

INTERIOR AND SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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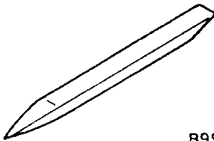
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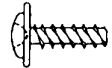
SPECIAL TOOL

Tool	Number	Name	Application
 8990784	MB990784	Ornament remover	Removal of switches and trims

INSTRUMENT PANEL**REMOVAL AND INSTALLATION**

The following bolts and screws are used for installing the instrument panel.

Bolts and screws are indicated as marks shown in the illustration in the sections of "Removal and Installation" and "Disassembly and Reassembly."

Name	Mark	Dimensions mm (screw diameter x screw length)	Color	Shape
Tapping screw	a	5 × 16	Black	 19Z0004
	b	5 × 16	–	
	c	5 × 12	–	 19Z0022
Bolt with washer	d	6 × 16	–	 19Z0005
	e	6 × 12	–	 19Z0020

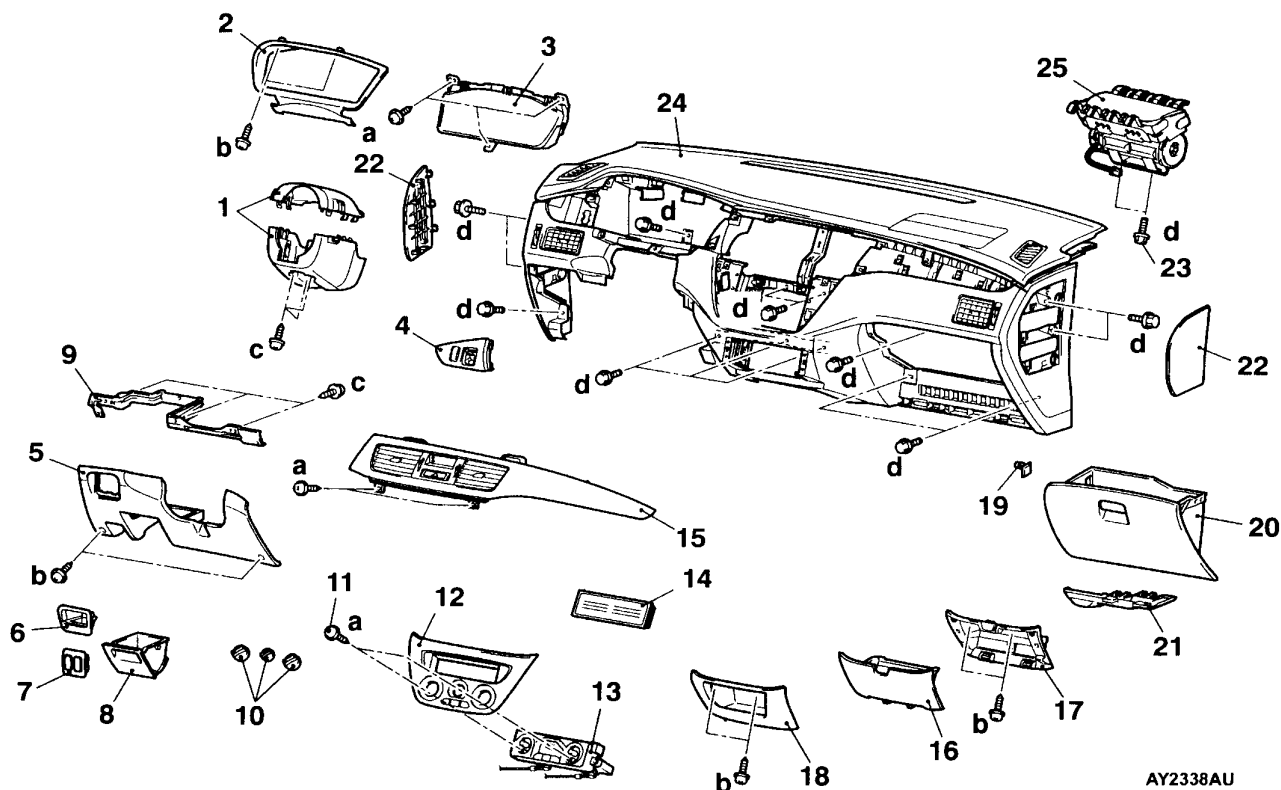
<L.H. DRIVE VEHICLE>

Caution: SRS

1. Refer to GROUP 52B-SRS Service Precautions and Air bag Module and Clock Spring before removing the passenger side air bag module.
2. Do not subject the SRS-ECU to any shocks when removing or installing the instrument panel.

Pre-removal and Post-installation Operation

- Removal and Installation of Front Pillar Trim (Refer to P.52A-15.)
- Hood Opener Lever (Refer to GROUP42.)



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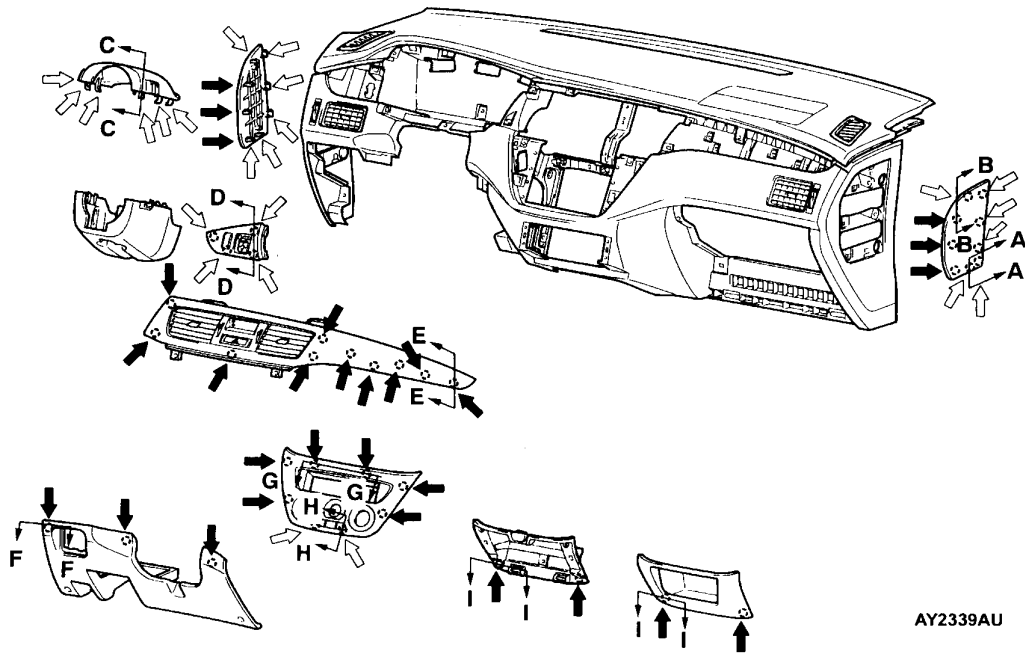
Removal steps

1. Column cover
2. Meter bezel
3. Combination meter
4. Instrument panel ornament
5. Under cover
6. Box <Vehicle with box>
7. Switch panel
<Vehicle with switch panel>
8. Side box
9. Lower frame
10. Heater control knob
11. Heater control assembly mounting screw
12. Center panel
13. Heater control panel assembly
14. Radio plug

