GROUP 52A

INTERIOR

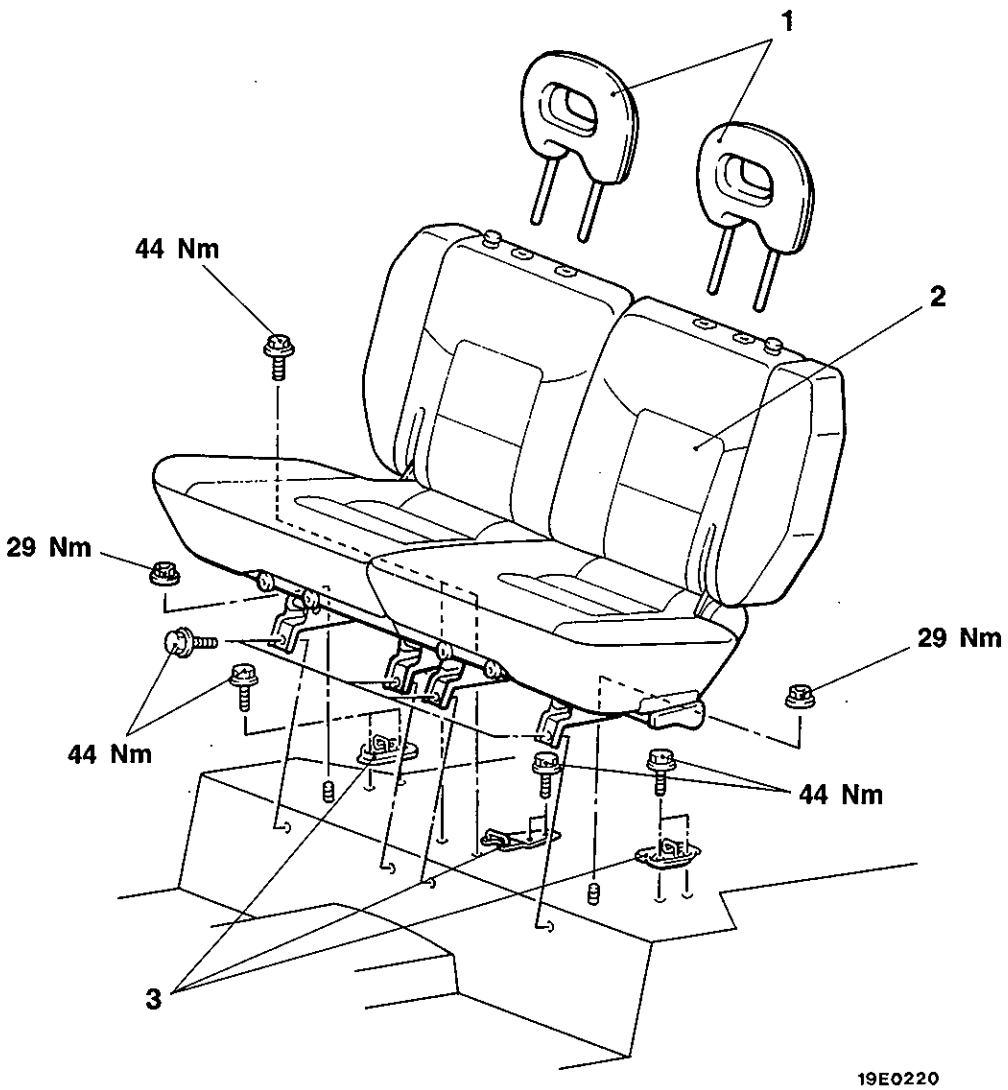
GENERAL

OUTLINE OF CHANGES

- A split type rear seat has been used <Long body>. With this, the service procedure has been added.
- The inner seat belt and center seat belt have been changed <Vehicles with rear split seat – Long body>. With this, the removal and installation have been changed.

REAR SEAT

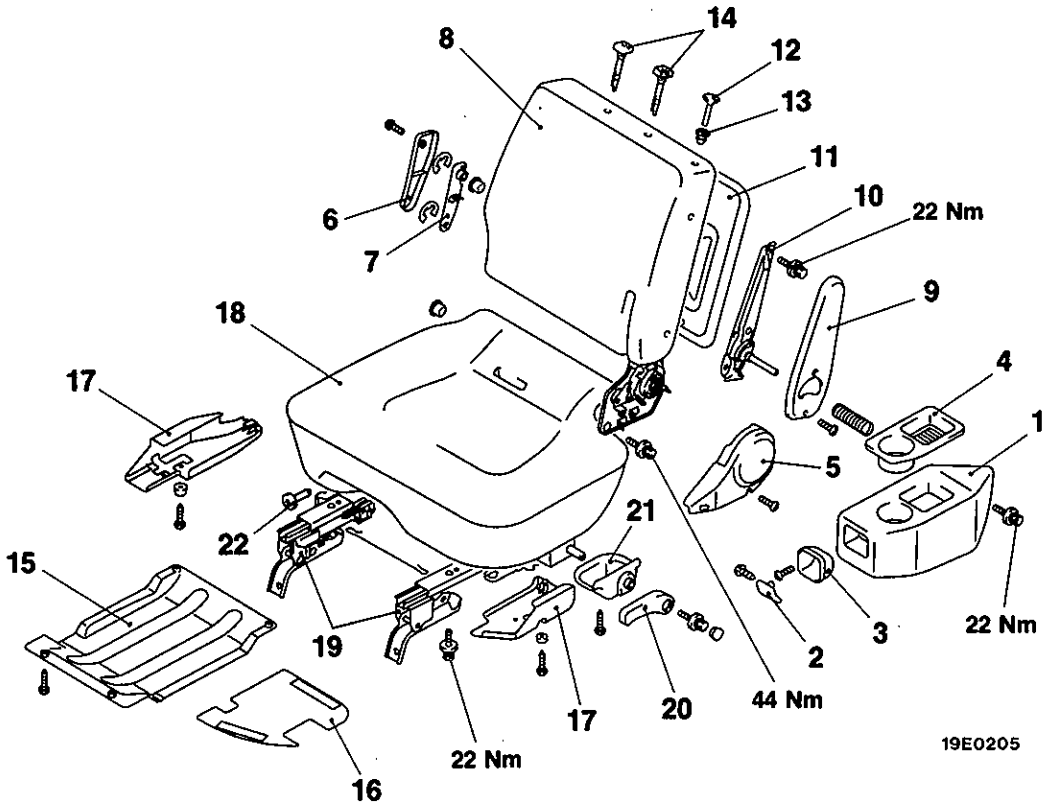
REMOVAL AND INSTALLATION



Removal steps

1. Headrestraint
2. Rear seat assembly
3. Striker

DISASSEMBLY AND REASSEMBLY

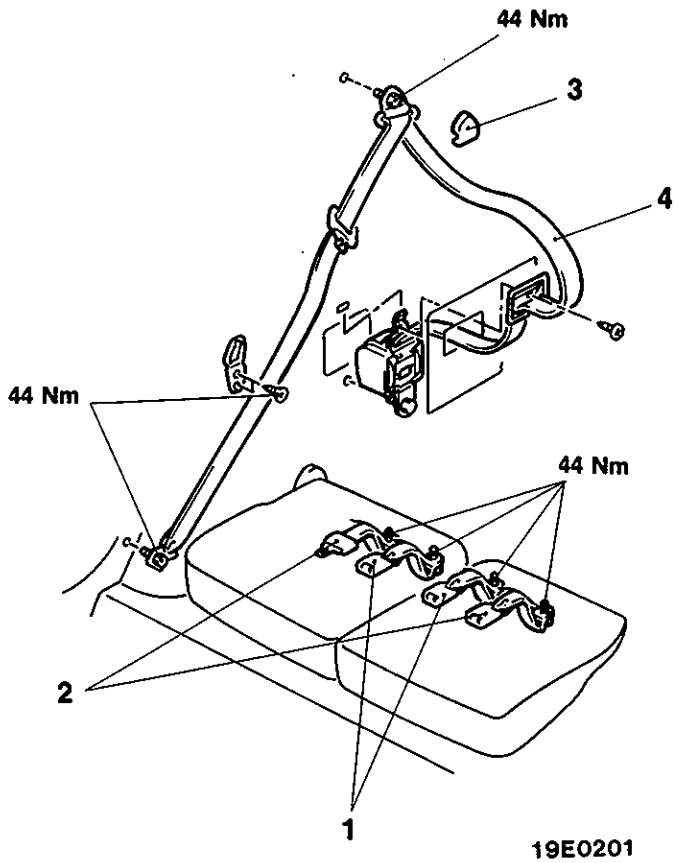


Disassembly steps

1. Side back assembly
2. Side back knob
3. Side back garnish
4. Side back tray
5. Reclining cover
6. Hinge cover
7. Hinge plate assembly
8. Seat back assembly
9. Rail cover
10. Side back hinge bracket
11. Seat back trim
12. Knob
13. Knob guide
14. Headrestraint guide
15. Cushion board
16. Cushion mat
17. Seat adjuster cover
18. Seat cushion assembly
19. Seat adjuster
20. Knob
21. Cover
22. Headrestraint guide

REAR SEAT BELT

REMOVAL AND INSTALLATION



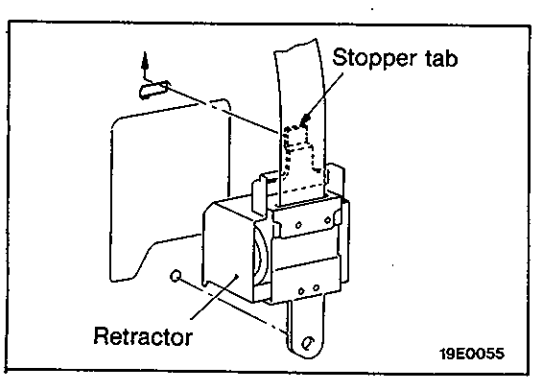
- Seat cushion board (Refer to P.52A-2.)

