

# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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E52BA00AA

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### CAUTION

- Carefully read and observe the information in the SRS SERVICE PRECAUTIONS (P.52B-3.) Prior to any service.
- For information concerning troubleshooting or maintenance, always observe the procedures in the Troubleshooting (P.52B-7.) or the SRS Maintenance (P.52B-29.) sections respectively.
- If any SRS components are removed or replaced in connection with any service procedures, be sure to follow the procedures in the INDIVIDUAL COMPONENT SERVICE section (P.52B-36.) for the components involved.
- If you have any questions about the SRS, please contact your local distributor.

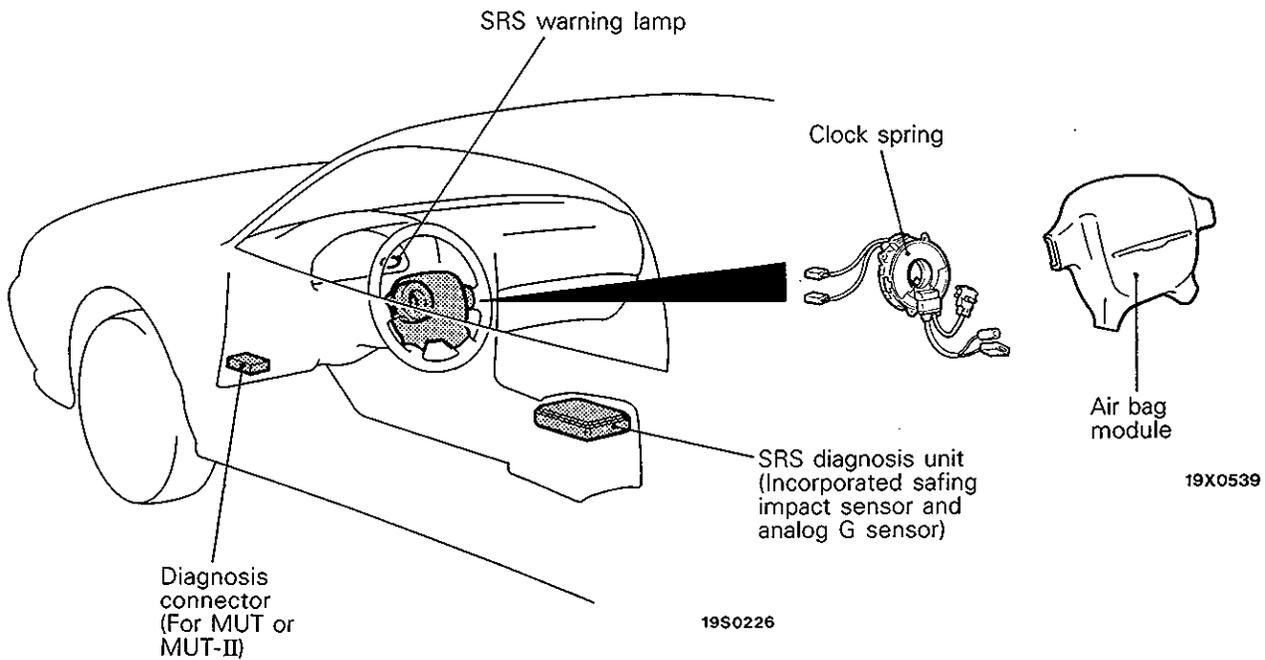
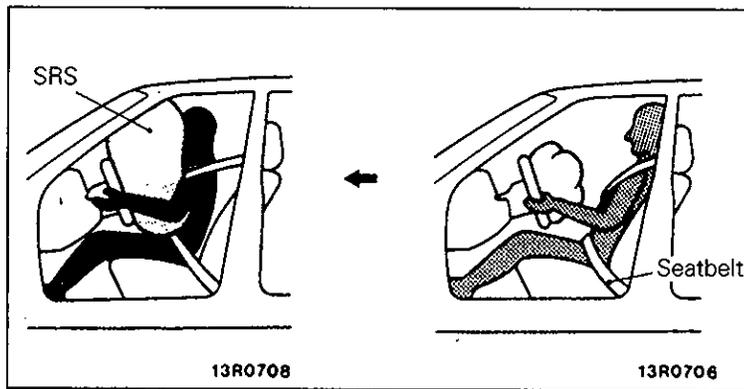
**GENERAL INFORMATION**

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The Supplemental Restraint System (SRS) is designed to supplement the driver's seat belt to help reduce the risk or severity of injury to the driver by activating and deploying an air bag in certain frontal collisions.

The SRS consists of: an air bag module located in the centre of the steering wheel, which contains the folded air bag and an inflator unit; the SRS diagnosis unit located under the floor console assembly, which monitors the system, and which contains a safing impact sensor and analog G sensor; an SRS warning lamp located on the instrument panel, which indicates the operation status of the SRS, and clock spring interconnection located within the steering column; wiring.

The SRS is designed so that the air bag will deploy when the safing sensor activates while the fire output is signaled by monitoring the analog G sensor. Only authorized service personnel should do work on or around the SRS components. Those service personnel should read this manual carefully before starting any such work. Extreme care must be used when servicing the SRS to avoid injury to the service personnel (by inadvertent deployment of the air bag) or the driver (by rendering the SRS inoperative).



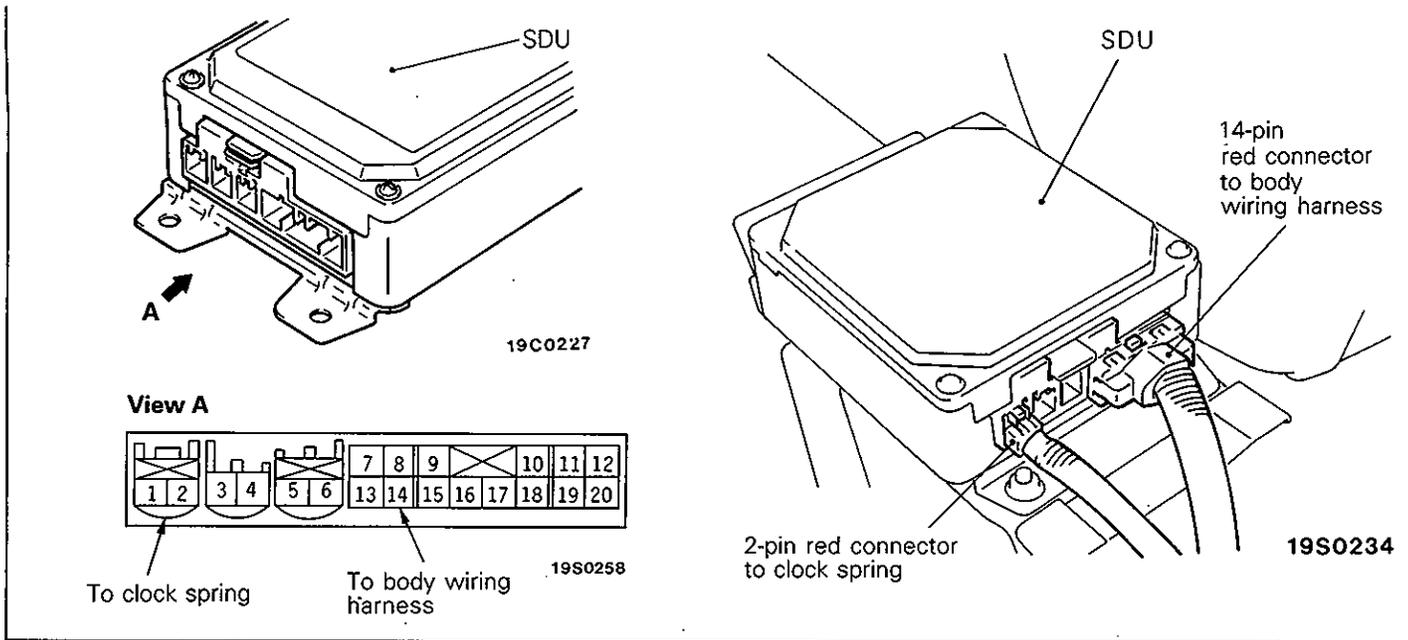
**SRS SERVICE PRECAUTIONS**

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1. In order to avoid injury to yourself or others from accidental deployment of the air bag during servicing, read and carefully follow all the precautions and procedures described in this manual.
2. Do not use any electrical test equipment on or near SRS components, except those specified on P.52B-5.  
Never use an analogue ohmmeter.
3. **Never Attempt to Repair the Following Components:**
  - SRS Diagnosis Unit (SDU)
  - Clock Spring
  - Air Bag Module

- If any of these components are diagnosed as faulty, they should only be replaced, in accordance with the INDIVIDUAL COMPONENT SERVICE procedures in this manual, starting at page 52B-36.
4. Do not attempt to repair the wiring harness connectors of the SRS. If any of the connectors are diagnosed as faulty, replace the wiring harness. If the wires are diagnosed as faulty, replace or repair the wiring harness according to the following table.

SDU Terminal No.	Harness Connector (No. of Terminals, Colour)	Destination of Harness	Corrective Action	
1	2 pins, red	Body wiring harness → Clock spring	Correct or replace each wiring harness. Replace clock spring.	
2				
7 and 8	14 pins, red	–	–	
9		Body wiring harness → Diagnosis connector	Correct or replace each wiring harness	
10		–	–	
11		Body wiring harness → Junction block (fuse No. 7)	Correct or replace each wiring harness	
12		Body wiring harness → Junction block (fuse No. 2)		
13		Body wiring harness → SRS warning lamp.		
14		–	–	
15 to 18		–	–	
19		Body wiring harness → Earth		Correct or replace body wiring harness
20				



5. After disconnecting the battery cable, wait 60 seconds or more before proceeding with the following work. The SRS system is designed to retain enough voltage to deploy the air bag for short time even after the battery has been disconnected, so serious injury may result from unintended air bag deployment if work is done on the SRS system immediately after the battery cables are disconnected.
6. SRS components should not be subjected to heat over 93°C (200°F), so remove the SRS diagnosis unit, air bag module and clock spring before drying or baking the vehicle after painting. Recheck SRS system operability after re-installing the components.
7. Whenever you finish servicing the SRS, check the SRS warning lamp operation to make sure that the system functions properly. (Refer to P.52B-7)
8. Make certain that the ignition switch is OFF when the MUT or MUT-II is connected or disconnected.
9. If you have any questions about the SRS, please contact your local distributor.

**NOTE**

SERIOUS INJURY CAN RESULT FROM UNINTENDED AIR BAG DEPLOYMENT, SO USE ONLY THE PROCEDURES AND EQUIPMENT SPECIFIED IN THIS MANUAL.

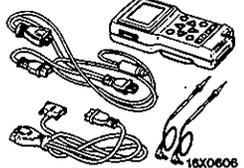
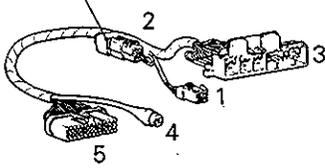
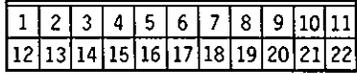
**SERVICE SPECIFICATIONS**

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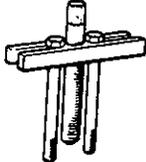
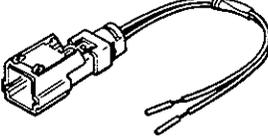
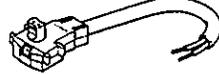
Items	Specifications
Standard value	
Clock spring resistance	Ω less than 0.4

**SPECIAL TOOLS AND TEST EQUIPMENT**

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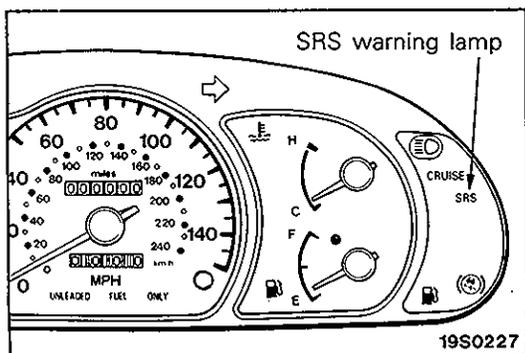
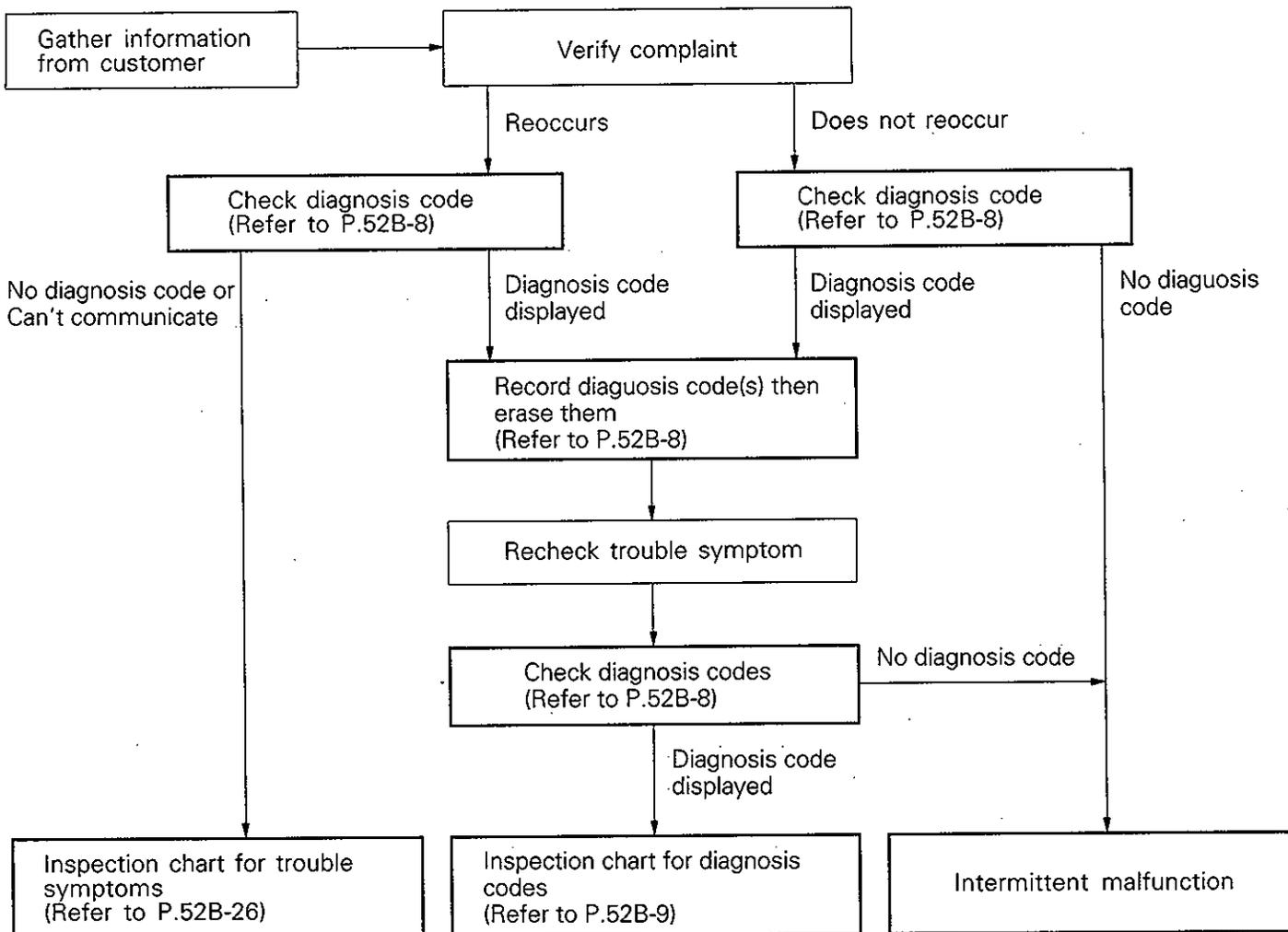
Tool	Number	Name	Use
	MB991341	Multi-use tester sub assembly	Up to 1993 models <ul style="list-style-type: none"> <li>• Reading diagnosis codes</li> <li>• Erasing diagnosis code</li> <li>• Reading trouble period</li> <li>• Reading erase times</li> </ul>
	(For the number, refer to GROUP 00 – Precautions Before Service.)	ROM pack	[Refer to MULTI-USE TESTER INSTRUCTION MANUAL]
	MB991502	Mut-II sub assembly	All models <ul style="list-style-type: none"> <li>• Reading diagnosis codes</li> <li>• Erasing diagnosis code</li> <li>• Reading trouble period</li> <li>• Reading erase times</li> </ul>
		ROM pack	[Refer to MUT-II OPERATING INSTRUCTION]
	MB991349	SRS Check Harness	<ul style="list-style-type: none"> <li>• Checking the SRS electrical circuitry with a digital multi-meter.</li> </ul> NOTE SRS check harness is used on various Diagnostic Tests. For details, refer to DIAGNOSTIC SEQUENCE (P.52B-7 – P.52B-25)
	19X0463	1 To SDU connector for clock spring	
	19X0464	2 (connected 3 Ω resistor)	
	19N0303	3 Connector to harness-side clock spring connector (2-pin, red)	
	19X0462	4 To clock spring connector for air bag module	
	19C0258	5 (check connector)	

# 52B-6 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Special Tools and Test Equipment

Tool	Number	Name	Use
 <p>13R0746</p>		Digital multi-meter Use a multi-meter for which the maximum test current is 2 mA or less at the minimum range of resistance measurement	Checking the SRS electrical circuitry with SRS Check Harness
	MB990803	Steering wheel puller	Removal of steering wheel
 <p>13R0732</p>	MB686560	SRS AIR BAG ADAPTER HARNESS A	Deployment of air bag module inside the vehicle
 <p>13R0731</p>	MB628919	SRS AIR BAG ADAPTER HARNESS B	Deployment of air bag module outside the vehicle

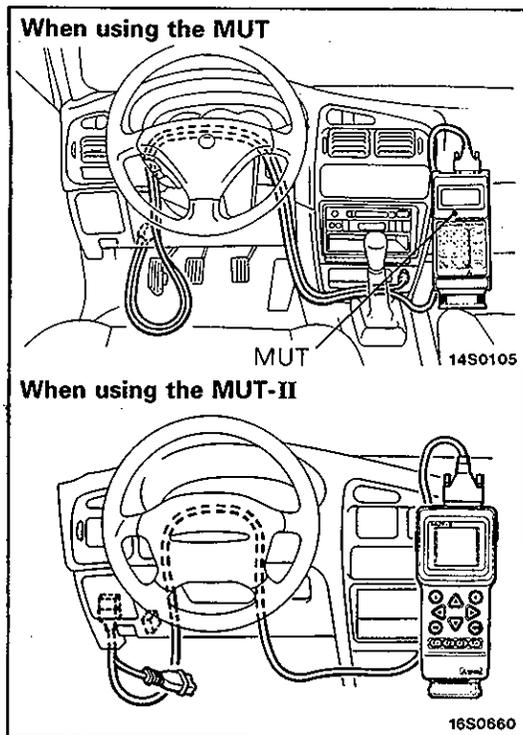
▶ TROUBLESHOOTING

DIAGNOSTIC TROUBLESHOOTING FLOW



**SRS WARNING LAMP INSPECTION**

- (1) Check to ensure that the SRS warning lamp comes on when the ignition switch is placed at ON.
- (2) Check to ensure that the lamp stays on for approximately seven seconds and then goes out.
- (3) If any other result is obtained, check the diagnosis code.