15. Center air outlet panel
16. Center lower box <RS- II >
17. Center lower case <RS- II >
18. Center lower box <RS>
19. Stopper
20. Glove box
21. Harness cover
22. Instrument panel side cover
23. SRS front passenger's air bag module mounting bolt
 - Steering column shaft mounting bolt (Refer to GROUP37A – Steering Wheel and Shaft.)
24. Instrument panel assembly
25. SRS front passenger's air bag module

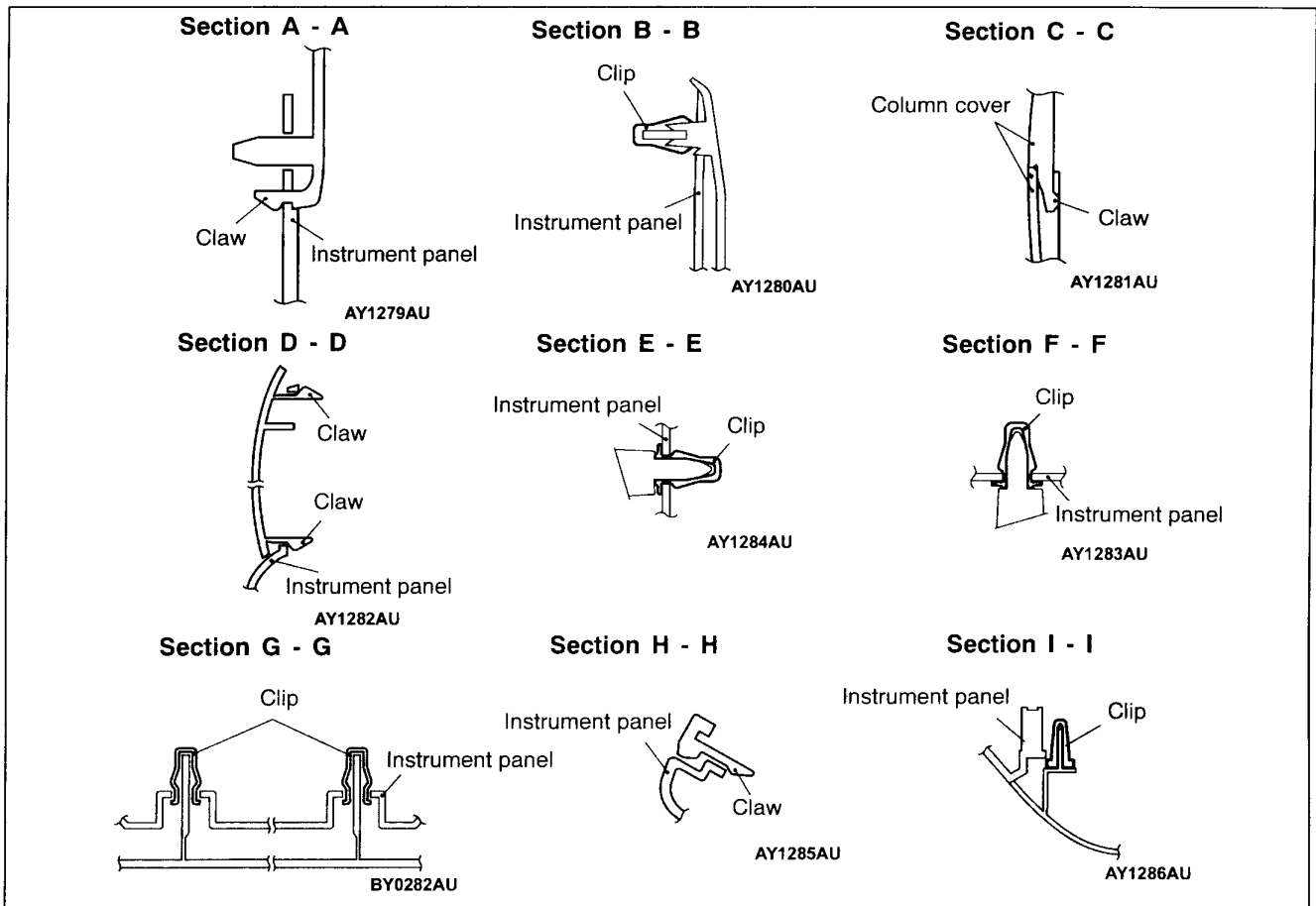


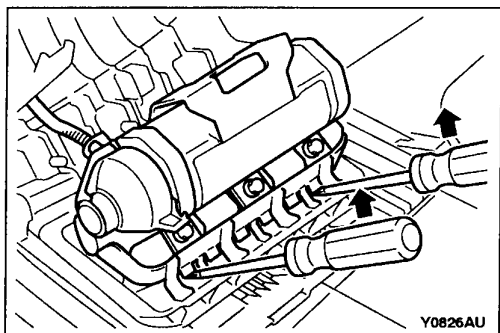
CLIP AND CLAW POSITIONS



NOTE

- (1) : Clip positions
 (2) : Claw positions

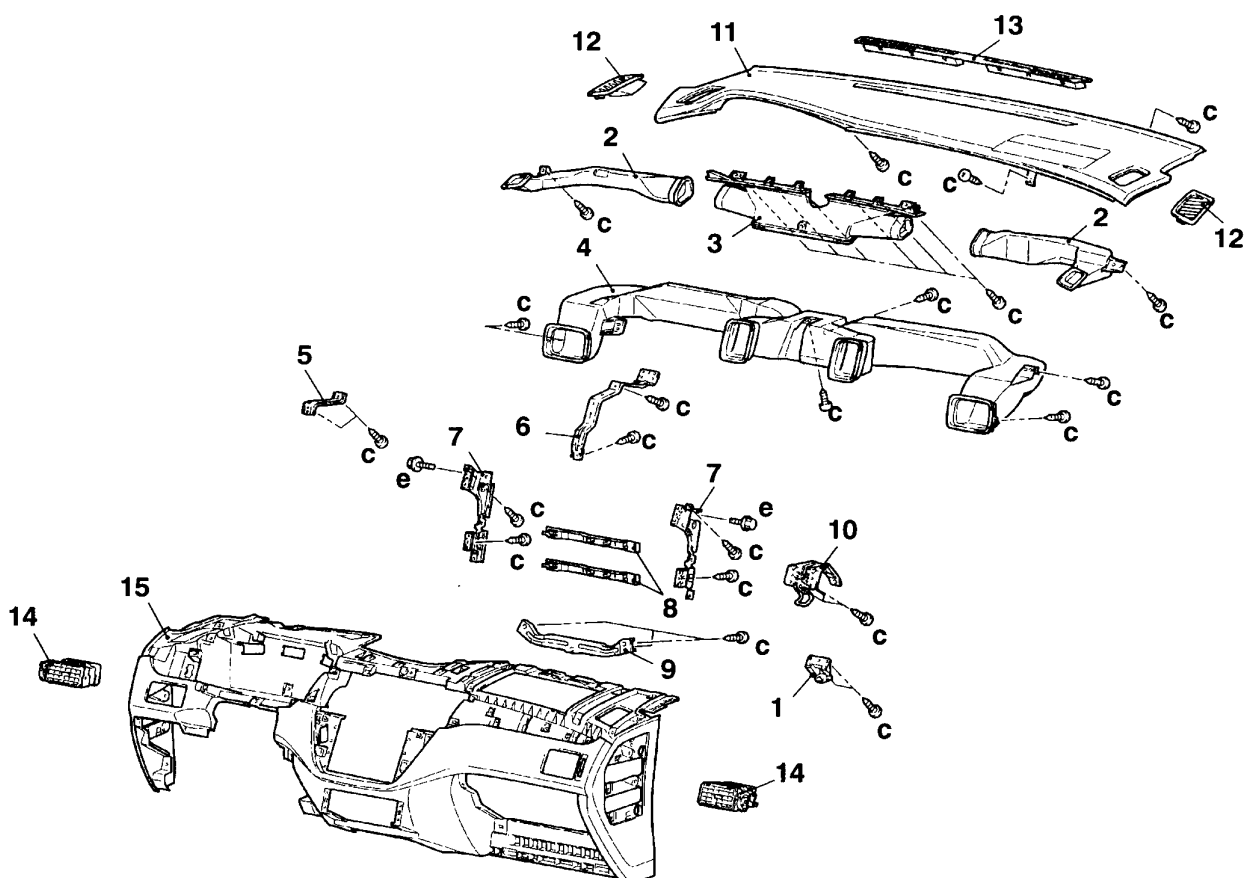


**REMOVAL SERVICE POINT****◀A▶ SRS FRONT PASSENGER'S AIR BAG MODULE REMOVAL**

Insert the flat tipped screw driver into the position shown in the illustration and pull up the screw driver to disengage the claws for removal of the front passenger's air bag module.

Caution

1. Do not damage the claws of the hinge when removing the front passenger's air bag module.
2. Store the removed front passenger's air bag module facing the deployed side upward in a clean and dry place.

DISASSEMBLY AND REASSEMBLY