1. Inner seat belt assembly
2. Centre seat belt assembly

Outer seat belt assembly removal steps

3. Sash guide cover
- Quarter trim lower [Refer to BASIC MANUAL (Looseleaf edition) GROUP 52A – Trims.]

▶A◀ 4. Outer seat belt assembly



INSTALLATION SERVICE POINT

▶A◀ OUTER SEAT BELT ASSEMBLY INSTALLATION

Securely insert the retractor stopper tab into the body hole.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

CONTENTS

CAUTION

- **Carefully read and observe the information in the 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.) section.**
- **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 (52B-20.) for the components involved.**
- **If you have any questions about the SRS, please contact your local distributor.**

GENERAL

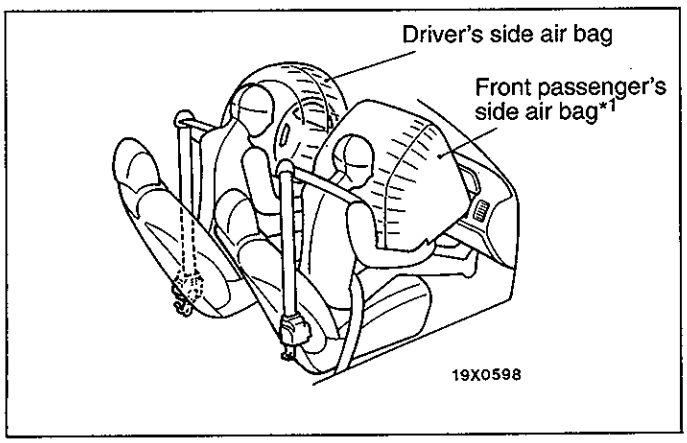
OUTLINE OF CHANGE

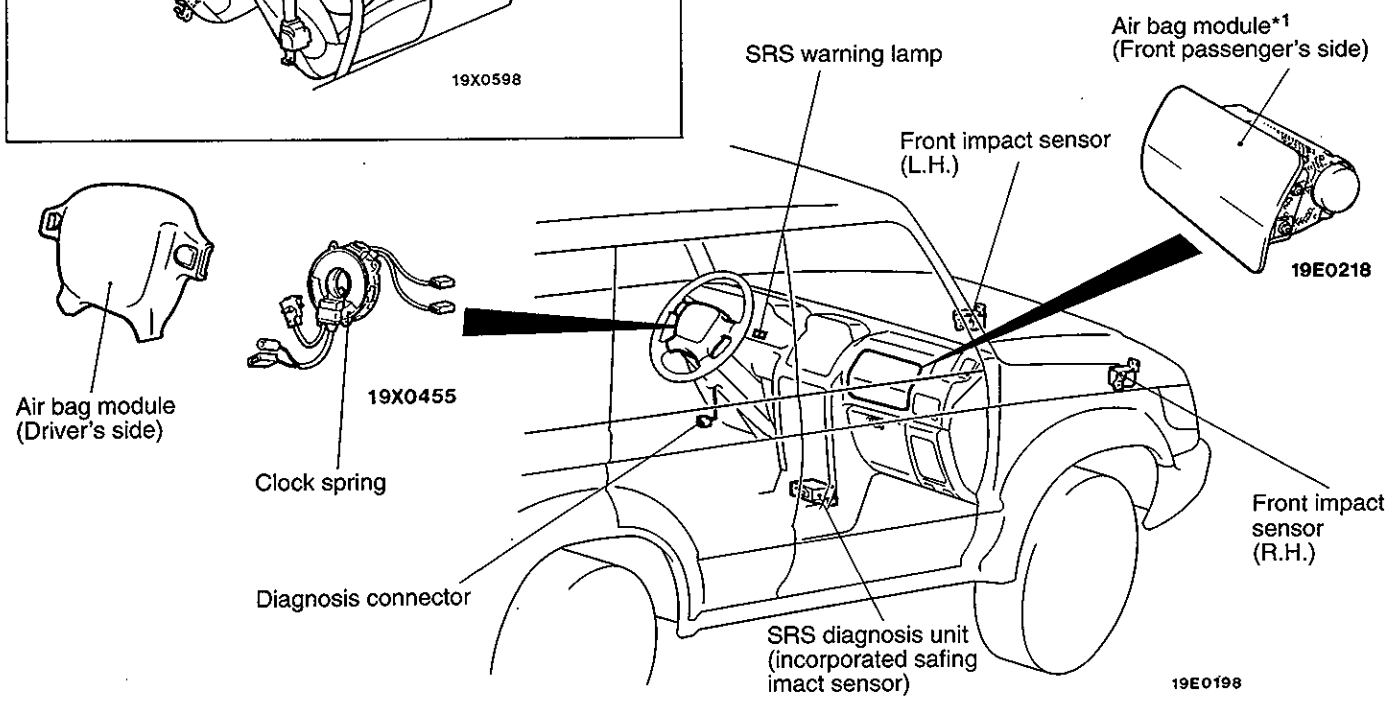
- Service points of removal and installation and inspection for the front passenger's supplemental restraint system (SRS) have been added.

GENERAL INFORMATION

The Supplemental Restraint System (SRS) is designed to supplement the seat belt to help reduce the risk or severity of injury to the driver and front passenger*1 by activating and deploying driver's side and front passenger's side*1 air bag in certain frontal collisions.
The SRS consists of : left front and right front impact sensors (located on the radiator support panels); air bag modules for the driver's seat (located in the centre of steering wheel) and for the front passenger*1 seat (located above the glove box). Each module contains a folded air bag and an inflator unit. The SRS also contains: an SRS Diagnosis Unit with safing impact sensor (located under the computer cover which monitors the system): an SRS warning lamp to indicate the operational status of the SRS (located on the instrument panel): a clock spring interconnection (located within the steering column): system wiring and wiring connectors.
The SRS is designed so that the air bag will deploy when the safing sensor, plus either or both of the left front and right front impact sensors simultaneously activate while the ignition "ON" is switched. In addition, the SRS diagnosis unit (SDU) has the following functions.

- A backup function (charging condenser for the power supply) for cases when there is a malfunction of the power supply when the SRS air bag is deployed (during an impact).
- A voltage build-up function (DC/DC converter circuit) for cases when there is a drop in system voltage.
- A self-diagnosis function to further improve the degree of safety and reliability.





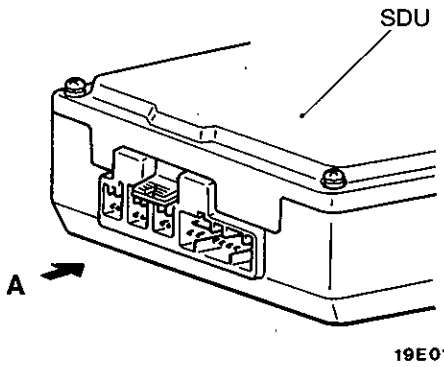
SERVICE PRECAUTIONS

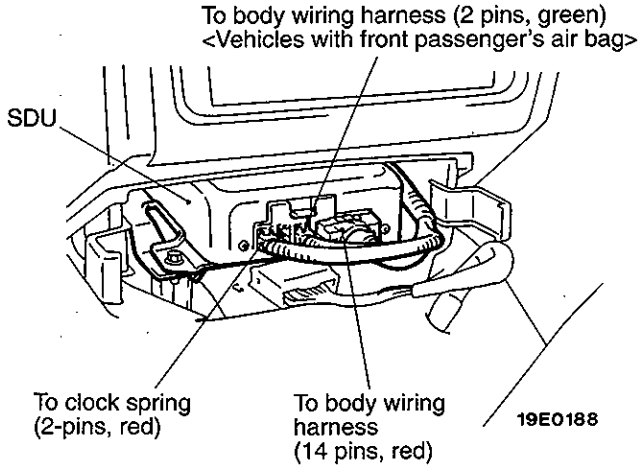
1. In order to avoid injury to yourself or others from accidental deployment of the air bag during servicing, read and carefully follow all the precautions and procedures described in this manual.
2. Do not use any electrical test equipment on or near SRS components, except those specified on P52B-6.
   Never use an analogue ohmmeter.
3. **Never Attempt to Repair the Following Components:**
   - Front Impact Sensors
   - SRS Diagnosis Unit (SDU)
   - Clock Spring
   - Air Bag Module (Driver's side or front passenger's side*1)

   If any of these components are diagnosed as faulty, they should only be replaced, in accordance with the INDIVIDUAL COMPONENTS SERVICE procedures in this manual.
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	Dash wiring harness → Clock spring	Correct or replace each wiring harness. Replace clock spring
2			
5*1	2 pins, green	Dash wiring harness → Air bag module (Front passenger's side)	Correct or replace each wiring harness
6*1			
7 and 8	14 pins, red	–	–
9		Dash wiring harness → Diagnosis connector	Correct or replace each wiring harness
10		Dash wirng harness → Control wiring harness → Dash wiring harness → Ignition switch (ST)	
11		Dash wiring harness → Junction block (fuse No. 18)	
12		Dash wiring harness → Junction block (fuse No. 12)	
13		Dash wiring harness → Instrument panel wiring harness → SRS warning lamp	
14			
16		Dash wiring harness → Front wiring harness → Front impact sensor (LH)	Replace with sensor cable*2
17			
15		Dash wiring harness → Front wiring harness → Front impact sensor (RH)	
18			
19		Dash wiring harness → Earth	Correct or replace dash wiring harness
20			

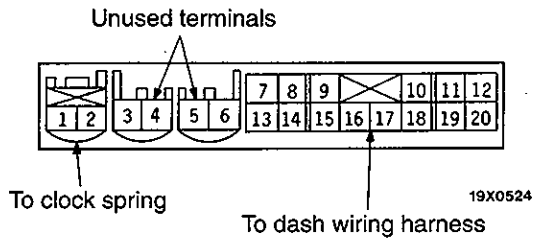
NOTE
(1) *1: Vehicles with front passenger's air bag <L.H. drive vehicles only>
(2) The sensor cable marked with*2 is available as service part.
(3) The sensor cable used as a replacement part is routed along the dash wiring harness and front wiring harness.