## DIAGNOSTIC FUNCTION

### DISGNOSIS CODES CHECK

Connect the MUT or MUT-II to the diagnosis connector and check diagnosis codes.

#### Caution

**Make certain that the ignition switch is OFF when the MUT or MUT-II is connected or disconnected.**

### ERASING DIAGNOSIS CODES

Connect the MUT or MUT-II to the diagnosis connector and then erase the diagnosis codes.

**INSPECTION CHART FOR DIAGNOSIS CODES**

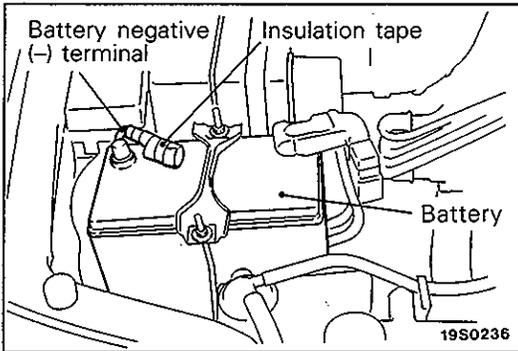
Code No.	Diagnosis item		Reference page
14	Analog G sensor system		P.52B-10
15	Safing impact sensor system		P.52B-11
16			
21	Air bag module (squib) system		P.52B-12
22			
31	DC-DC converter system		P.52B-14
32			
34*1	Connector lock system		P.52B-15
35	SDU (air bag already deployed) system		P.52B-16
41*2	IG1(A) power supply system		P.52B-17
42*2	IG1(B) power supply system		P.52B-18
43*2	SRS warning lamp drive circuit system	Lamp does not illuminate	P.52B-20
		Lamp does not switch off	P.52B-21
44	SRS warning lamp drive circuit system (when warning lamp is ON)		P.52B-22
45	Non-volatile memory (EEPROM) or A/D converter system		P.52B-23
46	Analog collision determination circuit system		P.52B-24
47, 51	Air bag module (squib ignition drive circuit) system		P.52B-25
48, 52			

**NOTE**

- (1)\*1: When the normal state is restored for  $1 \pm 0.2$  seconds, the diagnosis code is automatically erased and the SRS warning lamp goes out.
- (2)\*2: When the normal state is restored for  $5 \pm 0.2$  seconds, the diagnosis code is automatically erased and the SRS warning lamp goes out.
- (3) If the vehicle has a discharged battery, it will store the fault code 41 or 42. When this diagnosis code is displayed, check the battery.

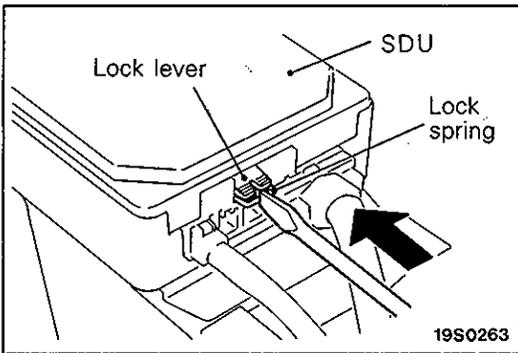
**INSPECTION PROCEDURE FOR DIAGNOSIS CODES**

Code No. 14	Analog G sensor system	Probable cause of trouble
[Explanation]	The SDU monitors the analog G sensor output and outputs this code when it detects a sensor failure, abnormal sensor characteristics or abnormal sensor output.	<ul style="list-style-type: none"> <li>● SDU out of order</li> </ul>



**Caution**

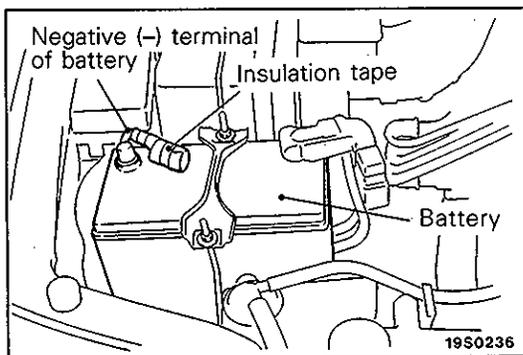
1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)



2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

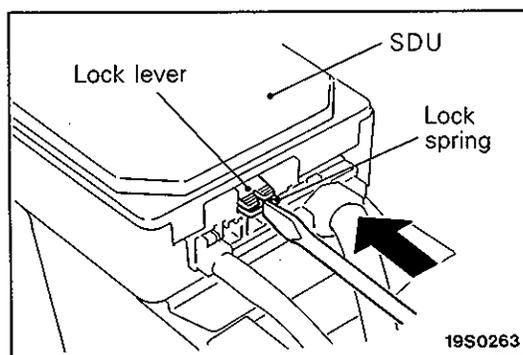
Since a defective analog G sensor in the SDU is suspected, replace the SDU.

Code No. 15, 16	Safing impact sensor system	Probable cause of trouble						
[Explanation] These codes are output when the resistance value between the safing impact sensor terminals in the SDU is out of the normal range. The probable causes of trouble associated with the respective code Nos. are as follows.	<table border="1"> <thead> <tr> <th data-bbox="147 436 305 489">Code No.</th> <th data-bbox="305 436 1065 489">Probable cause of trouble</th> </tr> </thead> <tbody> <tr> <td data-bbox="147 489 305 541">15</td> <td data-bbox="305 489 1065 541">Safing impact sensor short-circuited</td> </tr> <tr> <td data-bbox="147 541 305 594">16</td> <td data-bbox="305 541 1065 594">Safing impact sensor open-circuited</td> </tr> </tbody> </table>	Code No.	Probable cause of trouble	15	Safing impact sensor short-circuited	16	Safing impact sensor open-circuited	<ul style="list-style-type: none"> <li>● SDU out of order</li> </ul>
	Code No.	Probable cause of trouble						
15	Safing impact sensor short-circuited							
16	Safing impact sensor open-circuited							



**Caution**

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)

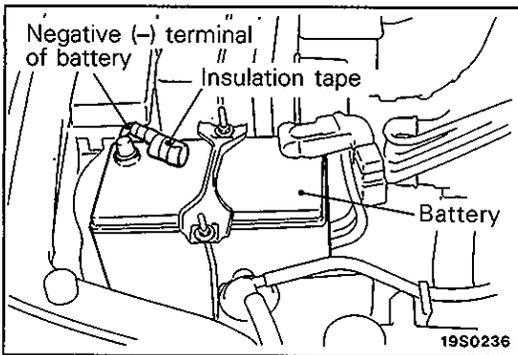


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

Since a defective safing impact sensor in the SDU is suspected, replace the SDU.

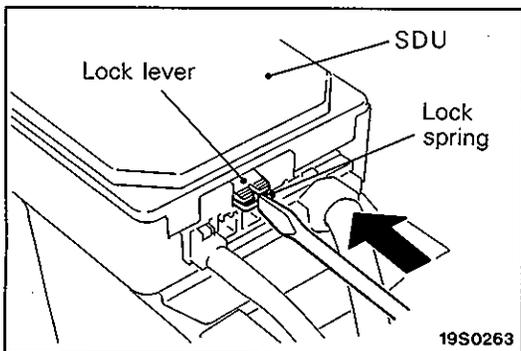
# 52B-12 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

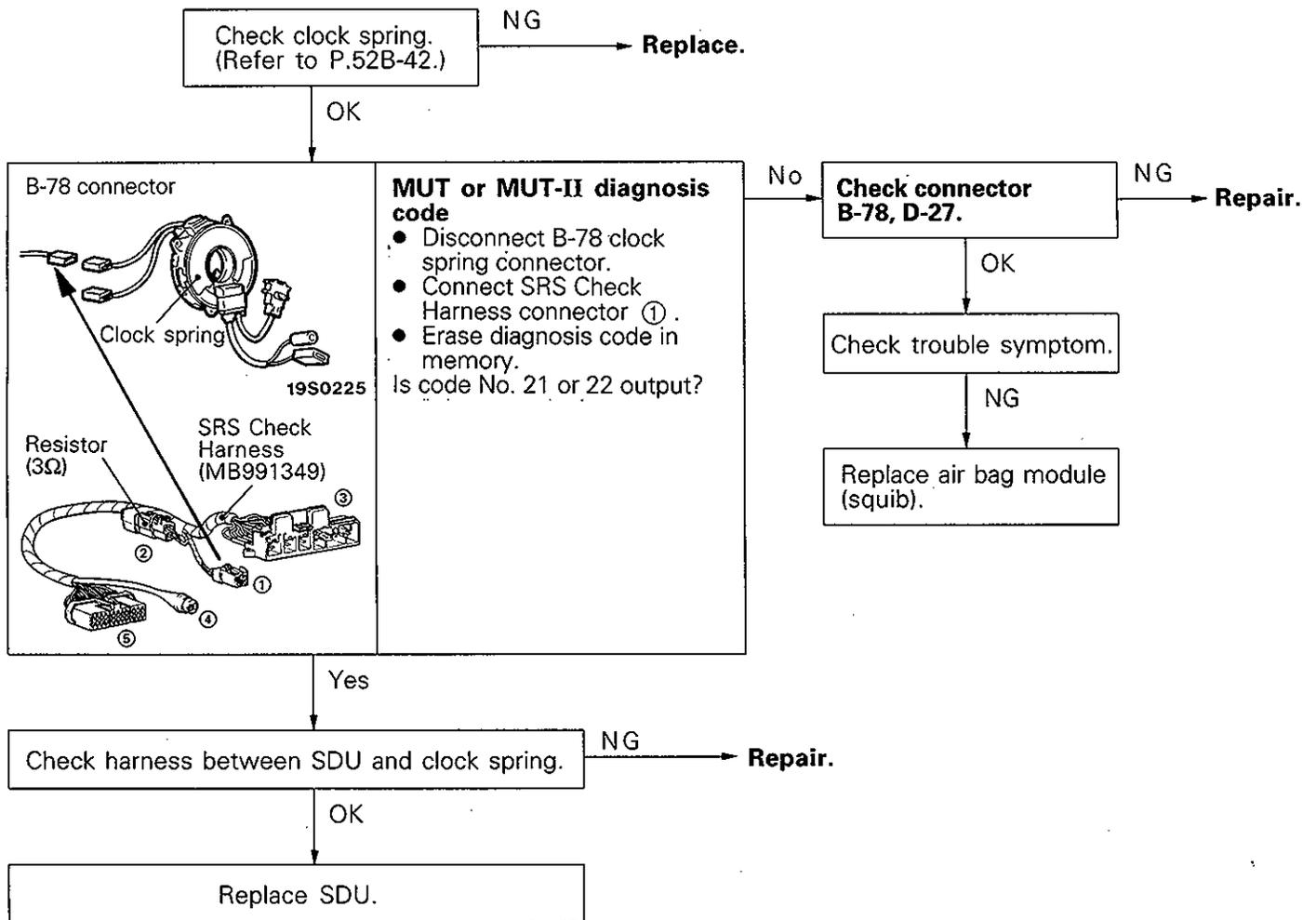
Code No. 21, 22	Air bag module (squib) system	Probable cause of trouble					
<p>[Explanation] These codes are output when the resistance value between the air bag module (squib) terminals in the SDU is out of the normal range. The probable causes of trouble associated with the respective code Nos. are as follows.</p>		<ul style="list-style-type: none"> <li>● Defective clock spring</li> <li>● Defective harness, connector</li> <li>● Defective air bag module (squib)</li> <li>● Defective SDU</li> </ul>					
<table border="1"> <thead> <tr> <th data-bbox="215 422 354 451">Code No.</th> <th data-bbox="370 422 688 451">Probable cause of trouble</th> </tr> </thead> <tbody> <tr> <td data-bbox="261 489 289 518">21</td> <td data-bbox="370 478 997 533"> <ul style="list-style-type: none"> <li>● Air bag module (squib) or harness short-circuited</li> <li>● Clock spring short-circuited</li> </ul> </td> </tr> <tr> <td data-bbox="261 583 289 613">22</td> <td data-bbox="370 558 997 638"> <ul style="list-style-type: none"> <li>● Air bag module (squib) or harness open-circuited</li> <li>● Clock spring open-circuited</li> <li>● Connector in loose contact</li> </ul> </td> </tr> </tbody> </table>			Code No.	Probable cause of trouble	21	<ul style="list-style-type: none"> <li>● Air bag module (squib) or harness short-circuited</li> <li>● Clock spring short-circuited</li> </ul>	22
Code No.	Probable cause of trouble						
21	<ul style="list-style-type: none"> <li>● Air bag module (squib) or harness short-circuited</li> <li>● Clock spring short-circuited</li> </ul>						
22	<ul style="list-style-type: none"> <li>● Air bag module (squib) or harness open-circuited</li> <li>● Clock spring open-circuited</li> <li>● Connector in loose contact</li> </ul>						



### Caution

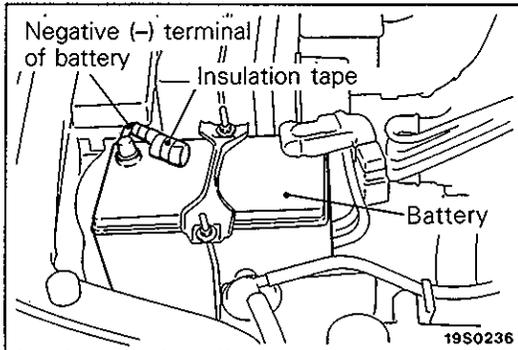
1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)
2. Do not attempt to measure the air bag module (squib) circuit resistance. Use of a tester in measuring the circuit resistance will supply current to the squib, or erroneous deployment due to static electricity could cause serious injury.
3. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.





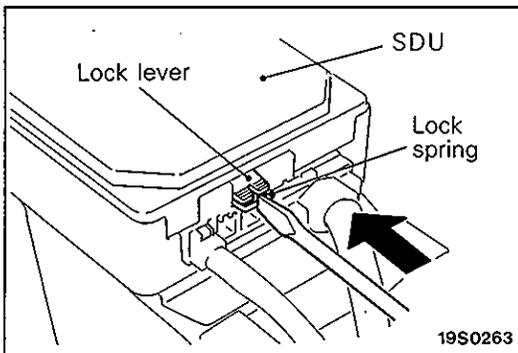
## 52B-14 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

Code No. 31, 32	DC-DC converter system	Probable cause of trouble
[Explanation]	The SDU monitors the DC-DC converter terminal voltage at all times. These codes are output when the DC-DC converter terminal voltage continues to be higher (code No. 31) or lower (code No. 32) than a predetermined value for five seconds.	● SDU out of order



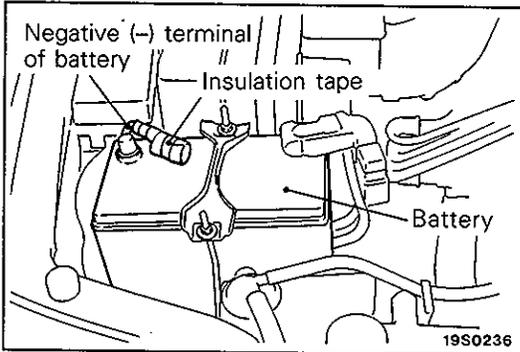
### Caution

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)
2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



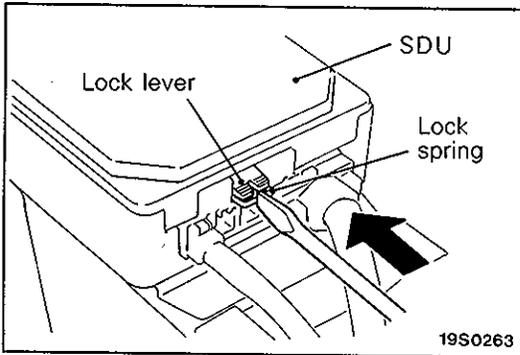
Since a defective DC-DC converter in the SDU is suspected, replace the SDU.

