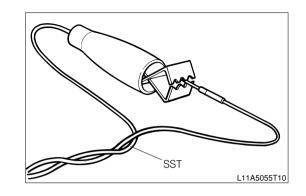


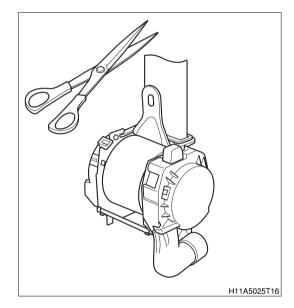


### H1-19

### (3) Unit actuation

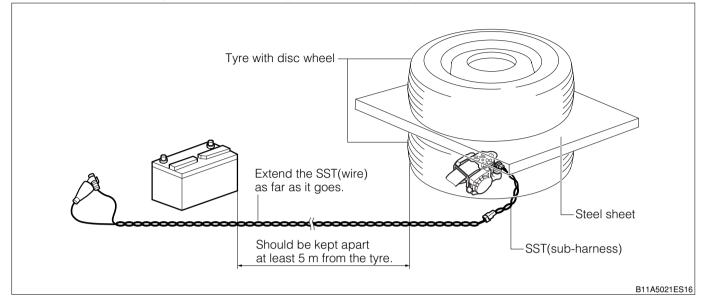
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the following two SSTs. SST: 09082-87710-000 09082-97201-000
- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000
- 4.Remove the front door scuff plate RH/LH. Refer to Page I2-48.
- 5.Remove the rear door scuff plate RH/LH. Refer to Page I2-48.
- 6.Remove the center pillar lower garnish RH/LH. Refer to Page I2-48.
- 7.Disconnect the connector for the pretensioner.
- 8.Cut the belt of the outside (Front) belt Ay at the retractor section.
- 9.Remove the pretensioner from the vehicle.
- 10.Connect the connector of the SST to the pretensioner. SST: 09082-97201-000





- 11.Place the pretensioner on the ground with its connector side facing upward. Place a tire with a disc wheel on it.
- 12.Place a steel sheet (Thickness t = approx. 1-2 mm) on the tire with disc wheel. Place another tire with a disc wheel on it.

13.Extend the SST fully. Place the battery at least 5 m away from the tire.



14.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

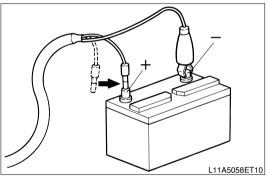
### WARNING

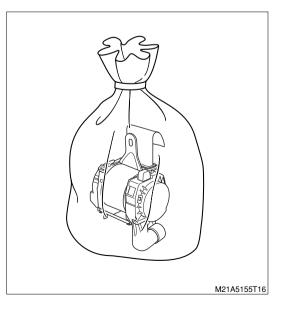
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before actuating the pretensioner.
- Never mount and reuse the tires and wheels used for the deployment on vehicles.

### 4-2-4 SCRAPPING PROCEDURE

1.Put the actuated pretensioner in a plastic bag and seal it to be scrapped.

- The temperature reaches a few hundred °C at some sections. Therefore, leave it at least 30 minutes after it is actuated.
- Do not apply water, etc.
- When handling, wear dust protective goggles and gloves.
- After completion of the operation, be sure to wash your hands with water.
- Never scrap the pad Ay that has not been deployed.





### 5 SRS SIDE AIRBAG 5-1 REMOVAL AND INSTALLATION

CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 5-1-1 ARTICLES TO BE PREPARED

Instrument

Torque wrench

### 5-1-2 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors of the front seat airbag Ay, RH/LH.
- 3.Remove the front seat Ay RH/LH.

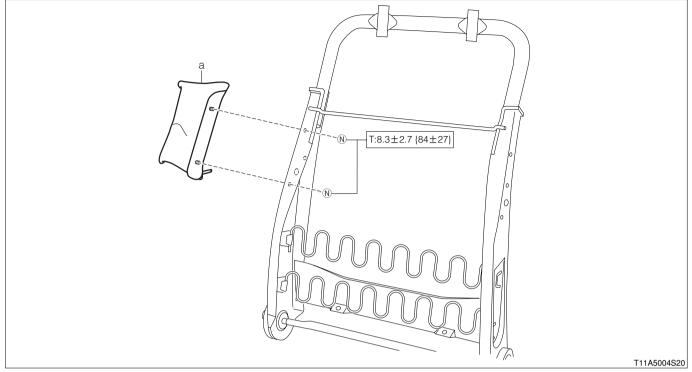
Refer to Page I2-33.

- 4.Remove the front seat back w/cover pad S/A RH/LH. Refer to Page I2-35.
- 5.Detach the hook and clip at the skirt of the front seat cushion pad with cover RH/LH. Refer to Page I2-35.

6.Disconnect the harness of the front seat airbag Ay RH/LH from the front seat Ay RH/LH.

### 5-1-3 REMOVAL AND INSTALLATION PROCEDURES

### (1) Components



#### Unit:N·m{kgf·cm}

### (2) Removal and installation procedures

1 a Airbag Ay, front seat, RH/LH

### 5-1-4 INSPECTION

### (1) Check of front seat airbag Ay RH/LH

- 1. When the following cases have occurred, perform checks. If there are any faulty parts, replace them.
  - (1) Case where the vehicle is damaged, including minor collisions where the airbag has not been deployed.
  - (2) Case where problems have been found out by the diagnosis check

### (2) External check of front seat airbag Ay RH/LH

1. When the following cases have occurred, replace the airbag assembly.

- (1) Case where the airbag has been deployed.
- (2) Case where the airbag deploying surface has scratches or cracks.
- (3) Case where the connector or harness has dents or chips.
- (4) Case where grease, water, detergent or oil has got to the airbag assembly in a large quantity.
- (5) Case where the airbag assembly dropped and got damaged.

### H1-23

### 5-1-5 OPERATION AFTER INSTALLATION

1.Connect the harness of the front seat airbag Ay RH/LH to the front seat Ay RH/LH.

- 2.Attach the hook and clip at the skirt of the front seat cushion pad with cover RH/LH. Refer to Page I2-35.
- 3.Install the front seat back w/cover pad S/A RH/LH. Refer to Page I2-35.
- 4.Install the front seat Ay RH/LH. Refer to Page I2-33.
- 5.Connect the connector of the front seat airbag Ay RH/LH.
- 6.Install the negative (-) terminal of the battery.
- 7.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

### 5-2 DISPOSAL CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 5-2-1 OUTLINE

1. When scrapping a vehicle equipped with an airbag system or scrapping the front seat airbag Ay, be sure to deploy the airbag. Then, follow the "Scrapping procedure" to scrap the airbag itself. When scrapping the front seat airbag Ay, that has been deployed by a customer during its use, too, follow the "Scrapping procedure."

### 5-2-2 DEPLOYMENT OF SRS SIDE AIRBAG

### (1) Articles to be prepare

SST

Shape	Part No.	Part name
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment
	09082-00760-000	Sub-harness 4,air bag deployment wire

### Lubricant, adhesive, others

12V battery for car use, Wire harness (1.25mm<sup>2</sup>), 1 tire with disc wheel, 4 tires, Vinyl bag

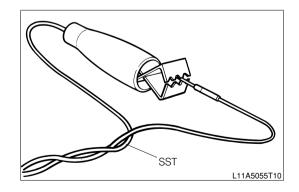
### (2) In-vehicle deployment of front seat airbag Ay

1.Set the IG SW "LOCK" position. Remove the negative (-) terminal of the battery.

2.Connect the following two SSTs.

SST: 09082-87710-000 SST: 09082-00760-000

3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000



### H1-25

- 4.Disconnect the harness side connector for the airbag of the front seat Ay RH/LH at the side to be deployed.
- 5.Connect the SST connector to the front seat airbag assembly connector (Yellow 2P).

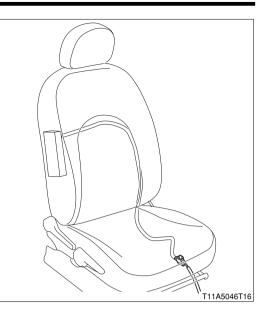
SST: 09082-00760-000

### WARNING

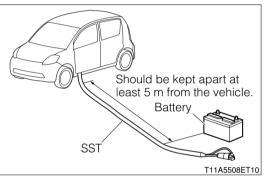
• At this time, close all the doors and windows.

### CAUTION

• Ensure that the front seat Ay RH/LH is secured to the vehicle.

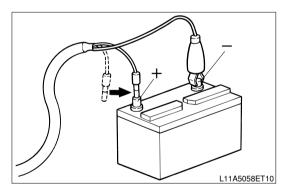


6.Extend the SST fully. Place the battery at least 5 m away from the vehicle.



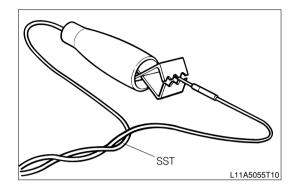
7.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.

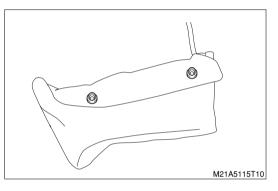


### (3) Deployment of front seat airbag Ay

- 1.Set the IG SW "LOCK" position. Remove the negative (-) terminal of the battery. If you begin the operation before 60 seconds pass, there is a danger that the airbag is mistakenly deployed.
- 2.Connect the following two SSTs.
- SST: 09082-87710-000 09082-00760-000
- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000



- 4.Remove the airbag Ay from the front seat Ay RH/LH. Refer to Page H1-21.
- 5.Install the two wire harness installing nuts to the airbag assembly.

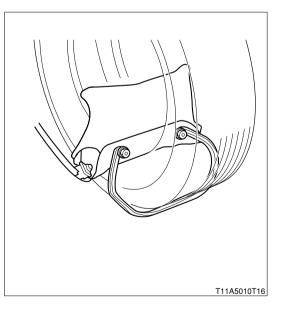


6.Secure the front seat airbag assembly to a tyre, using a wire harness for car use (Cross-sectional area of core wire: 1.25 mm2 or more).

#### WARNING

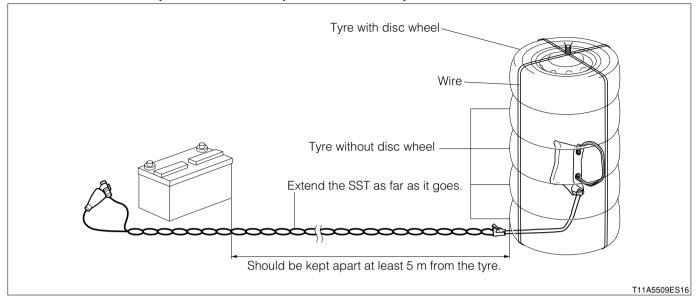
- Install the airbag assembly in such a way that the airbag deploying surface faces toward the center of the tyre.
- A great force will be applied to the wire harness at the time of airbag deployment. Therefore, secure the wire harness securely by winding it triple.
- 7.Install the SST to the front seat airbag assembly connector (2P).

SST: 09082-00760-000



8.Place a tire tied with the airbag Ay to two tires stacked vertically. Then, place one or more tires on these tires. Finally place a tire with a disc wheel on the top.

9.Connect the tires with wire so that the tires will not be scattered when the airbag is deployed. 10.Extend the SST fully. Place the battery at least 5 m away from the tire.



11.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

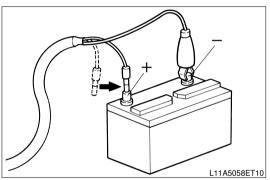
### WARNING

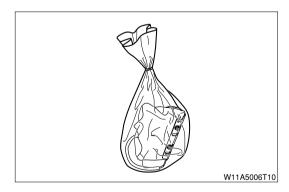
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.
- Never mount and reuse the tires and wheels used for the deployment on vehicles.

### (4) Scrapping procedure

1.Seal the deployed airbag assembly in a plastic bag before it is scrapped.

- The temperature of the front seat airbag assembly that has been deployed is a few hundred °C at some sections. Therefore, leave it at least 30 minutes after it is deployed.
- Do not apply water, etc. to the deployed front seat airbag assembly.
- When handling the deployed front seat airbag assembly, wear protective goggles and gloves.
- After completion of the operation, be sure to wash your hands with water.
- Never scrap the front seat airbag assembly that has not been deployed.





### 6 CURTAIN SHIELD AIRBAG 6-1 REMOVAL AND INSTALLATION CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 6-1-1 ARTICLES TO BE PREPARED

#### Instrument

Torque wrench

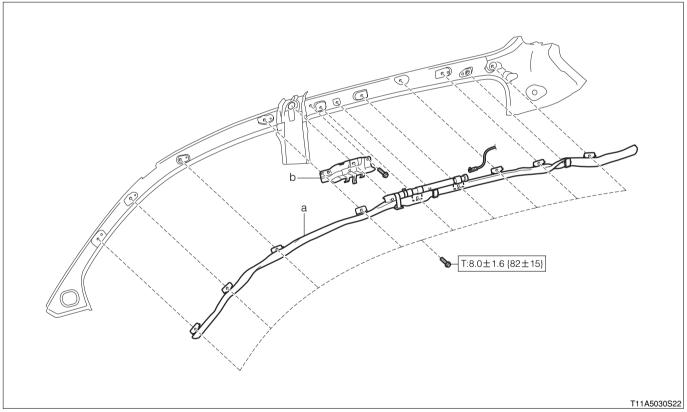
#### 6-1-2 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the roof headlining Ay.

Refer to Page I2-53.

### 6-1-3 REMOVAL AND INSTALLATION PROCEDURES

### (1) Components



Unit:N·m{kgf·cm}

#### (2) Removal and installation procedures

- ▲ 1 a Airbag Ay, curtain shield, RH/LH
  - 2 b Bracket S/A, roof side rail, RH/LH

### H1-29

### 6-1-4 INSPECTION

### (1) Check of curtain shield airbag ay RH/LH

1. When the following cases have occurred, perform checks. If there are any faulty parts, replace them.

- (1) Case where the vehicle is damaged, including minor collisions where the airbag has not been deployed.
- (2) Case where problems have been found out by the diagnosis check

### (2) External check of curtain shield airbag Ay RH/LH

1. When the following cases have occurred, replace the airbag assembly.

- (1) Case where the airbag has been deployed.
- (2) Case where the airbag deploying surface has scratches or cracks.
- (3) Case where the connector or harness has dents or chips.
- (4) Case where grease, water, detergent or oil has got to the airbag assembly in a large quantity.
- (5) Case where the airbag assembly dropped and got damaged.

### 6-1-5 POINTS OF INSTALLATION

### (1) Airbag Ay, curtain shield, RH/LH

1.Install the airbag assembly.

### CAUTION

• Be very careful not to installed the airbag Ay in a twisted state.

### 6-1-6 OPERATION AFTER INSTALLATION

1.Install the roof headlining Ay. Refer to Page I2-53.

2.Connect the negative (-) terminal of the battery.

3.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

### 6-2 DISPOSAL CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 6-2-1 DESCRIPTION

1. When scrapping a vehicle equipped with an airbag system or scrapping the curtain shield airbag Ay, be sure to deploy the airbag. Then, follow the "Scrapping procedure" to scrap the airbag itself. When scrapping the curtain shield airbag Ay, that has been deployed by a customer during its use, too, follow the "Scrapping procedure."