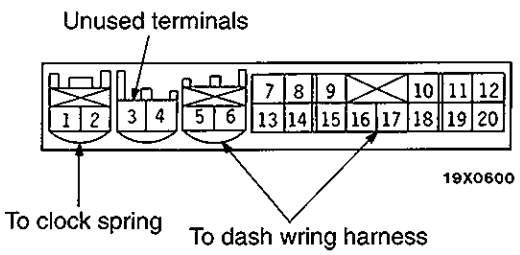


View A

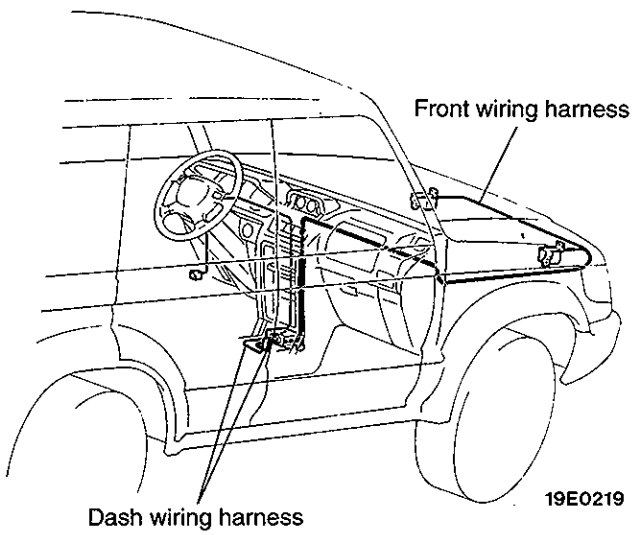
<Vehicles without front passenger's air bag>



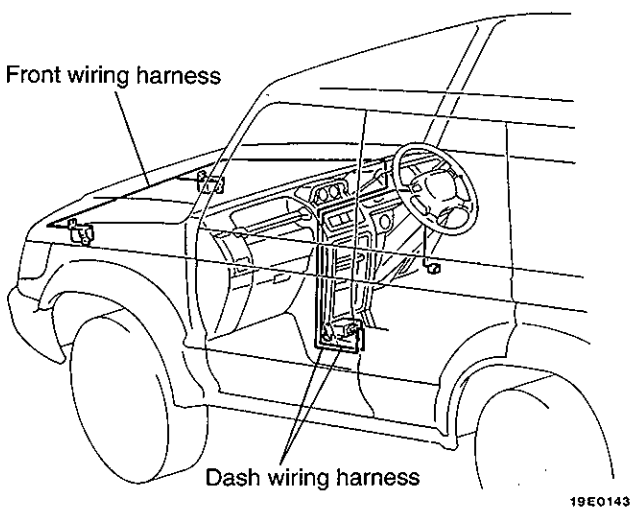
<Vehicles with front passenger's air bag>

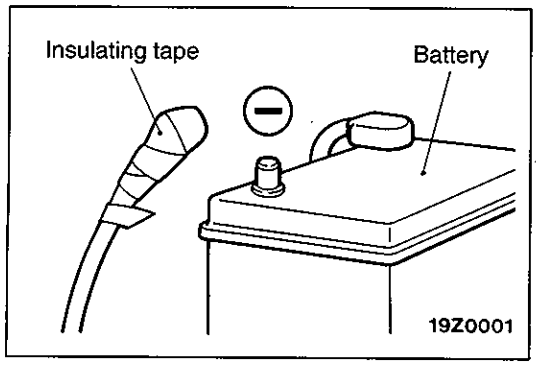


<L.H. drive vehicles>

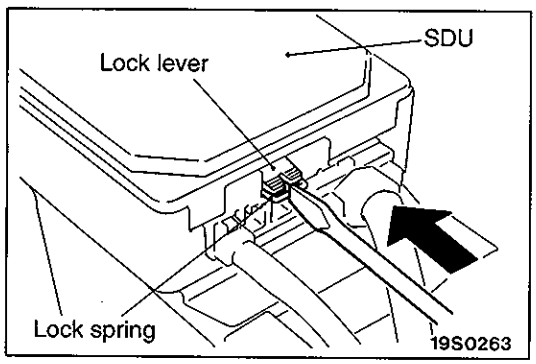


<R.H. drive vehicles>





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.**

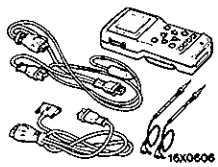
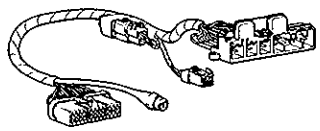
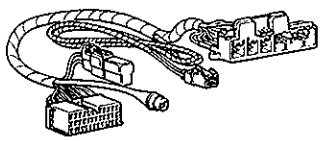
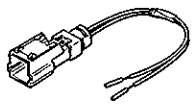


6. To unlock the SDU connector, place a flat-tipped screwdriver against the lock spring at the lock lever notch and push the spring toward the unit. In this case, do not force the lock lever up.

7. SRS components should not be subjected to heat over 93°C, so remove the front impact sensors, SRS diagnosis unit, air bag module and clock spring before drying or baking the vehicle after painting.
8. Whenever you finish servicing the SRS, erase the diagnosis codes and check the SRS warning lamp operation to make sure that the system functions properly. (Refer to P.52B-7)
9. Make certain that the ignition switch is OFF when the MUT-II is connected or disconnected.
10. 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.

SPECIAL TOOLS

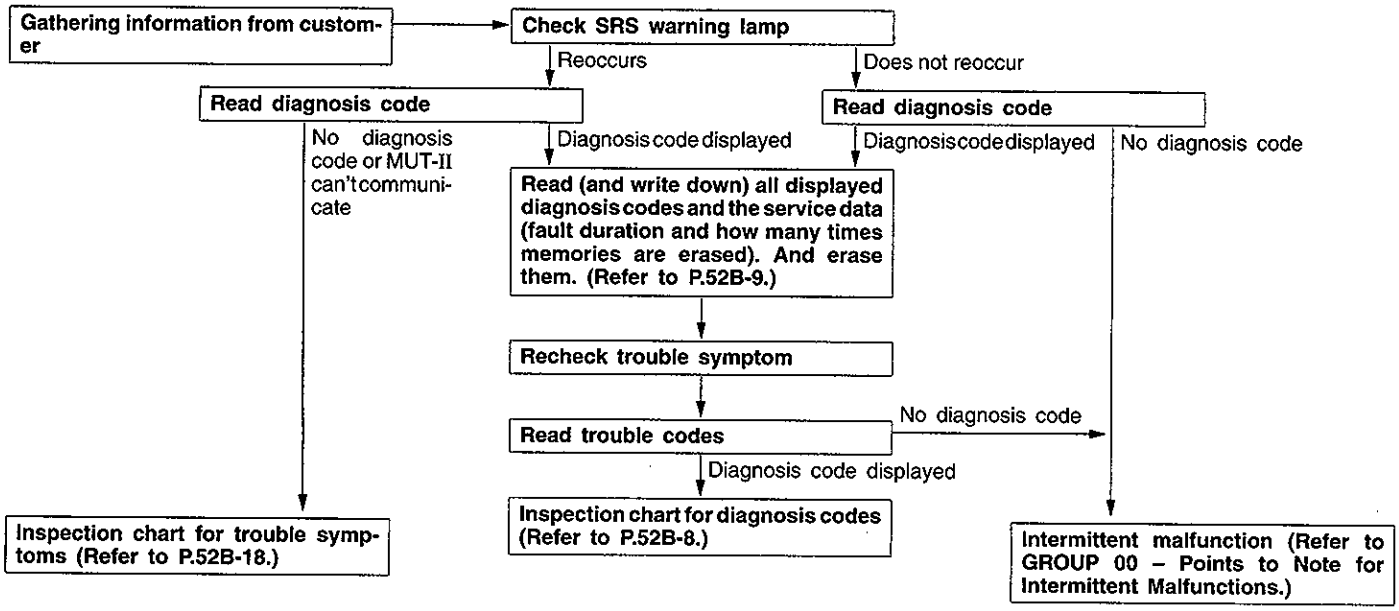
Tool	Number	Name	Use
 16X0606	MB991502	MUT-II sub assembly	• Reading diagnosis codes • Erasing diagnosis code • Reading trouble period • Reading erase times
 16X0607	–	ROM pack	
	MB991349	SRS Check Harness	• Checking the SRS electrical circuitry with a digital multi-meter
	MB991530	SRS Check Harness	• Checking the SRS electrical circuitry with a digital multi-meter <Vehicles with front passenger's air bag>
 13R0732	MB686560	SRS air bag adapter harness A	• Deployment of air bag module inside the vehicle

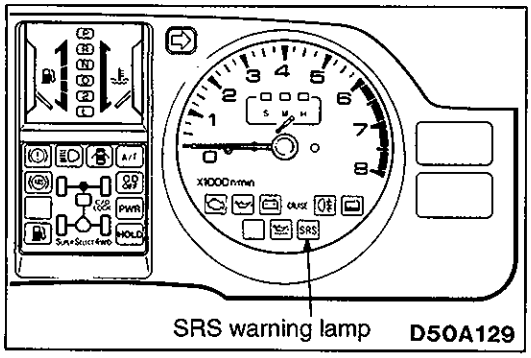
TEST EQUIPMENT

Tool	Name	Use
 13R0746	Digital multi-meter	Checking the SRS electrical circuitry [Use a multi-meter for which the maximum test current is 2 mA or less at the minimum range of resistance measurement]

TROUBLESHOOTING

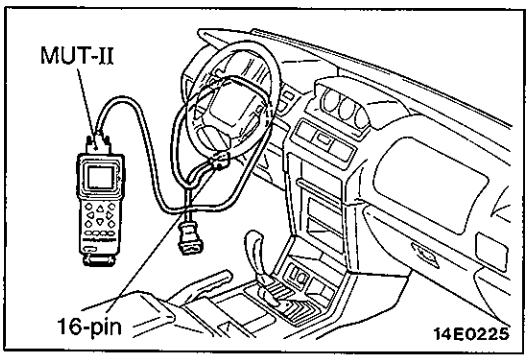
1. STANDARD FLOW OF DIAGNOSTIC TROUBLESHOOTING





2. "SRS" WARNING LAMP CHECK

Turn the ignition with the key "ON" position. Does the "SRS" warning lamp illuminate for about 7 seconds, turn OFF and then remain extinguished for at least 45 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-8.