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Disassembly steps

- | | |
|--|-------------------------------|
| 1. Instrument panel upper support | 9. Center lower reinforcement |
| 2. Side defroster duct | 10. Glove box striker |
| 3. Center defroster duct | 11. Instrument panel pad |
| 4. Distribution duct | 12. Side demister |
| 5. Driver side upper bracket | 13. Defroster garnish |
| 6. Center upper reinforcement | 14. Side air outlet assembly |
| 7. Instrument panel center reinforcement | 15. Instrument panel |
| 8. Bridge reinforcement | |

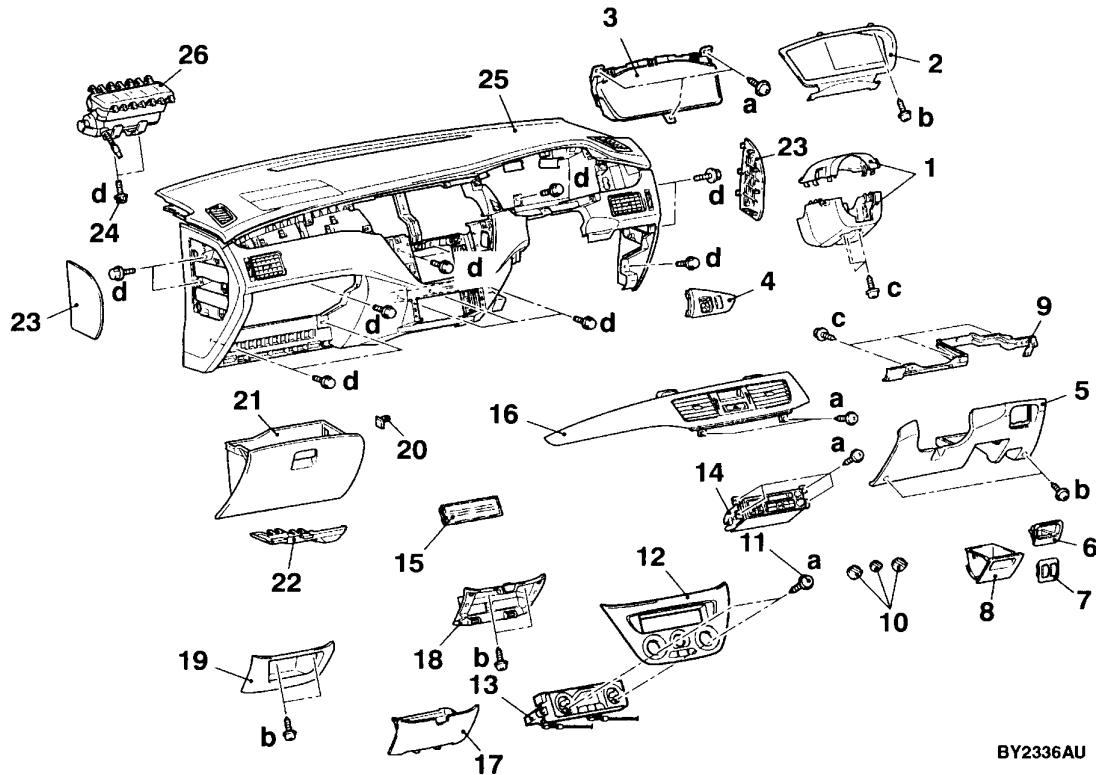
<R.H. DRIVE VEHICLE>

Caution: SRS

1. Refer to GROUP 52B-SRS Service Precautions and Air bag Module and Clock Spring before removing the passenger side air bag module.
2. Do not subject the SRS-ECU to any shocks when removing or installing the instrument panel.

Pre-removal and Post-installation Operation

- Removal and Installation of Front Pillar Trim (Refer to P.52A-15.)
- Hood Opener Lever (Refer to GROUP42.)



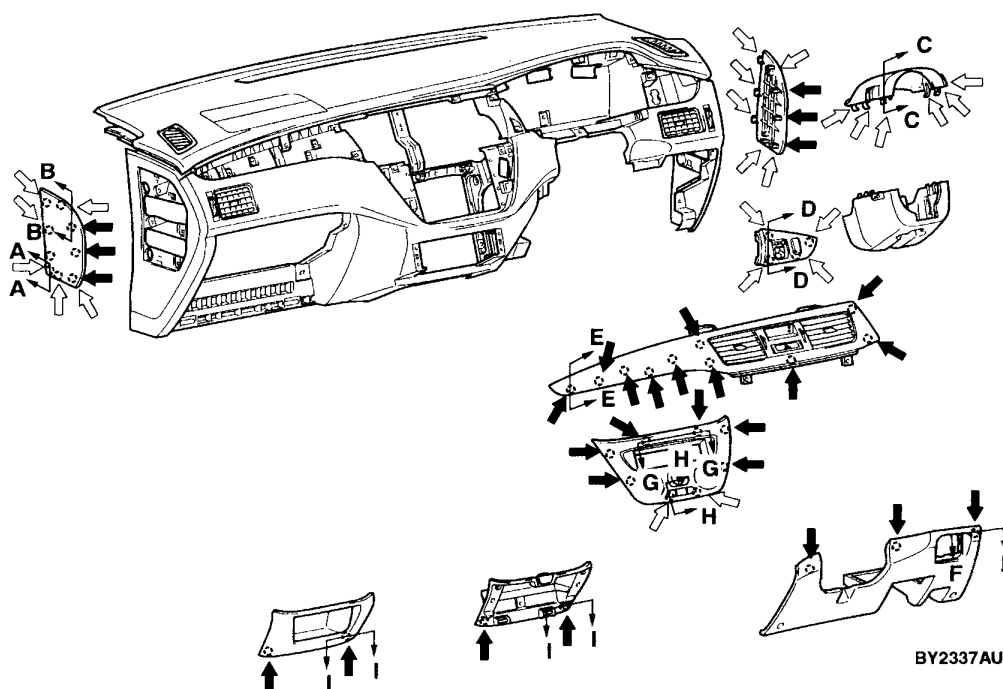
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Removal steps