### 6-2-2 DEPLOYMENT OF CURTAIN SHIELD AIRBAG AY

### (1) Articles to be prepared

SST

Shape	Part No.	Part name
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment
	09082-97201-000	Sub-harness D1,air bag deployment wire

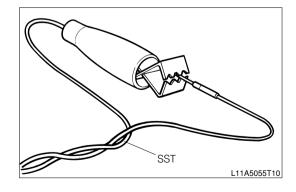
### Lubricant, adhesive, others

12V battery for car use,1 tire with disc wheel,4 tires,Vinyl bag

### (2) In-vehicle deployment

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the following two SSTs.
  - SST: 09082-87710-000 09082-97201-000
- 3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000
- 4.Remove the roof headlining Ay. Refer to Page I2-53.

5.Disconnect the harness side connector for the airbag.

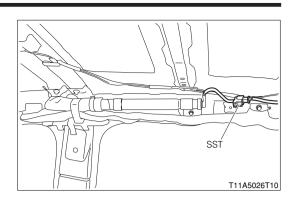


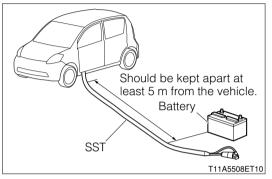
6.Connect the SST connector to the connector for the airbag (Yellow 2P).

SST: 09082-97201-000

### WARNING

- Ensure that there is no excessive play at the airbag assembly.
- At this time, close all the doors and windows.
- 7.Extend the SST fully. Place the battery at least 5 m away from the vehicle.

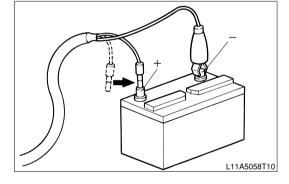




8.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to actuate the airbag.

### WARNING

- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.

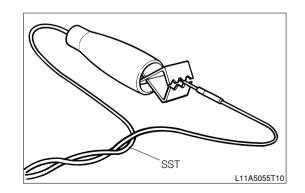


### (3) Unit deployment

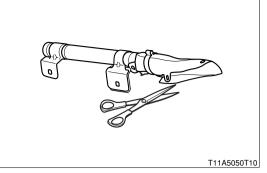
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the following two SSTs.

SST: 09082-87710-000 09082-97201-000

3.Short the terminal with the alligator clip of the SST. SST: 09082-87710-000



- 4.Remove the airbag assembly. Refer to Page H1-28.
- 5.Cut the bag of the airbag Ay at the root of the inflator.

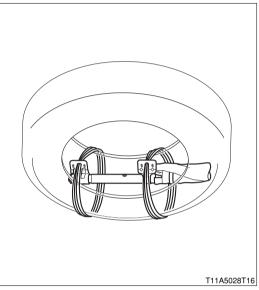


6.Secure the airbag Ay to a tire, using a wire harness for automotive use (Cross-sectional area of core wire: 1.25mm<sup>2</sup> or more).

### WARNING

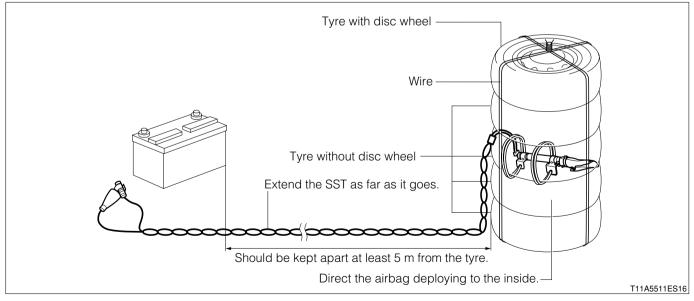
- Make sure that the airbag deploying surface faces toward the inside of the tire during the installation.
- A great force will be applied to the wire harness at the time of airbag deployment. Therefore, secure the wire harness firmly by winding it triple.
- 7.Connect the SST connector to the connector for the airbag (Yellow 2P).

SST: 09082-97201-000



8.Place a tire tied with the airbag Ay to two tires stacked vertically. Then, place one or more tires on these tires. Finally place a tire with a disc wheel on the top.

9.Connect the tires with wire so that the tires will not be scattered when the airbag is deployed. 10.Extend the SST fully. Place the battery at least 5 m away from the tire.



11.Confirm safety inside and around the vehicle. Then, connect the SST to the battery (The alligator clip to the negative (-) terminal of the battery; the terminal to the positive (+) terminal) so as to deploy the airbag.

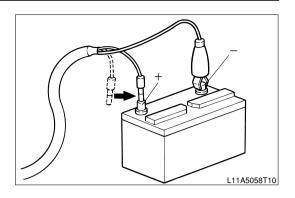
### WARNING

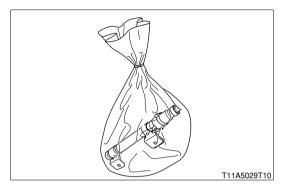
- Make sure that there is no one inside and around the vehicle.
- Give warning loudly to those nearby before deploying the airbag.
- Never mount and reuse the tires and wheels used for the deployment on vehicles.

### (4) Scrapping procedure

1.Seal the deployed airbag assembly in a plastic bag before it is scrapped.

- The temperature reaches a few hundred °C at some sections. Therefore, leave it at least 30 minutes after it is deployed.
- Do not apply water, etc.
- When handling, wear dust protective goggles and gloves.
- After completion of the operation, be sure to wash your hands with water.
- Never scrap the pad Ay that has not been deployed.





### 7 AIRBAG COMPUTER 7-1 REMOVAL AND INSTALLATION CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 7-1-1 ARTICLES TO BE PREPARED

#### Instrument

Torque wrench

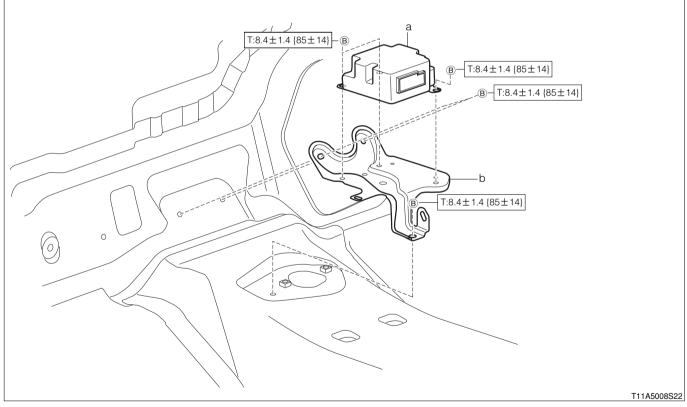
### 7-1-2 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the console panel and turn over the carpet.

Refer to Page I2-23.

# 7-1-3 REMOVAL AND INSTALLATION PROCEDURES (VEHICLES NOT EQUIPPED WITH CURTAIN SHIELD AIRBAG & SIDE AIRBAG)

#### (1) Components



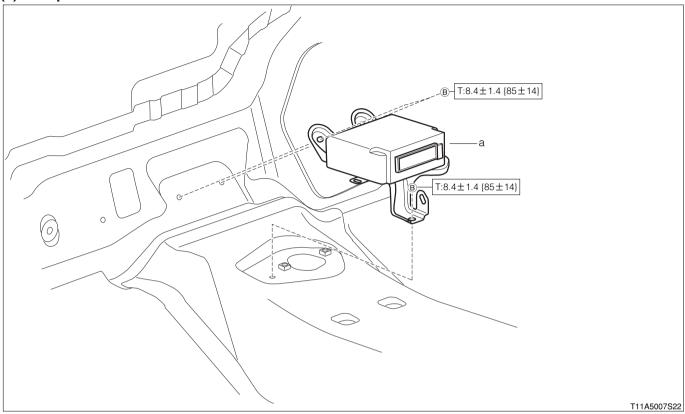
Unit:N·m{kgf·cm}

#### (2) Removal and installation procedures

- 1 a Computer Ay, airbag
- 2 b Bracket, ECU unit

# 7-1-4 REMOVAL AND INSTALLATION PROCEDURES (VEHICLES EQUIPPED WITH CURTAIN SHIELD AIRBAG & SIDE AIRBAG)

### (1) Components



Unit:N·m{kgf·cm}

### (2) Removal and installation procedures

1 a Computer Ay, airbag

### 7-1-5 INSPECTION

### (1) Check standard for airbag computer Ay

1. In cases where the vehicle is involved in a collision, check the computer Ay. Replace it if it is faulty.

### (2) External Check of airbag computer Ay

- 1. When the following cases have occurred, replace the computer assembly.
  - (1) Case where the computer Ay is dropped:
  - (2) Case where the connector section of the computer Ay has damage and cracks:
  - (3) Case where the computer Ay has deformation and cracks:

### 7-1-6 OPERATION AFTER INSTALLATION

- 1.Place the carpet and install the console panel. Refer to Page I2-232.
- 2.Connect the negative (-) terminal of the battery.
- 3.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

## 8 FRONT AIRBAG SENSOR 8-1 REMOVAL AND INSTALLATION CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

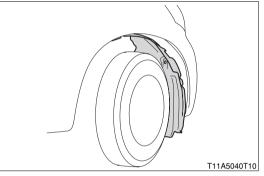
### 8-1-1 ARTICLES TO BE PREPARED

#### Instrument

Torque wrench

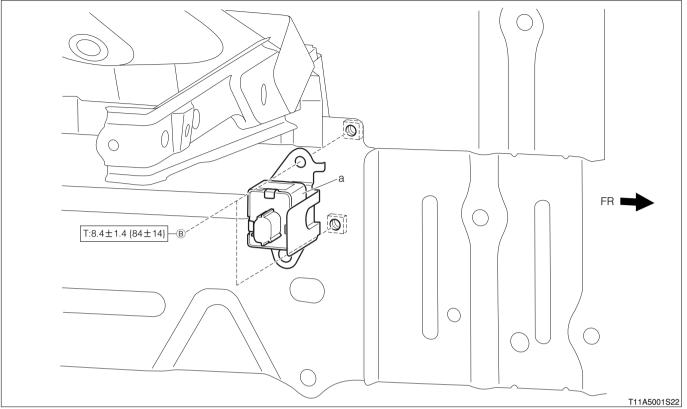
### 8-1-2 OPERATION BEFORE REMOVAL

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the clip and grommet of the front fender liner RH (RHD vehicles) or the front fender liner LH (LHD vehicles). Then, turn over the front side.Refer to Page I1-24.



### 8-1-3 REMOVAL AND INSTALLATION PROCEDURES

### (1) Components



Unit:N·m{kgf·cm}

The component diagram shows the RHD vehicle.

#### (2) Removal and installation procedures

▲ 1 a Sensor, airbag, front RH/LH

### 8-1-4 INSPECTION

### (1) Check standard for sensor, airbag front

1.In cases where the vehicle is involved in a collision, check the sensor. Replace it if it is faulty.

#### (2) External check of sensor, airbag front

1. When the following cases have occurred, replace the sensor.

- (1) Case where the sensor is dropped:
- (2) Case where the connector section of the sensor has damage and cracks:
- (3) Case where the sensor has deformation and cracks:

## 8-1-5 POINTS OF INSTALLATION

### (1) Sensor, airbag front

1.Install the side member Ay RH, being very careful not to install the sensor in a wrong direction.

### 8-1-6 OPERATION AFTER INSTALLATION

1.Install the front fender liner RH (RHD vehicles) or the front fender liner LH (LHD vehicles). Refer to Page I1-24.

- 2.Connect the negative (-) terminal of the battery.
- 3.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

## 9 SIDE AIRBAG SENSOR 9-1 REMOVAL AND INSTALLATION CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### 9-1-1 ARTICLES TO BE PREPARED

#### Instrument

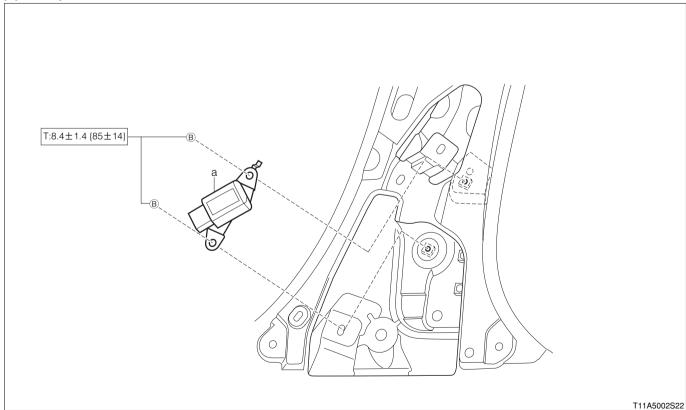
Torque wrench

### 9-1-2 OPERATION BEFORE REMOVAL

- 1.Set the IG SW "LOCK" position. Remove the negative (-) terminal of the battery. If you begin the operation before 60 seconds pass, there is a danger that the airbag and pretensioner are mistakenly actuated and deployed.
- 2.Remove the center pillar lower garnish RH/LH. Refer to Page I2-48.
- 3.Remove the front seat belt outer belt Ay RH/LH. Refer to Page I2-42.

## 9-1-3 REMOVAL AND INSTALLATION PROCEDURES

### (1) Components



Unit:N·m{kgf·cm}

### (2) Removal and installation procedures

1 a Sensor, side airbag, RH/LH

## 9-1-4 INSPECTION

### (1) Check standard for sensor Ay, side airbag RH/LH

1.In cases where the vehicle is involved in a collision, check the sensor Ay. Replace it if it is faulty.

## (2) External check of sensor Ay, side airbag RH/LH

- 1. When the following cases have occurred, replace the sensor assembly.
  - (1) Case where the sensor Ay is dropped:
  - (2) Case where the connector section of the sensor Ay has damage and cracks:
  - (3) Case where the computer Ay has deformation and cracks:

### 9-1-5 OPERATION AFTER INSTALLATION

1.Install the front seat belt outer belt Ay RH/LH. Refer to Page I2-42.

2.Install the center pillar lower garnish RH/LH. Refer to Page I2-48.

3.Install the negative (-) terminal of the battery.

4.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

## **10 SIDE AIRBAG REAR SENSOR** 10-1 REMOVAL AND INSTALLATION

## CAUTION

• Refer to the Caution Tips on Servicing.

Refer to Page A1-26.

### **10-1-1 ARTICLES TO BE PREPARED**

#### Instrument

Torque wrench

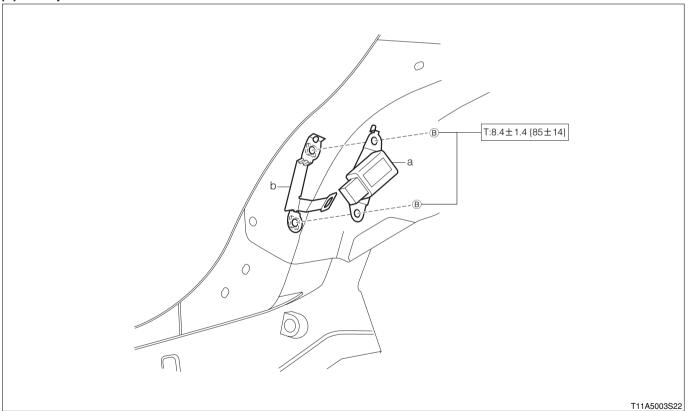
### **10-1-2 OPERATION BEFORE REMOVAL**

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the rear quarter trim panel Ay RH/LH.

Refer to Page I2-48.

### **10-1-3 REMOVAL AND INSTALLATION PROCEDURES**

### (1) Components



Unit:N·m{kgf·cm}

#### (2) Removal and installation procedures

1 a Sensor, side airbag, RH/LH

#### **10-1-4 INSPECTION**

#### (1) Check standard for sensor Ay, side airbag RH/LH

1.In cases where the vehicle is involved in a collision, check the sensor Ay. Replace it if it is faulty.