3. DIAGNOSIS CODE READING

(1) Connect the MUT-II to the diagnois connector located at the right or left side of the junction block.
(2) Read the service date (fault duration and how many times memories are erased) using the MUT-II.

NOTE
1. Maximum stored period: 9999 minutes (approximately 7 days)
2. Maximum number of times to be stored: 250

4. DIAGNOSIS CODES ERASING METHOD

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

5. INSPECTION CHART FOR DIAGNOSIS CODES

Inspect according to the inspection chart that is appropriate for the malfunction code.

Code No.	Diagnostic item		Reference page
11	Front impact sensor system		52B-9
12			
13			
21	Driver's side air bag module (squib) system		52B-10
22			
24*3	Front passenger's side air bag module (squib)		52B-12
25*3			
31	SDU capacitor system		52B-12
32			
33*2	Cranking signal system		52B-13
34*2	Connector lock system		52B-13
41*1, *2	IG_1 (A) power circuit system		52B-14
42*1, *2	IG_1 (B) power circuit system		52B-15
43	SRS warning lamp drive circuit system	Lamp does not illuminate*2	52B-16
		Lamp does not switch off	52B-17
44	SDU warning lamp drive circuit system		52B-17
45	SDU non-volatile memory (EEPROM) and A/D converter system		52B-17

NOTE

*1: If the vehicle condition returns to normal for a continuous period of 5 ± 0.2 seconds, the diagnostic trouble code will be automatically erased, and the SRS warning lamp will return to normal.

*2: If the vehicle condition returns to normal, the diagnosis code will be automatically erased, and the SRS warning lamp will return to normal.
If the vehicle has a discharged battery it will store the fault codes 41 or 42. When these diagnosis codes are displayed, check the battery.

*3: Vehicles with front passenger's air bag.

INSPECTION PROCEDURE CLASSIFIED BY DIAGNOSIS CODES

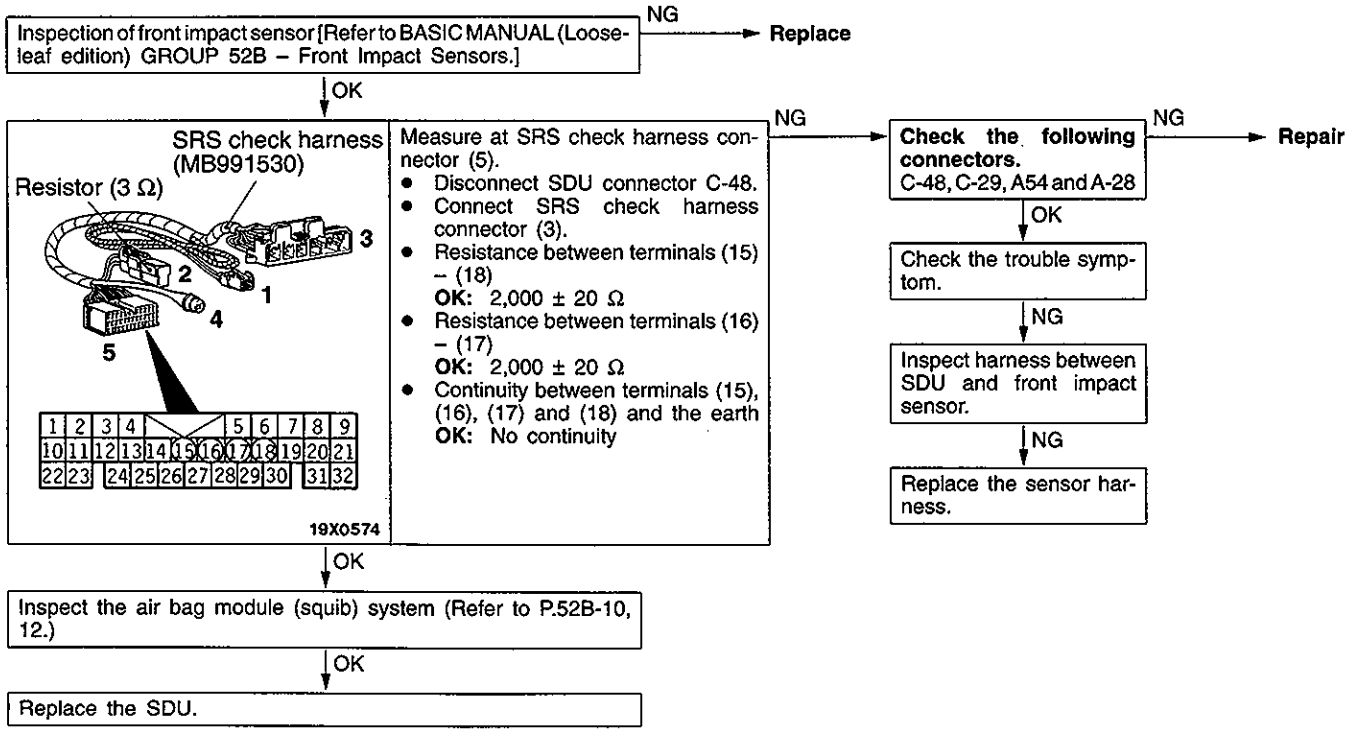
Code No. 11, 12 or 13 Front impact sensor system	Probable cause
(1) These diagnosis codes are output if there is abnormal resistance between the input terminals of the SDU front impact sensor. Refer to table 1 for the conditions for output of each diagnosis code. (2) Diagnosis codes 11, 12 and 13 are sometimes generator in combination with diagnosis codes relating to the air bag module (squib) (code Nos. 21, 22), but sometimes only one may be output instead of both being memorized. Because of this, the air bag module should also be inspected at the same time. Refer to table 2 for the failure mode combinations.	• Malfunction of front impact sensor • Malfunction of harnesses or connectors • Malfunction of SDU

TABLE 1: CONDITIONS FOR OUTPUT OF EACH DIAGNOSIS CODE

Code No.	Trouble Symptom
11	• Short in front impact sensor of harness short • Short in front impact sensor or air bag module (squib) harnesses leading to the vehicle body earth • Short in front impact sensor or air bag module (squib) harnesses leading to the power supply
12	• Open circuit in either left or right impact sensor or open harness • Short in front impact sensor or air bag module (squib) harnesses leading to the power supply
13	• Open circuit in both left and right front impact sensors or open harness • Short in front impact sensor or air bag module (squib) harnesses leading to the power supply

TABLE 2: FAILURE MODE COMBINATIONS

Failure modes		Front impact sensor short	Front impact sensor open circuit (1 sensor)	Front impact sensor open circuit (2 sensors)
Driver's air bag module (squib)	Short	11 or 21	12 or 21	13 or 21
	Open circuit	11 or 22	12 or 22	13 or 22
Front passenger's air bag module (squib)	Short	11 or 24	12 or 24	13 or 24
	Open circuit	11 or 25	12 or 25	13 or 25



Code No. 21 or 22 Driver's air bag module (squib) system	Probable cause
(1) These diagnosis codes are output if there is abnormal resistance between the input terminals of the driver's air bag module (squib). Refer to table 1 for the conditions for output of each diagnosis code. (2) Diagnosis codes 21 and 22 are sometimes generated in combination with diagnosis codes relating to the front impact sensor (code Nos. 11, 12 and 13), but sometimes only one may be output instead of both being memorized. Because of this, the front impact sensor should also be inspected at the same time. Refer to table 2 for the failure mode combinations.	• Malfunction of clock spring • Malfunction of harnesses or connectors • Malfunction of air bag module (driver's side squib) • Malfunction of SDU

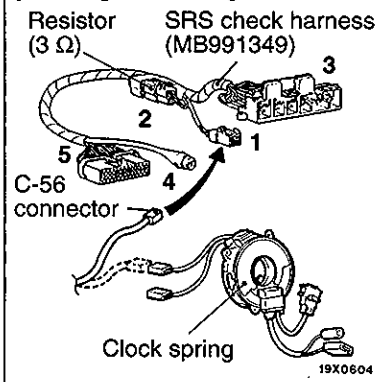
TABLE 1: CONDITIONS FOR OUTPUT OF EACH DIAGNOSIS CODE

Code No.	Trouble Symptom
21	• Short in air bag module (driver's side squib) or harness short • Short in clock spring • Short in driver's air bag module (squib) or front impact sensor harnesses leading to the power supply
22	• Open circuit in air bag module (driver's side squib) or open harness • Open circuit in clock spring • Malfunction of connector contact • Short in driver's air bag module (squib) or front impact sensor harnesses leading to the power supply

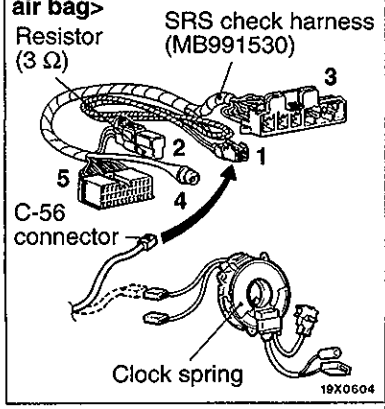
TABLE 2: FAILURE MODE COMBINATIONS

Failure modes		Front impact sensor short	Front impact sensor open circuit (1 sensor)	Front impact sensor open circuit (2 sensors)
Driver's air bag module (squib)	Short	11 or 21	12 or 21	13 or 21
	Open circuit	11 or 22	12 or 22	13 or 22

<Vehicles without front passenger's air bag>



<Vehicles with front passenger's air bag>



MUT-II SELF DIAG. CODE

- Disconnect clock spring connector C-56.
- Connect SRS check harness connector (1).
- Erase diagnosis code memory

Are code Nos. 21 and 22 output?