Code No. 34	Connector lock system	Probable cause of trouble
[Explanation]	This code is output when the opened state of the double lock short bar of the SDU connector is detected. When the normal state is restored for a continuous period of $1 \pm 0.2$ second, code No. 34 is automatically erased, and the SRS warning lamp goes out.	<ul style="list-style-type: none"> <li>● Defective connector</li> <li>● Defective SDU</li> </ul>

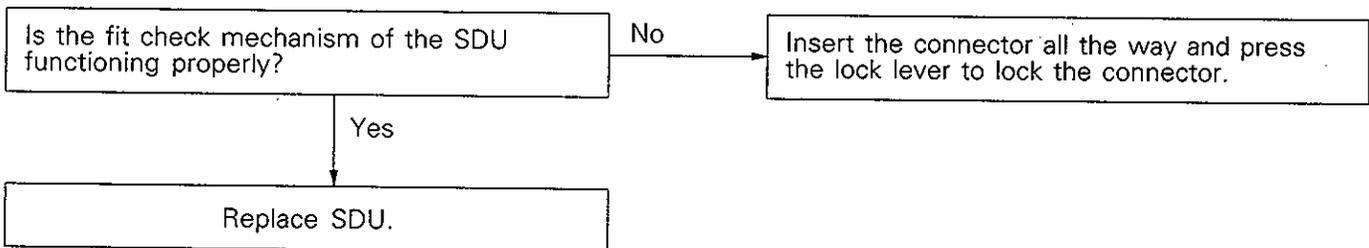


**Caution**

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)

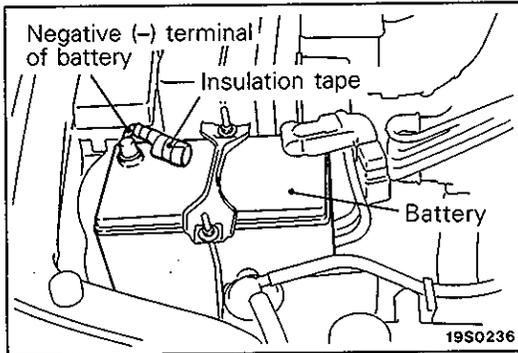


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



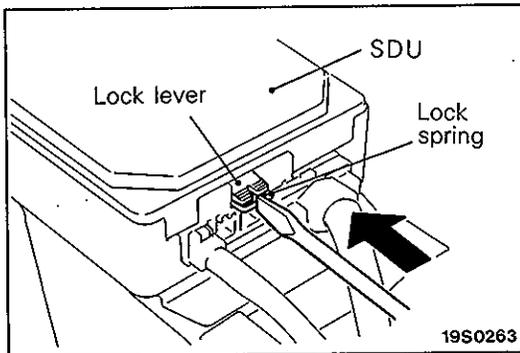
## 52B-16 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

Code No. 35	SDU (air bag already deployed) system	Probable cause of trouble
[Explanation]	After deployment of the air bag, this code is output. If this code is output before deployment of the air bag, a trouble in the SDU is suspected.	● Defective SDU



### Caution

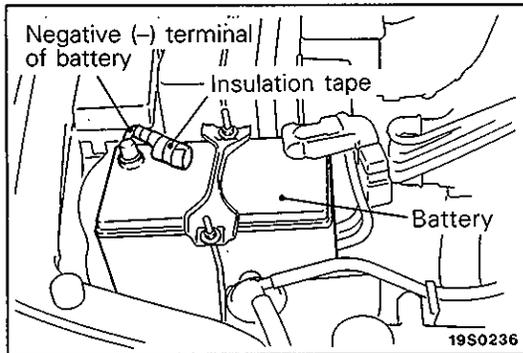
1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)
2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



If the air bag was deployed, replace the SDU.

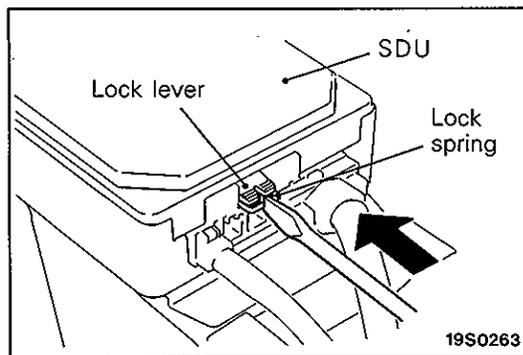
If the code was output before deployment of the air bag, a trouble in the SDU is suspected. Replace the SDU.

Code No. 41	IG <sub>1</sub> (A) power supply circuit system	Probable cause of trouble
[Explanation]	This code is output when the voltage between the IG <sub>1</sub> (A) terminal and ground continues to be lower than a predetermined value for five seconds. When the normal state is restored for a continuous period of 5 ± 0.2 seconds, code No. 41 is automatically cleared, and the SRS warning lamp goes out.	<ul style="list-style-type: none"> <li>• Defective harness, connector</li> <li>• Defective SDU</li> </ul>



**Caution**

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4; No.5)

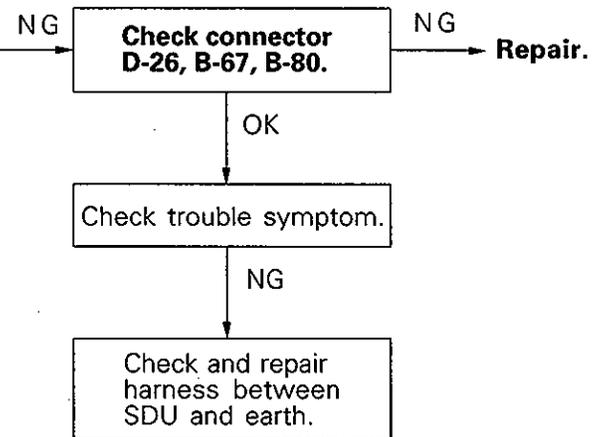


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

Measure at SRS Check Harness connector ⑤.

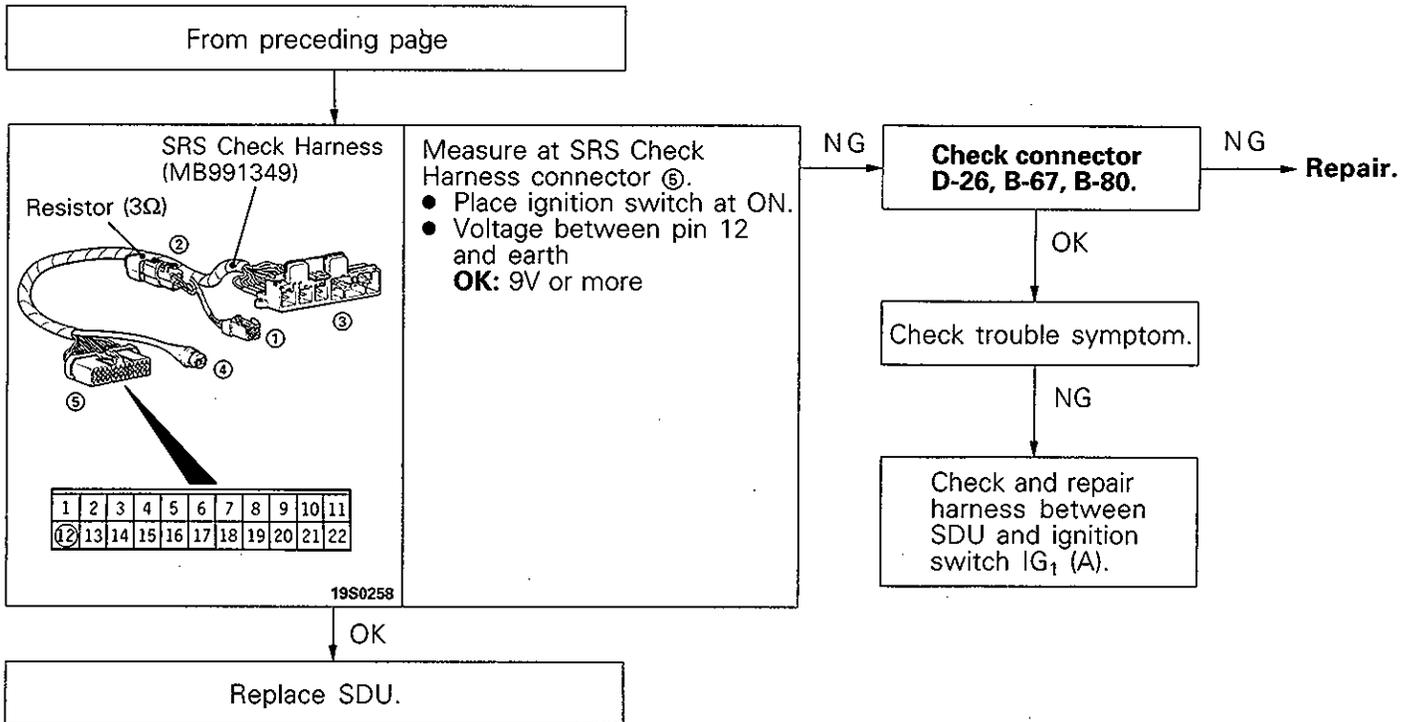
- Disconnect D-26 SDU connector.
- Connect SRS Check Harness connector ③.
- Continuity between pin 19 and earth
- Continuity between pin 20 and earth

**OK:** If continuity is evident

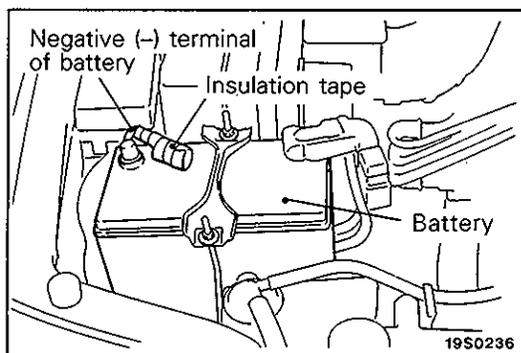


OK  
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To next page

# 52B-18 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

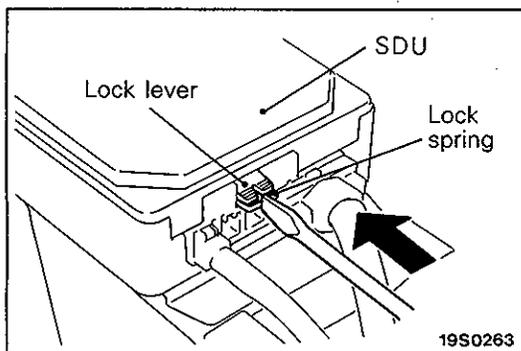


Code No. 42	IG <sub>1</sub> (B) power supply circuit	Probable cause of trouble
[Explanation]	This code is output when the voltage between the IG <sub>1</sub> (B) terminal and earth continues to be lower than a predetermined value for five seconds. When the normal state is restored for a continuous period of 5 ± 0.2 seconds, code No. 42 is automatically cleared, and the SRS warning lamp goes out.	<ul style="list-style-type: none"> <li>● Defective harness, connector</li> <li>● Defective SDU</li> </ul>

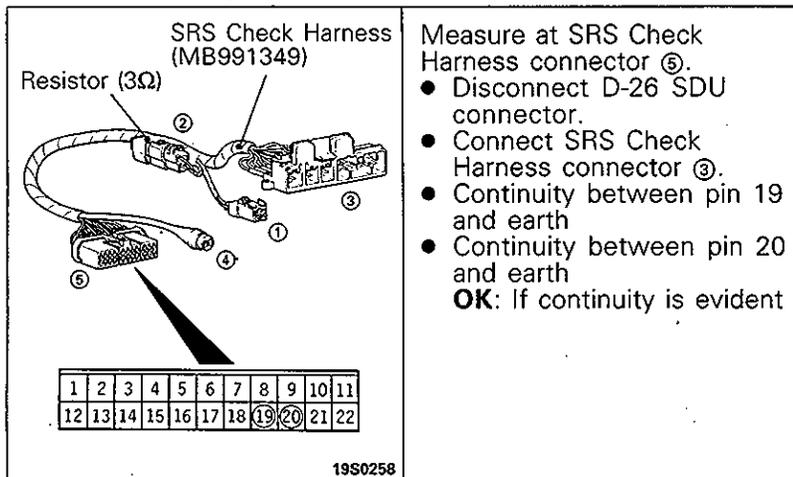


### Caution

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)



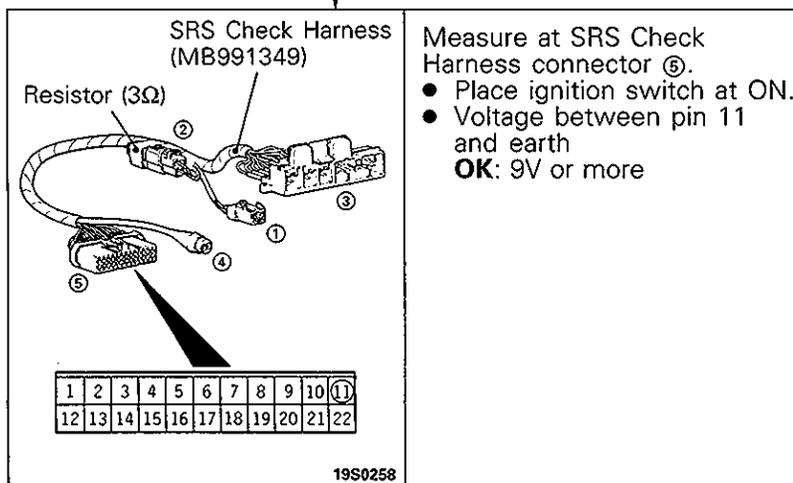
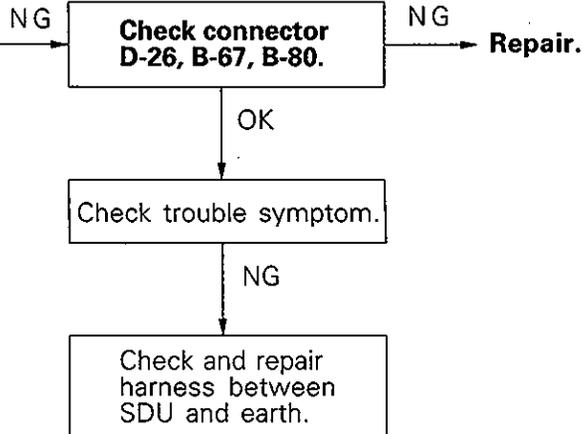
2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



Measure at SRS Check Harness connector ⑤.

- Disconnect D-26 SDU connector.
- Connect SRS Check Harness connector ③.
- Continuity between pin 19 and earth
- Continuity between pin 20 and earth

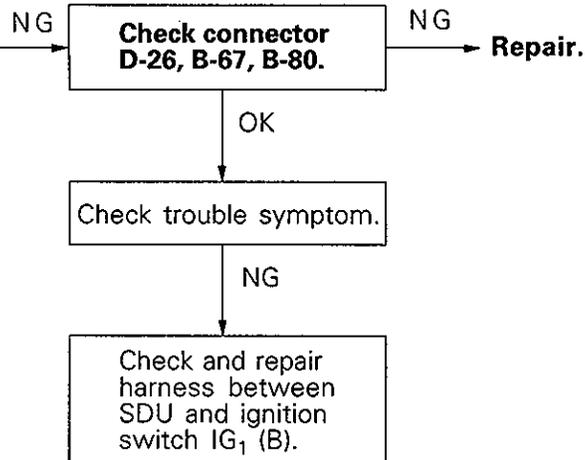
**OK:** If continuity is evident



Measure at SRS Check Harness connector ⑤.

- Place ignition switch at ON.
- Voltage between pin 11 and earth

**OK:** 9V or more

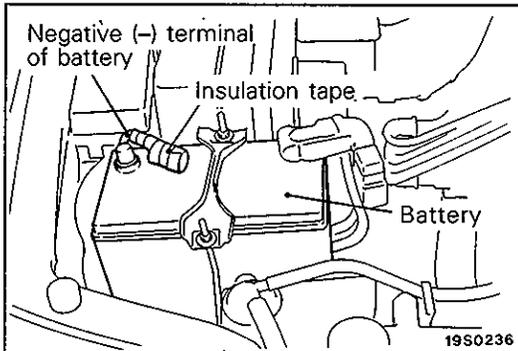


OK ↓

Replace SDU.

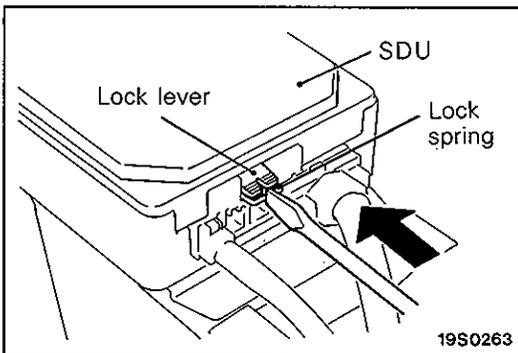
# 52B-20 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

Code No. 43	SRS warning lamp drive circuit system (when warning lamp is OFF)	Probable cause of trouble
[Explanation]	The SDU monitors the SRS warning lamp circuit and outputs this code when the circuit has been open for five seconds because of break in the lamp or the harness, loose connection, etc. When the normal state is restored for a continuous period of $5 \pm 0.2$ seconds, code No. 43 is automatically erased, and the SRS warning lamp goes out.	<ul style="list-style-type: none"> <li>● Defective harness, connector</li> <li>● Defective bulb</li> <li>● Defective SDU</li> <li>● Defective combination meter</li> </ul>



### Caution

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)

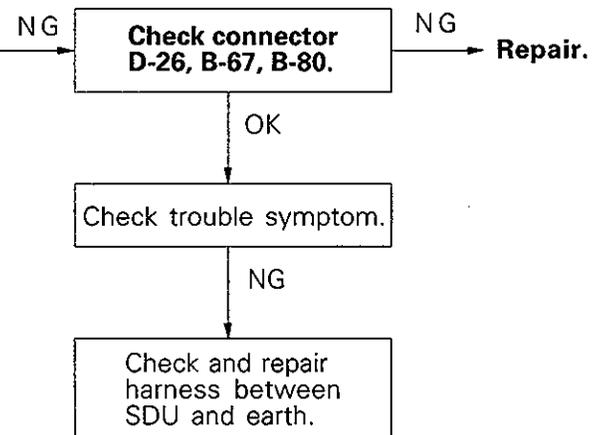


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

Measure at SRS Check Harness connector ⑤.