## (2) External check of sensor Ay, side airbag RH/LH

1. When the following cases have occurred, replace the sensor assembly.

- (1) Case where the sensor Ay is dropped:
- (2) Case where the connector section of the sensor Ay has damage and cracks:
- (3) Case where the computer Ay has deformation and cracks:

### **10-1-5 OPERATION AFTER INSTALLATION**

1.Install the rear quarter trim panel Ay RH/LH. Refer to Page I2-48.

2.Install the negative (-) terminal of the battery.

3.Set the IG SW "ON" position. At this time, ensure that the airbag warning lamp goes on about six seconds and then goes out.

## **11 CONTROL SYSTEM** 11-1 ARTICLES TO BE PREPARED

SST

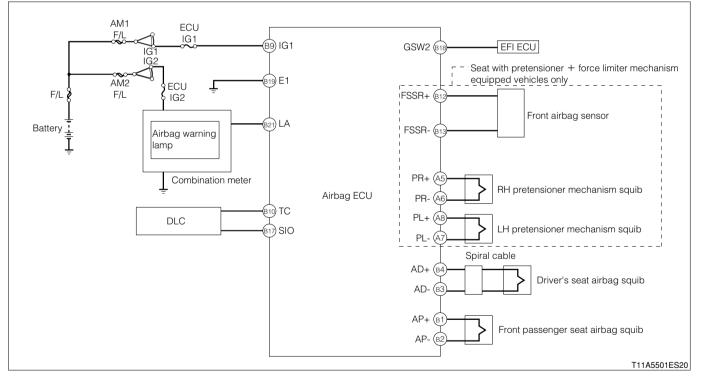
Shape	Part No.	Part name
	09991-87404-000 (09991-87401-000)	Wire,engine control system inspection
	09991-87403-000	Wire,diagnosis check
	09082-87710-000 (09082-87701-000)	Wire,air bag deployment

#### Instrument

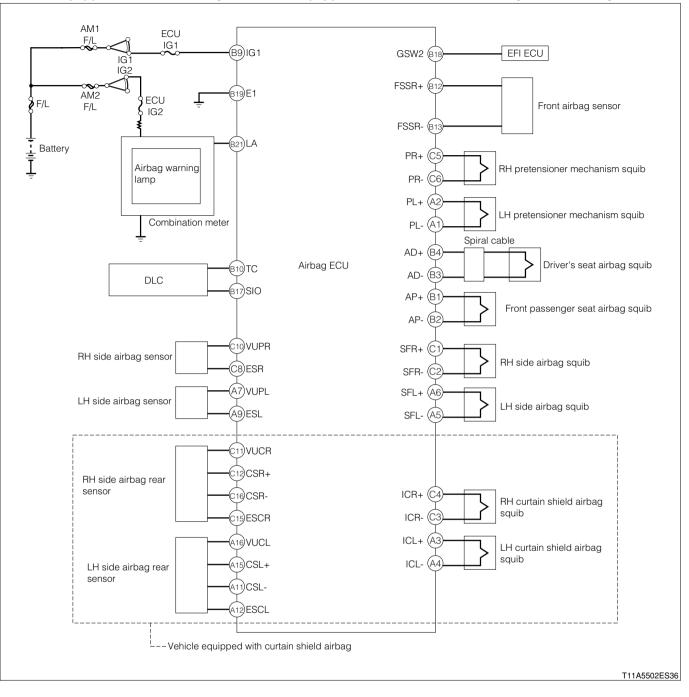
Electrical Tester

## **11-2 SYSTEM WIRING DIAGRAM**

Vehicles not equipped with curtain shield airbag & side airbag

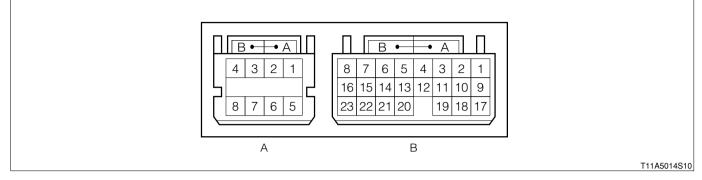


### Vehicles equipped with side airbag / Vehicles equipped with curtain shield airbag & side airbag



## **11-3 ARRANGEMENT OF ECU TERMINAL**

Vehicles not equipped with curtain shield airbag & side airbag



### Connector A

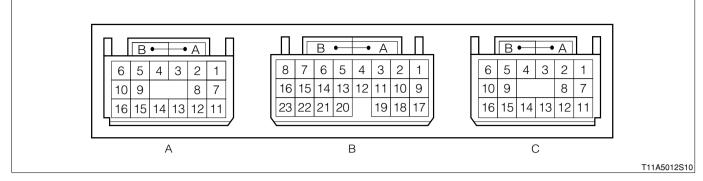
Terminal	Terminal code	Terminal name
No.		
А	—	Half fit detecting mechanism
В	—	Half fit detecting mechanism
1	—	_
2	—	-
3	—	_
4	—	_
5*	PR+	RH pretensioner mechanism squib (+)
6*	PR-	RH pretensioner mechanism squib (-)
7*	PL-	LH pretensioner mechanism squib (-)
8*	PL+	LH pretensioner mechanism squib (+)

X:Vehicles equipped with only seat belt with pretensioner + force limiter mechanism

Connecto	or B	
Terminal	Terminal code	Terminal name
No.		
А	—	Half fit detecting mechanism
В	—	Half fit detecting mechanism
1	AP+	Front passenger seat airbag squib (+)
2	AP-	Front passenger seat airbag squib $(-)$
3	AD-	Driver's seat airbag squib (-)
4	AD+	Driver's seat airbag squib (+)
5	—	_
6	—	_
7	—	_
8	—	—
9	IG1	IG power supply
10	TC	Start of diagnosis
11	—	_
12*	FSSR +	Front airbag sensor (+)
13*	FSSR -	Front airbag sensor (-)
14	—	_
15	—	_
16	—	_
17	SIO	DLC
18	GSW2	EFI ECU
19	E1	Earth
20	—	_
21	LA	Airbag warning lamp
22	—	_
23	—	_

X:Vehicles equipped with only seat belt with pretensioner + force limiter mechanism

### Vehicles equipped with side airbag / Vehicles equipped with curtain shield airbag & side airbag



#### Connector A

Terminal	Terminal code	Terminal name
No.		
А	—	Half fit detecting mechanism
В	—	Half fit detecting mechanism
1	PL-	LH pretensioner mechanism squib $(-)$
2	PL+	LH pretensioner mechanism squib (+)
3*	ICL+	LH curtain shield airbag squib (+)
4*	ICL-	LH curtain shield airbag squib (-)
5	SFL-	LH side airbag squib (-)
6	SFL+	LH side airbag squib (+)
7	VUPL	LH side airbag sensor power supply, communication
8	—	_
9	ESL	LH side airbag sensor earth
10	—	_
11*	CSL-	LH side airbag safing rear sensor $(-)$
12*	ESCL	LH side airbag rear sensor earth
13	—	_
14	—	_
15 <sup>**</sup>	CSL+	LH side airbag safing rear sensor (+)
16 <sup>*</sup>	VUCL	LH side airbag rear sensor power supply, communication

X:Vehicle equipped with curtain shield airbag

Connecto	r B	
Terminal	Terminal code	Terminal name
No.		
А	—	Half fit detecting mechanism
В	—	Half fit detecting mechanism
1	AP+	Front passenger seat airbag squib (+)
2	AP-	Front passenger seat airbag squib (-)
3	AD-	Driver's seat airbag squib (-)
4	AD+	Driver's seat airbag squib (+)
5	—	_
6	—	_
7	—	_
8	—	-
9	IG1	IG power supply
10	TC	Start of diagnosis
11	—	_
12	FSSR +	Front airbag sensor (+)
13	FSSR-	Front airbag sensor (-)
14	—	_
15	—	_
16	—	_
17	SIO	DLC
18	GSW2	EFI ECU
19	E1	Earth
20	—	_
21	LA	Airbag warning lamp
22	—	_
23	—	_

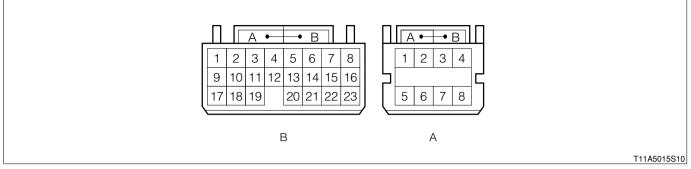
## Connector C

Terminal	Terminal code	Terminal name
No.		
А	_	Half fit detecting mechanism
В	_	Half fit detecting mechanism
1	SFR+	RH side airbag squib (+)
2	SFR-	RH side airbag squib (-)
3*	ICR-	RH curtain shield airbag squib (-)
4*	ICR+	RH curtain shield airbag squib (+)
5	PR+	RH pretensioner mechanism squib (+)
6	PR-	RH pretensioner mechanism squib (-)
7	_	_
8	ESR	RH side airbag sensor earth
9	—	_
10	VUPR	RH side airbag sensor power supply, communication
11*	VUCR	RH side airbag rear sensor power supply, communication
12*	CSR+	RH side airbag safing rear sensor (+)
13	—	_
14	_	_
15 <sup>**</sup>	ESCR	RH side airbag rear sensor earth
16 <sup>*</sup>	CSR-	RH side airbag safing rear sensor (-)

X:Vehicle equipped with curtain shield airbag

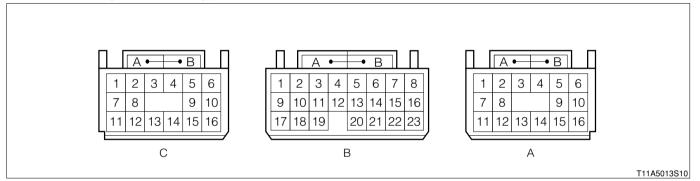
## **11-4 ARRANGEMENT OF VEHICLE HARNESS SIDE CONNECTOR TERMINALS**

Harness side connector of airbag ECU (Vehicles not equipped with curtain shield airbag & side airbag)



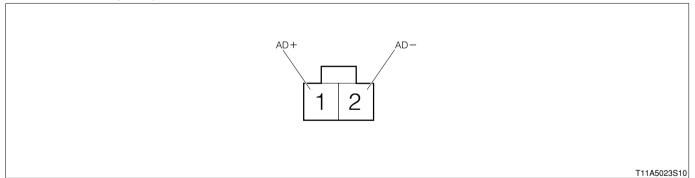
With regard to the terminal names of the connector leading to the airbag ECU, refer to the "Arrangement Diagram of Computer Connector Terminals."

Harness side connector of airbag ECU (Vehicles equipped with side airbag / Vehicles equipped with curtain shield airbag & side airbag)

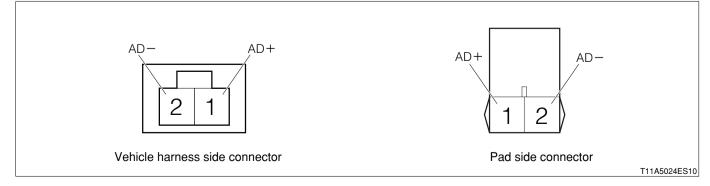


With regard to the terminal names of the connector leading to the airbag ECU, refer to the "Arrangement Diagram of Computer Connector Terminals."

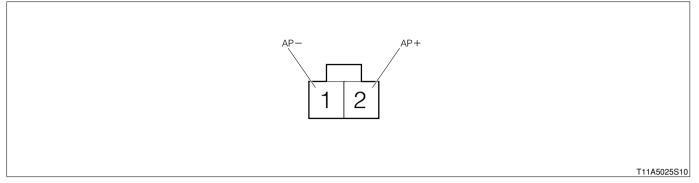
#### Connector leading to spiral cable



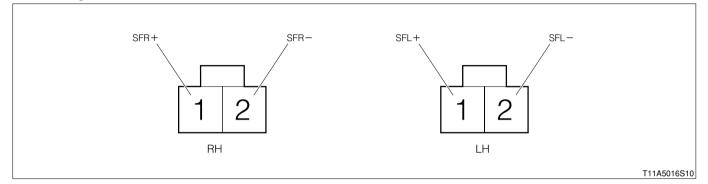
#### Spiral cable



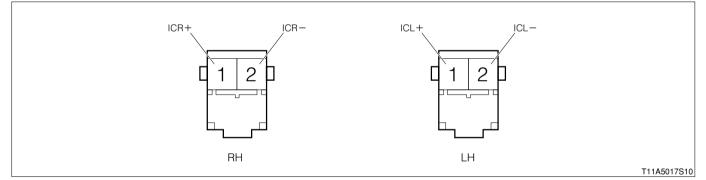
## Front passenger seat airbag



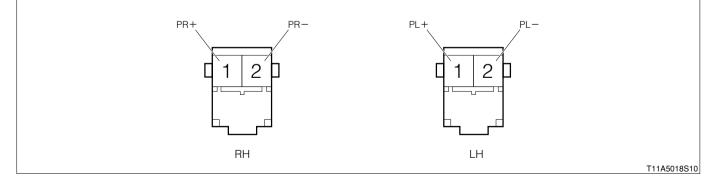
### Side airbag



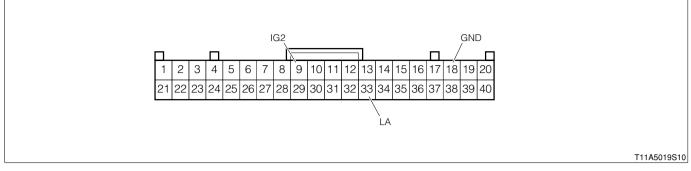
## Curtain shield airbag



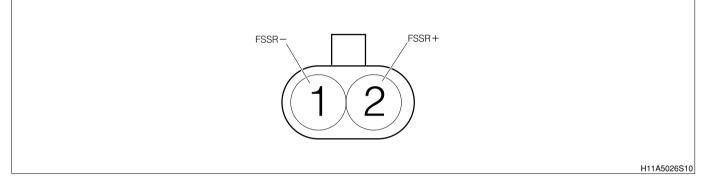
### Seat belt with pretensioner + force limiter mechanism



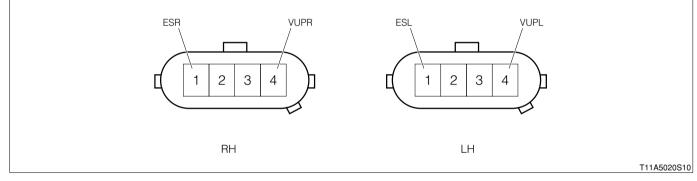
### Combination meter



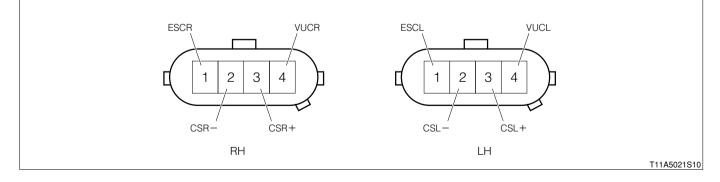
### Front airbag sensor



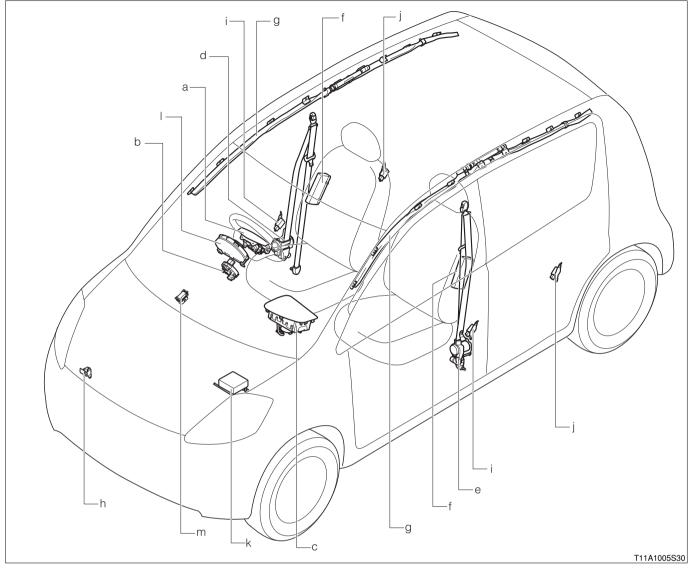
## Side airbag sensor



### Side airbag rear sensor



# **11-5 LOCATION OF COMPONENTS**



The figure shows the RHD vehicle.