1. Column cover
2. Meter bezel
3. Combination meter
4. Instrument panel ornament
5. Under cover
6. Box <Vehicle with box>
7. Switch panel
<Vehicle with switch panel>
8. Side box
9. Lower frame
10. Heater control knob
11. Heater control assembly mounting screw
12. Center panel
13. Heater control panel assembly
14. Radio and tape player
15. Plug <Vehicle without radio and tape player>
16. Center air outlet panel
17. Center lower box A <RS- II >
18. Center lower case A <RS- II >
19. Center lower box B <RS>
20. Stopper
21. Glove box
22. Harness cover
23. Instrument panel side cover
24. SRS front passenger's air bag module mounting bolt
 - Steering column shaft mounting bolt (Refer to GROUP37A – Steering Wheel and Shaft.)
25. Instrument panel assembly
26. SRS front passenger's air bag module

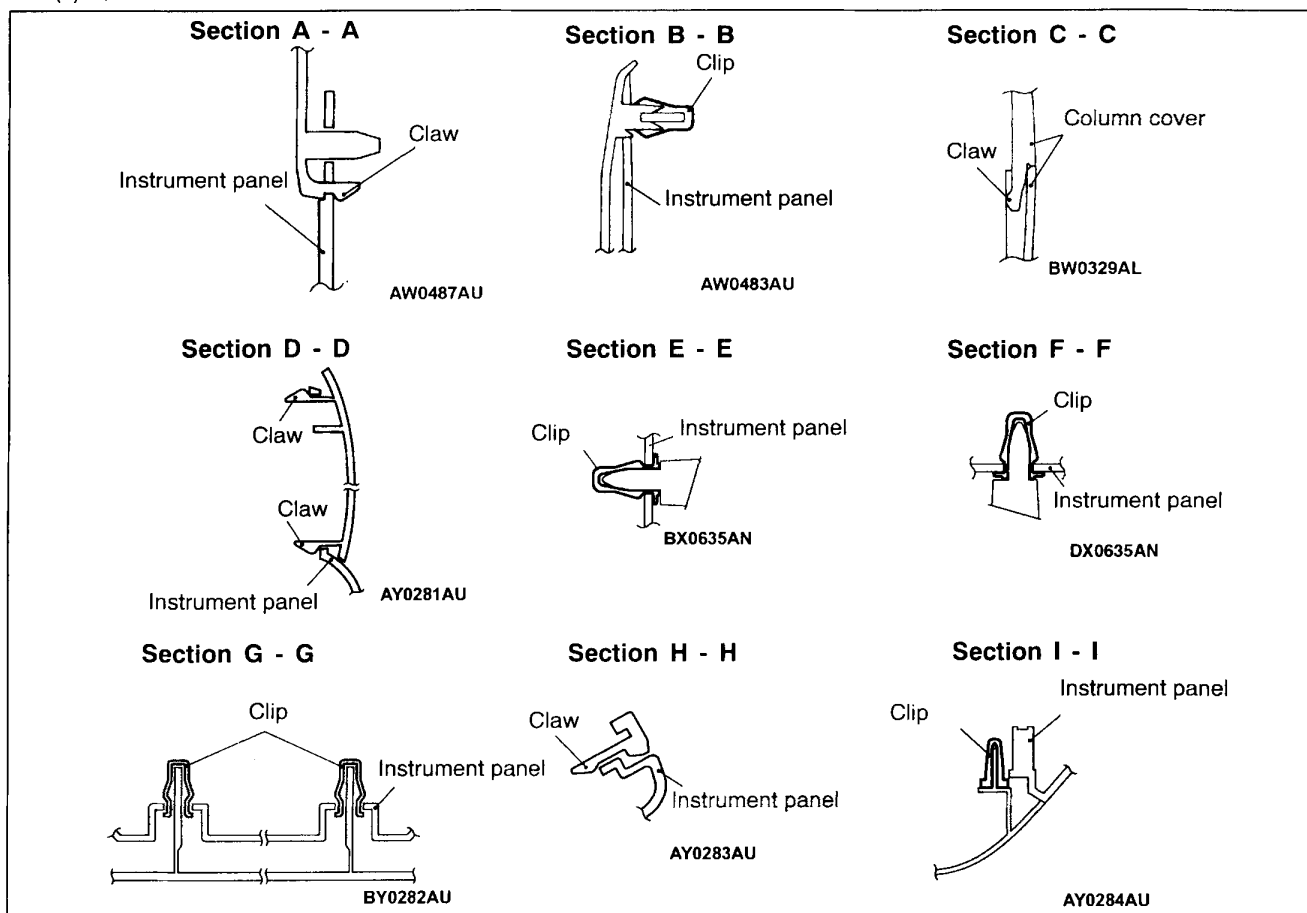


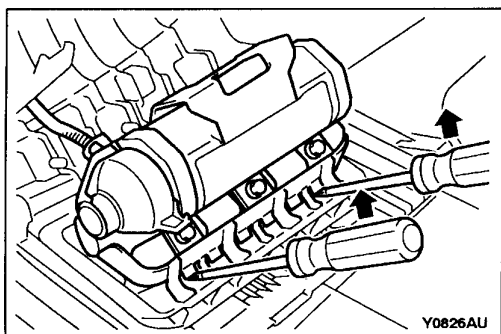
CLIP AND CLAW POSITIONS



NOTE

- (1) : Clip location
 (2) : Claw location





REMOVAL SERVICE POINT

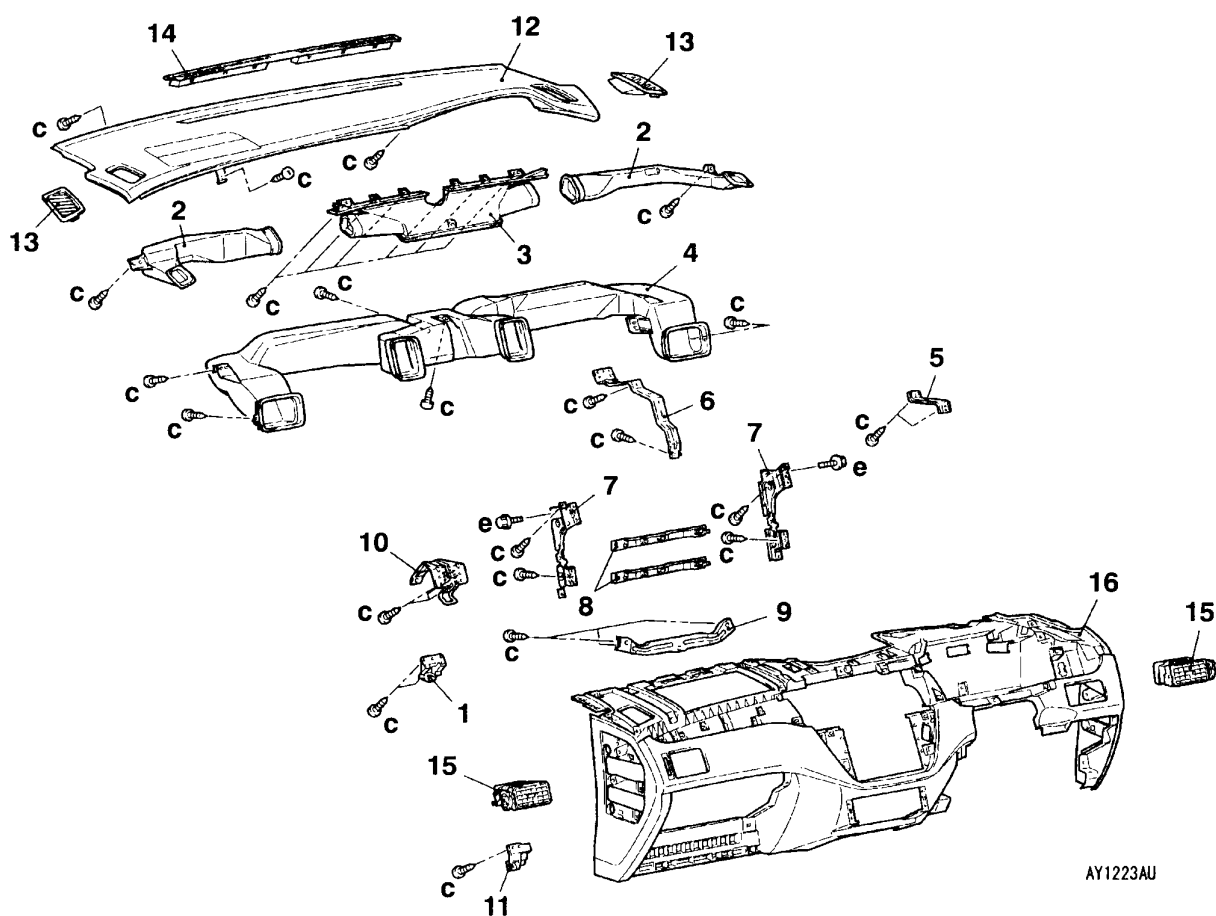
◀▶ SRS FRONT PASSENGER'S AIR BAG MODULE REMOVAL

Insert the flat tipped screw driver into the position shown in the illustration and pull up the screw driver to disengage the claws for removal of the front passenger's air bag module.