NG → Clock spring inspection → NG → **Replace**

OK ↓

NG → **Check the following connectors.** C-49 and C-56 → NG → **Repair**

OK ↓

Check the trouble symptom.

NG ↓

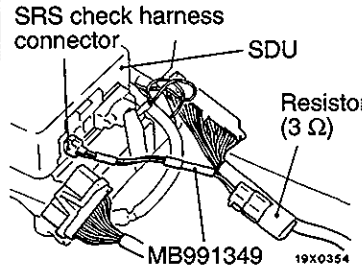
Replace the air bag module (driver's side squib).

Yes ↓

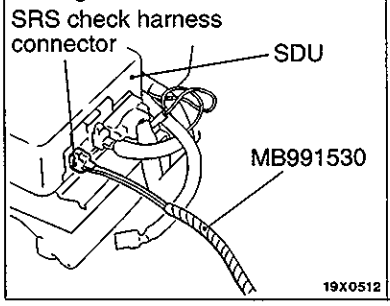
To next page

From previous page

<Vehicles without front passenger's air bag>



<Vehicles with front passenger's air bag>



MUT-II SELF DIAG. CODE

- Connect clock spring connector C-56.
- Disconnect SDU connector C-48.
- Connect SRS check harness connector (1)
- Erase diagnosis code memory

Are code Nos. 21 and 22 output?

No → Clock the harness between the SDU and clock spring, and repair if necessary.

Yes → Replace the SDU.

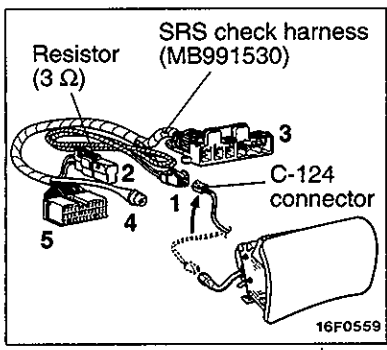
Code No. 24 or 25 Front passenger's side air bag module (squib) system	Probable cause
(1) These diagnosis codes are output if there is abnormal resistance between the input terminals of the front passenger's air bag module (squib). Refer to table 1 for the conditions for output of each diagnosis code. (2) Diagnosis codes 24 and 25 are sometimes generated in combination with diagnosis codes relating to the front impact sensor (code Nos. 11, 12 and 13), but sometimes only one may be output instead of both being memorized. Because of this, the front impact sensor should also be inspected at the same time. Refer to table 2 for the failure mode combinations.	• Malfunction of harnesses or connectors • Malfunction of air bag module (front passenger's side squib) • Malfunction of SDU

TABLE 1: CONDITIONS FOR OUTPUT OF EACH DIAGNOSIS CODE

Code No.	Trouble Symptom
24	• Short in air bag module (front passenger's side squib) or harness short • Short in air bag module (front passenger's side squib) or front impact sensor harnesses leading to the power supply
25	• Open circuit in air bag module (front passenger's side squib) or open harness • Malfunction of connector contact • Short in front passenger's air bag module (squib) or front impact sensor harnesses leading to the power supply

TABLE 2: FAILURE MODE COMBINATIONS

Failure modes		Front impact sensor short	Front impact sensor open circuit (1 sensor)	Front impact sensor open circuit (2 sensors)
Driver's air bag module (squib)	Short	11 or 24	12 or 24	13 or 24
	Open circuit	11 or 25	12 or 25	13 or 25



MUT-II SELF DIAG. CODE
- Disconnect air bag module (front passenger's side) connector C-124.
- Connect SRS check harness connector (1)
- Erase diagnosis code memory

Are code Nos. 24 and 25 output?

No → **Check the following connectors.** C-124 and C-123 → NG → **Repair**

OK → Check the trouble symptom.

NG → Replace the air bag module (front passenger's side squib).

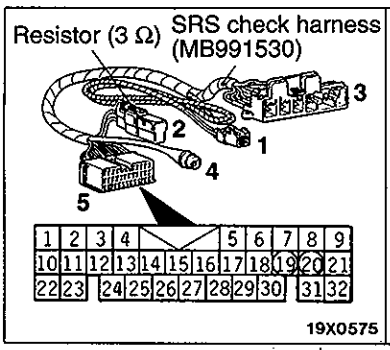
Yes → Inspect harness between SDU and air bag module (front passenger's side) → NG → **Repair**

OK → Replace the SDU.

Code No. 31 or 32 SDU capacitor system	Probable cause
These diagnosis codes are output if the voltage at the SDU capacitor terminals is higher (No. 31) or lower (No. 32) than the specified value for 5 seconds or more. However, if diagnosis code Nos. 41 and 42 are being output due to a drop in battery voltage, code No. 32 will not be detected.	• Malfunction of SDU

The capacitor inside the SDU is probably defective, so replace the SDU.

Code No. 33 Cranking signal system	Probable cause
The cranking signal is provided in order to prevent mistaken detection of power supply voltage drops at the IG1 terminal during cranking. This diagnosis code is output if the cranking signal is output for a continuous period of 45 seconds or more (cranking signal harness is shorted to the power supply). However, if the vehicle condition returns to normal for a continuous period of 5 ± 0.2 seconds (except when cranking), diagnosis code No. 33 will be automatically erased, and the SRS warning lamp will switch off.	• Malfunction of harnesses or connectors • Malfunction of SDU



Measure at SRS check harness connector (5).
- Disconnect SDU connector C-48.
- Connect SRS check harness connector (3)
- Continuity between terminals (19) – (20)

OK: Continuity

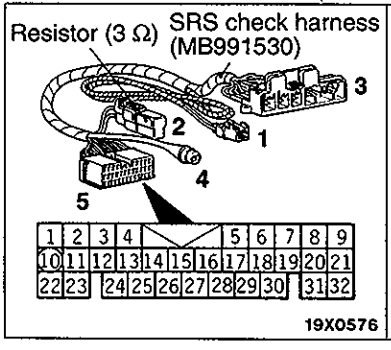
NG → **Check the following connector.**
- C-48

NG → **Repair**

OK → Check the trouble symptoms.

NG → Check the harness wire between each, SDU and earth, and repair if necessary.

OK ↓



Measure at SRS check harness connector (5).
- Ignition switch: ON
- Voltage between terminal (10) and earth

OK: 0 V

NG → Check the harness between the SDU and ignition switch (ST), and repair if necessary.

OK → Replace the SDU

Code No. 34 Connector lock system	Probable cause
This diagnosis code is output if the double lock shorting bar of the SDU connector is detected to be open. However, if the vehicle condition returns to normal, diagnosis code No. 34 will be automatically erased, and the SRS warning lamp will switch off.	• Malfunction of connectors • Malfunction of SDU

If the SDU engagement detection mechanism operating correctly?

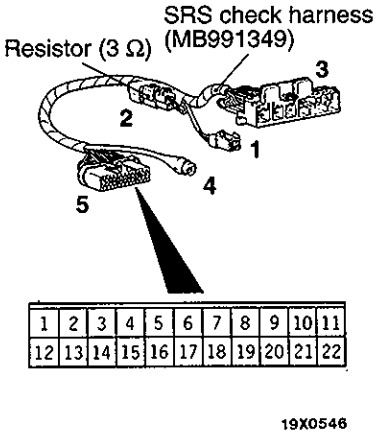
No → Insert the connector securely and lower the lock lever to lock the connector.

Yes ↓

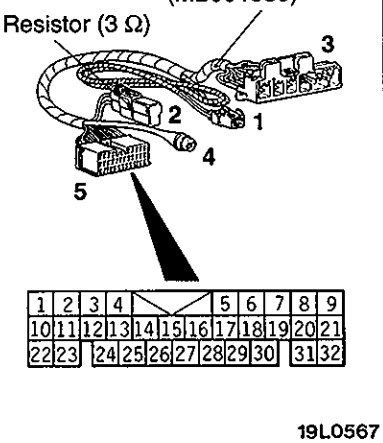
Replace the SDU

Code No. 41 IG_1 (A) power circuit system	Probable cause
This diagnosis code is output if the voltage between the IG_1 (A) terminal and the earth is lower than the specified value for a continuous period of 5 seconds or more. However, if the vehicle conditions returns to normal, diagnosis code No. 41 will be automatically erased, and the SRS warning lamp will switch off.	• Malfunction of harnesses or connectors • Malfunction of SDU

<Vehicles without front passenger's air bag>



<Vehicles with front passenger's air bag>



Measure at SRS check harness connector (5).
- Disconnect the SDU connector C-48
- Connect SRS check harness connector (3)
- Continuity between terminals (19) – (20)

OK: Continuity

NG → **Check the following connector.** C-48 → NG → **Repair**

OK → Check the trouble symptom.

NG → Check the harness between the SDU and earth, and repair if necessary.

OK → Measure at SRS check harness connector (5).
- Ignition switch ON
- Voltage between terminal (12) and body earth

OK: 9 V or more

NG → **Check the following connectors.** C-116, C-107, C-77 <LHD>, C-78 <RHD> and C-48 → NG → **Repair**

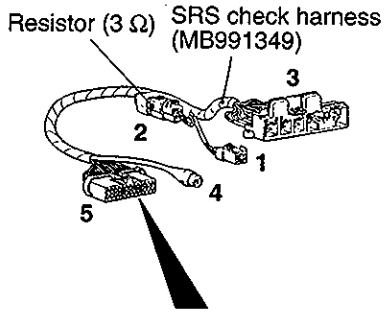
OK → Replace the SDU.

OK → Check the trouble symptom.

NG → Check the harness between the SDU and ignition switch IG1 (A), and repair if necessary.