			sioner + force lim- iter mechanism	Vehicles with the side airbag	Vehicles with the curtain shield air- bag & side airbag
а	Driver's seat airbag	0	0	0	0
b	Spiral cable	0	0	0	0
С	Front passenger-side airbag	0	0	0	0
d	Seatbelts with the RH pretensioner and the force limiter mechanism	0	_	0	0
е	Seatbelts with the LH pretensioner and the force limiter mechanism	0	-	0	0
f	Side airbag RH/LH	_	-	0	0
g	Curtain Shield Airbag RH/LH	—	-	_	0
h	Front Airbag Sensor	0	-	0	0
i	Side Airbag Sensor RH/LH	—	—	0	0
j	Side airbag rear sensor RH/LH	—	—	_	0
k	Airbag ECU	0	0	0	0
Ι	Combination Meter (air bag warning Iamp)	0	0	0	0
m	DLC	0	0	0	0

O: Provided -: Not provided

## 11-6 HOW TO PROCEED WITH TROUBLE SHOOTING

- 1.The airbag is provided with a diagnosis function which diagnoses malfunctioning sections. This function gives important clues in carrying out the trouble shooting. This system is provided with a backup function (EEPROM) which memorizes the diagnosis code. Therefore, even if the power supply is cut off, the diagnosis contents are retained.
- 2. The diagnosis code is indicated by illumination of the airbag warning lamp inside the combination meter.
- 3.In the airbag system, by using the diagnosis mode function that uses the diagnosis tester (DS- 21/DS-II), you can choose between the normal mode and test mode. When the test mode is selected, the detection sensitivity of diagnosis will be increased.
  - (1) Refer to the diagnosis code list in the service manual for the diagnosis codes which correspond to each test mode.

## CAUTION

- In the airbag trouble-shooting procedure, there are cases where confirmation as to the "%"-marked items given below is difficult due to the characteristics of the system (safety device).
- If wrong operations are performed during checks or repairs, the system may have malfunction or wrong operation. Therefore, care must be exercised to observe the notes given and perform the operations according to the instructions of this manual.

## $\sum$ 1. Bringing-in of malfunctioning vehicle

▼<u>Go to ⊃2 .</u>

## $\triangleright$ **2.** Inquiry with customer\*

1. Thoroughly inquire about conditions and environmental phenomenon when the malfunction took place.  $\bigvee$  Go to  $\sum$ 3.

### ${}^{\textstyle >}$ 3.Check of airbag warning lamp

1.Check the airbag warning lamp.

▼ Proceed to >4 in cases where the warning lamp is illuminated at all times (The airbag ECU is detecting a malfunction).

▼ Proceed to  $\ge$ 11 in the case of an abnormality of the warning lamp not illuminated (A malfunction is taking place in the warning lamp system).

## imes4. Record the confirmation of diagnosis codes

Refer to Page H1-59.

▼<u>Go to ⊳5 .</u>

### >5. Erasing of diagnosis code

Refer to Page H1-60.

▼<u>Go to ∑6 .</u>

⊳6. Basic check

Refer to Page H1-62.

▼<u>Go to ⊃7 .</u>

### ${}^{>}$ 7. Reproduction and confirmation of malfunction phenomenon \*

1.Confirm the phenomenon and grasp the malfunctioning condition. Refer to Page A1-17.

▼<u>Go to ⊳8 .</u>

>8. Reconfirmation of diagnosis code

Refer to Page H1-59.

- ▼ Proceed to >10 in cases where a diagnosis code is outputted.
- $\checkmark$  Proceed to >11 in cases where the lamp is illuminated at all times.
- $\checkmark$  Proceed to  $\triangleright$ 9 in cases where no diagnosis code is outputted.

### **▷9.Check using test mode function (Using DS-21)**

- 1.Confirm and record diagnosis codes, using the test mode function.
  - ▼ Proceed to >10 in cases where a diagnosis code is outputted.
  - ▼ Proceed to >11 in cases where no diagnosis code is outputted.
- ${}^{\textstyle \triangleright}$  10. Trouble-shooting check according to diagnosis code

Refer to Page H1-64.

▼In cases where no malfunction can be found, the reproduction method must be employed. Proceed to > 12.

Refer to Page A1-17.

▼ Narrow down the malfunctioning system and perform repairs if a malfunction is found. Then, proceed to  $\Sigma$  12.

# ▷11. Trouble-shooting check according to malfunction phenomenon Pofer to Page H1 117

Refer to Page H1-117.

▼In cases where no malfunction can be found, the reproduction method must be employed. Proceed to  $\sum 12$ .

Refer to Page A1-17.

Varrow down the malfunctioning system and perform repairs if a malfunction is found. Then, proceed to  $\sum 12$ .

### >12. Erasing of diagnosis code

Refer to Page H1-60.

▼<u>Go to ⊃13 .</u>

#### ▷13. Confirmation and recording of diagnosis code Refer to Page H1.59

Refer to Page H1-59.

▼ Proceed to >14 in cases where the normal code is outputted.

▼ Proceed to >10 in cases where a diagnosis code is outputted.

# H1–55

## ▷14.Confirmation test

1.Confirm that the malfunction phenomenon of the vehicle claimed by the customer has been remedied and the vehicle has been restored to the normal condition.

 $\checkmark$  If the result is OK, the test is finished.

## **11-6-1 DIAGNOSIS THROUGH INQUIRIES**

- 1.In an effort to remove causes for malfunction from the vehicle concerned, it is impossible to determine the cause without confirming the malfunction phenomenon. If the phenomenon is not confirmed, the vehicle may not be able to return to the normal conditions even if you continue your work. The diagnosis by interviews is to collect information from the customer before confirming the malfunction phenomena. The diagnosis by interviews provides very important clues in reproducing malfunction phenomena.
- 2. Since the information obtained through the diagnosis by interviews is referred to during the trouble shooting, it is imperative to make an inquiry of the customer, centering on the items related to the mal-function, instead of simply asking general questions.

## (1) Diagnosis interview sheet for SRS airbag system

Checked by	Check date	Day Month
Checked by	Check dale	(Day of week)

### Customer information

Name of		Gender of customer (Male, female)		Age [approx. ]	Occupatio	on [ ]
customer		Area where vehi-	Urban, s	suburb, seashore,	Parking	Outdoor,
	Mr./Ms.	cle is mainly used	moi	untain, others	place	indoor

### Details of vehicle

Date when vehicle was brought to workshop	Day Month (day of week)	Date when malfunction took place	Day Month (day of week)	Repair history	No,Ye time	(
Frame No.		Registration date	Day Month Year	Vehicle model		
Engine type		Transmission	5M/T·3A/T·4A/ electronically-contro		Driving	2WD·4WD
Running distance	km	Equipment	Tire [	]· Wheel [Stee	el · Alumir	num]

### Weather

🗆 Fine	Cloudy	🗌 Rainy	□ Snow	Other(	)
Temperature(A	Approx. °C)				

### Vehicle conditions

□ Starting	🗌 Idling	🗆 Running (Constant speed	Acceleration	Deceleration	
Others	)				

### Road conditions

# H1–57

## Contents of problem

□ Not illuminated State of airbag warning lamp Always illuminated □ Sometimes illuminated Abnormal code [ During 🗌 Normal 1 check □ Normal □ Abnormal code [ Diagnosis indication Second ] (Short circuit of T terminal) time □ Normal □ Abnormal code [ ] nd(rd) time

### 11-6-2 CONFIRMATION, RECORD AND ERASURE OF DIAGNOSIS CODE

1. When an abnormality code is indicated, confirm whether the malfunction took place sometimes in the system or is still persisting. Also it is necessary to check any relation between the code and the reproduced malfunction (Malfunction code). For this purpose, the diagnosis code should be indicated twice, namely before and after the confirmation of the phenomena.

#### 11-6-3 BASIC CHECK

1. The basic check enables you to narrow down the malfunctioning system.

### 11-6-4 RE-CONFIRMATION OF DIAGNOSIS CODE

1. After confirming the malfunction phenomenon, check the illuminating condition of the warning lamp (Malfunction mode). Note whether any change has occurred before and after the confirmation. In this way, judge whether the system is currently normal or not.

# H1–59

## 11-7 CONFIRMATION, RECORD AND ERASURE OF DIAGNOSIS CODE 11-7-1 CHECKING METHOD OF DIAGNOSIS

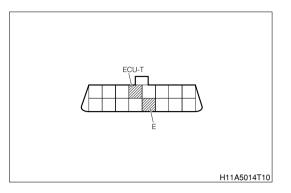
## (1) Indication by airbag warning lamp

1.Stop the vehicle.

2.With the IG SW set to "ON" position, short the ECU-T terminal and E terminal of the DLC located under the instrument panel.

## CAUTION

- In order to short the DLC, be sure to use the specified SST.
- If the short is made for wrong positions of the DLC, it will cause malfunction. Be very careful not to select wrong terminals.



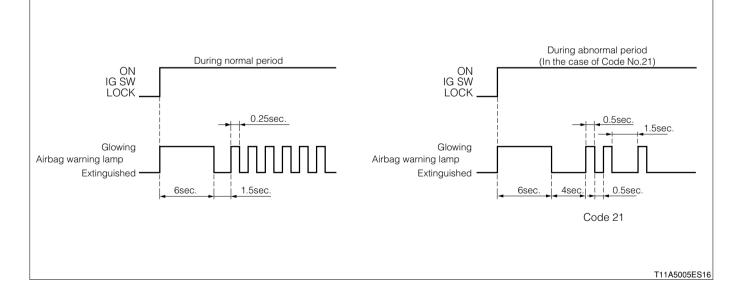
SST: 09991-87404-000

09991-87403-000

3. The airbag warning lamp inside the combination meter flashes, thus indicating the code.

## NOTE

- When the DLC is shorted, warning lamps other than the airbag warning lamp will flash. But this does not indicate system malfunction.
- All the memorized codes are shown repeatedly in the sequence of malfunction number, starting from the smallest number.
- When there is one code, the malfunction code is indicated again after a pause of four second.
- When there are more than one code, the codes are shown starting from the smaller number with a pause of 2.5 seconds made between each code indication. When all codes have been shown, after a pause of 4 seconds, the codes are again indicated one by one from the smaller one.



### 11-7-2 CANCELING METHOD OF DIAGNOSIS

### (1) Canceling method using DLC

- 1. When the section which is responsible for the malfunction code has been checked and repaired, erase the memory, following the procedure given below.
  - (1) Make the abnormality code be outputted to the airbag warning lamp by using the diagnosis code output indicating method.
  - (2) While looking at a clock (Having a second hand), short the ECU-T terminal and E terminal of the DLC for 1±0.4 second, and release these terminals for 1±0.4 second. Repeat connecting/releasing four times. Then, when the ECUT terminal and E terminal are shorted fifth time, these terminals should be kept connected.
  - Refer to Page A1-19.

(3) If the code has been erased by now, the airbag warning lamp will flash quickly.

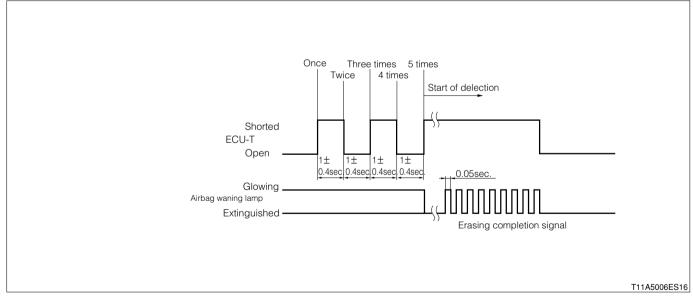
## CAUTION

- In order to short the DLC, be sure to use the specified SST.
- If the short is made for wrong positions of the DLC, it will cause malfunction. Be very careful not to select wrong terminals.

SST: 09991-87404-000 09991-87403-000

### NOTE

If the airbag warning lamp does not flash quickly, repeat this operation from the beginning.



(4) After the memory has been erased, ensure that the airbag warning lamp is extinguished. Let the code be outputted again. Ensure that the normal code is outputted.

## **11-7-3 CONTENTS OF DIAGNOSIS**

## Contents of diagnosis

Coc	le No.	Test mode	Warning	Cord	Contents of diagnosis	
Two-di git code	Four-digit code	Output <sup>×3</sup> (Provided: O) (Not pro- vided: X)	Indication (Provided: O) (Not pro- vided: X)	Memory (Provided: O) (Not pro- vided: X)	System diagnosed	Diagnosis items
11	B1802	0	0	0	Driver's seat airbag squib circuit	Earth short
12	B1803	0	0	0	Driver's seat airbag squib circuit	Power supply short
13	B1800	0	0	0	Driver's seat airbag squib circuit	Short between wires
14	B1801	0	0	0	Driver's seat airbag squib circuit	Open wire
15 <sup>×1</sup>	B1600	×	0	0	Front airbag sensor	Abnormality of the main body
23 <sup>×1</sup>	B1630	0	0	0	RH side airbag rear sensor	Abnormality of the main body
24 <sup>×1</sup>	B1635	0	0	0	LH side airbag rear sensor	Abnormality of the main body
31 <sup>**2</sup>	B1000	×	0	0	Airbag ECU	Abnormality of the main body
32 <sup>×1</sup>	B1620	0	0	0	RH side airbag sensor	Abnormality of the main body
33 <sup>**1</sup>	B1625	0	0	0	LH side airbag sensor	Abnormality of the main body
41	B1822	0	0	0	RH side airbag squib circuit	Earth short
42	B1823	0	0	0	RH side airbag squib circuit	Power supply short
43	B1820	0	0	0	RH side airbag squib circuit	Short between wires
44	B1821	0	0	0	RH side airbag squib circuit	Open wire
45	B1827	0	0	0	LH side airbag squib circuit	Earth short
46	B1828	0	0	0	LH side airbag squib circuit	Power supply short
47	B1825	0	0	0	LH side airbag squib circuit	Short between wires
48	B1826	0	0	0	LH side airbag squib circuit	Open wire
51	B1807	0	0	0	Front passenger's seat airbag squib circuit	Earth short
52	B1808	0	0	0	Front passenger's seat airbag squib circuit	Power supply short
53	B1805	0	0	0	Front passenger's seat airbag squib circuit	Short between wires
54	B1806	0	0	0	Front passenger's seat airbag squib circuit	Open wire
61 62	B1902 B1903	0	0	0	RH pretensioner mechanism squib circuit RH pretensioner mechanism squib circuit	Earth short Power supply short
63	B1900	0	0	0	RH pretensioner mechanism squib circuit	Short between wires
64	B1901	0	0	0	RH pretensioner mechanism squib circuit	Open wire
71	B1907	0	0	0	LH pretensioner mechanism squib circuit	Earth short
72	B1908	0	0	0	LH pretensioner mechanism squib circuit	Power supply short
73	B1905	0	0	0	LH pretensioner mechanism squib circuit	Short between wires
74 81	B1906 B1832	0 0	0 0	0 0	LH pretensioner mechanism squib circuit RH curtain shield airbag squib circuit	Open wire Earth short
82	B1833	0	0	0	RH curtain shield airbag squib circuit	Power supply short

83	B1830	0	0	0	RH curtain shield airbag squib circuit	Short between wires
84	B1831	0	0	0	RH curtain shield airbag squib circuit	Open wire
85	B1837	0	0	0	LH curtain shield airbag squib circuit	Earth short
86	B1838	0	0	0	LH curtain shield airbag squib circuit	Power supply short
87	B1835	0	0	0	LH curtain shield airbag squib circuit	Short between wires
88	B1836	0	0	0	LH curtain shield airbag squib circuit	Open wire

X1: This may be emitted, not only when the airbag sensor inside is malfunctioning, but also when the circuit has an abnormality.