Caution

1. Do not damage the claws of the hinge when removing the front passenger's air bag module.
2. Store the removed front passenger's air bag module facing the deployed side upward in a clean and dry place.

DISASSEMBLY AND REASSEMBLY



Disassembly steps

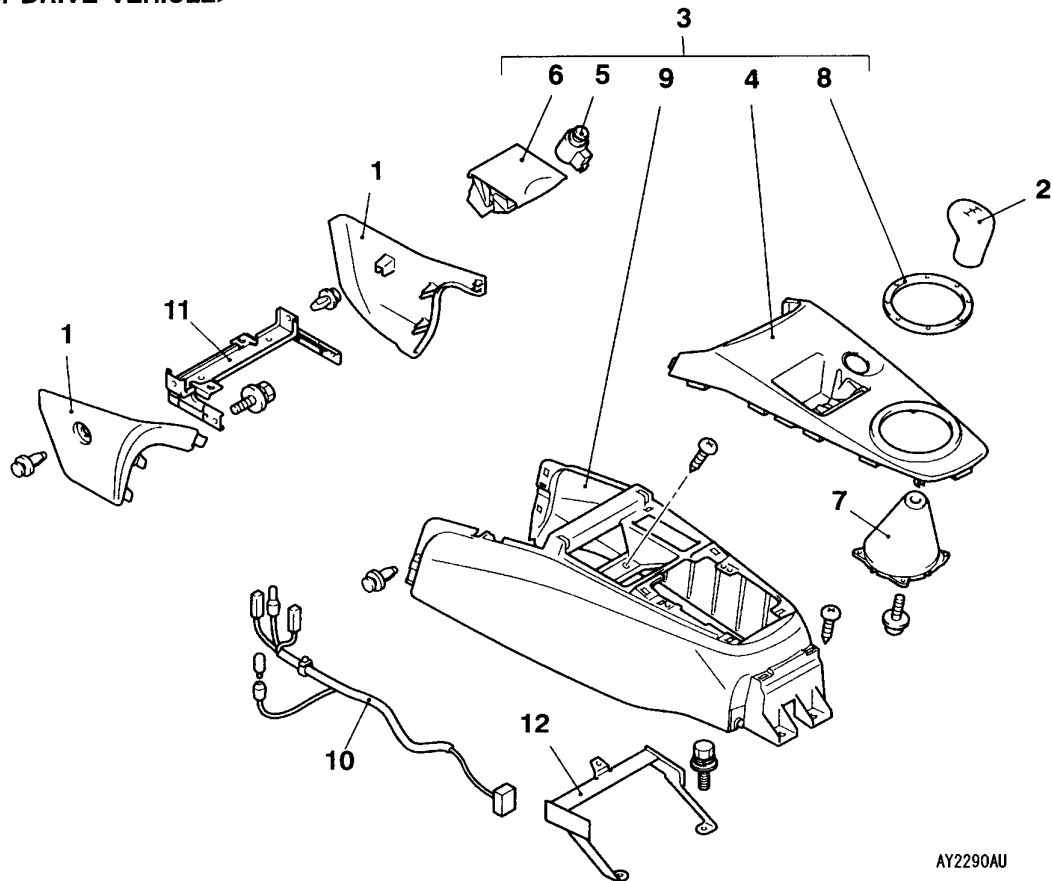
- | | |
|--|-------------------------------|
| 1. Instrument panel upper support | 9. Center lower reinforcement |
| 2. Side defroster duct | 10. Glove box striker |
| 3. Center defroster duct | 11. Glove box cover |
| 4. Distribution duct | 12. Instrument panel pad |
| 5. Driver side upper bracket | 13. Side demister |
| 6. Center upper reinforcement | 14. Defroster garnish |
| 7. Instrument panel center reinforcement | 15. Side air outlet assembly |
| 8. Bridge reinforcement | 16. Instrument panel |

FRONT FLOOR CONSOLE

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation
Removal and Installation of Rear Floor Console
(Refer to P.52A-12.)

<L.H. DRIVE VEHICLE>



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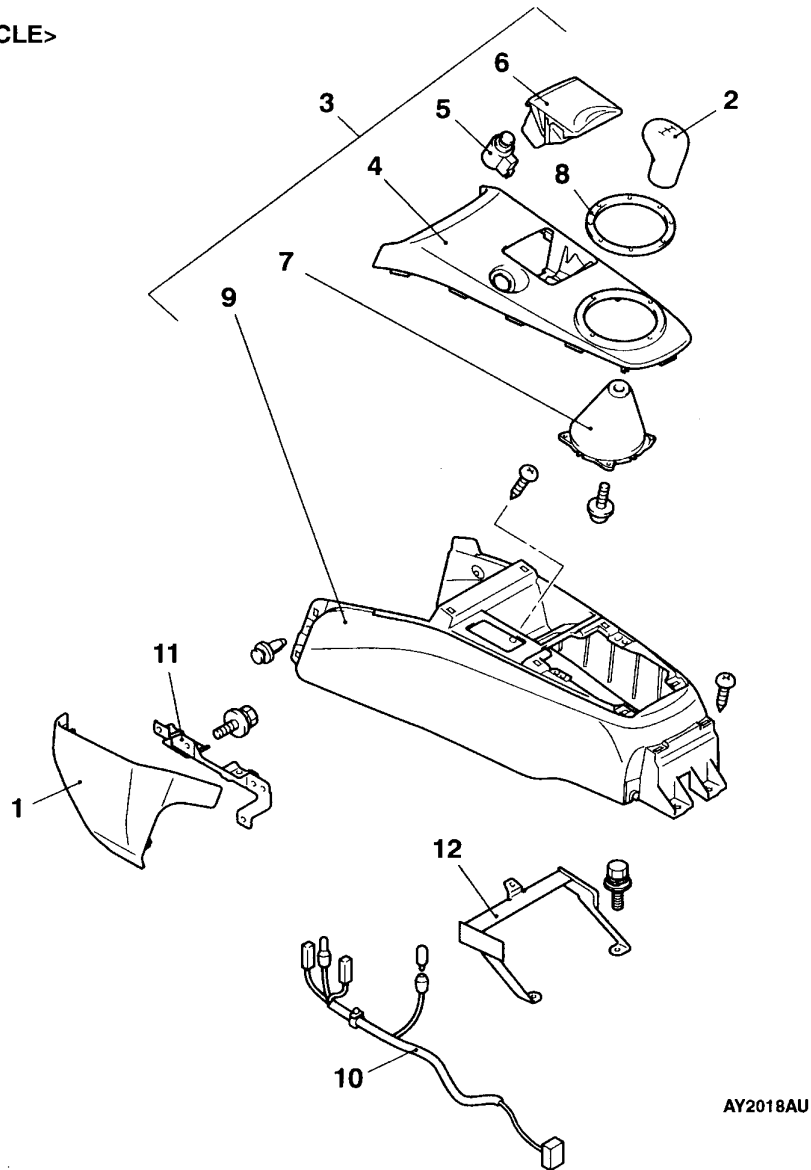
Removal steps