- Disconnect D-26 SDU connector.
- Connect SRS Check Harness connector ③.
- Continuity between pin 19 and earth
- Continuity between pin 20 and earth

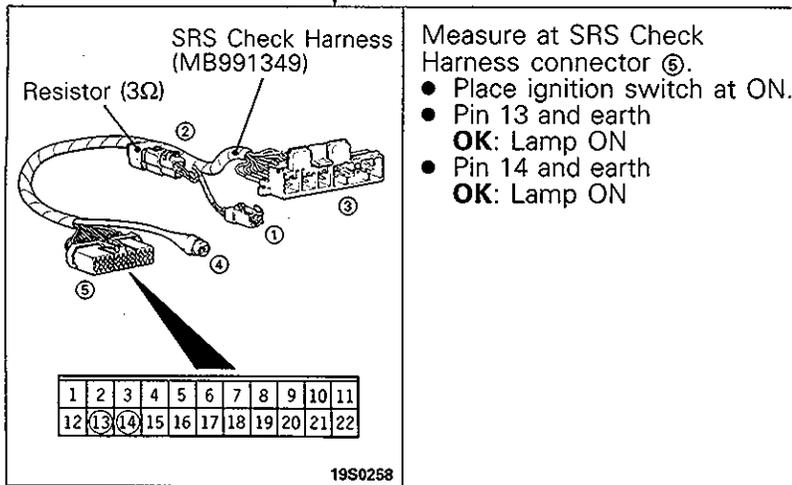
**OK:** If continuity is evident



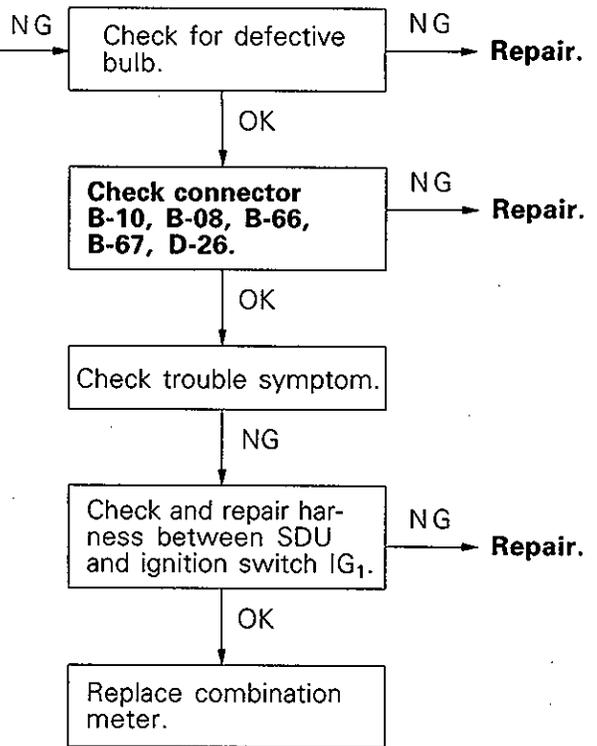
OK

To next page

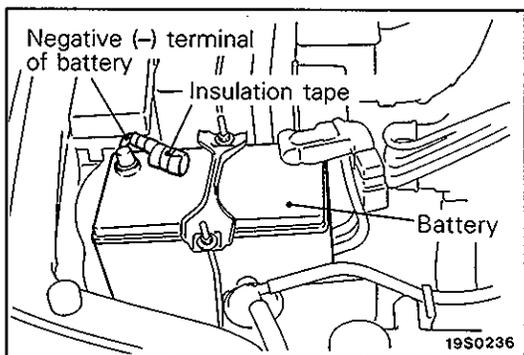
From preceding page



Replace SDU.

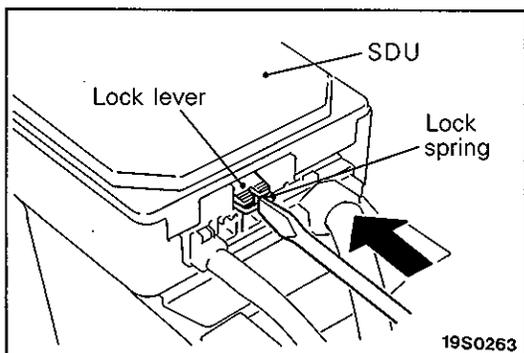


Code No. 43	SRS warning lamp drive circuit system (Lamp does not switch off.)	Probable cause of trouble
[Comment]	This diagnosis code is output when a short to earth occurs in the harness between the lamp and the SDU while the SDU is monitoring the SRS warning lamp and the lamp is ON.	<ul style="list-style-type: none"> <li>● Malfunction of harnesses or connectors</li> <li>● Malfunction of SDU</li> </ul>



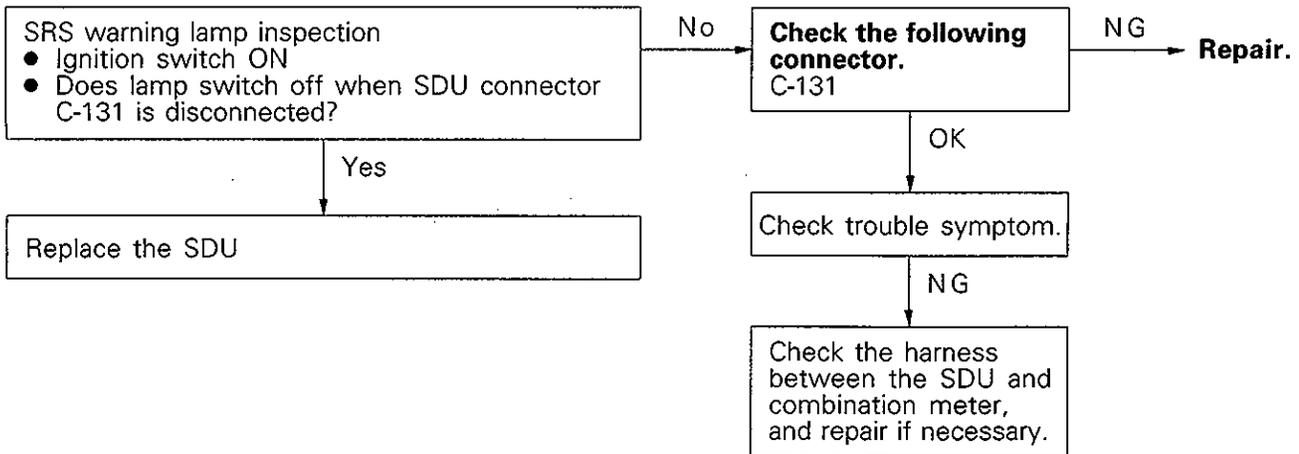
**Caution**

1. After the ignition switch has been placed at the **LOCK** position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)

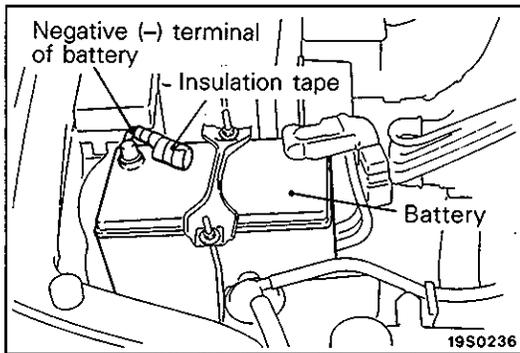


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

# 52B-22 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

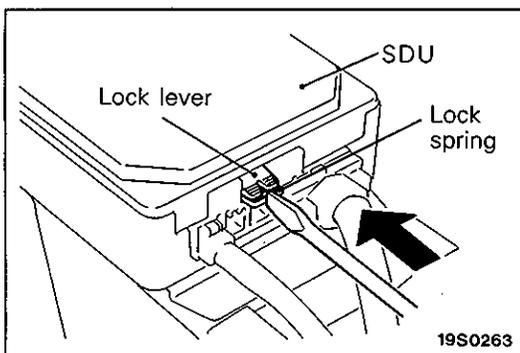


Code No. 44	SRS warning lamp drive circuit system (when warning lamp is ON)	Probable cause of trouble
[Explanation]	The SDU monitors the SRS warning lamp drive circuit and outputs this code when a trouble in the warning lamp drive circuit is detected.	<ul style="list-style-type: none"> <li>Defective SDU</li> </ul>



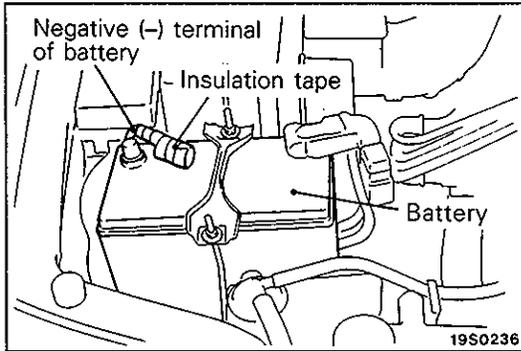
### Caution

- After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No.5)
- To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



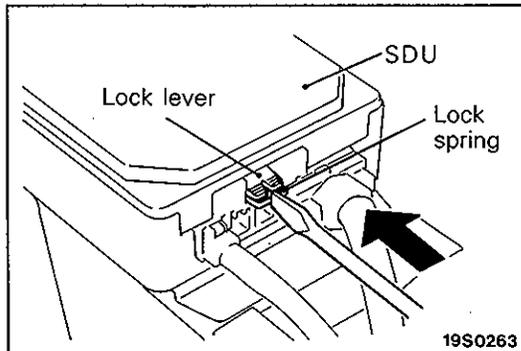
Since a defective SRS warning lamp drive circuit in the SDU is suspected, replace the SDU.

<b>Code No. 45</b>	<b>Non-volatile memory and A/D converter system</b>	Probable cause of trouble
[Explanation]	This code is output when the A/D converter and non-volatile memory (EEPROM) system in the SDU fails.	<ul style="list-style-type: none"> <li>• Defective SDU</li> </ul>



**Caution**

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)

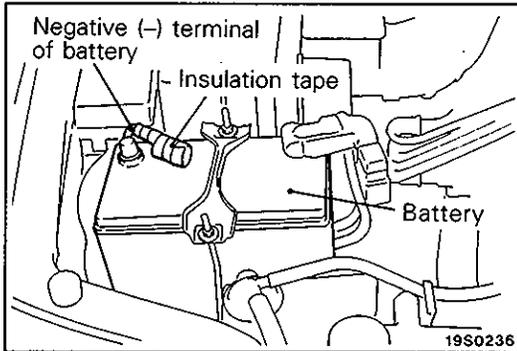


2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

Since the A/D converter and non-volatile memory (EEPROM) system in the SDU is suspected, replace the SDU.

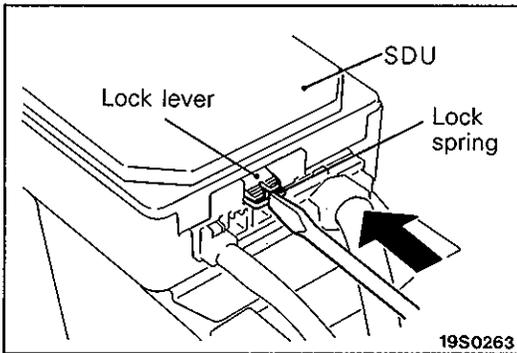
## 52B-24 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

Code No. 46	Analog collision determination circuit system	Probable cause of trouble
[Explanation]	The SDU monitors the analog collision determination circuit and outputs this code when failure or abnormal characteristics of the collision determination circuit are detected.	● Defective SDU



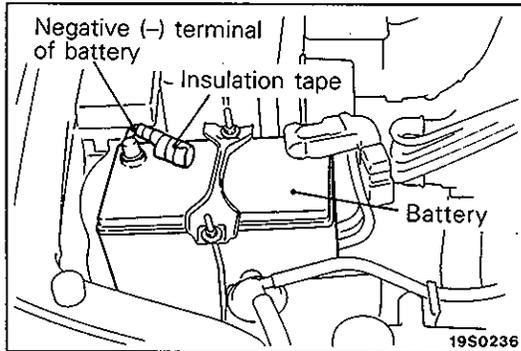
### Caution

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)
2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



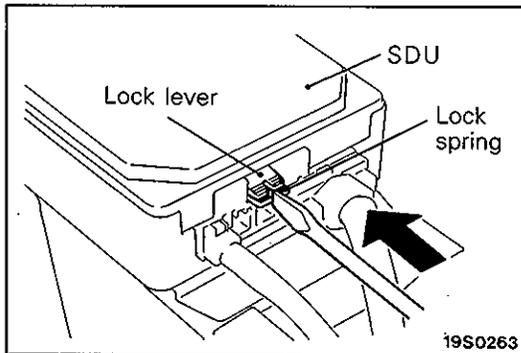
Since a defective analog collision determination circuit in the SDU is suspected, replace the SDU.

<b>Code No. 47, 51, 48, 52</b>	<b>Air bag module (squib ignition drive circuit) system</b>	Probable cause of trouble
[Explanation]	The SDU monitors the squib ignition drive transistor and outputs the codes when the ignition drive circuit is short-circuited (code No. 47, 51) or open-circuited (code No. 48, 52).	● Defective SDU



**Caution**

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)



2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

Since a defective ignition drive circuit in the SDU is suspected, replace the SDU.

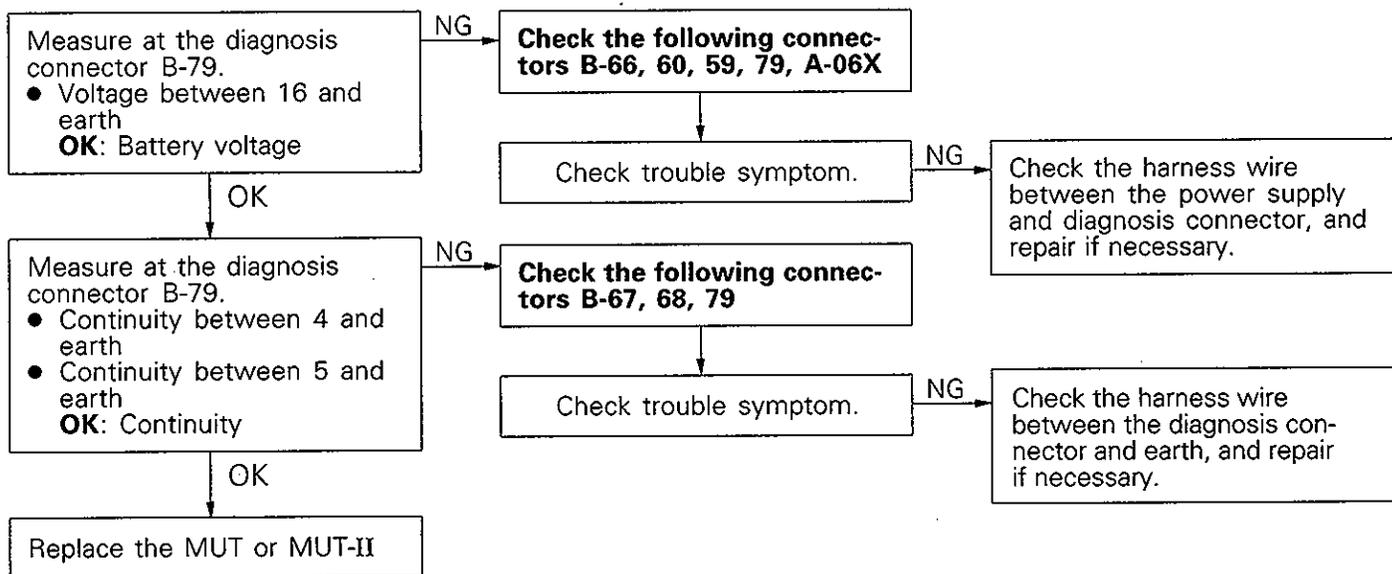
**INSPECTION CHART FOR TROUBLE SYMPTOMS**

Trouble symptom		Inspection procedure No.	Reference page
No communications with MUT or MUT-II	No communications with all systems	1	P.52B-26
	No communications with SRS only	2	P.52B-26
SRS warning lamp does not go out.		3	P.52B-28

**INSPECTION PROCEDURE FOR TROUBLE SYMPTOMS**

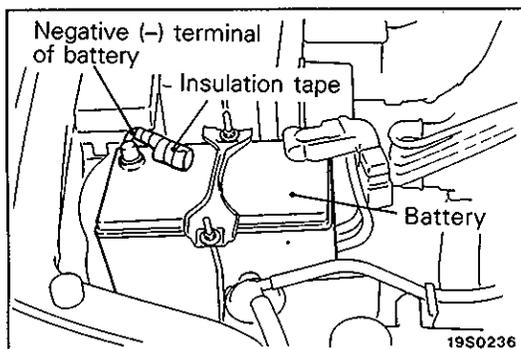
**INSPECTION PROCEDURE 1**

No communications with MUT or MUT-II (No communications with all systems)	Probable cause of trouble
[Explanation] A trouble in the power system (including the earth) on the diagnosis line is suspected.	<ul style="list-style-type: none"> <li>Defective harness, connector</li> </ul>



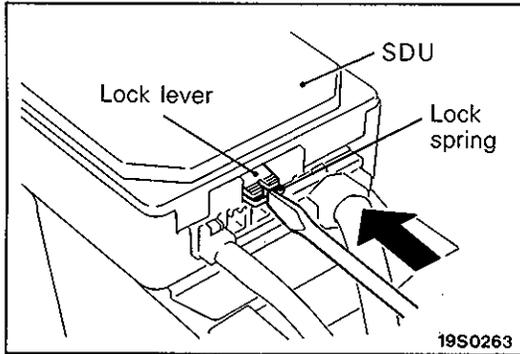
**INSPECTION PROCEDURE 2**

No communications with MUT or MUT-II (No communications with SRS only)	Probable cause of trouble
[Explanation]. An open circuit in the diagnosis output circuit or power supply circuit (including the earth) is suspected.	<ul style="list-style-type: none"> <li>Defective harness, connector</li> <li>Defective SDU</li> </ul>



**Caution**

- After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)



2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

SRS Check Harness (MB991349)

Resistor (3Ω)

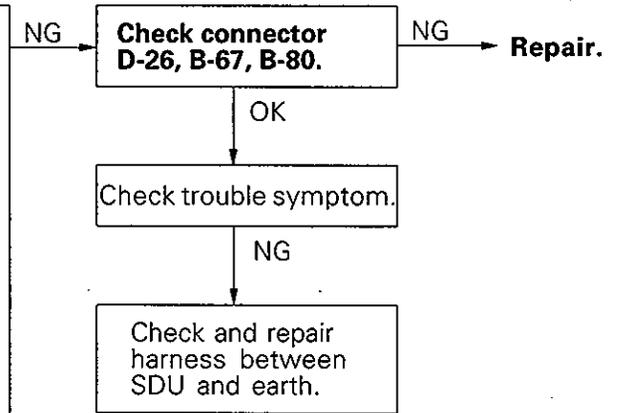
19S0258

Measure at SRS Check Harness connector ⑥.