%2: This may be emitted, not only when the airbag ECU inside is malfunctioning, but also when the squib system circuit has an abnormality.

 $\ensuremath{\overset{\scriptstyle\frown}{_{\scriptstyle \sim}}}$  3: This is outputted when the diagnosis tester (DS- 21/DS-II) is used.

### NOTE

• After the airbag and pretensioner have operated and deployed, the airbag warning lamp flashes at an interval of 0.5 second.

## **11-8 BASIC CHECK**

### **11-8-1 MEASUREMENT OF BATTERY VOLTAGE**

1.With the engine in a stopped state, measure the battery voltage. SPECIFIED VALUE: 10-14V

## 11-8-2 CHECK OF SRS AIRBAG SYSTEM POWER SUPPLY AND EARTH CIRCUIT

### (1) Check of power supply circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the airbag ECU.
- 3.Connect the negative (-) terminal of the battery.
- 4.After the IG SW has been turned "ON", check the voltage of the connectors at the airbag ECU harness side, respectively.

(1) Connector B9 (IG1)-B19 (E1) at airbag ECU harness side

SPECIFIED VALUE: 10-14V (Battery voltage)

## (2) Check of earth circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the airbag ECU.
- 3.Check continuity between the connectors between the airbag ECU and the vehicle harness, respectively.

(1) Connectors B19 (E1)(body earth at the airbag ECU side

SPECIFIED VALUE: Continuity exists

(2) Connectors B19 (E1)(body earth at airbag ECU harness side SPECIFIED VALUE: Continuity exists

## 11-9 TROUBLE SHOOTING ACCORDING TO DIAGNOSIS CODE 11-9-1 WARNING LAMP CIRCUIT SYSTEM

## (1) Checking points

- 1.Is the gauge fuse normal?
- 2.Is the combination meter normal?
- 3.Is there any abnormality in the harness of the warning lamp system?

## (2) Checking method

## è1. Confirmation of warning lamp illuminating state

1. After the IG SW has been set to "ON" position, check the illuminating state of the airbag warning lamp. <u>cProceed to è2 when the lamp remains illuminated even after an elapse of 6 seconds.</u> <u>cIf the lamp is extinguished, proceed to è4.</u>

## è2. Confirmation of warning lamp illuminating state

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the airbag ECU. Short the connector B21 (LA) with earth, using the SST. SST: 09991-87403-000
- 3.Install the negative terminal of the battery. With the IG SW set to "ON" position, check the lighting state of the airbag warning lamp.

SPECIFIED VALUE: The lamp goes out.

çReplace the airbag ECU if the lamp goes out. Refer to Page H1-34.

çlf it remains illuminated, proceed to è3.

## $\grave{\mathrm{e}3}.$ Continuity check between combination meter and airbag ECU

1. After the IG SW has been set to "LOCK" position, disconnect the combination meter connector.

- 2.Check the harness between the combination meter and the airbag ECU.
  - (1) Connector 33 (LA) of combination meter at harness side(Connector B21 (LA) of airbag ECU at harness side

SPECIFIED VALUE: Continuity exists

çlf the result is OK, repair or replace the combination meter. Refer to Page J3-3.

çlf the result is NG, replace the harness and connector.

## è4. Confirmation of warning lamp illuminating state

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Disconnect the connector from the airbag ECU. Then, install the negative (() terminal of the battery.

3.After the IG SW has been set to "ON" position, check the illuminating state of the warning lamp.

## SPECIFIED VALUE: Illuminates.

çlf the lamp is illuminated, replace the airbag ECU. Refer to Page H1-34.

çlf the lamp is extinguished, proceed to è5.

## è5. Check of fuse

1. After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Check the fuse.

SPECIFIED VALUE: No fuse has blown out.

çlf it is OK, go to è6. çlf it is NG, go to è8.

- è6. Check continuity between the combination meter and the fuse and continuity between the combination meter and the earth.
- 1.Check the harnesses between the combination meter and the gauge fuse as well as between the combination meter and the earth for open wire.
  - (1) Connector 9 (IG2) of combination meter at harness side(gauge fuse (Downstream side)

(2) Connector 18 (GND) of combination meter at harness side(body earth

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è7. çlf the result is NG, replace the harness and connector.

## $\rm \grave{e}7.$ Check of short between combination meter and airbag ECU

 Check the harness between the combination meter and the airbag ECU for short circuit.
 (1) Connector B21 (LA) of airbag ECU at harness side(body earth SPECIFIED VALUE: 1MΩ or more (No continuity)

çlf the result is OK, repair or replace the combination meter. Refer to Page J3-3.

çlf the result is NG, replace the harness and connector.

## $\grave{\mathrm{e}}\mathbf{8}.$ Check continuity between the combination meter and the fuse

1.Check the harness between the combination meter and the fuse.(1) Connector 9 (IG2) of combination meter at harness side(IG SW ('B side) SPECIFIED VALUE: Continuity exists

<u>clf the result is OK, replace the gauge fuse. Then, observe for a while.</u> <u>clf the result is NG, replace the gauge fuse and replace the harness and connector.</u>

### 11-9-2 DIAGNOSIS CODE NO.11(DRIVER'S SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

### (1) Diagnostic code output conditions

1. Cases where the harness between the driver's seat airbag and the airbag ECU is shorted with the earth

### (2) Checking points

1.Is there any abnormality in the harness and connector between the driver's seat airbag and the airbag ECU.

## CAUTION

• Since a connector with terminal short mechanism is used for the spiral cable, there is the possibility to make a wrong judgment that there is a short between harnesses. Therefore, before starting the check, ensure that there is no damage, such as open wire or short, in the SST for deploying the airbag (Part number: 09082-87710-000). Then, install it to the spiral cable. Check the harness with the SST installed.

## (3) Checking method

## $\rm \grave{e}1.$ Check of harness between steering wheel pad Ay and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the airbag ECU and steering wheel pad Ay. Then, check the harness between the pad Ay and the airbag ECU for short circuit.
  - (1) Connector 1 (AD') of spiral cable at pad side(Body earth
  - (2) Connector 2 (AD() of spiral cable at pad side(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

ç<u>lf it is OK, go to è2 .</u> ç<u>lf it is NG, go to è4 .</u>

### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, install the airbag ECU to the vehicle and connector the connector.
- 2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the codes. Then, check the code again.

SPECIFIED VALUE: Diagnosis code No.11 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Install the steering wheel pad assembly.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.11 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, it means that the system has returned to the normal state. Erase the diagnosis code</u> <u>and observe for a while.</u>

<u>clf outputted, replace the steering wheel pad Ay.</u>

Refer to Page H1-1.

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## è4. Check of harness between spiral cable and airbag ECU for short circuit

1.Disconnect the connector at the spiral cable harness side.

2. Check the harness between the spiral cable and the airbag ECU for short circuit.

(1) Connector 2 (AD() leading to spiral cable(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

<u>clf it is OK, go to è5.</u> <u>clf the result is NG, replace the harness and connector at the vehicle side.</u>

## $\rm \grave{e}5.$ Check of spiral cable inside for short circuit.

1.Check the inside of the spiral cable for short circuit.(1) Connector 1 (AD') of spiral cable at pad side(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

 <u>clf the result is OK, it means that the system has returned to the normal state. Erase the diagnosis code</u> and observe for a while.
 <u>clf the result is NG, replace the spiral cable.</u>
 Refer to Page H1-8.

### 11-9-3 DIAGNOSIS CODE NO.12(DRIVER'S SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

### (1) Diagnostic code output conditions

1. Cases where the harness between the driver's seat airbag and the airbag ECU is shorted with the earth

### (2) Checking points

1.Check the harness and connector between the driver's seat airbag and the airbag ECU for abnormality.

### CAUTION

• Since a connector with terminal short mechanism is used for the spiral cable, there is the possibility to make a wrong judgment that there is a short between harnesses. Therefore, before starting the check, ensure that there is no damage, such as open wire or short, in the SST for deploying the airbag (Part number: 09082-87710-000). Then, install it to the spiral cable. Check the harness with the SST installed.

### (3) Checking method

### $\grave{\mathrm{e}}$ 1. Check of harness between steering wheel pad Ay and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the airbag ECU and steering wheel pad Ay.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", check the harness between the pad Ay and the airbag ECU for short circuit.

(1) Connector 1 (AD') of spiral cable at pad side(Body earth

(2) Connector 2 (AD() of spiral cable at pad side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

ç<u>lf it is OK, go to è2 .</u> ç<u>lf it is NG, go to è4 .</u>

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, install the airbag ECU to the vehicle and connector the connector.
- 2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.12 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Install the steering wheel pad assembly.
- 3.Install the negative terminal of the battery. With the IG SW set to "ON" position, erase the diagnosis codes. Then, check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.12 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, it means that the system has returned to the normal state. Erase the diagnosis code</u> <u>and observe for a while.</u>

çlf outputted, replace the steering wheel pad Ay.

Refer to Page

## $\rm \grave{e}4.$ Check of harness between spiral cable and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, disconnect the connector at the vehicle harness side of the spiral cable.
- 2.After the IG SW has been turned "ON", check the harness between the spiral cable and the airbag ECU for short circuit.

(1) Connector 2 (AD() leading to spiral cable(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è5.

çlf the result is NG, replace the harness and connector at the vehicle side.

## $\rm \grave{e}5.$ Check of spiral cable inside for short circuit.

- 1.Set the IG SW "LOCK" position.
- 2. With the IG SW set to "ON" position, check the spiral cable inside for short circuit.

(1) Connector 1 (AD') of spiral cable at pad side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

<u>clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe</u> for a while. <u>clf the result is NG, replace the spiral cable.</u>

Refer to Page H1-8.

### 11-9-4 DIAGNOSIS CODE NO.13(DRIVER'S SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

### (1) Diagnostic code output conditions

1.Case of short between wires of the harness between the driver's seat airbag and the airbag ECU

### (2) Checking points

1.Check the harness and connector between the driver's seat airbag and the airbag ECU for abnormality.

## CAUTION

• Since a connector with terminal short mechanism is used for the spiral cable, there is the possibility to make a wrong judgment that there is a short between harnesses. Therefore, before starting the check, ensure that there is no damage, such as open wire or short, in the SST for deploying the airbag (Part number: 09082-87710-000). Then, install it to the spiral cable. Check the harness with the SST installed.

## (3) Checking method

### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the steering wheel pad Ay. Then, short both terminals of the connector of the spiral cable at pad side.
- 3.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.13 is outputted.

çlf outputted, proceed to è2. çlf not outputted, replace the airbag ECU. Refer to Page H1-34.

### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the spiral cable at pad side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.13 is outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, proceed to è4.

## è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Install the steering wheel pas Ay.
- 2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.13 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the steering wheel pad Ay. Refer to Page H1-1.

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## è4. Confirmation of diagnosis codes

- 1. After the IG SW has been set to "LOCK" position, disconnect the connector at the vehicle harness side of the spiral cable.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.13 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è5. çlf outputted, proceed to è6.

## $\rm \grave{e}5.$ Check of spiral cable inside for short circuit.

1.After the IG SW has been set to "LOCK" position, disconnect the spiral cable from the vehicle.

2.Connect the SST to the connector at the spiral cable vehicle harness side.

- SST: 09082-87710-000
- 3.Ensure that the terminals of the SST for connecting the battery are not in contact with each other. Then, check the spiral cable inside for short circuit.
  - (1) Connector 1 (AD') of spiral cable at vehicle harness side

(Connector 2 (AD() of spiral cable at vehicle harness side

## SPECIFIED VALUE: 1M $\Omega\,$ or more (No continuity)

çlf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

ç<u>If the result is NG, replace the spiral cable.</u>

Refer to Page H1-8.

## $\grave{\mathrm{e}}\mathbf{6}.$ Check of harness between spiral cable and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, disconnect the connector of the airbag ECU. Then, disconnect the shorted terminal of the connector at the airbag ECU vehicle side.
- 2.Check the harness between the spiral cable and the airbag ECU for short circuit.
  - (1) Connector 1 (AD') leading to spiral cable
    - (Connector 2 (AD() leading to spiral cable

SPECIFIED VALUE: 1M  $\Omega\,$  or more (No continuity)

clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf it is NG, replace the vehicle side harness.

#### 11-9-5 DIAGNOSIS CODE NO.14(DRIVER'S SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1. When open wire took place in the harness between the driver's seat airbag and the airbag ECU

#### (2) Checking points

1.Check the harness and connector between the driver's seat airbag and the airbag ECU for abnormality.

## CAUTION

• Since a connector with terminal short mechanism is used for the spiral cable, there is the possibility to make a wrong judgment that there is a short between harnesses. Therefore, before starting the check, ensure that there is no damage, such as open wire or short, in the SST for deploying the airbag (Part number: 09082-87710-000). Then, install it to the spiral cable. Check the harness with the SST installed.

#### (3) Checking method

#### $\rm \grave{e}1.$ Continuity check between steering wheel pad Ay and airbag ECU

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Remove the airbag ECU and steering wheel pad Ay.
- 3. Check the harness between the pad Ay and the airbag ECU for open wire.
  - Connector 1 (AD') of spiral cable at pad side
     (Connector B4 (AD') of airbag ECU at harness side
  - (2) Connector 2 (AD() of spiral cable at pad side (Connector B2 (AD() of sirbar EC)) at harmonic

(Connector B3 (AD() of airbag ECU at harness side

SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è2.</u> ç<u>lf it is NG, go to è4.</u>

#### è2. Confirmation of diagnosis code

1.Short the connectors 1 (AD') and 2 (AD() of the spiral cable at pad side.

- 2.Install the airbag ECU to the vehicle and connect the connector.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.14 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the spiral cable. Then, install the steering wheel pad Ay.

3.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.14 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the steering wheel pad Ay. Refer to Page H1-1.

#### è4. Continuity check between spiral cable and airbag ECU

1.Disconnect the connector at the vehicle harness side of the spiral cable.

2. Check the harness between the spiral cable and the airbag ECU for open wire.

(1) Connector 1 (AD') leading to spiral cable

(Connector 2 (AD() leading to spiral cable

SPECIFIED VALUE: Continuity exists

ç<u>If it is OK, go to è5</u>. c<u>If the result is NG, replace the vehicle harness and connector.</u>

## $\grave{\mathrm{e}5}$ . Continuity check of spiral cable inside

1. Check the spiral cable inside for open wire.

(1) Connector 1 (AD') of spiral cable at pad side

(Connector 2 (AD() of spiral cable at pad side

SPECIFIED VALUE: Continuity exists

çIf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, replace the spiral cable. Refer to Page H1-8.