Code No. 42 IG_1 (B) power circuit system	Probable cause
This diagnosis code is output if the voltage between the IG_1 (B) terminal and the earth is lower than the specified value for a continuous period of 5 seconds or more. However, if the vehicle conditions returns to normal, diagnosis code No. 42 will be automatically erased, and the SRS warning lamp will switch off.	• Malfunction of harnesses or connectors • Malfunction of SDU

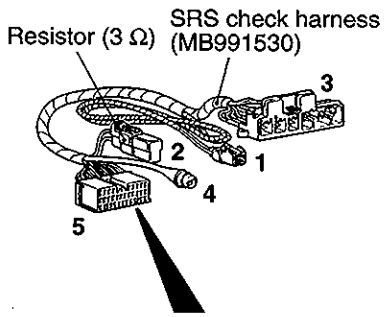
<Vehicles without front passenger's air bag>



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

19X0546

<Vehicles with front passenger's air bag>



1	2	3	4			5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31	32

19L0567

Measure at SRS check harness connector (5).
- Disconnect the SDU connector C-48
- Connect SRS check harness connector (3)
- Continuity between terminals (19) – (20)

OK: Continuity

NG → **Check the following connector.** C-48 → NG → **Repair**

OK → Check the trouble symptom.

NG → Check the harness between the SDU and earth, and repair if necessary.

OK → Measure at SRS check harness connector (5).
- Ignition switch ON
- Voltage between terminal (11) and body earth

OK: 9 V or more

NG → **Check the following connectors.** C-116, C-102, C-107 and C-48 → NG → **Repair**

OK → Replace the SDU.

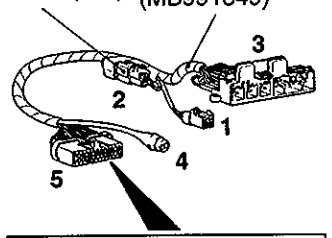
OK → Check the trouble symptom.

NG → Check the harness between the SDU and ignition switch IG1 (B), and repair if necessary.

Code No. 43 SRS warning lamp drive circuit system (Lamp does not illuminate.)	Probable cause
This diagnosis code is output when an open circuit occurs for a continuous period of 5 seconds while the SDU is monitoring the SRS warning lamp and the lamp is OFF (transistor OFF). However, if this code is output due to an open circuit, if the vehicle condition returns to normal, this diagnosis code No. 43 will be automatically erased, and the SRS warning lamp will return to normal.	• Malfunction of harnesses or connectors • Blown bulb • Malfunction of SDU • Malfunction of combination meter

<Vehicles without front passenger's air bag>

Resistor (3 Ω) SRS check harness (MB991349)

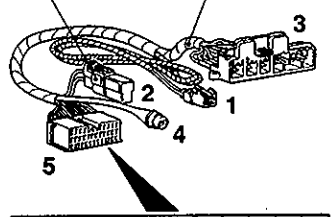


1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

19X0546

<Vehicles with front passenger's air bag>

Resistor (3 Ω) SRS check harness (MB991530)



1	2	3	4		5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31	32

19L0567

Measure at SRS check harness connector (5).
- Disconnect the SDU connector C-48
- Connect SRS check harness connector (3)
- Continuity between terminals (19) – (20)

OK: Continuity

NG → **Check the following connector.** C-48 NG → **Repair**

OK ↓

Check the trouble symptom.

NG ↓

Check the harness between the SDU and earth, and repair if necessary.

OK ↓

Measure at SRS check harness connector (5).
- Ignition switch ON
- Voltage between terminal (13) and body earth

OK: Lamp illuminates

NG → Blown bulb inspection NG → **Repair**

OK ↓

Check the following connectors. C-116, C-110, C-05, C-11 and C-48 NG → **Repair**

OK ↓

Check the trouble symptom.

NG ↓

Check the harness between the SDU and ignition switch (IG1), and repair if necessary. NG → **Repair**

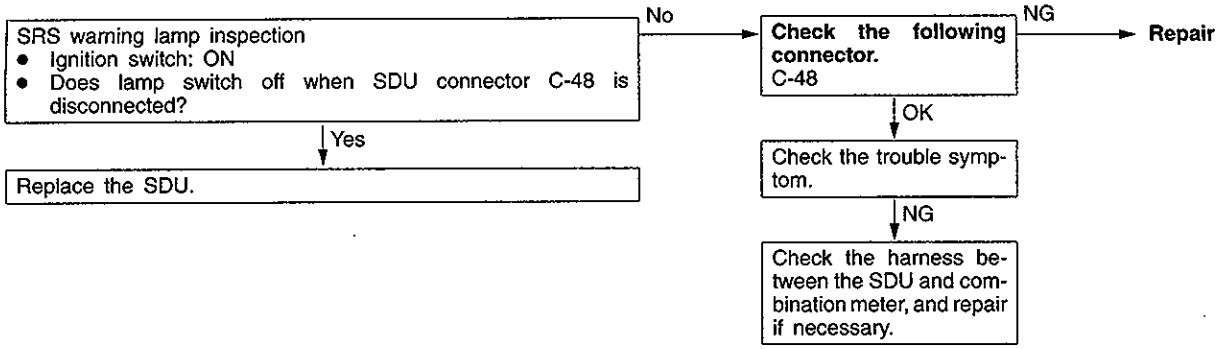
OK ↓

Replace the combination meter.

OK ↓

Replace the SDU.

Code No. 43 SRS warning lamp drive circuit system (Lamp does not switch off.)	Probable cause
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.	• Malfunction of harnesses or connectors • Malfunction of SDU



Code No. 44 SRS warning lamp drive circuit system	Probable cause
This diagnosis code is output when a short occurs in the lamp drive circuit or a malfunction of the output transistor inside the SDU isn detected while the SDU is monitoring the SRS warning lamp drive circuit.	• Malfunction of harnesses or connectors • Malfunction of SDU

If the results of inspection of the SRS warning lamp drive circuit system are normal, the transistor inside the SDU is probably defective, so replace the SDU.

Code No. 45 SDU non-volatile memory (EEPROM) and A/D converter system	Probable cause
This diagnosis code is output if there is a malfunction in the SDU non-volatile memory (EEPROM) or A/D converter.	• Malfunction of SDU

The SDU non-volatile memory (EEPROM) or A/D converter is probably defective, so replace the SDU.

6. INSPECTION CHART FOR TROUBLE SYMPTOMS

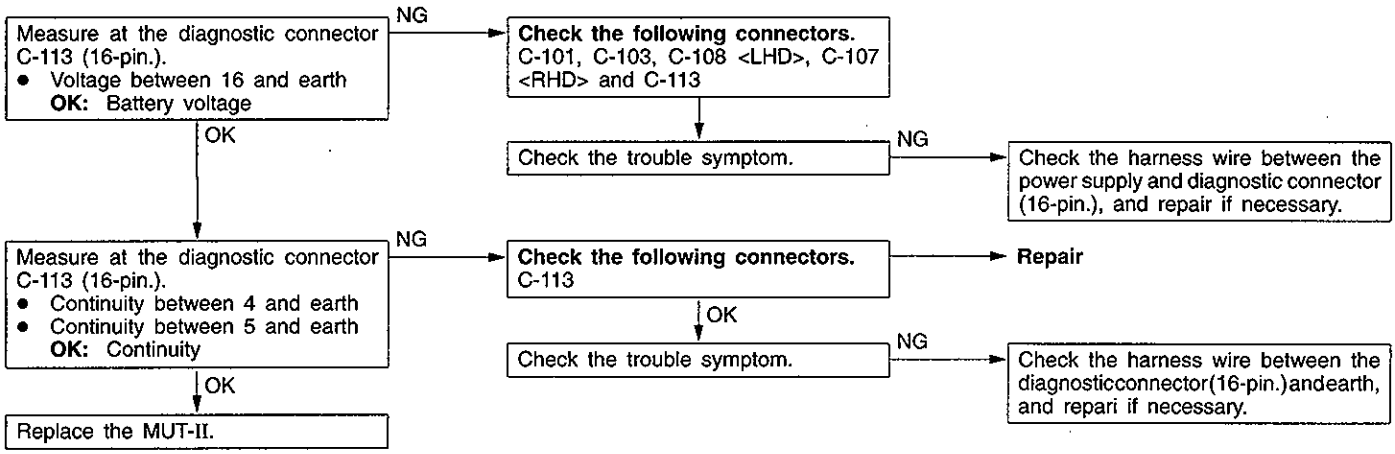
Get an understanding of the trouble symptoms and check according to the inspection procedure chart.

Trouble symptom		Inspection Procedure No.	Reference page
Communication with MUT-II is not possible.	Communication with all systems is not possible.	1	52B-18
	Communication is not possible with SRS only.	2	52B-19
When the ignition key is turned to "ON" (engine stopped), the SRS warning lamp does not illuminate.		Refer to diagnosis code No. 43.	52B-16
After the ignition switch is turned to ON, the SRS warning lamp is still on after approximately 7 seconds have passed.		Refer to diagnosis code No. 43.	52B-17

7. INSPECTION PROCEDURE FOR TROUBLE SYMPTOMS

Inspection Procedure 1

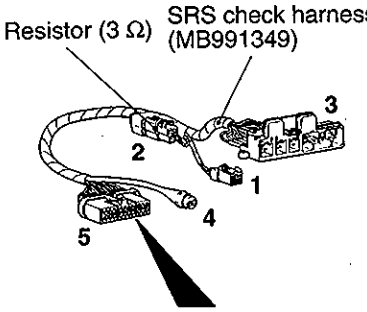
Communication with MUT-II is not possible. (Communication with all system is not possible)	**Probable cause**
The cause is probably a power supply system (including earth circuit) of the diagnosis line.	• Malfunction of connectors • Malfuncton of harness



Inspection Procedure 2

Communication with MUT-II is not possible. (Communication is not possible with SRS only)	Probable cause
If communication is not possible with the SRS only, the cause is probably an open circuit in the diagnosis output circuit of the SRS or in the power circuit (including earth circuit).	• Malfunction of harnesses or connectors • Malfunction of SDU

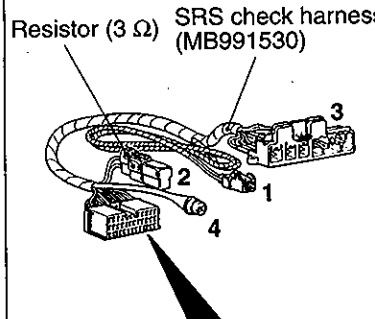
<Vehicles without front passenger's air bag>



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

19X0546

<Vehicles with front passenger's air bag>



1	2	3	4		5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21
22	23		24	25	26	27	28	29	30		31	32

19L0567

Measure at SRS check harness connector (5).
- Disconnect the SDU connector C-48
- Connect SRS check harness connector (3)
- Continuity between terminals (19) – (20)
  OK: Continuity

NG → **Check the following connector.** C-48 NG → **Repair**

OK → Check the trouble symptom.