- Disconnect D-26 SDU connector.
- Connect SRS Check Harness connector ③.
- Continuity between pin 19 and earth
- Continuity between pin 20 and earth

**OK:** If continuity is evident

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22



SRS Check Harness (MB991349)

Resistor (3Ω)

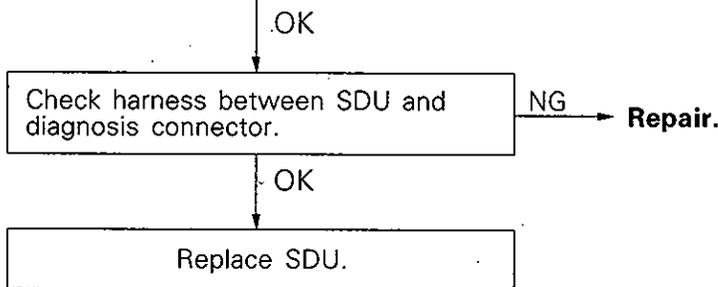
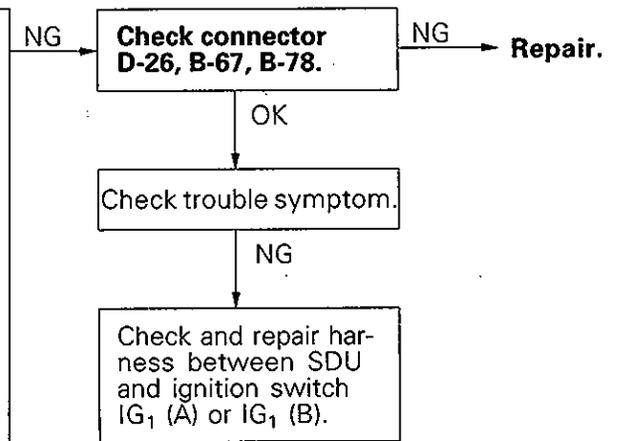
19S0258

Measure at SRS Check Harness connector ⑥.

- Disconnect D-26 SDU connector.
- Connect SRS Check Harness connector ③.
- Voltage between pin 11 and earth
- Voltage between pin 12 and earth

**OK:** 9V or more

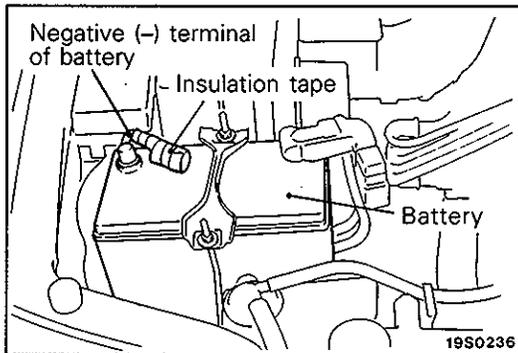
1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22



# 52B-28 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Troubleshooting

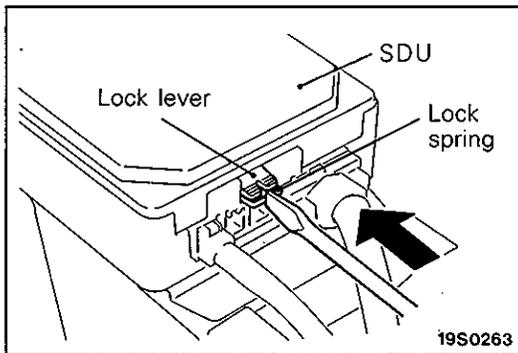
## INSPECTION PROCEDURE 3

SRS warning lamp does not go out.	Probable cause of trouble
[Explanation] A short-circuited harness between the SRS warning lamp and SDU is suspected.	<ul style="list-style-type: none"> <li>● Defective harness, connector</li> <li>● Defective combination meter</li> <li>● Defective SDU</li> </ul>

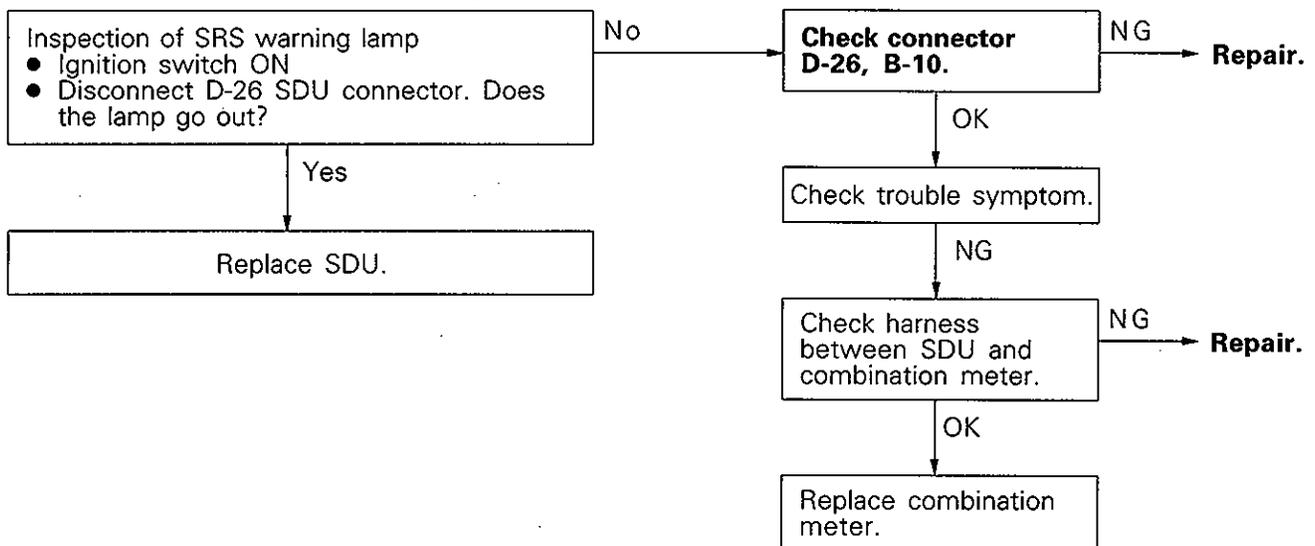


### Caution

1. After the ignition switch has been placed at the LOCK position and the negative (-) terminal of the battery has been disconnected, wait for more than 60 seconds before starting work. Wind a tape around the disconnected (-) terminal for insulation. (Refer to P.52B-4, No. 5)



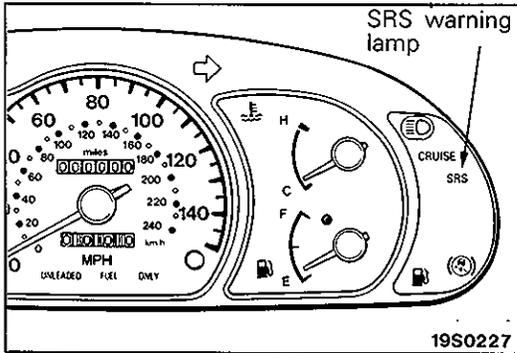
2. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.



## SRS MAINTENANCE

E52BF00AA

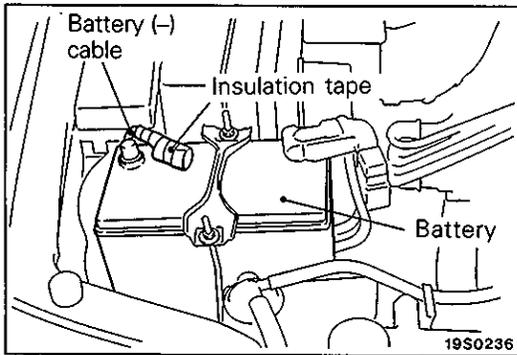
The SRS must be inspected by an authorized dealer 10 years after the date of vehicle registration.



### "SRS" WARNING LAMP CHECK

E52BF01AA

Turn the ignition with the key "ON" position. Does the "SRS" warning lamp illuminate for about 7 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-9.



### SRS COMPONENTS VISUAL CHECK

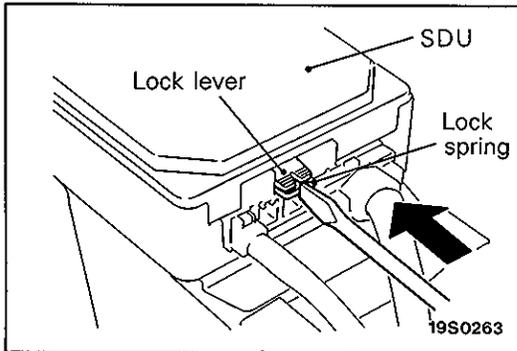
E52BF03AA

1. Turn the ignition key to "LOCK" position, disconnect the negative battery cable and tape the terminal.

#### Caution

**Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-4.)**

2. Remove the rear console assembly. (Refer to P.52B-37.)

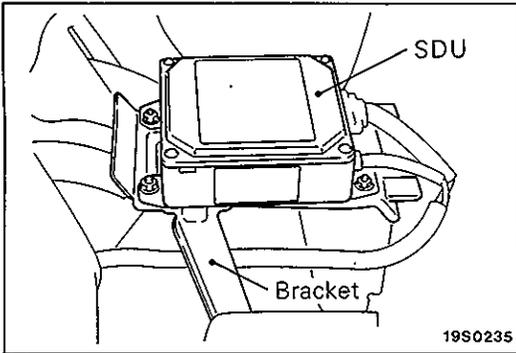


3. Place a flat-tipped (-) screwdriver against the lock spring at the lock lever notch and push the spring toward the unit.

#### Caution

**Do not use excessive force to raise the lock lever (green).**

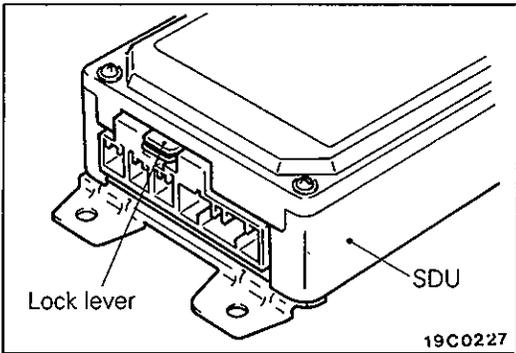
4. Disconnect the red 14-pin connector from the SRS diagnosis unit while pressing down the lock of the connector.



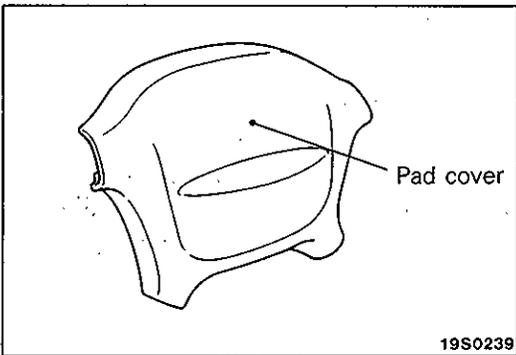
**SRS DIAGNOSIS UNIT (SDU)**

E52BF03CA

1. Check SDU case and brackets for dents, cracks, deformities of rust.



2. Check connectors and lock lever for damage, and terminals for deformities or rust. Replace SDU if it fails visual check. (Refer to P.52B-37.)



**AIR BAG MODULE, STEERING WHEEL AND CLOCK SPRING**

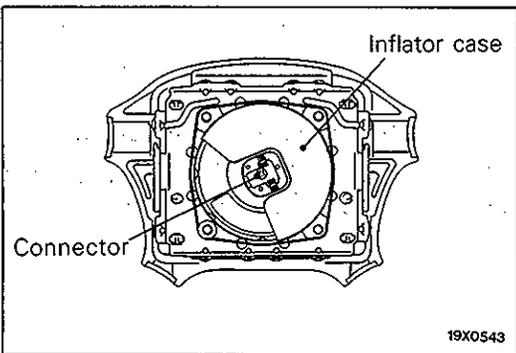
E52BF03DA

1. Remove the air bag module, steering wheel and clock spring. (Refer to P.52B-40.)

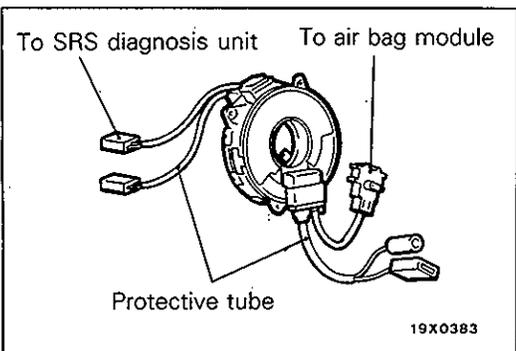
**Caution**

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

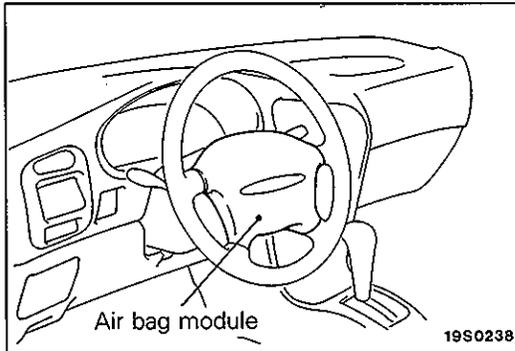
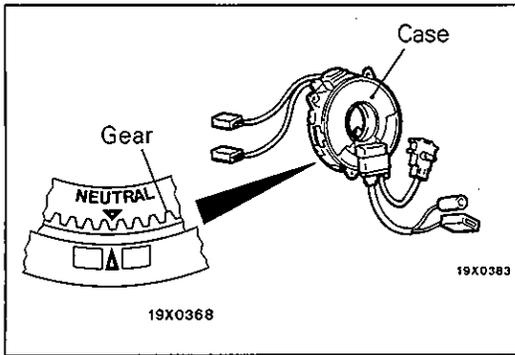
2. Check pad cover for dents, cracks or deformities.



3. Check connector for damage, terminals deformities, and harness for binds.
4. Check air bag inflator case for dents, cracks or deformities.
5. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.



6. Check clock spring connectors and protective tube for damage, and terminals for deformities.



7. Visually check the clock spring case and the gears for damage.
8. Align the mating mark and "NEUTRAL" position indicator and, after turning the vehicle's front wheel to straightahead position, install the clock spring to the column switch.

**Caution**

**If the clock spring's mating mark is not properly aligned, the steering wheel may not be completely rotational during a turn, or the flat cable within the clock spring may be severed, obstructing normal operation of the SRS and possibly leading to serious injury to the vehicle's driver.**

9. Install the steering column covers, steering wheel and the air bag module.
10. Check steering wheel for noise, binds or difficult operation.
11. Check steering wheel for excessive free play.

REPLACE ANY VISUALLY INSPECTED PART IF IT FAILS THAT INSPECTION.

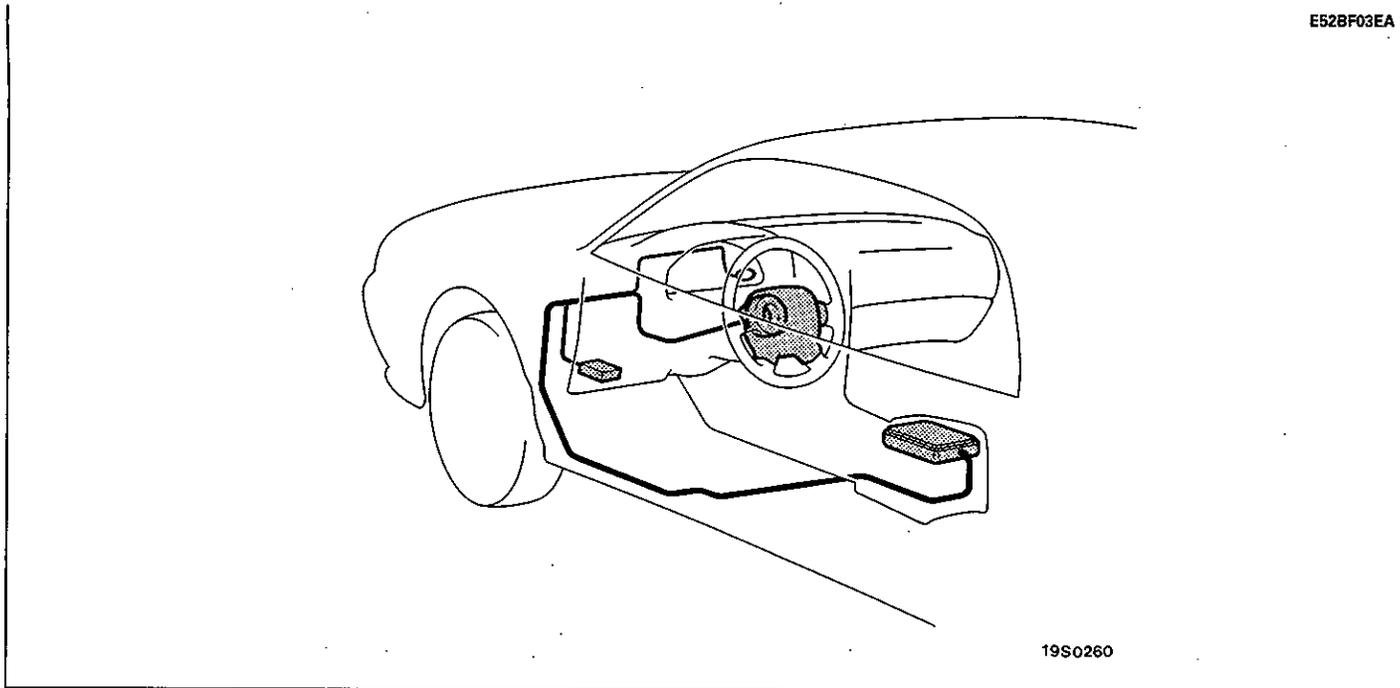
(Refer to P.52B-40.)