#### 11-9-6 DIAGNOSIS CODE NO.15(FRONT SATELLITE SENSOR SYSTEM)

#### (1) Diagnostic code output conditions

- 1.Cases where the harness between the front airbag sensor and the airbag ECU exhibits open wire or short circuit
- 2.Inner abnormality in the front airbag sensor

### (2) Checking points

1.Check the harness and connector between the front airbag sensor and the airbag ECU for abnormality.

### (3) Checking method

#### $\grave{e}$ 1. Unit check of front airbag sensor

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the front airbag sensor.
- 3.Remove the front airbag sensor. Then, perform the unit check.

Refer to Page H1-117.

ç<u>lf it is OK, go to è2 .</u>

<u>çIf the result is NG, replace the front airbag sensor.</u>

Refer to Page H1-36.

#### $\grave{\mathrm{e}}\mathbf{2}.$ Continuity check between front airbag sensor and airbag ECU

1.Disconnect the connector at the harness side from the airbag ECU.

- 2.Check the harness between the front airbag sensor and the airbag ECU for open wire.
  - (1) Connector 1 (FSSR() of front airbag sensor at vehicle side(Connector B13 (FSSR() of airbag ECU at harness side
  - (2) Connector 2 (FSSR') of front airbag sensor at vehicle side(Connector B12 (FSSR') of airbag ECU at harness side

SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è3 .</u> ç<u>lf it is NG, replace the vehicle side harness.</u>

#### $\grave{\mathrm{e}3}.$ Check of harness between front airbag sensor and airbag ECU for short circuit

1.Check that the harness between the front airbag sensor and the airbag ECU is not shorted with the earth.

(1) Connector 1 (FSSR() of front airbag at sensor vehicle side(Body earth SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

2.Check that the harness between the front airbag sensor and the airbag ECU is not shorted with the power supply.

(1) Connector 2 (FSSR') of front airbag sensor at vehicle side(Body earth

#### SPECIFIED VALUE: 0 V (No continuity with 'B)

- 3. Check that the harnesses of the front airbag sensor are not shorted with each other.
  - (1) Connector 1 (FSSR() of front airbag sensor at vehicle side(Connector 2 (FSSR') of front airbag sensor at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

ç<u>lf it is OK, go to è4 .</u> ç<u>lf it is NG, replace the vehicle side harness.</u>

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#### è4. Confirmation of diagnosis codes

1.Connect the connector to the airbag ECU.

2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.15 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

ç<u>lf outputted, replace the airbag ECU.</u>

Refer to Page H1-34.

#### 11-9-7 NO.23 (RH SIDE AIRBAG REAR SENSOR SYSTEM)

#### (1) Output conditions of diagnosis code

- 1.Cases where the harness between the RH side airbag rear sensor and the airbag ECU exhibits open wire or short circuit
- 2. Inner abnormality in the RH side airbag rear sensor
- 3.Cases where the safing sensor inside the sensor is shorted

### (2) Checking points

1.Check the harness and connector between the RH side airbag rear sensor and the airbag ECU for abnormality.

#### (3) Checking method

- è1. Continuity check between connector of RH side airbag rear sensor at vehicle side and connector of airbag ECU at vehicle side
  - 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH side airbag rear sensor.
- 3. Check the harness between the RH side airbag rear sensor and the airbag ECU for open wire.
  - (1) Connector 1 (ESCR) of RH side airbag rear sensor at vehicle side(Connector C15 (ESCR) of airbag ECU at vehicle side
  - (2) Connector 2 (CSR() of RH side airbag rear sensor at vehicle side(Connector C16 (CSR() of airbag ECU at vehicle side
  - (3) Connector 3 (CSR') of RH side airbag rear sensor at vehicle side(Connector C12 (CSR') of airbag ECU at vehicle side
  - (4) Connector 4 (VUCR) of RH side airbag rear sensor at vehicle side(Connector C11 (VUCR) of airbag ECU at vehicle side

SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è2 .</u>

çIf the result is NG, replace the vehicle harness and connector.

#### $\grave{\mathrm{e}}\text{2}.$ Check of harness between RH side airbag rear sensor and airbag ECU for short circuit

- Check the harness between the RH side airbag rear sensor and the airbag ECU for short circuit.
   (1) Connector of RH side airbag rear sensor at vehicle side(Body earth SPECIFIED VALUE: 1MΩ or more (No continuity)
- 2.Check that the harness between the RH side airbag rear sensor and the airbag ECU is not shorted with the power supply.

(1) Connector of RH side airbag rear sensor at vehicle side(Body earth SPECIFIED VALUE: 0 V (No continuity with 'B)

- 3. Check that the harnesses of the RH side airbag rear sensor are not shorted with each other.
  - (1) Each terminal of connector of RH side airbag rear sensor at vehicle side(Other terminals of connector of RH side airbag rear sensor at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

ç<u>lf it is OK, go to è3 .</u>

çIf the result is NG, replace the vehicle harness and connector.

# H1–77

#### è3. Confirmation of diagnosis code

1.Connect the connectors to the airbag ECU and RH side airbag rear sensor.

2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.23 is not outputted.

çlf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, replace the RH side airbag rear sensor.

Refer to Page H1-40.

#### 11-9-8 NO.24 (LH SIDE AIRBAG REAR SENSOR SYSTEM)

#### (1) Output conditions of diagnosis code

- 1.Cases where the harness between the LH side airbag rear sensor and the airbag ECU exhibits open wire or short circuit
- 2.Inner abnormality in the LH side airbag rear sensor
- 3.Cases where the safing sensor inside the sensor is shorted

### (2) Checking points

1.Check the harness and connector between the LH side airbag rear sensor and the airbag ECU for abnormality.

#### (3) Checking method

- è1. Continuity check between connector of LH airbag rear sensor at vehicle side and connector of airbag at vehicle side
  - 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH side airbag rear sensor.
- 3. Check the harness between the LH side airbag rear sensor and the airbag ECU for open wire.
  - (1) Connector 1 (ESCL) of LH side airbag rear sensor at vehicle side(Connector A12 (ESCL) of airbag ECU at vehicle side
  - (2) Connector 2 (CSL() of LH side airbag rear sensor at vehicle side(Connector A11 (CSL() of airbag ECU at vehicle side
  - (3) Connector 3 (CSL') of LH side airbag rear sensor at vehicle side(Connector A15 (CSL') of airbag ECU at vehicle side
  - (4) Connector 4 (VUCL) of LH side airbag rear sensor at vehicle side(Connector A16 (VUCL) of airbag ECU at vehicle side

#### SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è2.</u>

çIf the result is NG, replace the vehicle harness and connector.

#### $\grave{\mathrm{e}}\text{2}.$ Check of harness between LH side airbag rear sensor and airbag ECU for short circuit

- 1. Check the harness between the LH side airbag rear sensor and the airbag ECU for short circuit.
  - (1) Connector of LH side airbag rear sensor at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

2.Check that the harness between the LH side airbag rear sensor and the airbag ECU is not shorted with the power supply.

(1) Connector of LH side airbag rear sensor at vehicle side(Body earth SPECIFIED VALUE: 0 V (No continuity with 'B)

- 3. Check that the harnesses of the LH side airbag rear sensor are not shorted with each other.
  - (1) Each terminal of connector of LH side airbag rear sensor at vehicle side(Other terminals of connector of LH side airbag rear sensor at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

ç<u>lf it is OK, go to è3 .</u>

çIf the result is NG, replace the vehicle harness and connector.

## H1-79

#### è3. Confirmation of diagnosis code

1.Connect the connectors to the airbag ECU and LH side airbag rear sensor.

2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.24 is not outputted.

çlf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, replace the LH side airbag rear sensor.

Refer to Page H1-40.

#### 11-9-9 NO.32 (RH SIDE AIRBAG SENSOR SYSTEM)

#### (1) Output conditions of diagnosis code

- 1.Cases where the harness between the RH side airbag sensor and the airbag ECU exhibits open wire or short circuit
- 2.Inner abnormality in the RH side airbag sensor

#### (2) Checking points

1.Check the harness and connector between the RH side airbag sensor and the airbag ECU for abnormality.

#### (3) Checking method

- è1. Continuity check between connector of RH side airbag sensor at vehicle side and connector of airbag ECU at vehicle side
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH side airbag sensor.
- 3. Check the harness between the RH side airbag sensor and the airbag ECU for open wire.
  - (1) Connector 1 (ESR) of RH side airbag sensor at vehicle side(Connector C8 (ESR) of airbag ECU at vehicle side
  - (2) Connector 4 (VUPR) of RH side airbag sensor at vehicle side(Connector C10 (VUPR) of airbag ECU at vehicle side

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

çIf the result is NG, replace the vehicle harness and connector.

#### $\grave{\mathrm{e}}\textsc{2}.$ Check of harness between RH side airbag sensor and airbag ECU for short circuit

1.Check that the harness between the RH side airbag sensor and the airbag ECU is not shorted with the earth.

(1) Connector of RH side airbag sensor at vehicle side(Body earth SPECIFIED VALUE: 1M+ or more (No continuity)

2.Check that the harness between the RH side airbag sensor and the airbag ECU is not shorted with the power supply.

(1) Connector of RH side airbag sensor at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

3. Check that the harnesses of the RH side airbag sensor are not shorted with each other.

(1) Each terminal of connector of RH side airbag sensor at vehicle side(Other terminals of connector of RH side airbag sensor at vehicle side

SPECIFIED VALUE: 1M+ or more (No continuity)

çIf it is OK, go to è3. çIf the result is NG, replace the vehicle harness and connector.

## H1-81

#### è3. Confirmation of diagnosis code

1.Connect the connectors to the airbag ECU and RH side airbag sensor.

2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.32 is not outputted.

çlf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

ç<u>If the result is NG, replace the RH side airbag rear sensor.</u>

Refer to Page H1-38.

#### 11-9-10 NO.33 (LH SIDE AIRBAG SENSOR SYSTEM)

#### (1) Output conditions of diagnosis code

- 1.Cases where the harness between the LH side airbag sensor and the airbag ECU exhibits open wire or short circuit
- 2.Inner abnormality in the LH side airbag sensor

### (2) Checking points

1.Check the harness and connector between the LH side airbag sensor and the airbag ECU for abnormality.

### (3) Checking method

- è1. Continuity check between connector of LH side airbag sensor at vehicle side and connector of airbag ECU at vehicle side
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH side airbag sensor.
- 3. Check the harness between the LH side airbag sensor and the airbag ECU for open wire.
  - (1) Connector 1 (ESL) of LH side airbag sensor at vehicle side(Connector A9 (ESL) of airbag ECU at vehicle side
  - (2) Connector 4 (VUPL) of LH side airbag sensor at vehicle side(Connector A7 (VUPL) of airbag ECU at vehicle side

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

çIf the result is NG, replace the vehicle harness and connector.

#### $\grave{\mathrm{e}}\textsc{2}.$ Check of harness between LH side airbag sensor and airbag ECU for short circuit

1.Check that the harness between the LH side airbag sensor and the airbag ECU is not shorted with the earth.

(1) Connector of LH side airbag sensor at vehicle side(Body earth SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

2.Check that the harness between the LH side airbag sensor and the airbag ECU is not shorted with the power supply.

(1) Connector of LH side airbag sensor at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

3. Check that the harnesses of the LH side airbag sensor are not shorted with each other.

(1) Each terminal of connector of LH side airbag sensor at vehicle side(Other terminals of connector of LH side airbag sensor at vehicle side

SPECIFIED VALUE: 1M  $\Omega\,$  or more (No continuity)

ç<u>If it is OK, go to è3.</u> ç<u>If the result is NG, replace the vehicle harness and connector.</u>

## H1-83

#### è3. Confirmation of diagnosis code

1.Connect the connectors to the airbag ECU and passenger seat airbag sensor.

2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.33 is not outputted.

çlf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, replace the LH side airbag sensor.

Refer to Page H1-38.

#### 11-9-11 NO.41 (RH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Output conditions of diagnosis codes

1.Cases where the harness between the RH side airbag and the airbag ECU is shorted with the earth

#### (2) Checking points

1. Check the harness and connector between the RH side airbag and the airbag ECU for abnormality.

#### (3) Checking method

- è1. Continuity check between RH side airbag and airbag ECU
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH side airbag.
- 3. Check the harness between the RH side airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (SFR') of RH side airbag at vehicle side(Body earth
  - (2) Connector 2 (SFR() of RH side airbag at vehicle side(Body earth

## SPECIFIED VALUE: $1M\Omega$ (No continuity)

ç<u>lf it is OK, go to è2 .</u> ç<u>lf it is NG, replace the vehicle side harness.</u>

#### è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.41 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the RH side airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.41 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the RH side airbag. Refer to Page H1-21.

## 11-9-12 NO.42 (RH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Output conditions of diagnosis codes

1.Cases where the harness between the RH side airbag and the airbag ECU is shorted with the power supply

### (2) Checking points

1. Check the harness and connector between the RH side airbag and the airbag ECU for abnormality.

### (3) Checking method

#### $\rm \grave{e}1.$ Continuity check between RH side airbag and airbag ECU

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH side airbag.
- 3.Connect the negative (() terminal of the battery.
- 4.After the IG SW has been turned "ON", check the harness between the RH side airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (SFR') of RH side airbag at vehicle side(Body earth
  - (2) Connector 2 (SFR() of RH side airbag at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2.

çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.42 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Connect the connector to the RH side airbag.

3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.42 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the RH side airbag. Refer to Page H1-21.

#### 11-9-13 NO.43 (RH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Output conditions of diagnosis codes

1.Case of short between wires of the harness between the RH side airbag and the airbag ECU

#### (2) Checking points

1. Check the harness and connector between the RH side airbag and the airbag ECU for abnormality.

#### (3) Checking method

#### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the RH side airbag.
- 3.Short both terminals of the connector of the RH side airbag at vehicle side.
- 4.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.43 is outputted.

çlf outputted, proceed to è2. çlf not outputted, replace the airbag ECU. Refer to Page H1-34.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the RH side airbag at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.43 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Then, install the RH side airbag.
- 2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.43 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the RH side airbag. Refer to Page H1-21.

#### $\rm \grave{e}4.$ Check of harness between RH side airbag and airbag ECU for short circuit

1. After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU.

2.Check the harness between the RH side airbag and the airbag ECU for short circuit.

(1) Connector 1 (SFR') of RH side airbag at vehicle side(Connector 2 (SFR() of RH side airbag at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf it is NG, replace the vehicle side harness.

## 11-9-14 NO.44 (RH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Output conditions of diagnosis codes

1. When open wire took place in the harness between the RH side airbag and the airbag ECU

## (2) Checking points

1. Check the harness and connector between the RH side airbag and the airbag ECU for abnormality.

## (3) Checking method

## è1. Continuity check between RH side airbag and airbag ECU

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH side airbag.
- 3. Check the harness between the RH side airbag and the airbag ECU for open wire.
  - (1) Connector 1 (SFR') of RH side airbag at vehicle side(Connector C1 (SFR') of airbag ECU at vehicle side
  - (2) Connector 2 (SFR() of RH side airbag at vehicle side(Connector C2 (SFR() of airbag ECU at vehicle side

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

<u>çlf the result is NG, replace the vehicle harness and connector.</u>

## è2. Confirmation of diagnosis code

- 1.Short the connectors 1 (SFR') and 2 (SFR() of the RH side airbag at vehicle side.
- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.44 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the RH side airbag at vehicle side.
- 3.Connect the connector to the RH side airbag.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.44 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the RH side airbag.