NG → Check the harness between the SDU and earth, and repair if necessary.

OK → Measure at SRS check harness connector (5).
- Disconnect SDU connector C-48.
- Connect SRS check harness connector (3).
- Voltage between the terminal (11) and body earth.
  OK: 9 V or more
- Voltage between the terminal (12) and body earth.
  OK: 9 V or more

NG → **Check the following connector.** C-48 NG → **Repair**

OK → Check the trouble symptom.

NG → Check the harness between the SDU and ignition switch IG1 (A) or ignition switch IG1 (B), and repair if necessary.

OK → Inspect the harness between the SDU and diagnosis connector. NG → **Repair**

OK → Replace the SDU.

INDIVIDUAL COMPONENT SERVICE

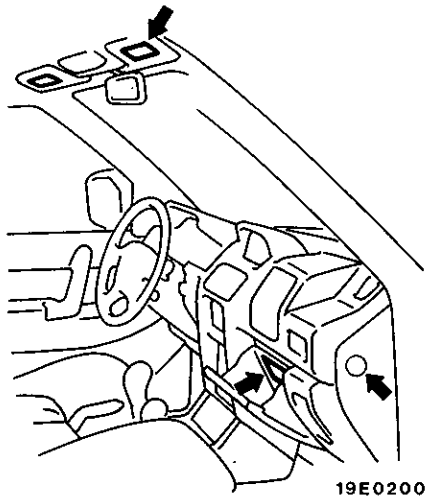
If the SRS components are to be removed, follow each procedure. (P.52B-21 – P.52B-23.)

Caution

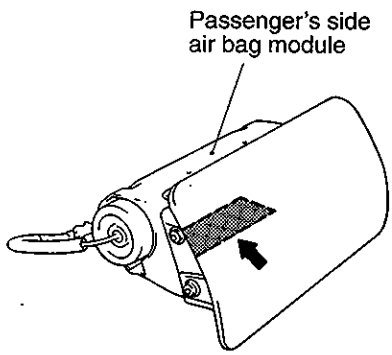
1. **SRS components should not be subjected to heat over 93°C, so remove the front impact sensors, SRS diagnosis unit and air bag module and clock spring before drying or baking the vehicle after painting.**
2. **If the SRS components are removed for the purpose of check, sheet metal repair, painting, etc., they should be stored in a clean, dry place until they are reinstalled.**

WARNING/CAUTION LABELS

The attachment positions for the special labels in vehicles which are equipped with a passenger's side air bag are shown below. Other labels are in the same position as in vehicles which are equipped with a driver's side air bag only.



19E0200



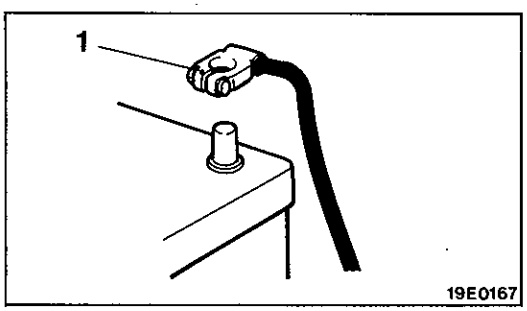
19E0195

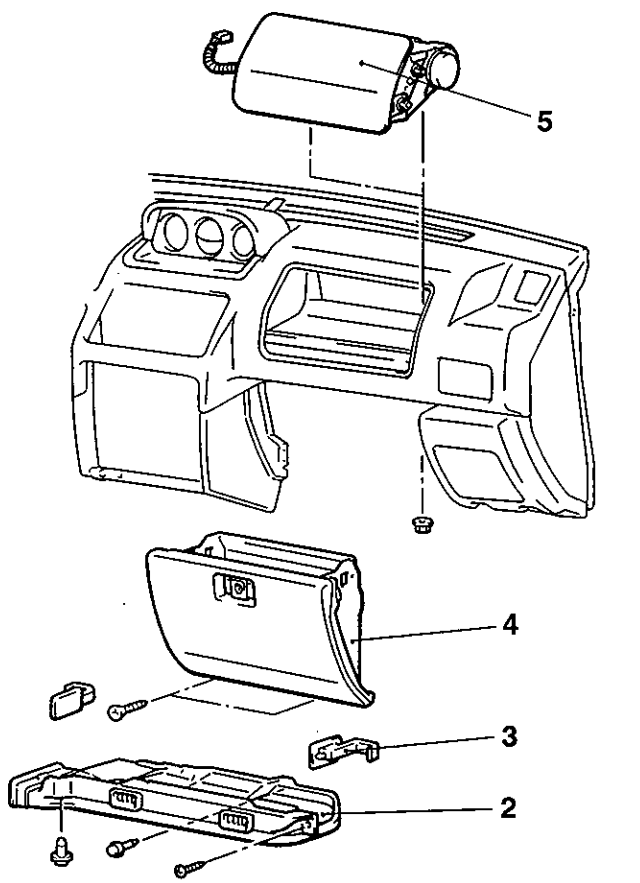
AIR BAG MODULE (FRONT PASSENGER'S SIDE)

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. Do not place anything on top of it.**
4. **Do not expose the air bag module to temperature over 93°C.**
5. **After deployment of an air bag, replace the clock spring with a new one.**
6. **Wear gloves and safety glasses when handling an air bag that has already deployed.**
7. **An unemployed air bag module should only be disposed of in accordance with the procedures. (Refer to P.52B-23.)**

REMOVAL AND INSTALLATION





Air bag module removal steps

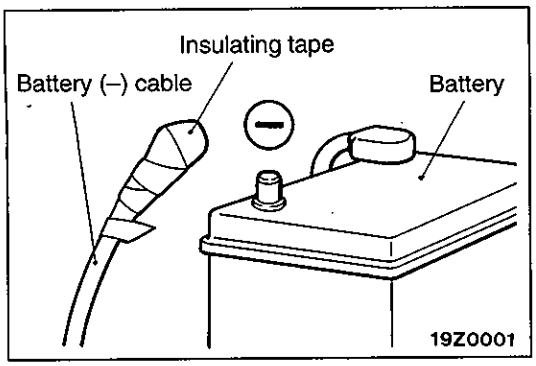
▶B◀ • Post-installation inspection

◀A▶ 1. Negative (–) battery cable connection

2. Foot shower duct (R.H.)
3. Stopper
4. Glove box

◀B▶ 5. Air bag module

▶A◀ • Pre-installation inspection

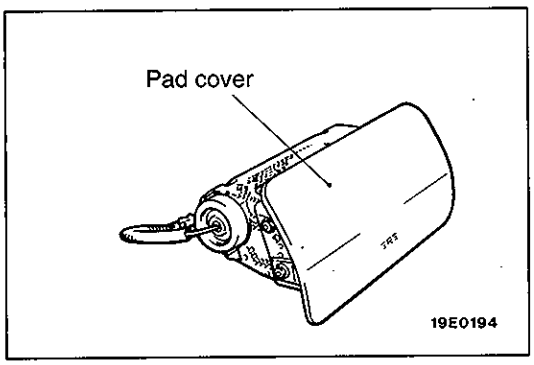


REMOVAL SERVICE POINTS

◀A▶ NEGATIVE (–) BATTERY CABLE DISCONNECTION

Disconnect the negative battery cable from the battery and tape the terminal.

Caution
Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-5, No. 5.)



◀B▶ AIR BAG MODULE REMOVAL

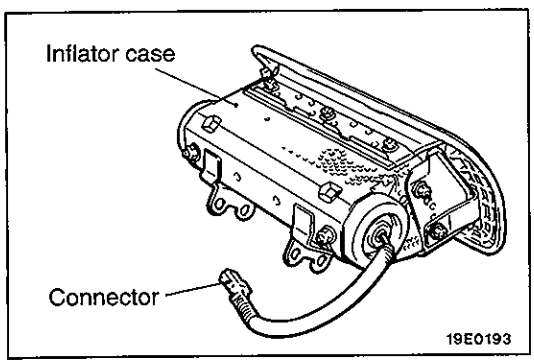
Caution
The removed air bag module should be stored in a clean, dry place with the pad cover face up.

INSPECTION

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-23.)

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.



(1) Check pad cover for dents, cracks or deformities.
(2) Check connectors for damage, terminals for deformities, and harness for binds.
(3) Check air bag inflator case for dents, cracks or deformities.

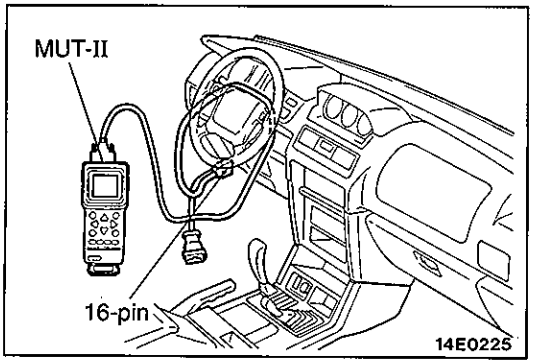
INSTALLATION SERVICE POINTS

▶A◀ PRE-INSTALLATION INSPECTION

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

Caution
Dispose of air bag modules only according to the specified procedure. (Refer to P.52B-23.)

(2) Connect the battery (–) terminal.