**Caution**

**The SRS may not active if any of the above components is not installed properly, which could result in serious injury or death to the vehicle's driver.**

## BODY WIRING HARNESS

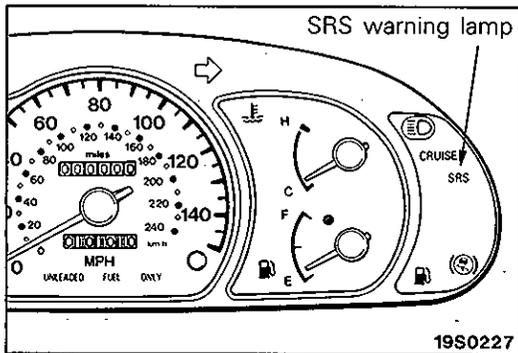
E52BF03EA



1. Check connector for poor connection.
2. Check harnesses for binds, connectors for damage, and terminals for deformities.  
REPLACE ANY CONNECTORS OR HARNESS THAT FAIL THE VISUAL INSPECTION.  
(Refer to P.52B-3.)

### Caution

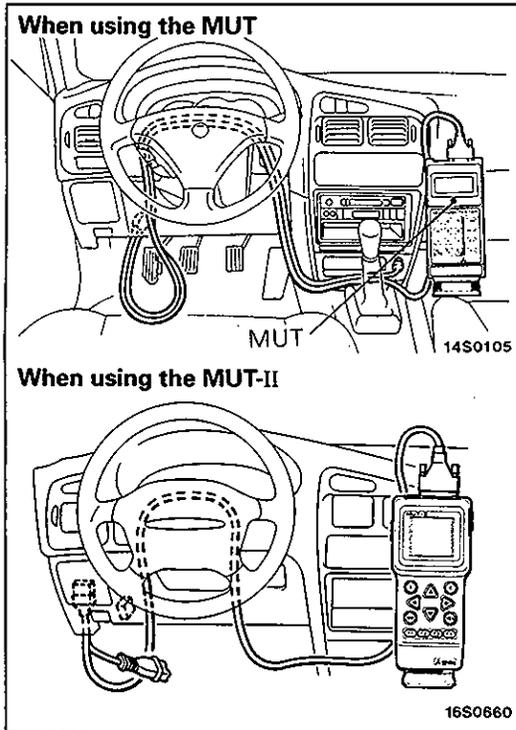
**The SRS may not activate if SRS harness or connectors are damaged or improperly connected, which could result in serious injury or death to the vehicle's driver.**



## POST-INSTALLATION INSPECTION

E52BF04AA

Reconnect the negative battery terminal. Turn the ignition key to the "ON" position. Does the "SRS" warning lamp illuminate for about 7 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-9.



## POST-COLLISION DIAGNOSIS

E13BF20AA

To inspect and service the SRS after a collision (whether or not the air bag, has deployed), perform the following steps.

### SRS DIAGNOSIS UNIT MEMORY CHECK

E13BF21AA

1. Connect the MUT or MUT-II to the diagnosis connector located at the right or left side of the junction block.

#### Caution

**Make certain that the ignition switch is OFF when the MUT or MUT-II is connected or disconnected.**

2. Read (and write down) all displayed diagnosis codes. (Refer to P.52B-9.)

#### NOTE

If the battery power supply has been disconnected or disrupted by the collision, the MUT or MUT-II cannot communicate with the SRS diagnosis unit. Inspect and, if necessary, repair the body wiring harness before proceeding further.

3. Read the service data (fault duration and how many times memories are erased) using the MUT or MUT-II.

#### NOTE

- Maximum stored period: 9999 minutes (approximately 7 days)
- Maximum number of times to be stored: 250

4. Erase the diagnosis codes and after waiting 45 seconds or more read (and write down) all displayed diagnosis codes. (Refer to P.52B-9.)

## REPAIR PROCEDURE

E13BF22AA

### When air bag deploys collision.

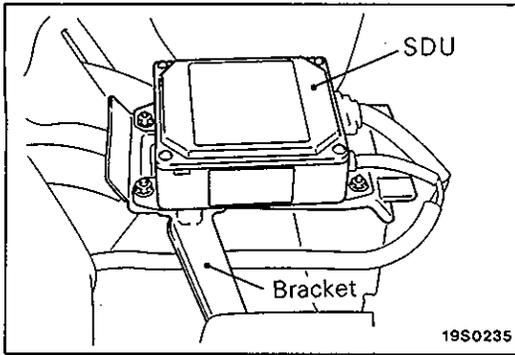
1. Replace the following parts with new ones.
  - SRS diagnosis unit (SDU) (Refer to P.52B-37.)
  - Air bag module (Refer to P.52B-40.)
  - Clock spring (Refer to P.52B-40.)
  - Steering wheel, steering column and intermediate joint (Refer to GROUP 37A – Steering Wheel and Shaft.)
2. Check harnesses for binding, connectors for damage, poor connections, and terminals for deformities. (Refer to P.52B-3.)

### When air bag does not deploy in low-speed collision.

Check the SRS components.

If the SRS components are showing any visible damage such as dents, cracks, or deformation, replace them with new ones.

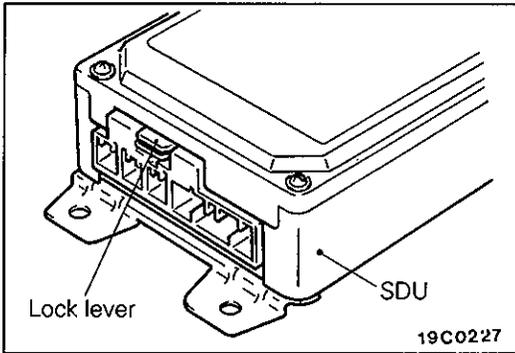
Concerning parts removed for inspection, replacement with new parts and cautionary points for working, refer to appropriate INDIVIDUAL COMPONENT SERVICE, P.52B-36.



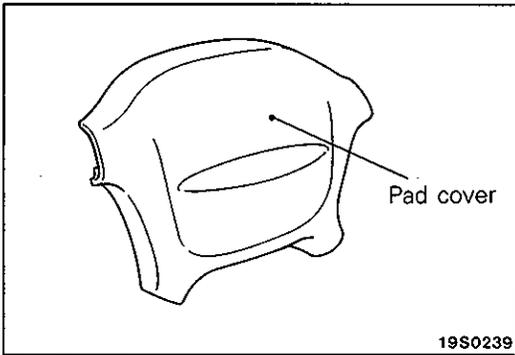
**SRS DIAGNOSIS UNIT (SDU)**

E52BF24AA

1. Check SDU case and brackets for dents, cracks or deformities.



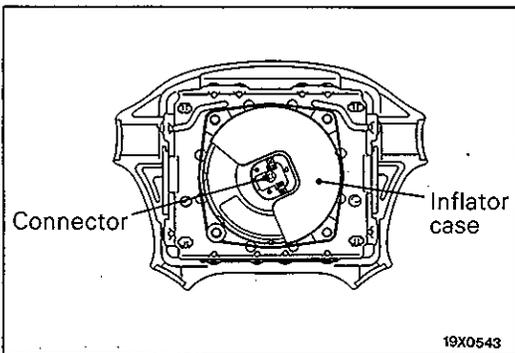
2. Check connectors and lock lever for damage, and terminals for deformities.



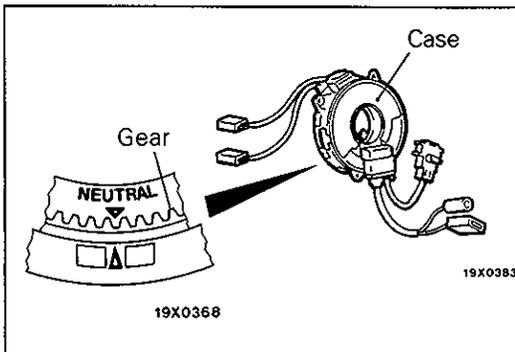
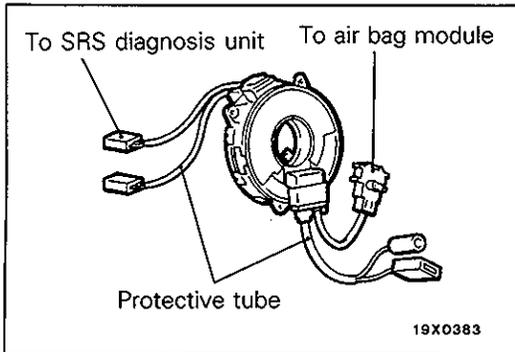
**AIR BAG MODULE**

E52BF25AA

1. Check pad cover for dents, cracks or deformities.



2. Check connector for damage, terminals deformities, and harness for binds.
3. Check air bag inflator case for dents, cracks or deformities.
4. Install air bag module to steering wheel to check fit or alignment with the wheel.



## CLOCK SPRING

E52BF26AA

1. Check clock spring connectors and protective tube for damage, and terminals for deformities.
2. Visually check the case and the gear for damage.

## STEERING WHEEL, STEERING COLUMN AND INTERMEDIATE JOINT

E52BD27AA

1. Check wiring harness (built into steering wheel) and connectors for damage, and terminals for deformities.
2. Install air bag module to check fit or alignment with steering wheel.
3. Check steering wheel for noise, binds or difficult operation and excessive free play.

## HARNESS CONNECTOR (BODY WIRING HARNESS)

E52BF28AA

Check harnesses for binding, connectors for damage, poor connections, and terminals for deformities. (Refer to P. 52B-3.)

## INDIVIDUAL COMPONENT SERVICE

E52BF40AA

If the SRS components are to be removed or replaced as a result of maintenance, troubleshooting, etc., follow each procedure (P.52B-37 – P.52B-44.)

### Caution

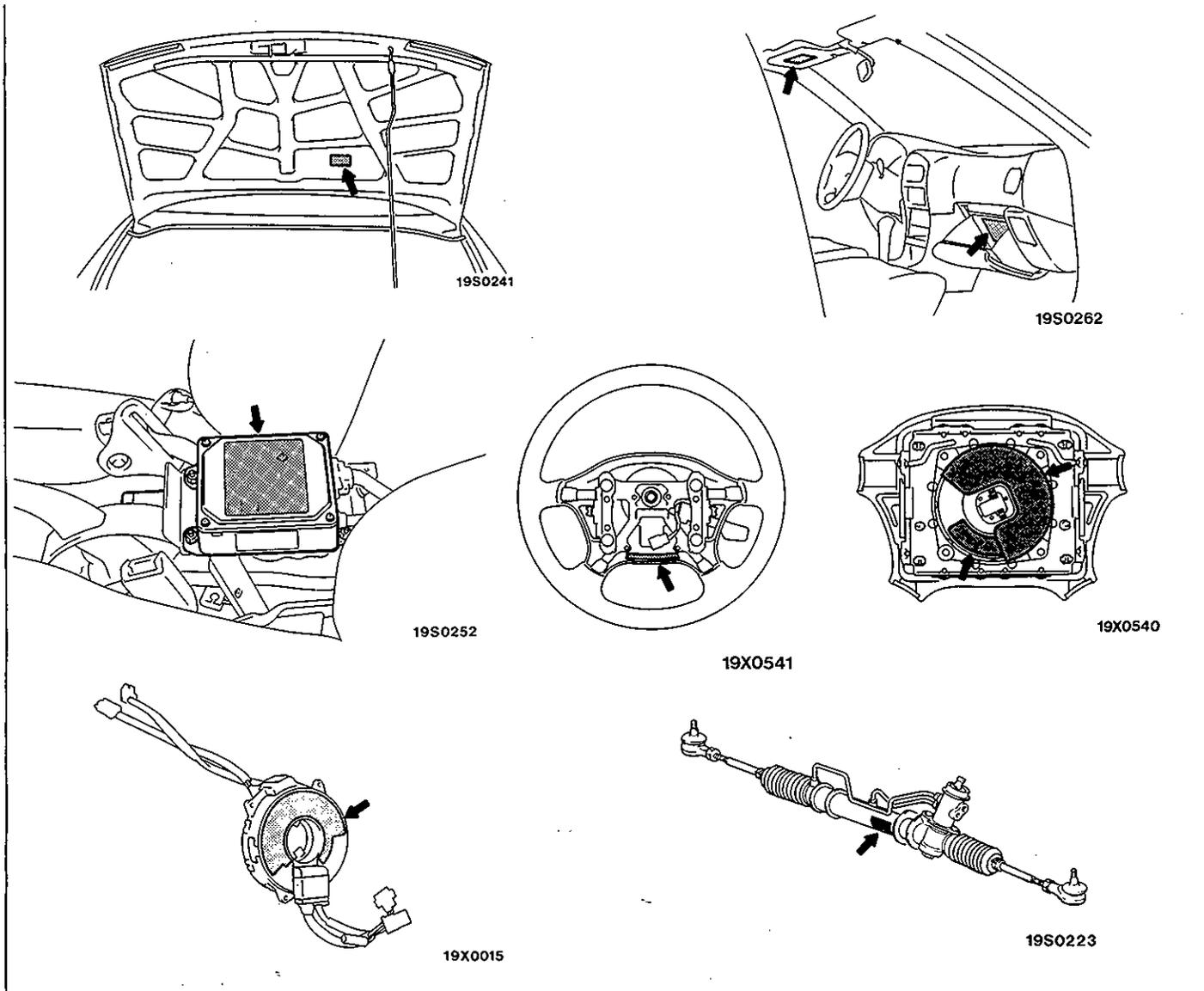
1. SRS components should not be subjected to heat over 93°C (200°F), so remove the SRS diagnosis unit and air bag module and clock spring before drying or baking the vehicle after painting. Recheck SRS system operability after re-installing them.
2. If the SRS components are removed for the purpose of check, sheet metal repair, painting, etc., they should be stored in a clean, dry place until they are reinstalled.

## WARNING/CAUTION LABELS

E52BD41AA

A number of caution labels relating to the SRS are found in the vehicle, as shown in the following illustration. Follow label instructions when servicing SRS.

If labels are dirty or damaged, replace them with new ones.



# SRS DIAGNOSIS UNIT (SDU)

E52BH00AA

## Caution

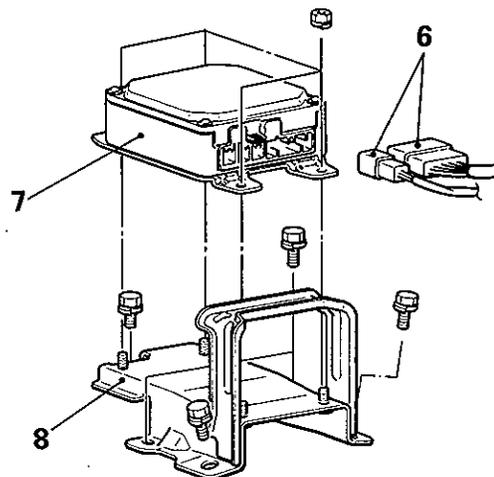
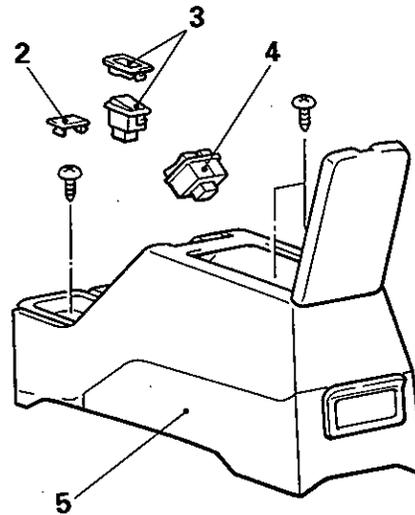
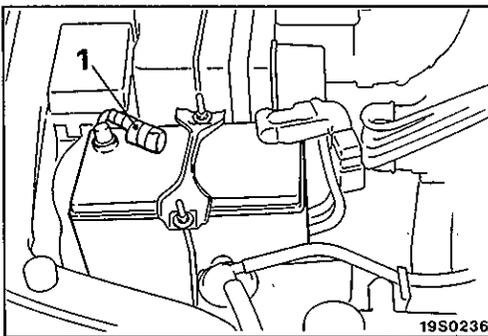
1. Never attempt to disassemble or repair the SDU. If faulty, replace it.
2. Do not drop or subject the SDU to impact or vibration.  
If denting, cracking, deformation, or rust are discovered in the SDU, replace it with a new SDU. Discard the old one.