Refer to Page H1-21.

#### 11-9-15 NO.45 (LH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Output conditions of diagnosis codes

1.Cases where the harness between the LH side airbag and the airbag ECU is shorted with the earth

#### (2) Checking points

1. Check the harness and connector between the LH side airbag and the airbag ECU for abnormality.

#### (3) Checking method

- è1. Continuity check between LH side airbag and airbag ECU
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH side airbag.
- 3. Check the harness between the LH side airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (SFL') of LH side airbag at vehicle side(Body earth
  - (2) Connector 2 (SFL() of LH side airbag at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  (No continuity)

ç<u>lf it is OK, go to è2 .</u> ç<u>lf it is NG, replace the vehicle side harness.</u>

#### è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.45 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the LH side airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.45 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH side airbag. Refer to Page H1-21.

## 11-9-16 NO.46 (LH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

### (1) Output conditions of diagnosis codes

1.Cases where the harness between the LH side airbag and the airbag ECU is shorted with the power supply

### (2) Checking points

1. Check the harness and connector between the LH side airbag and the airbag ECU for abnormality.

## (3) Checking method

### $\rm \grave{e}1.$ Continuity check between LH side airbag and airbag ECU

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH side airbag.
- 3.Connect the negative (() terminal of the battery.
- 4.After the IG SW has been turned "ON", check the harness between the LH side airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (SFL') of LH side airbag at vehicle side(Body earth
  - (2) Connector 2 (SFL() of LH side airbag at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2.

çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.46 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Connect the connector to the LH side airbag.

3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.46 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

 $\ensuremath{\varsigmalf}$  outputted, replace the LH side airbag. Refer to Page H1-21.

#### 11-9-17 NO.47 (LH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Output conditions of diagnosis codes

1.Case of short between wires of the harness between the LH side airbag and the airbag ECU

#### (2) Checking points

1. Check the harness and connector between the LH side airbag and the airbag ECU for abnormality.

#### (3) Checking method

#### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the LH side airbag.
- 3.Short both terminals of the connector of the LH side airbag at vehicle side.
- 4.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.47 is outputted.

çlf outputted, proceed to è2. çlf not outputted, replace the airbag ECU. Refer to Page H1-34.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the LH side airbag at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.47 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Then, install the LH side airbag.
- 2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.47 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH side airbag. Refer to Page H1-21.

#### $\rm \grave{e}4.$ Check of harness between LH side airbag and airbag ECU for short circuit

1. After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU.

2.Check the harness between the LH side airbag and the airbag ECU for short circuit.

(1) Connector 1 (SFL') of LH side airbag at vehicle side(Connector 2 (SFL() of LH side airbag at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf it is NG, replace the vehicle side harness.

# H1–91

## 11-9-18 NO.48 (LH SIDE AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Output conditions of diagnosis codes

1. When open wire took place in the harness between the LH side airbag and the airbag ECU

## (2) Checking points

1. Check the harness and connector between the LH side airbag and the airbag ECU for abnormality.

## (3) Checking method

## è1. Continuity check between LH side airbag and airbag ECU

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH side airbag.
- 3. Check the harness between the LH side airbag and the airbag ECU for open wire.
  - (1) Connector 1 (SFL') of LH side airbag at vehicle side(Connector A6 (SFL') of airbag ECU at vehicle side
  - (2) Connector 2 (SFL() of LH side airbag at vehicle side(Connector A5 (SFL() of airbag ECU at vehicle side

## SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

<u>çlf the result is NG, replace the vehicle harness and connector.</u>

## è2. Confirmation of diagnosis code

- 1. Short the connectors 1 (SFL') and 2 (SFL() of the LH side airbag at vehicle side.
- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.48 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the LH side airbag at vehicle side.
- 3.Connect the connector to the LH side airbag.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.48 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

 $\ensuremath{\varsigma}\xspace{lf}$  outputted, replace the LH side airbag.

Refer to Page H1-21.

## 11-9-19 DIAGNOSIS CODE NO.51(FRONT PASSENGER SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the passenger seat airbag and the airbag ECU is shorted with the earth

#### (2) Checking points

1.Check the harness and connector between the passenger seat airbag and the airbag ECU for abnormality.

### (3) Checking method

#### ${\rm \grave{e}1}.$ Check of harness between passenger seat airbag and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and passenger seat airbag.
- 3. Check the harness between the passenger seat airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (AP() of passenger seat airbag at vehicle side(Body earth
  - (2) Connector 2 (AP') of passenger seat airbag at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  (No continuity)

çlf it is OK, go to è2.

çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.51 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the passenger seat airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.51 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the passenger seat airbag.

Refer to Page H1-11.

## 11-9-20 DIAGNOSIS CODE NO.52(FRONT PASSENGER SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the passenger seat airbag and the airbag ECU is shorted with the power supply

### (2) Checking points

1.Check the harness and connector between the passenger seat airbag and the airbag ECU for abnormality.

## (3) Checking method

## ${\rm \grave{e}1}.$ Check of harness between passenger seat airbag and airbag ECU for short circuit

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and passenger seat airbag. Then, install the negative (() terminal of the battery.
- 3.After the IG SW has been turned "ON", check the harness between the passenger seat airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (AP() of passenger seat airbag at vehicle side(Body earth
  - (2) Connector 2 (AP') of passenger seat airbag at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2. çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

1. After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.

2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.52 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the passenger seat airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.52 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the passenger seat airbag. Refer to Page H1-11.

## 11-9-21 DIAGNOSIS CODE NO.53(FRONT PASSENGER SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1.Case of short between wires of the harness between the passenger seat airbag and the airbag ECU

#### (2) Checking points

1. Check the harness and connector between the passenger seat airbag and the airbag ECU for abnormality.

### (3) Checking method

## è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the passenger seat airbag. Then, short both terminals of the connector of the passenger seat airbag at vehicle side.
- 3.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.53 is outputted.

çlf outputted, proceed to è2. çlf not outputted, replace the airbag ECU. Refer to Page H1-34.

## è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the passenger seat airbag at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.53 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Then, connect the connector to the passenger seat airbag.

2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.53 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

 $\varsigma lf$  outputted, replace the passenger seat airbag. Refer to Page H1-11.

## H1-95

#### è4. Check of harness between passenger seat airbag and airbag ECU for short circuit

1. After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU. Then, disconnect the shorted terminal of the connector of the airbag ECU at vehicle side.

2. Check the harness between the passenger seat airbag and the airbag ECU for short circuit.

(1) Connector 1 (AP() of passenger seat airbag at vehicle side(Connector 2 (AP') of passenger seat airbag at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

<u>clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe</u> for a while.

çlf it is NG, replace the vehicle harness.

## 11-9-22 DIAGNOSIS CODE NO.54(FRONT PASSENGER SEAT AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1. When open wire took place in the harness between the passenger seat airbag and the airbag ECU

#### (2) Checking points

1.Check the harness and connector between the passenger seat airbag and the airbag ECU for abnormality.

## (3) Checking method

- $\grave{\mathrm{e}}$  1. Continuity check between passenger seat airbag and airbag ECU
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and passenger seat airbag. Then, check the harness between the passenger seat airbag and the airbag ECU for open wire.
  - (1) Connector 1 (AP() of passenger seat airbag at vehicle side(Connector B2 (AP() of airbag ECU at harness side
  - (2) Connector 2 (AP') of passenger seat airbag at vehicle side(Connector B1 (AP') of airbag ECU at harness side

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

çIf the result is NG, replace the vehicle harness and connector.

#### è2. Confirmation of diagnosis code

- 1.Short the connectors 1 (AP() and 2 (AP') of the passenger seat airbag at vehicle side. Then, connect the connector to the airbag ECU.
- 2.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.54 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the passenger seat airbag at vehicle side. Then, connect the connector to the passenger seat airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.54 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the passenger seat airbag. Refer to Page H1-11.

## 11-9-23 DIAGNOSIS CODE NO.61(FRONT DRIVER'S PRETENSIONER SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the RH pretensioner mechanism and the airbag ECU is shorted with the earth

## (2) Checking points

1.Check the harness and connector between the RH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## ${\rm \grave{e}1}.$ Check of harness between RH pretensioner mechanism and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH pretensioner mechanism.
- 3. Check the harness between the RH pretensioner mechanism and the airbag ECU for short circuit.
  - (1) Connector 1 (PR') of RH pretensioner mechanism at vehicle side(Body earth
  - (2) Connector 2 (PR() of RH pretensioner mechanism at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

<u>çlf it is OK, go to è2.</u> clf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.61 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the RH pretensioner mechanism.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.61 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

ç<u>lf outputted, replace the RH pretensioner mechanism.</u> Refer to Page I2-42.

## 11-9-24 DIAGNOSIS CODE NO.62(FRONT DRIVER'S PRETENSIONER SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the RH or LH pretensioner mechanism and the airbag ECU is shorted with the power supply

#### (2) Checking points

1. Check the harness and connector between the RH pretensioner mechanism and the airbag ECU for abnormality.

#### (3) Checking method

#### ${\rm \grave{e}1}.$ Check of harness between RH pretensioner mechanism and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH pretensioner mechanism.
- 3.Install the negative (() terminal of the battery. With the IG SW turned "ON", check the harness between the RH pretensioner mechanism and the airbag ECU for short circuit.
  - (1) Connector 1 (PR') of RH pretensioner mechanism at vehicle side(Body earth
  - (2) Connector 2 (PR() of RH pretensioner mechanism at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2.

çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.62 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the RH pretensioner mechanism.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.62 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the RH pretensioner mechanism. Refer to Page I2-42.

### 11-9-25 DIAGNOSIS CODE NO.63(FRONT DRIVER'S PRETENSIONER SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Case of short between wires of the harness between the RH pretensioner mechanism squib and the airbag ECU

### (2) Checking points

1.Check the harness and connector between the RH pretensioner mechanism and the airbag ECU for abnormality.

### (3) Checking method

### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the RH pretensioner mechanism.
- 3.Short both terminals of the connector of the RH pretensioner mechanism at vehicle side.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.63 is outputted.

ç<u>lf outputted, proceed to è2.</u> ç<u>lf not outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è2. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the RH pretensioner mechanism at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.63 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

1. After the IG SW has been set to "LOCK" position, install the negative (() terminal of the battery. Then, connect the connector to the RH pretensioner mechanism.

2.After the IG SW has been turned "ON", check the diagnosis code. SPECIFIED VALUE: Diagnosis code No.63 is not outputted. (Other codes may be outputted.)

çlf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe for a while.

ç<u>lf outputted, replace the RH pretensioner mechanism.</u> Refer to Page I2-42.

#### è4. Check of harness between RH pretensioner mechanism and airbag ECU for short circuit

1.After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU. 2.Check the harness between the RH pretensioner mechanism and the airbag ECU for short circuit.

(1) Connector 1 (PR') of RH pretensioner mechanism at vehicle side(Connector 2 (PR() of RH pretensioner mechanism at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf it is NG, replace the vehicle side harness.

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## 11-9-26 DIAGNOSIS CODE NO.64(FRONT DRIVER'S PRETENSIONER SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1. When open wire took place in the harness between the RH pretensioner mechanism and the airbag ECU

## (2) Checking points

1.Check the harness and connector between the RH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## ${\rm \grave{e}1}.$ Continuity check of harness between RH pretensioner mechanism and airbag ECU

1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Disconnect the connectors from the airbag ECU and RH pretensioner mechanism.

3. Check the harness between the RH pretensioner mechanism and the airbag ECU for open wire.

Vehicles not equipped with curtain	Connector 1 (PR+) of RH pretensioner mechanism at vehicle side
	-Connector A5 (PR+) of airbag ECU at harness side
	Connector 2 (PR $-$ ) of RH pretensioner mechanism at vehicle side
	-Connector A6 (PR-) of airbag ECU at harness side
Vehicles equipped with curtain	Connector 1 (PR+) of RH pretensioner mechanism at vehicle side
	-Connector C5 (PR+) of airbag ECU at harness side
	Connector 2 (PR-) of RH pretensioner mechanism at vehicle side
	-Connector C6 (PR-) of airbag ECU at harness side

## SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è2.</u> clf the result is NG, replace the vehicle harness and connector.

#### è2. Confirmation of diagnosis code

1.Short the connectors 1 (PR') and 2 (PR() of the RH pretensioner mechanism at vehicle side.

- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.64 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the RH pretensioner mechanism at vehicle side.
- 3.Connect the connector to the RH pretensioner mechanism.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.64 is not outputted. (Other codes may be outputted.)

çlf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe for a while.

çlf outputted, replace the RH pretensioner mechanism.

Refer to Page I2-42.

#### 11-9-27 DIAGNOSIS CODE NO.71(FRONT PASSENGER'S PRETENSIONER SQUIB CIRCUIT SYS-TEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the LH pretensioner mechanism and the airbag ECU is shorted with the earth

## (2) Checking points

1.Check the harness and connector between the LH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## ${\rm \grave{e}1}.$ Check of harness between LH pretensioner mechanism and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH pretensioner mechanism.
- 3. Check the harness between the LH pretensioner mechanism and the airbag ECU for short circuit.
  - (1) Connector 1 (PL') of LH pretensioner mechanism at vehicle side(Body earth
  - (2) Connector 2 (PL() of LH pretensioner mechanism at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

ç<u>lf it is OK, go to è2 .</u>

çlf it is NG, replace the vehicle side harness.

## è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.71 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## $\grave{\mathrm{e}}\mathbf{3}.$ Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the LH pretensioner mechanism.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.71 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH pretensioner mechanism. Refer to Page I2-42.

#### 11-9-28 DIAGNOSIS CODE NO.72(FRONT PASSENGER'S PRETENSIONER SQUIB CIRCUIT SYS-TEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the LH pretensioner mechanism and the airbag ECU is shorted with the power supply

### (2) Checking points

1.Check the harness and connector between the LH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## $\grave{\mathrm{e}}$ 1. Check of harness between LH pretensioner mechanism and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH pretensioner mechanism.
- 3.Install the negative (() terminal of the battery. With the IG SW turned "ON", check the harness between the LH pretensioner mechanism and the airbag ECU for short circuit.
  - (1) Connector 1 (PL') of LH pretensioner mechanism at vehicle side(Body earth
  - (2) Connector 2 (PL() of LH pretensioner mechanism at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2. çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the airbag ECU.
- 3.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.72 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.

2.Connect the connector to the LH pretensioner mechanism.

3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.72 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

 $\ensuremath{\varsigmalf}$  outputted, replace the LH pretensioner mechanism.

Refer to Page I2-42.

#### 11-9-29 DIAGNOSIS CODE NO.73(FRONT PASSENGER'S PRETENSIONER SQUIB CIRCUIT SYS-TEM)

## (1) Diagnostic code output conditions

1.Case of short between wires of the harness between the LH pretensioner mechanism squib and the airbag ECU

## (2) Checking points

1.Check the harness and connector between the RH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## $\grave{\mathrm{e}}\ensuremath{\mathbf{1}}$ . Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the LH pretensioner mechanism.
- 3.Short both terminals of the connector of the LH pretensioner mechanism at vehicle side.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.73 is outputted.

çlf outputted, proceed to è2.

çlf not outputted, replace the airbag ECU.

Refer to Page H1-34.

## è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the LH pretensioner mechanism at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.73 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, install the negative (() terminal of the battery. Then, connect the connector to the LH pretensioner mechanism.