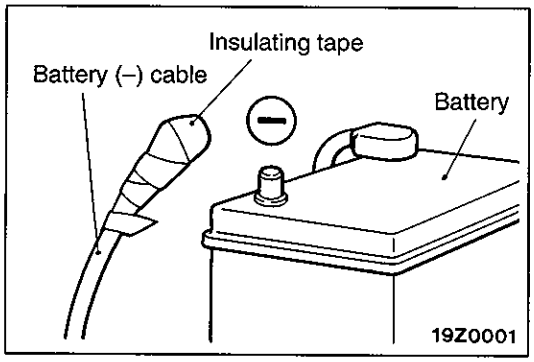


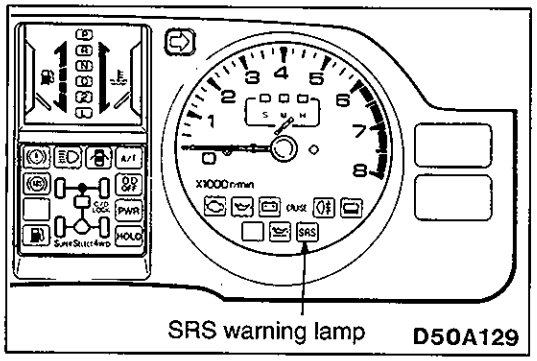
(3) Connect the MUT-II to the diagnosis connector located at the left side of the junction block.

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

(4) Reconnect negative terminal of battery, and turn the ignition key to the "ON" position.
(5) Conduct self-diagnosis using the MUT-II to ensure entire SRS operates properly, except open circuit of air bag modules (Diagnosis code No. 22, No. 25). (Refer to P.52B-10, 12.)
(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-5, No. 5.)





▶B◀ POST-INSTALLATION INSPECTION

Reconnect the negative battery terminal. Turn the ignition key to the "ON" position. Does the "SRS" warning lamp illuminate for about 7 seconds, turn OFF and then remain extinguished for at least 45 seconds? If yes, SRS system is functioning properly. If no, consult page 52B-8.

AIR BAG MODULE DISPOSAL PROCEDURES

Before either disposing of a vehicle equipped with air bags, or prior to disposing of the air bag modules, be sure to first follow the procedures described below to deploy the air bags.

UNDEPLOYED AIR BAG MODULE DISPOSAL

Caution

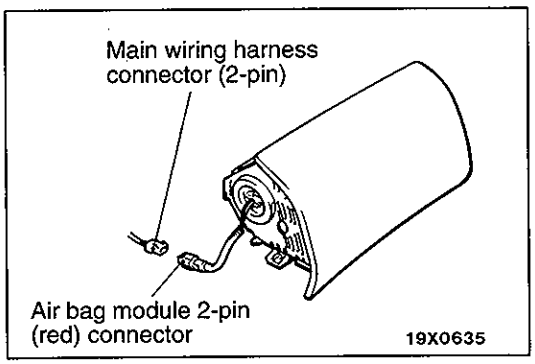
1. **If the vehicle is to be scrapped, or otherwise disposed of, deploy the air bags inside the vehicle. If the vehicle will continue to be operated and only the air bag modules are to be disposed of, deploy the air bags outside the vehicles.**
2. **Since a large amount of smoke is produced when the air bags are 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 bags are deployed, avoid residental areas whenever possible. If anyone is nearby, give warning of the impending noise.**
4. **Suitable ear protection should be worn by personnel performing these procedures or by people in the immediate area.**

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle)

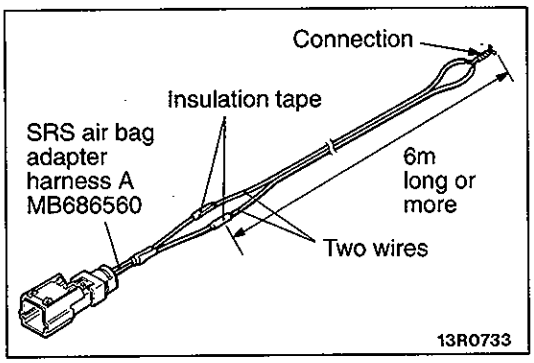
(1) Open all windows and doors of the vehicle. Move the vehicle to an isolated spot.

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

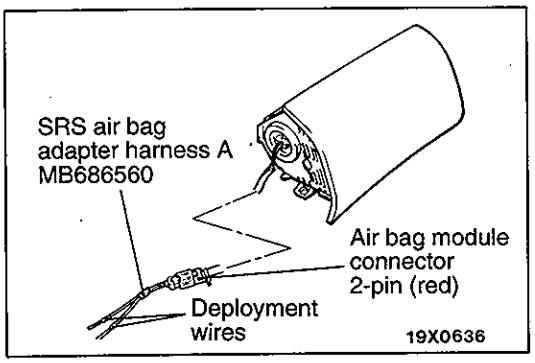
Caution
Wait at least 60 seconds after disconnecting the battery cable before doing any further work. (Refer to P.52B-5, No. 5.)



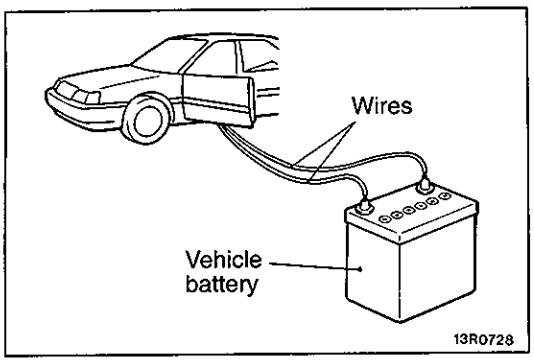
(3) To deploy the air bag module:
1. Remove the glove box.
2. Remove the connection between the air bag module connector (red; 2-pin) and the main wiring harness connector.



(4) Connect two wires, each six meters 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.



(5) To deploy the air bag module:
Connect the air bag module (front passenger's side) 2-pin connector (red) to SRS air bag adapter harness A and pass the deployment wires out of the vehicles.



(6) At a location as far away from the vehicles 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.**
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.**

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.**

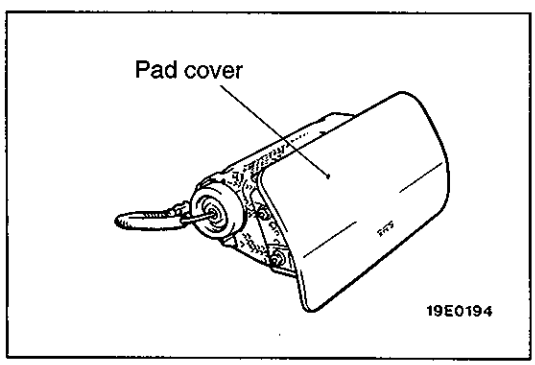
(7) Dispose of the air bag module after deployment according to the Deployed Air Bag Module Disposal Procedures.

DEPLOYMENT OUTSIDE THE VEHICLE

Caution
1. **Should be carried out in a wide, flat area at least 6 m 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 down-wind from the battery.**

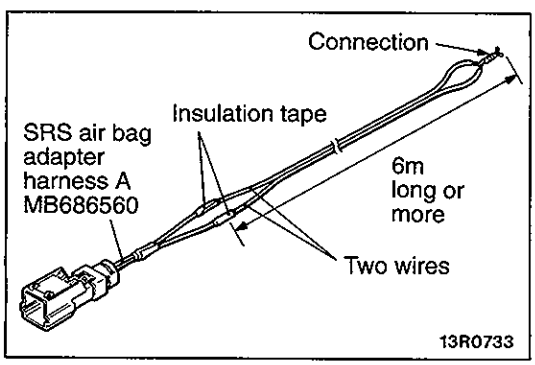
(1) Disconnect the negative (–) and positive (+) battery cables from the battery terminals, and then remove the battery from the vehicle.

Caution
Wait at least 60 seconds after disconnecting the battery cables before doing any further work. (Refer to P.52B-5, No. 5.)

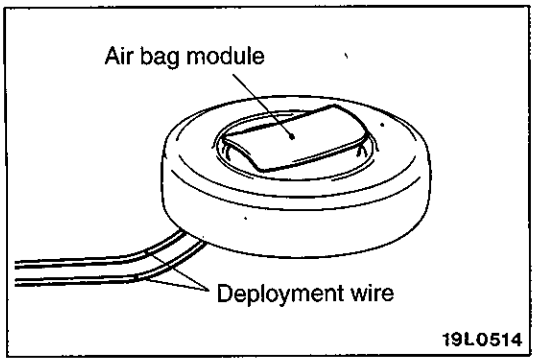


(2) Remove the air bag module from the vehicle. (Refer to P.52B-21.)

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.

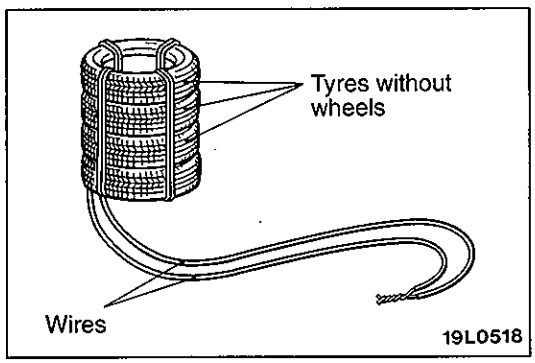


(3) Connect two wires, each six meters long or more, to the two leads of SRS air bag adapter harness A, and cover the connections with insulation tape. The other ends of the two wires should be connected to each other (short-circuited), to prevent sudden unexpected deployment of the air bag.



(4) Connect the deployment wires to the SRS air bag adaptor harness A, pass it beneath the tyre, and wheel assembly, and connect it to the air bag module.
(5) Pass the thick wires into the hole of the air bag module bracket, and secure it to the wheel of the old tyre with wheel (4 locations), with the air bag facing upwards.

Caution
1. **Leave some space below the wheel for the deployment wires.**
   If there is no space, the reaction of the air bag deployment could result in damage of the adaptor harness.
2. **While deployment takes place, do not have the connector of the SRS air bag adaptor harness A inserted between the tyres.**



(6) Place three old tyres with no wheels on top of the tyre secured to the air bag module, and secure all tyres with ropes (4 locations).
(7) 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 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.**

(8) Dispose of the air bag module after deployment according to the Deployed Air Bag Module Disposal Procedures.

NOTES