3. After deployment of an air bag, replace the SDU with a new one.
4. Never use an ohmmeter on or near the SDU, and use only the special test equipment described on P.52B-5.

## REMOVAL AND INSTALLATION

### Pre-removal Operation

- Turn the ignition key to the "LOCK" position.

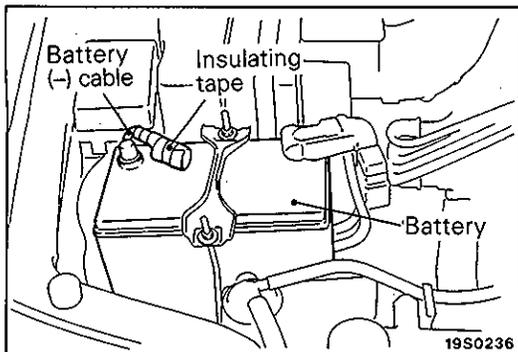


### Removal steps

- ◆◆ • Post-installation inspection
- ◆◆ 1. Connection for the negative (-) battery cable to the battery
- 2. Hole cover
- 3. Plug or POWER/ECONOMY changeover switch
- 4. Heated seat switch  
<Vehicles with heated seat>
- ◆◆ 5. Rear console box assembly
- ◆◆ 6. Connection for the SRS diagnosis unit and each harness connector
- ◆◆ 7. SRS diagnosis unit (SDU)
- 8. Bracket

19S0261

E52BH01AA



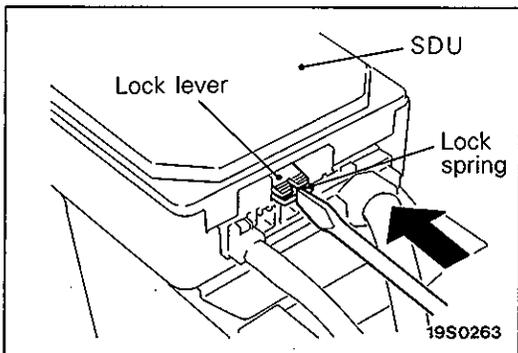
## SERVICE POINTS OF REMOVAL

### 1. DISCONNECTION OF NEGATIVE (-) BATTERY CABLE FROM THE BATTERY

Disconnect the negative battery cable and tape the terminal.

#### Caution

Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-4.)



### 6. DISCONNECTION OF SDU AND EACH HARNESS CONNECTOR

- (1) Place a flat-tipped (-) screwdriver against the lock spring at the lock lever notch and push the spring toward the unit.

#### Caution

Do not use excessive force to raise the lock lever (green).

- (2) While pushing the locks of each connector downwards, remove each connector from the SDU.

#### Caution

Because a double lock mechanism is employed for the SDU connectors, be careful not to exert undue force to remove the connectors, as this will damage them.

## INSPECTION

E52BH02AA

- Check the SDU case and brackets for dents, cracks or deformities.
- Check connectors and lock lever for damage, and terminals for deformities.

#### Caution

If a dent, cracks, deformation or rust discovered, replace the SDU with a new one.

#### NOTE

For checking of the SDU other than described above, refer to the section concerning troubleshooting. (Refer to P.52B-6.)

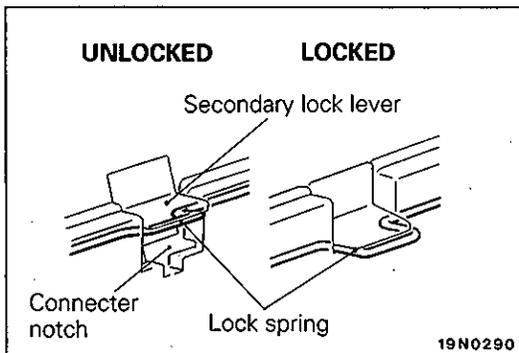
**SERVICE POINTS OF INSTALLATION**

E52BH04AA

**7. INSTALLATION OF SRS DIAGNOSIS UNIT (SDU)**

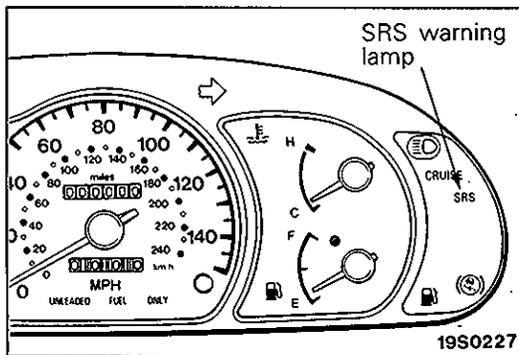
**Caution**

The SRS may not activate if SDU is not installed properly, which could result in serious injury or death to the vehicle's driver.



**6. CONNECTION OF SDU AND EACH HARNESS CONNECTION**

After connecting each harness connector securely and correctly to the SDU, be sure to press down the lock lever of the SDU.



**POST-INSTALLATION INSPECTION**

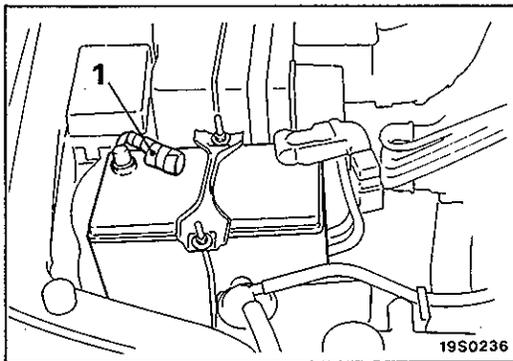
Reconnect the negative battery terminal. Turn the ignition key to the "ON" position. Does the "SRS" warning lamp illuminated for about 7 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-9.

# AIR BAG MODULE AND CLOCK SPRING

## Caution

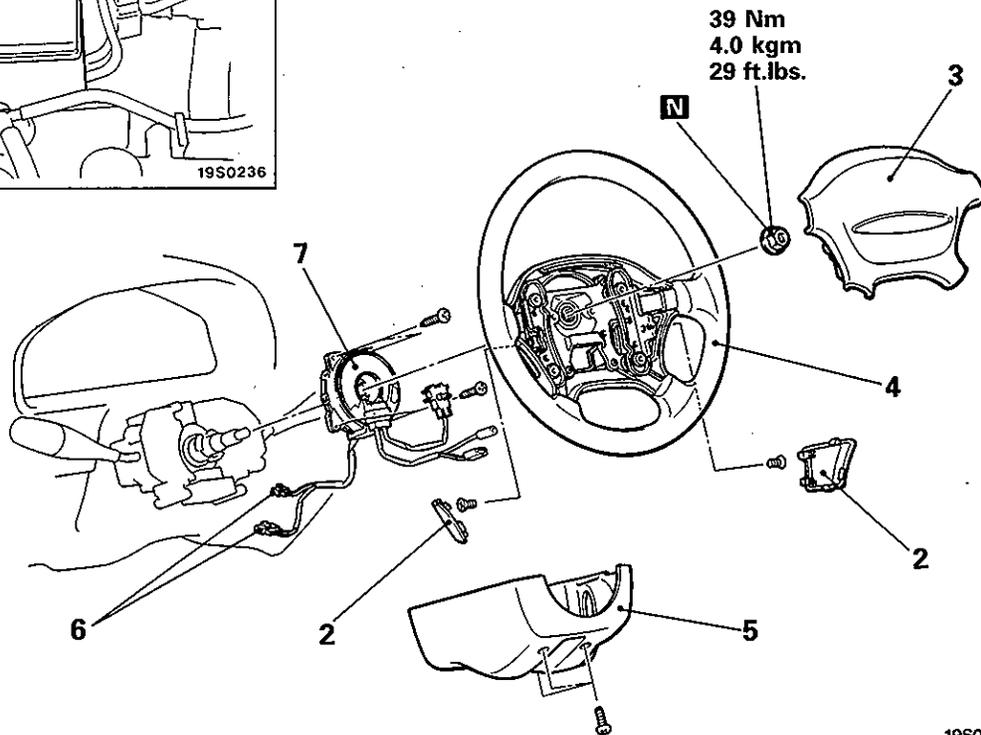
1. Never attempt to disassemble or repair the air bag module or clock spring. If faulty, replace it.
2. Do not drop the air bag module or clock spring or allow contact with water, grease or oil. Replace it if a dent, crack, deformation or rust are detected.
3. The air bag module should be stored on a flat surface and placed so that the pad surface is facing upward.
4. Do not place anything on top of it.
5. Do not expose the air bag module to temperature over 93°C (200°F).
6. After deployment of an air bag, replace the clock spring with a new one.
7. Wear gloves and safety glasses when handling an air bag that has already deployed.
8. An undeployed air bag module should only be disposed of in accordance with the procedures [P.52B-45 – P.52B-48.]

## REMOVAL AND INSTALLATION



**Pre-removal Operation**

- After setting the steering wheel and the front wheels to the straight ahead position, remove the ignition key.



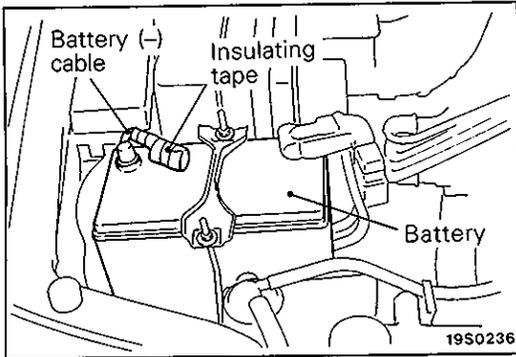
19S0228

### Clock spring removal steps

- ◆◆ ● Post-installation inspection
- ◆◆ 1. Connection for the negative (-) battery cable to the battery
- 2. Cover
- ◆◆ 3. Air bag module
- ◆◆◆◆ 4. Steering wheel
- ◆◆ 5. Column cover lower
- ◆◆ 6. Clock spring and body wiring harness connection
- ◆◆ 7. Clock spring
- ◆◆ ● Pre-installation inspection

### Air bag module removal steps

- ◆◆ ● Post-installation inspection
- ◆◆ 1. Connection for the negative (-) battery cable to the battery
- 2. Cover
- ◆◆ 3. Air bag module
- ◆◆ ● Pre-installation inspection



**SERVICE POINTS OF REMOVAL**

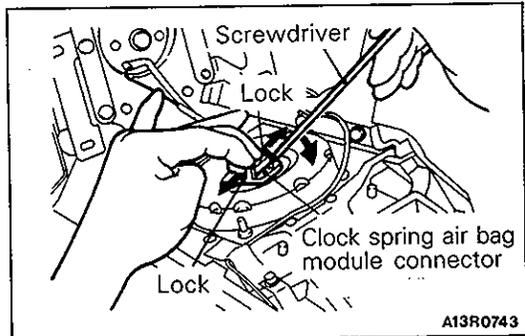
E52BI01AA

**1. DISCONNECTION OF NEGATIVE (-) CABLE FROM THE BATTERY**

Disconnect the negative battery cable and tape the terminal.

**Caution**

**Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-4.)**

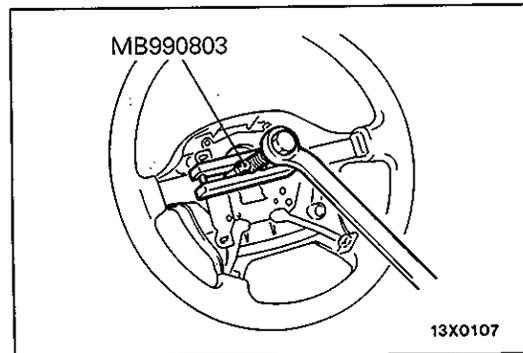
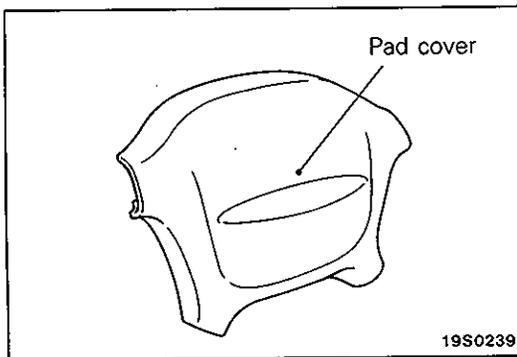


**3. REMOVAL OF AIR BAG MODULE**

- (1) Remove the air bag module mounting nut using a socket wrench from the back side.
- (2) When disconnecting the connector of the clock spring from the air bag module, press the air bag's lock toward the outer side to spread it open. Use a screwdriver, as shown in the figure at the left, to pry so as to remove the connector gently.

**Caution**

1. **When disconnecting the air bag module-clock spring connector, take care not to apply excessive force to it.**
2. **The removed air bag module should be stored in a clean, dry place with the pad cover face up.**



**4. REMOVAL OF STEERING WHEEL**

**Caution**

**Do not hammer on the steering wheel. Doing so may damage the collapsible column mechanism.**

**INSPECTION**

E52BI02AA

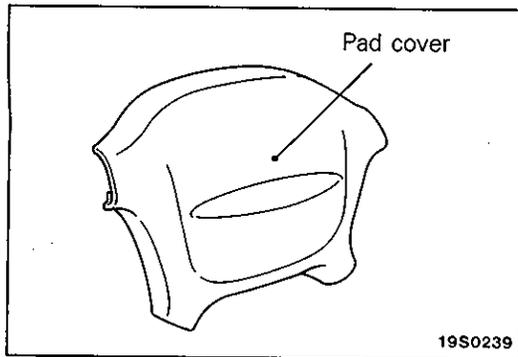
**AIR BAG MODULE**

If any improper part is found during the following inspection, replace the air bag module with a new one. Dispose of the old one according to the specified procedure: (Refer to P.52B-45.)

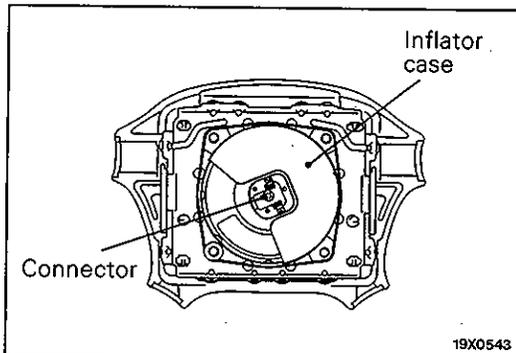
**Caution**

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

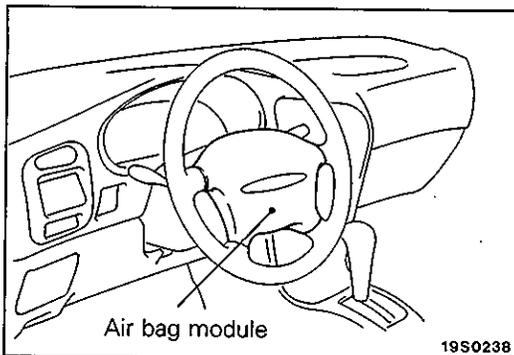
## 52B-42 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Air Bag Module and Clock Spring



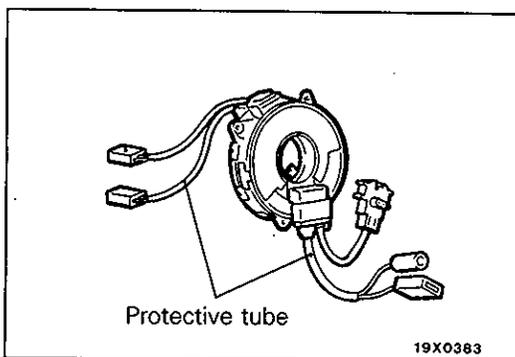
(1) Check pad cover for dents, cracks or deformities.



- (2) Check the air module for denting, cracking or deformation.
- (3) Check connectors for damage, terminals for deformities, and harness for binds.
- (4) Check air bag inflator case for dents, cracks or deformities.



(5) Install the air bag module to steering wheel to check fit or alignment with the wheel.

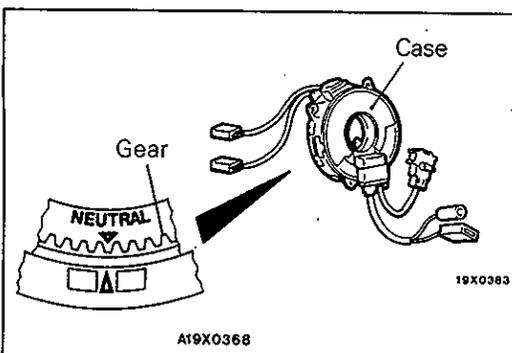


### CLOCK SPRING

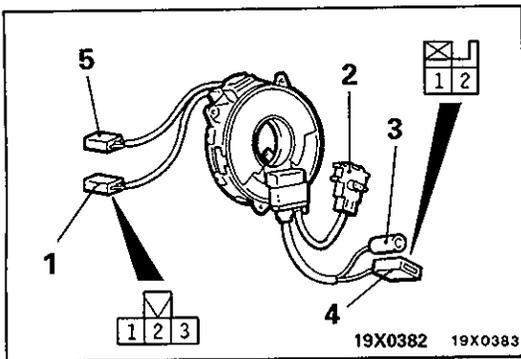
E52B10BA

If, as result of following checks, even one abnormal point is discovered, replace the clock spring with a new one.

(1) Check connectors and protective tube for damage, and terminals for deformities.



(2) Visually check the case and the gears for damage.



(3) Check for continuity between the No. 1 connector of the clock spring and connectors No. 3 and 4.