- | | |
|---------------------------------|---------------------------------|
| 1. Console side cover | 7. Shift lever cover |
| 2. Shift lever knob | 8. Shift lever panel garnish |
| 3. Front floor console assembly | 9. Front floor console |
| 4. Front floor console panel | 10. Harness |
| 5. Cigarette lighter | 11. Console side cover bracket |
| 6. Ashtray | 12. Front floor console bracket |

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation
Removal and Installation of Rear Floor Console
(Refer to P.52A-12.)

<R.H. DRIVE VEHICLE>

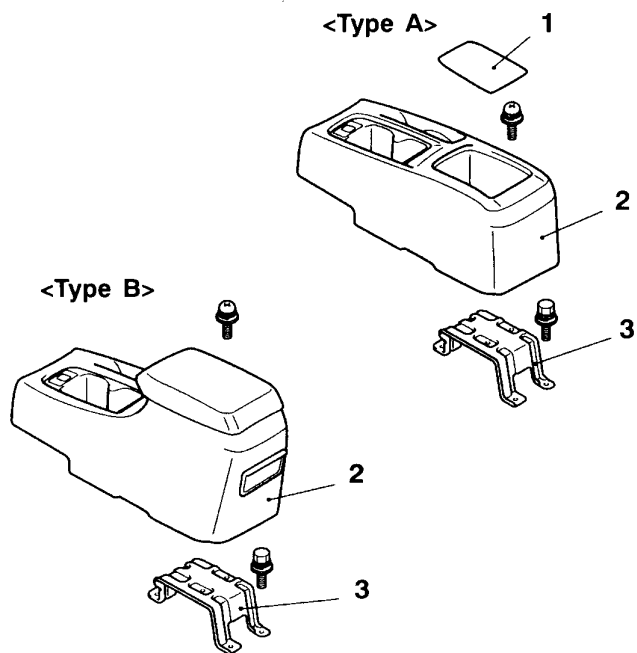


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Removal steps

- | | |
|---------------------------------|---------------------------------|
| 1. Console side cover | 7. Shift lever cover |
| 2. Shift lever knob | 8. Shift lever panel garnish |
| 3. Front floor console assembly | 9. Front floor console |
| 4. Front floor console panel | 10. Harness |
| 5. Cigarette lighter | 11. Console side cover bracket |
| 6. Ashtray | 12. Front floor console bracket |

REAR FLOOR CONSOLE REMOVAL AND INSTALLATION

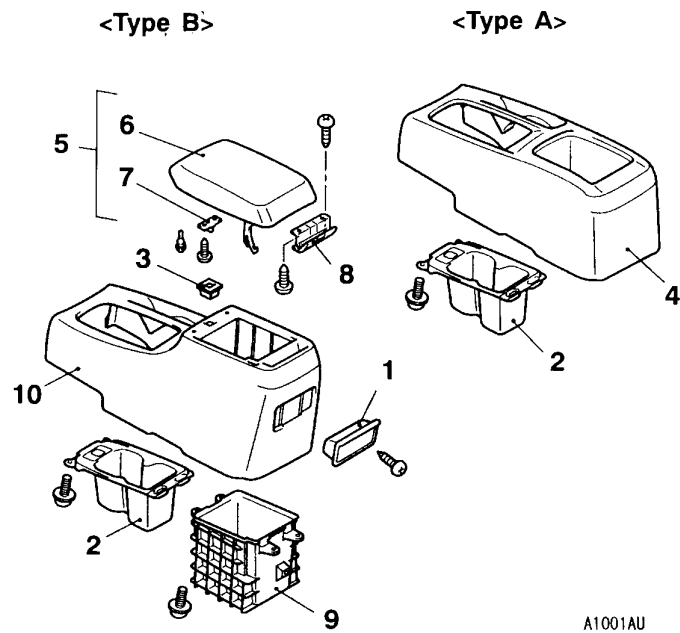


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Removal steps

1. Console box mat
2. Rear console assembly
 - Rear seat cushion assembly (Refer to P.52A-22.)
 - Front scuff plate (Refer to P.52A-15.)
3. Rear console bracket
 - Rear scuff plate (Refer to P.52A-15.)
 - Center pillar trim, lower (Refer to P.52A-15.)
 - Floor carpet

DISASSEMBLY AND REASSEMBLY



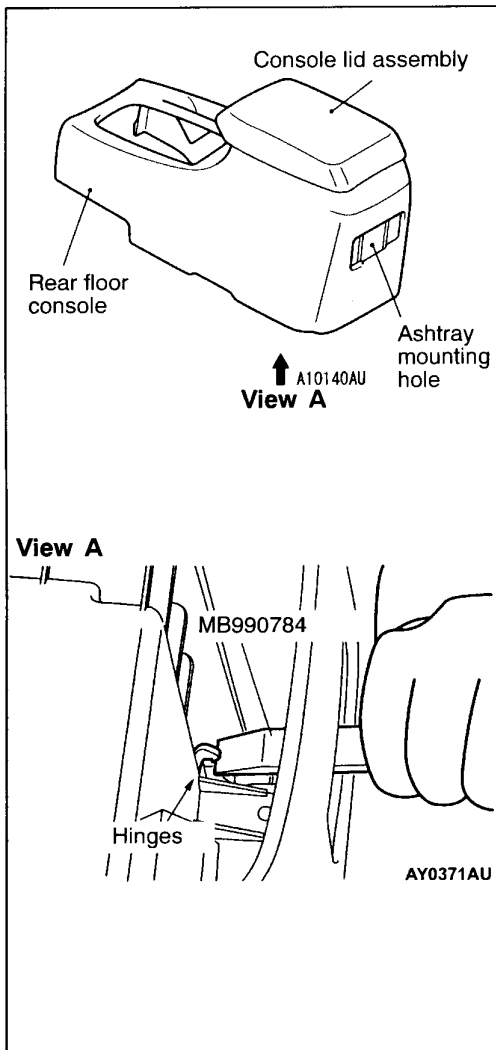
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Disassembly steps