2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.73 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

ç<u>lf outputted, replace the LH pretensioner mechanism.</u> Refer to Page I2-42.

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#### è4. Check of harness between LH pretensioner mechanism and airbag ECU for short circuit

1. After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU. 2. Check the harness between the LH pretensioner mechanism and the airbag ECU for short circuit.

(1) Connector 1 (PL') of LH pretensioner mechanism at vehicle side(Connector 2 (PL() of LH pretensioner mechanism at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

çIf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf it is NG, replace the vehicle side harness.

#### 11-9-30 DIAGNOSIS CODE NO.74(FRONT PASSENGER'S PRETENSIONER SQUIB CIRCUIT SYS-TEM)

### (1) Diagnostic code output conditions

1. When open wire took place in the harness between the LH pretensioner mechanism and the airbag ECU

## (2) Checking points

1.Check the harness and connector between the LH pretensioner mechanism and the airbag ECU for abnormality.

## (3) Checking method

## $\rm \grave{e}1.$ Continuity check between LH pretensioner mechanism and airbag ECU

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH pretensioner mechanism.

3. Check the harness between the LH pretensioner mechanism and the airbag ECU for open wire.

Vehicles not equipped with curtain shield airbag & side airbag	Connector 1 (PL+) of LH pretensioner mechanism at vehicle side
	-Connector A8 (PL+) of airbag ECU at harness side
	Connector 2 (PL $-$ ) of LH pretensioner mechanism at vehicle side
	<ul> <li>Connector A7 (PL-) of airbag ECU at harness side</li> </ul>
Vehicles equipped with curtain shield airbag & side airbag	Connector 1 (PL+) of LH pretensioner mechanism at vehicle side
	<ul> <li>Connector A2 (PL+) of airbag ECU at harness side</li> </ul>
	Connector 2 (PL $-$ ) of LH pretensioner mechanism at vehicle side
	<ul> <li>Connector A1 (PL-) of airbag ECU at harness side</li> </ul>

#### SPECIFIED VALUE: Continuity exists

ç<u>lf it is OK, go to è2.</u> <u>clf the result is NG, replace the vehicle harness and connector.</u>

## è2. Confirmation of diagnosis code

- 1. Short the connectors 1 (PL') and 2 (PL() of the LH pretensioner mechanism at vehicle side.
- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.74 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the LH pretensioner mechanism at vehicle side.
- 3.Connect the connector to the LH pretensioner mechanism.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.74 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH pretensioner mechanism. Refer to Page I2-42.

# H1–107

## 11-9-31 NO.81 (RH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1. Cases where the harness between the RH curtain shield airbag and the airbag ECU is shorted with the earth

## (2) Checking points

1. Check the harness and connector between the RH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

## ${\rm \grave{e}1}.$ Check of harness between RH curtain shield airbag and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH curtain shield airbag.
- 3. Check the harness between the RH curtain shield airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (ICR') of RH curtain shield airbag at vehicle side(Body earth
  - (2) Connector 2 (ICR() of RH curtain shield airbag at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  (No continuity)

çlf it is OK, go to è2.

çlf it is NG, repair or replace the vehicle side harness.

## è2. Confirmation of diagnosis code

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.81 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

## $\grave{\text{e}}\textbf{3}\textbf{.}$ Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the RH curtain shield airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.81 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

clf outputted, replace the RH curtain shield airbag.

Refer to Page H1-28.

#### 11-9-32 NO.82 (RH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1.Cases where the harness between the RH curtain shield airbag and the airbag ECU is shorted with the power supply

#### (2) Checking points

1. Check the harness and connector between the RH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

- ${\rm \grave{e}1}.$  Check of harness between RH curtain shield airbag and airbag ECU for short circuit
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH curtain shield airbag.
- 3.Connect the negative (() terminal of the battery.
- 4.After the IG SW has been turned "ON", check the harness between the RH curtain shield airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (ICR') of RH curtain shield airbag at vehicle side(Body earth
  - (2) Connector 2 (ICR() of RH curtain shield airbag at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

çlf it is OK, go to è2. çlf it is NG, replace the vehicle side harness.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.82 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the RH curtain shield airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.82 is not outputted. (Other codes may be outputted.)

# <u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

ç<u>lf outputted, replace the RH curtain shield airbag.</u> Refer to Page H1-28.

## 11-9-33 NO.83 (RH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1. Case of short between wires of the harness between the RH curtain shield airbag and the airbag ECU

## (2) Checking points

1. Check the harness and connector between the RH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the RH curtain shield airbag.
- 3.Short both terminals of the connector of the RH curtain shield airbag at vehicle side.
- 4.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.83 is outputted.

ç<u>lf outputted, proceed to è2.</u> ç<u>lf not outputted, replace the airbag ECU.</u> Refer to Page H1-34.

## è2. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the RH curtain shield airbag at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.83 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, proceed to è4.

#### è3. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Then, install the RH curtain shield airbag.
- 2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.83 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

ç<u>lf outputted, replace the RH curtain shield airbag.</u> Refer to Page H1-28.

#### è4. Check of harness between RH curtain shield airbag and airbag ECU for short circuit

1.After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU. 2.Check the harness between the RH curtain shield airbag and the airbag ECU for short circuit.

(1) Connector 1 (ICR') of RH curtain shield airbag at vehicle side(Connector 2 (ICR() of RH curtain shield airbag at vehicle side

SPECIFIED VALUE:  $1M\Omega$  or more (No continuity)

clf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, repair or replace the vehicle side harness.

# H1–111

## 11-9-34 NO.84 (RH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1. When open wire took place in the harness between the RH curtain shield airbag and the airbag ECU

## (2) Checking points

1. Check the harness and connector between the RH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

- ${\rm \grave{e}1}.$  Continuity check of harness between RH curtain shield airbag and airbag ECU
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and RH curtain shield airbag.
- 3. Check the harness between the RH curtain shield airbag and the airbag ECU for open wire.
  - (1) Connector 1 (ICR') of RH curtain shield airbag at vehicle side(Connector C4 (ICR') of airbag ECU at vehicle side
  - (2) Connector 2 (ICR() of RH curtain shield airbag at vehicle side(Connector C3 (ICR() of airbag ECU at vehicle side
  - SPECIFIED VALUE: 4.6+ or less (Continuity exists.)

çlf it is OK, go to è2.

çlf the result is NG, repair or replace the vehicle harness and connector.

## è2. Confirmation of diagnosis code

- 1.Short the connectors 1 (ICR') and 2 (ICR() of the RH curtain shield airbag at vehicle side.
- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.84 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

## è3. Confirmation of diagnosis code

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the RH curtain shield airbag at vehicle side.
- 3.Connect the connector to the RH curtain shield airbag.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.84 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

<u>clf outputted, replace the RH curtain shield airbag.</u>

Refer to Page H1-28.

## 11-9-35 NO.85 (LH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

### (1) Diagnostic code output conditions

1.Cases where the harness between the LH curtain shield airbag and the airbag ECU is shorted with the earth

## (2) Checking points

1. Check the harness and connector between the LH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

## $\grave{e}$ 1. Check of harness between LH curtain shield airbag and airbag ECU for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH curtain shield airbag.
- 3. Check the harness between the LH curtain shield airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (ICL') of LH curtain shield airbag at vehicle side(Body earth
  - (2) Connector 2 (ICL() of LH curtain shield airbag at vehicle side(Body earth

SPECIFIED VALUE:  $1M\Omega$  (No continuity)

çlf it is OK, go to è2.

çlf it is NG, repair or replace the vehicle side harness.

#### è2. Confirmation of diagnosis codes

- 1.Connect the connector to the airbag ECU.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.85 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è3. Confirmation of diagnosis codes

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the LH curtain shield airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.85 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

çlf outputted, replace the LH curtain shield airbag.

Refer to Page H1-28.

# H1–113

## 11-9-36 NO.86 (LH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

## (1) Diagnostic code output conditions

1.Cases where the harness between the LH curtain shield airbag and the airbag ECU is shorted with the power supply

#### (2) Checking points

1.Check the harness and connector between the LH curtain shield airbag and the airbag ECU for abnormality.

## (3) Checking method

## $\rm \grave{e}1.$ Check of harness between LH curtain shield airbag and airbag ECU for short circuit

- 1. After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH curtain shield airbag.
- 3.Connect the negative (() terminal of the battery.
- 4.After the IG SW has been turned "ON", check the harness between the LH curtain shield airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (ICL') of LH curtain shield airbag at vehicle side(Body earth
  - (2) Connector 2 (ICL() of LH curtain shield airbag at vehicle side(Body earth

SPECIFIED VALUE: 0 V (No continuity with 'B)

<u>çlf it is OK, go to è2 .</u> <u>çlf it is NG, repair or replace the vehicle side harness.</u>

#### è2. Confirmation of diagnosis code

1. After the IG SW has been set to "LOCK" position, connect the connector to the airbag ECU.

2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.86 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Connect the connector to the LH curtain shield airbag.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.86 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> for a while.

ç<u>lf outputted, replace the LH curtain shield airbag.</u> Refer to Page H1-28.

#### 11-9-37 NO.87 (LH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1.Case of short between wires of the harness between the LH curtain shield airbag and the airbag ECU

#### (2) Checking points

1. Check the harness and connector between the LH curtain shield airbag and the airbag ECU for abnormality.

### (3) Checking method

### è1. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the LH curtain shield airbag.
- 3.Short both terminals of the connector of the LH curtain shield airbag at vehicle side.
- 4.Install the negative (() terminal of the battery. Erase the diagnosis codes. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.87 is outputted.

ç<u>lf outputted, proceed to è2.</u> ç<u>lf not outputted, replace the airbag ECU.</u> Refer to Page H1-34.

#### è2. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, release the short between the terminals of the connector of the LH curtain shield airbag at vehicle side.
- 2.After the IG SW has been turned "ON", erase the diagnosis code. Then, check the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.87 is not outputted. (Other codes may be outputted.)

ç<u>lf not outputted, proceed to è3.</u> ç<u>lf outputted, proceed to è4.</u>

#### è3. Confirmation of diagnosis code

1.After the IG SW has been set to "LOCK" position, remove the negative (() terminal of the battery. Then, install the LH curtain shield airbag.

2.After the IG SW has been turned "ON", check the diagnosis code.

SPECIFIED VALUE: Diagnosis code No.87 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH curtain shield airbag. Refer to Page H1-28.

## H1-115

### è4. Check of harness between LH curtain shield airbag and airbag ECU for short circuit

1. After the IG SW has been set to "LOCK" position, disconnect the connector from the airbag ECU.

- 2. Check the harness between the LH curtain shield airbag and the airbag ECU for short circuit.
  - (1) Connector 1 (ICL') of LH curtain shield airbag at vehicle side(Connector 2 (ICL() of LH curtain shield airbag at vehicle side

SPECIFIED VALUE: 1M  $\Omega\,$  or more (No continuity)

çIf the result is OK, the system has returned to the normal state. Erase the diagnosis code and observe for a while.

çlf the result is NG, repair or replace the vehicle side harness.

#### 11-9-38 NO.88 (LH CURTAIN SHIELD AIRBAG SQUIB CIRCUIT SYSTEM)

#### (1) Diagnostic code output conditions

1. When open wire took place in the harness between the LH curtain shield airbag and the airbag ECU

#### (2) Checking points

1. Check the harness and connector between the LH curtain shield airbag and the airbag ECU for abnormality.

### (3) Checking method

- $\rm \grave{e}1.$  Continuity check of harness between LH curtain shield airbag and airbag ECU
- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connectors from the airbag ECU and LH curtain shield airbag.
- 3. Check the harness between the LH curtain shield airbag and the airbag ECU for open wire.
  - (1) Connector 1 (ICL') of LH curtain shield airbag at vehicle side(Connector A3 (ICL') of airbag ECU at vehicle side
  - (2) Connector 2 (ICL() of LH curtain shield airbag at vehicle side(Connector A4 (ICL() of airbag ECU at vehicle side

SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2.

çIf the result is NG, repair or replace the vehicle harness and connector.

#### è2. Confirmation of diagnosis code

1.Short the connectors 1 (ICL') and 2 (ICL() of the LH curtain shield airbag at vehicle side.

- 2.Connect the connector to the airbag ECU.
- 3.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.88 is not outputted. (Other codes may be outputted.)

çlf not outputted, proceed to è3. çlf outputted, replace the airbag ECU. Refer to Page H1-34.

#### è3. Confirmation of diagnosis code

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Release the short between the terminals of the LH curtain shield airbag at vehicle side.
- 3.Connect the connector to the LH curtain shield airbag.
- 4.Install the negative (() terminal of the battery. After the IG SW has been turned "ON", erase the diagnosis code again.

SPECIFIED VALUE: Diagnosis code No.88 is not outputted. (Other codes may be outputted.)

<u>clf not outputted, the system has returned to the normal state. Erase the diagnosis codes and observe</u> <u>for a while.</u>

çlf outputted, replace the LH curtain shield airbag.

Refer to Page H1-28.

# <u>H1–117</u>

## 11-10 TROUBLE SHOOTING ACCORDING TO MALFUNCTION PHENOMENA 11-10-1 NO DIAGNOSIS CODE IS INDICATED

## (1) Checking points

1. Open wire of harness and connector between airbag ECU and DLC

2. Abnormality of airbag ECU main body

## (2) Checking method

## $\rm \grave{e}1.$ Continuity check between airbag ECU and DLC

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the airbag ECU.
- 3. Check the harness between the airbag ECU and the DLC for open wire.
  - (1) Connector B10 (TC) of airbag ECU at harness side(DLC4 (ECU-T)
  - (2) Connector B17 (SIO) of airbag ECU at harness side(DLC10 (SIO)

## SPECIFIED VALUE: Continuity exists

çlf it is OK, go to è2. çlf the result is NG, replace the harness and connector.

## $\grave{\mathrm{e}}\mathbf{2}.$ Continuity check between DLC and earth

1. Check the harness between the DLC and the earth for open wire.

(1) DLC13 (E)(Body earth

SPECIFIED VALUE: Continuity exists

<u>clf the result is OK, connect the connector to the airbag ECU and observe for a while.</u> <u>clf the result is NG, replace the harness and connector.</u>

## 11-10-2 THE DIAGNOSIS CODE IS ALWAYS INDICATED

## (1) Checking points

1.Short circuit of harness between airbag ECU and DLC

## (2) Checking method

## $\rm \grave{e}1.$ Check of harness between airbag ECU and DLC for short circuit

- 1.After the IG SW has been set to "LOCK" position, remove the negative terminal of the battery. Leave the engine under this state for 60 seconds or more.
- 2.Disconnect the connector from the airbag ECU.
- 3.Check the harness between the airbag ECU and the DLC for short circuit.
  - (1) Connector B10 (TC) of airbag ECU at harness side(DLC4 (ECU-T)

çlf the result is OK, replace the airbag ECU. Refer to Page H1-34.

çlf the result is NG, replace the harness and connector.

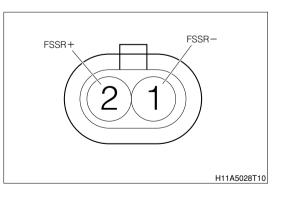
## 11-11 UNIT CHECK

## 11-11-1 FRONT AIRBAG SENSOR

1.Measure the resistance between the terminals 1 (FSSR() and 2 (FSSR') of the front airbag sensor. SPECIFIED VALUE: 820&82+ (at 20°C)

## CAUTION

 Be sure to perform the check if there is the possibility that the front section of the vehicle has received an impact.



TO NEXT SECTION