No. 1 connector			No. 3 connector	No. 4 connector	
Terminal 1	Terminal 2	Terminal 3		Terminal 1	Terminal 2
○	○	○	○	○	○
To cruise control unit	To ACC power	To horn relay	To horn switch	To cruise control switch	

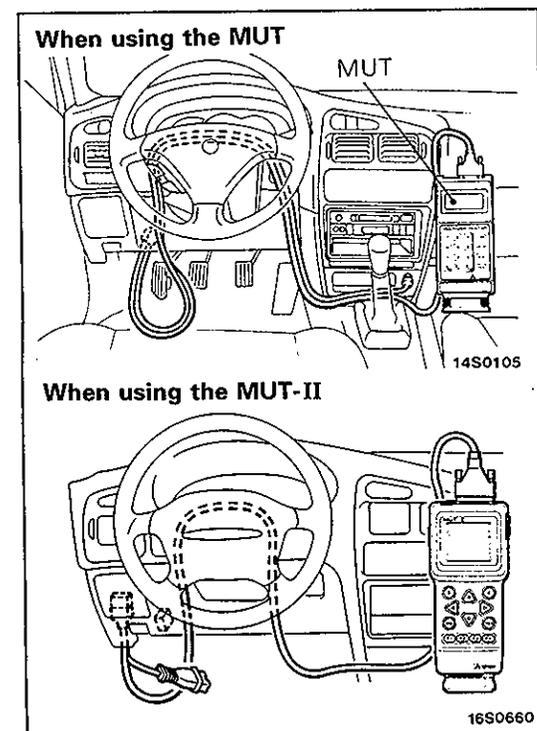
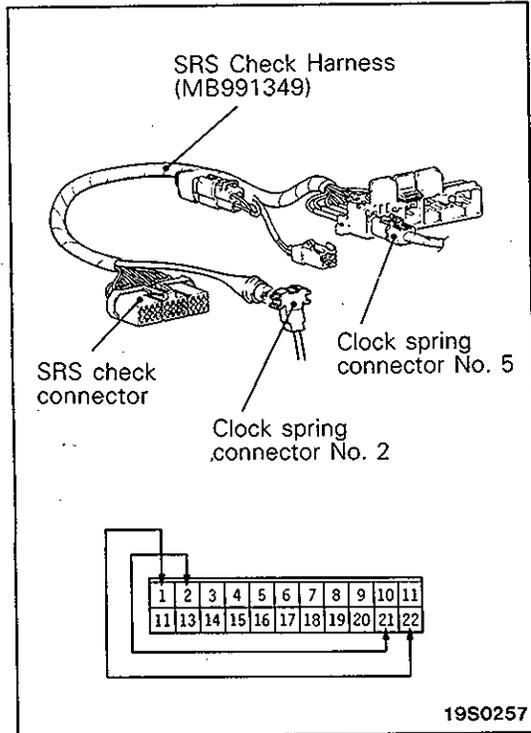
### NOTE

○—○ indicates that there is continuity between the terminals.

(4) Connect clock spring connectors Nos. 2 and 5 to the SRS Check Harness (MB991349).

(5) Measure the resistance values between pins 1 and 22 and between pins 2 and 21 of the SRS check connector, using a digital multi-meter.

**Standard value: Less than 0.4Ω**



## SERVICE POINTS OF INSTALLATION

E52B104AA

### PRE-INSTALLATION INSPECTION

(1) When installing new air bag module and clock spring, refer to "INSPECTION".

#### Caution

**Dispose of an bag module only according to the specified procedure. (Refer to P.52B-45.)**

(2) Connect the battery (-) terminal.

(3) Connect the MUT or MUT-II to the diagnosis connector located at the right side of the junction block.

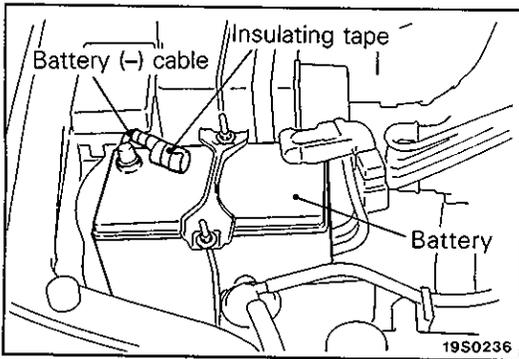
#### Caution

**Make certain that the ignition switch is OFF when the MUT or MUT-II is connected or disconnected.**

(4) Turn the ignition key to the "ON" position.

(5) Conduct self-diagnosis using the MUT or MUT-II to ensure entire SRS operates properly, except open circuit of air bag module (Diagnosis code No. 22). (Refer to P.52B-9.)

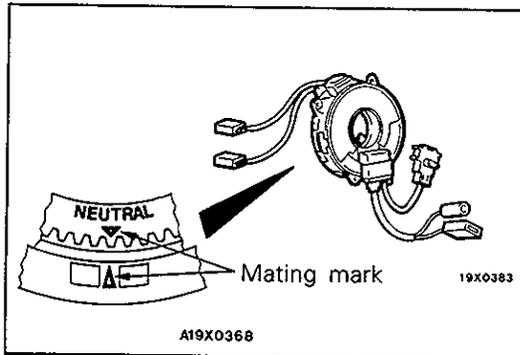
## 52B-44 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Air Bag Module and Clock Spring



- (6) Turn the ignition key to the "LOCK" position, disconnect the negative battery cable and tape the terminal.

### Caution

**Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-4.)**



### 7. INSTALLATION OF CLOCK SPRING

Align the mating mark and "NEUTRAL" position indicator of the clock spring, and, after turning the front wheels to the straight-ahead position, install the clock spring to the column switch.

### Caution

**If the clock spring's mating mark is not properly aligned, the steering wheel may not be completely rotational during a turn, or the flat cable within the clock spring may be severed, obstructing normal operation of the SRS and possibly leading to serious injury to the vehicle's driver.**

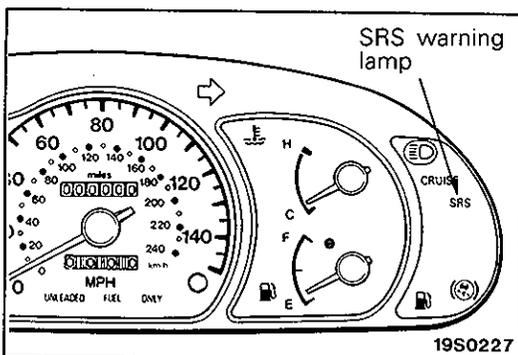
### 4. INSTALLATION OF STEERING WHEEL

- (1) Before installing the steering wheel, be sure to first turn the vehicle's front wheels to the straight-ahead position and align the mating mark and "NEUTRAL" position indicator of the clock spring.

### Caution

**Be sure when installing the steering wheel, that the harness of the clock spring does not become caught or tangled.**

- (2) After clamping, turn the steering wheel all the way in both directions to confirm that steering is normal.



### POST-INSTALLATION INSPECTION

- (1) After installing the clock spring, the steering wheel, the column covers and the air bag module, check steering wheel of noise, binds or difficult operation.
- (2) Reconnect the negative battery terminal. Turn the ignition key to the "ON" position. Does the "SRS" warning lamp illuminate for about 7 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-9.

## AIR BAG MODULE DISPOSAL PROCEDURES

E52BF50AA

Before either disposing of a vehicle equipped with an air bag, or prior to disposing of the air bag module,

be sure to first follow the procedures described below to and deploy the air bag.

### UNDEPLOYED AIR BAG MODULE DISPOSAL

E52BF51AA

#### Caution

1. **If the vehicle is to be scrapped, or otherwise disposed of, deploy the air bag inside the vehicle. If the vehicle will continue to be operated and only the air bag module is to be disposed of, deploy the air bag outside the vehicle.**
2. **Since a large amount of smoke is produced when the air bag is deployed, select a well-ventilated site. Moreover, never attempt the test near a smoke sensor.**
3. **Since there is a loud noise when the air bag is deployed, avoid residential areas whenever possible. If anyone is nearby, give warning of the impending noise.**

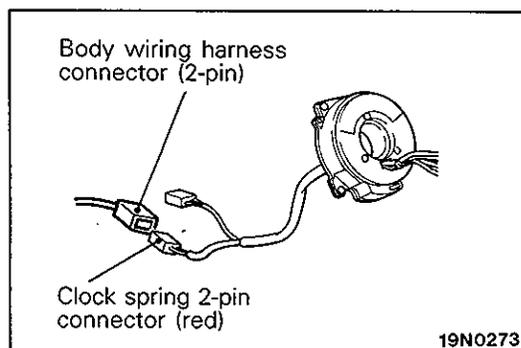
### DEPLOYMENT INSIDE THE VEHICLE (when disposing a vehicle)

E52BF51BA

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

#### Caution

**Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-4.)**

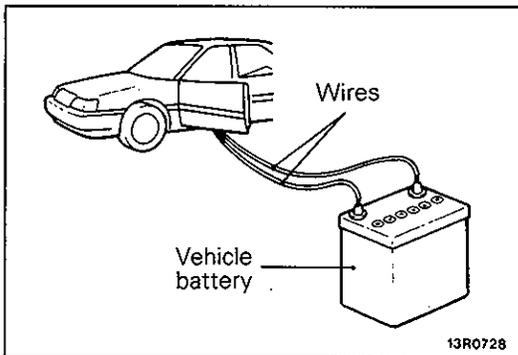
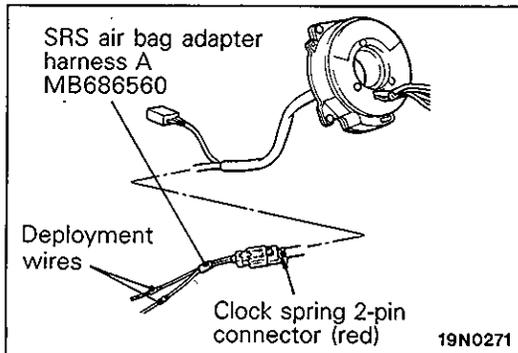
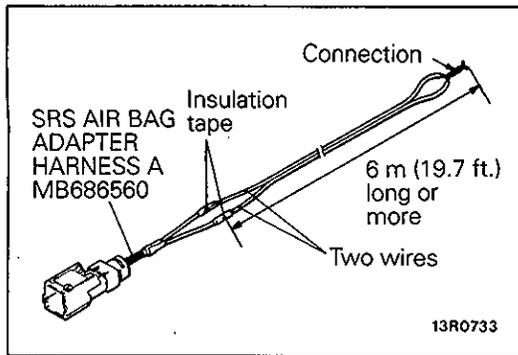


- (3) Remove the steering column cover lower.
- (4) Remove the connection between the clock spring 2-pin connector (red) and the body wiring harness connector.

#### NOTE

If the clock spring connector is disconnected from the body wiring harness, both electrodes of the clock spring connector will be automatically shorted to prevent unintended deployment of the air bag due to static electricity, etc.

## 52B-46 SUPPLEMENTAL RESTRAINT SYSTEM (SRS) – Air Bag Module Disposal Procedures



- (5) Connect two wires, each six meters (19.7 ft.) long or more, to the two leads of SRS AIR BAG ADAPTER HARNESS A and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected deployment of the air bag.

- (6) Connect the clock spring 2-pin connector (red) to SRS air bag adapter harness A and pass the deployment wires out of the vehicle.

- (7) At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (removed from the vehicle) to deploy the air bag.

### Caution

1. Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.
2. The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See the Deployed Air Bag Module Disposal Procedures (P.52B-48) for post-deployment handling instructions.
3. If the air bag module fails to deploy when the procedures above are followed, do not go near the module.

Contact your local distributor.

- (8) Dispose of the air bag module after deployment according to the Deployed Air Bag Module Disposal Procedures. (Refer to P.52B-48.)

### DEPLOYMENT OUTSIDE THE VEHICLE

E52BF51CA

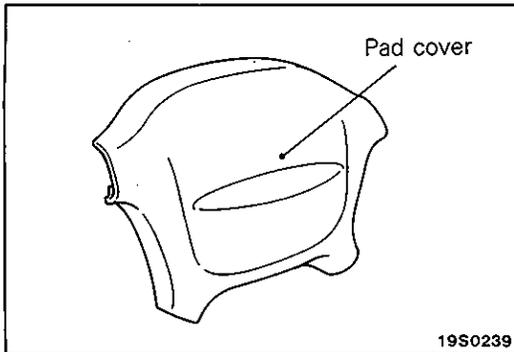
#### Caution

1. Should be carried out in a wide, flat area at least 6 m (19.7 ft.) away from obstacles and other people.
2. Do not perform deployment outside, if a strong wind is blowing, and if there is even a slight breeze, the air bag module should be placed and deployed downwind from the battery.

- (1) Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.

**Caution**

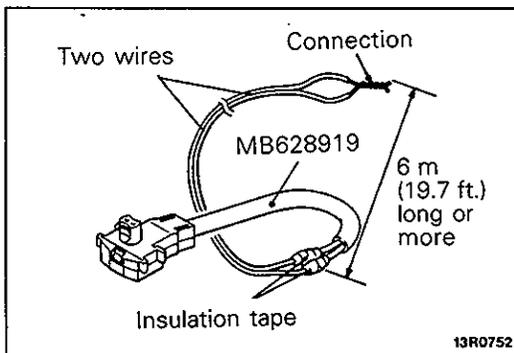
**Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-4.)**



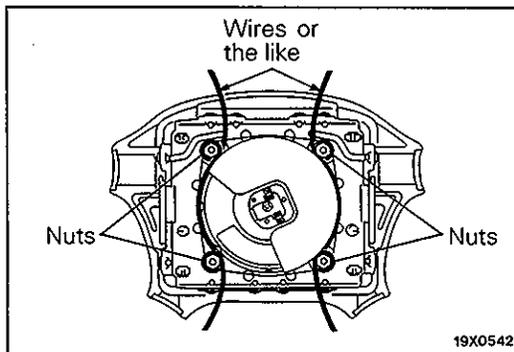
- (2) Remove the air bag module from the vehicle. (Refer to P.52B-40.)

**Caution**

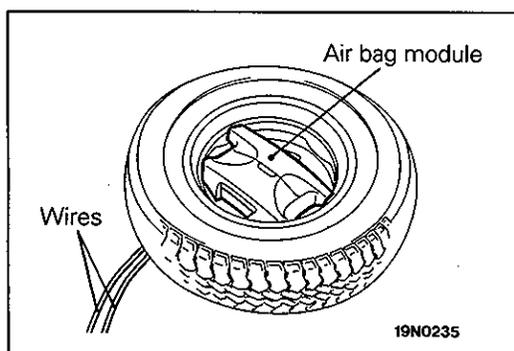
**The air bag module should be stored on a flat surface and placed so that the pad cover face up. Do not place anything on top of it.**



- (3) Connect two wires each six meters (19.7 feet) long or more, to the two leads of SRS AIR BAG ADAPTER HARNESS B, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected deployment of the air bag.



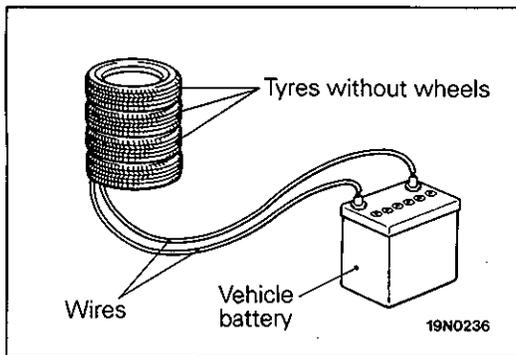
- (4) Install nuts that are no longer needed to the four bolts on the rear side of the air bag module, and tie some thick wire to secure to the wheel.
- (5) Take the SRS air bag adaptor harness B that is connected to the wires, pass it beneath the old tyre that is attached to the wheel, and connect it to the air bag module.



- (6) Insert that air bag module into the wheel on which the old tyre has been installed, and secure it with the wires that are tied to the bolts, with the air bag facing upward.

**Caution**

**Leave some space below the wheel for the adaptor harness. If there is no space, the reaction when the air bag deploys could damage the adaptor harness.**



- (7) Place three old tyres with no wheels on top of the tyre secured to the air bag module.
- (8) At a location as far away from the air bag module as possible, and from a shielded position, if possible, disconnect the two connected wires from each other and connect them to the two terminals of the battery (removed from the vehicle) to deploy the air bag.

### Caution

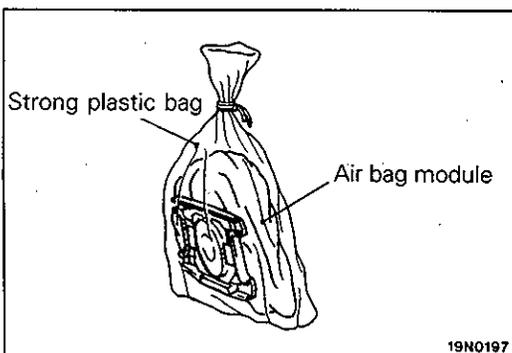
1. Before deployment, check carefully to be sure that no one is nearby.
  2. The inflator will be quite hot immediately following deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See the Deployed Air Bag Module Disposal Procedures (as shown below) for post-deployment handling instructions.
  3. If the air bag module fails to deploy when the procedures above are followed, do not go near the module. Contact your local distributor.
- (9) Dispose of the air bag module after deployment according to the Deployed Air Bag Module Disposal Procedures.

## DEPLOYED AIR BAG MODULE DISPOSAL PROCEDURES

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After deployment, the air bag module should be disposed of in the same manner as any other scrap parts, except that the following points should be carefully noted during disposal.

- (1) The inflator will be quite hot immediately following deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it.
- (2) Do not put water or oil on the air bag after deployment.
- (3) There may be, adhered to the deployed air bag module, material that could irritate the eyes and/or skin, so wear gloves and safety glasses when handling a deployed air bag module. IF DESPITE THESE PRECAUTIONS, THE MATERIAL DOES, GET INTO THE EYES OR ON THE SKIN, IMMEDIATELY RINSE THE AFFECTED AREA WITH A LARGE AMOUNT OF CLEAN WATER. IF ANY IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION.



- (4) Tightly seal the air bag module in a strong plastic bag for disposal.
- (5) Be sure to always wash your hands after completing this operation.