1. Ashtray
2. Cup holder
3. Hole lock
4. Rear floor console
5. Console lid assembly

6. Console lid
7. Lower lid striker
8. Hinge bracket
9. Box
10. Rear floor console

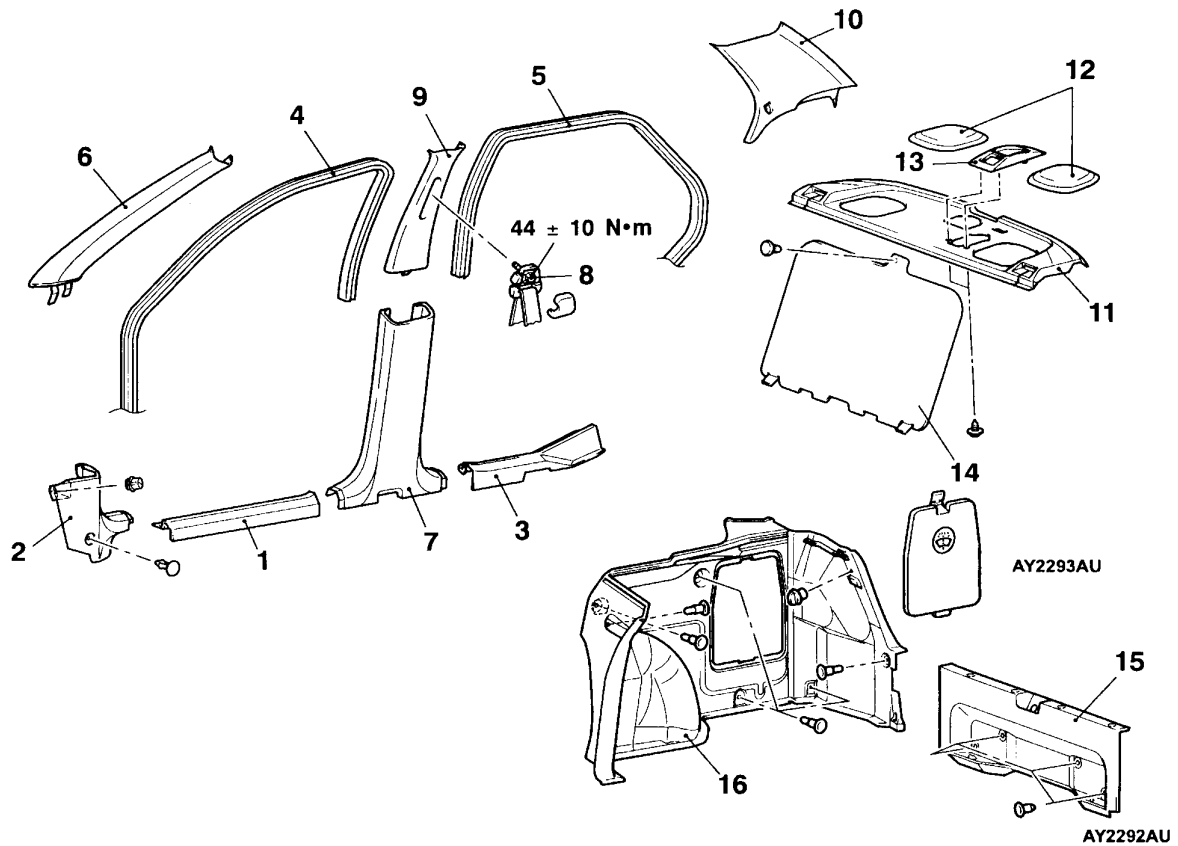


**DISASSEMBLY SERVICE POINT****◀A▶ REMOVAL OF CONSOLE LID ASSEMBLY**

Insert the special tool into the hinges of the console lid assembly and the rear floor console through the ashtray mounting hole to pry for removal.

TRIMS

REMOVAL AND INSTALLATION



NOTE

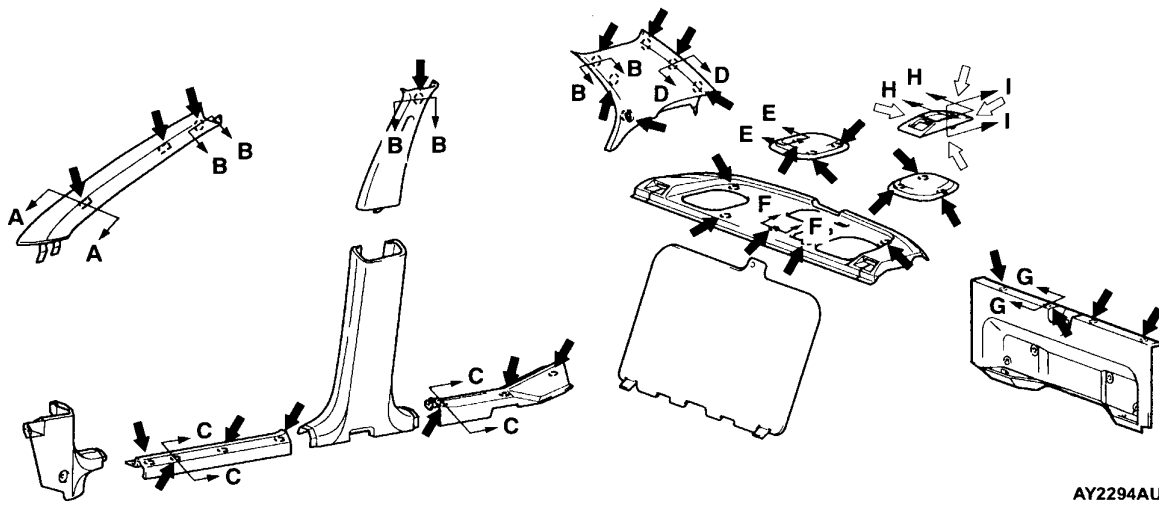
Refer to GROUP42 for more information regarding door trim.

Removal steps

1. Front scuff plate
2. Cowl side trim
3. Rear scuff plate
4. Front door opening trim
5. Rear door opening trim
6. Front pillar trim
7. Center pillar trim, lower
8. Front seat belt connection
9. Center pillar trim, upper
10. Rear pillar trim
11. Rear shelf trim
12. Speaker garnish <RS- II >
13. Retractor trim
14. Partition board
15. Rear end trim
16. Trunk side trim <RS- II >



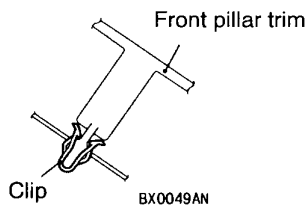
CLIP POSITION



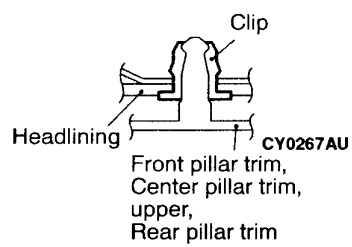
NOTE

- ◀: Clip position
 ⇨: Claw position

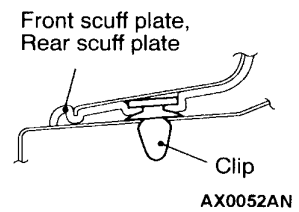
Section A - A



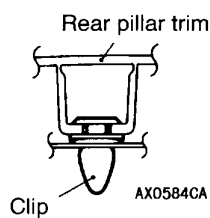
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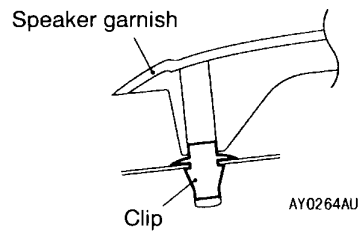
Section C - C



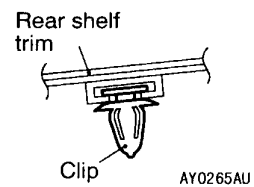
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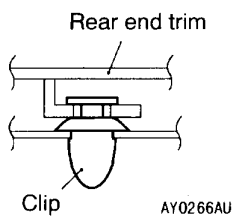
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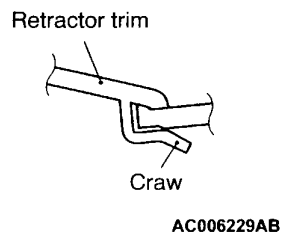
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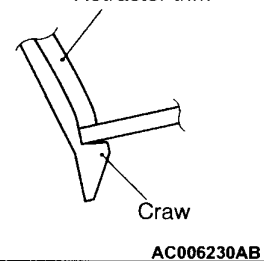
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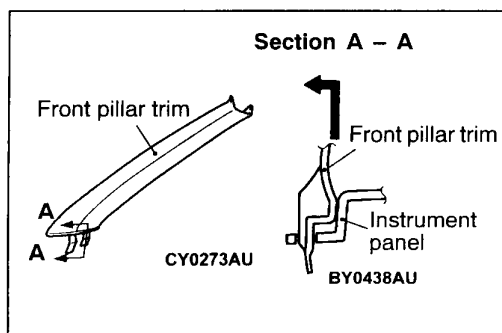


Section H - H



Section I - I





REMOVAL SERVICE POINT

◀A▶ FRONT PILLAR TRIM REMOVAL

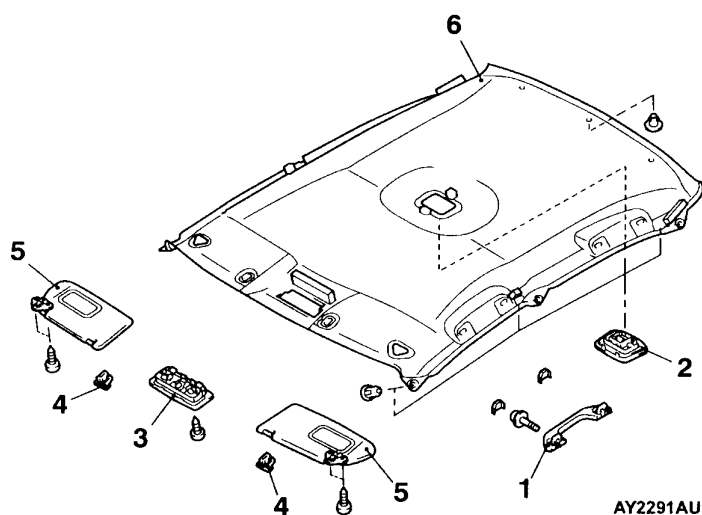
Release the clip to pull towards the direction shown in the illustration and remove the front pillar trim.

HEADLINING

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

Removal and Installation of Front Pillar Trim, Center Pillar Trim, upper, Rear Pillar Trim (Refer to P.52A-15.)



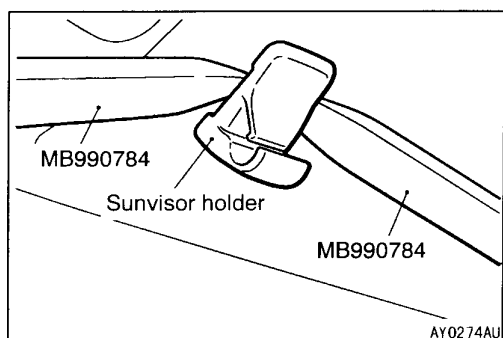
Removal steps

1. Assist grip
2. Room lamp assembly
3. Front room lamp
4. Sunvisor holder

◀A▶

◀B▶

5. Sunvisor assembly
- Front floor console assembly (Refer to P.52A-10.)
6. Headlining

**REMOVAL SERVICE POINTS****◀A▶ SUNVISOR HOLDER REMOVAL**

Insert the special tool into sides claws of the sunvisor holder through the both sides of the sunvisor holder to remove the hinges.

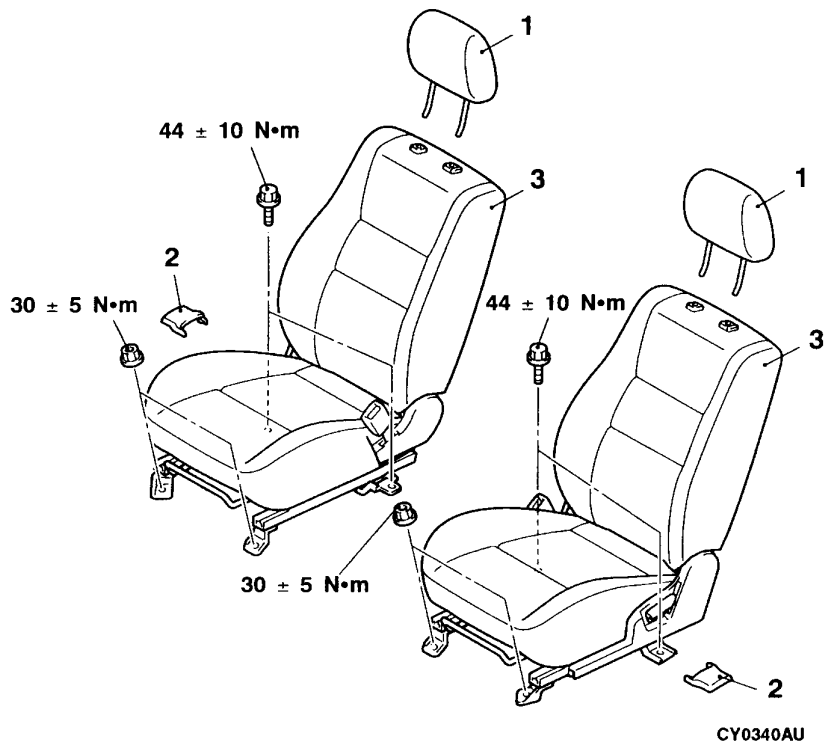
◀B▶ HEADLINING REMOVAL

Bend the headlining to remove from the front passenger's door.

SEAT

FRONT SEAT

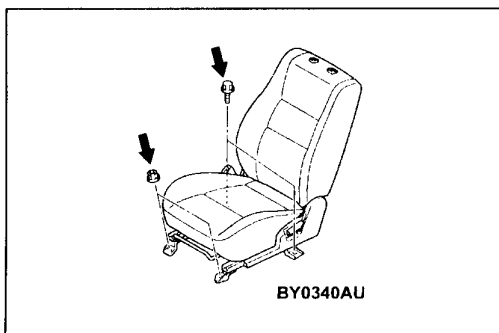
REMOVAL AND INSTALLATION



1. Headrest

Front seat assembly removal steps

- A◄
- 2. Front seat anchor cover
 - 3. Front seat assembly



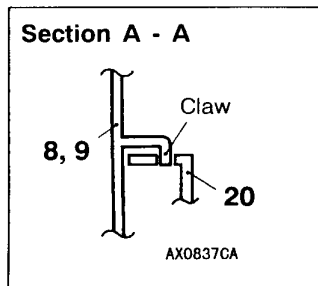
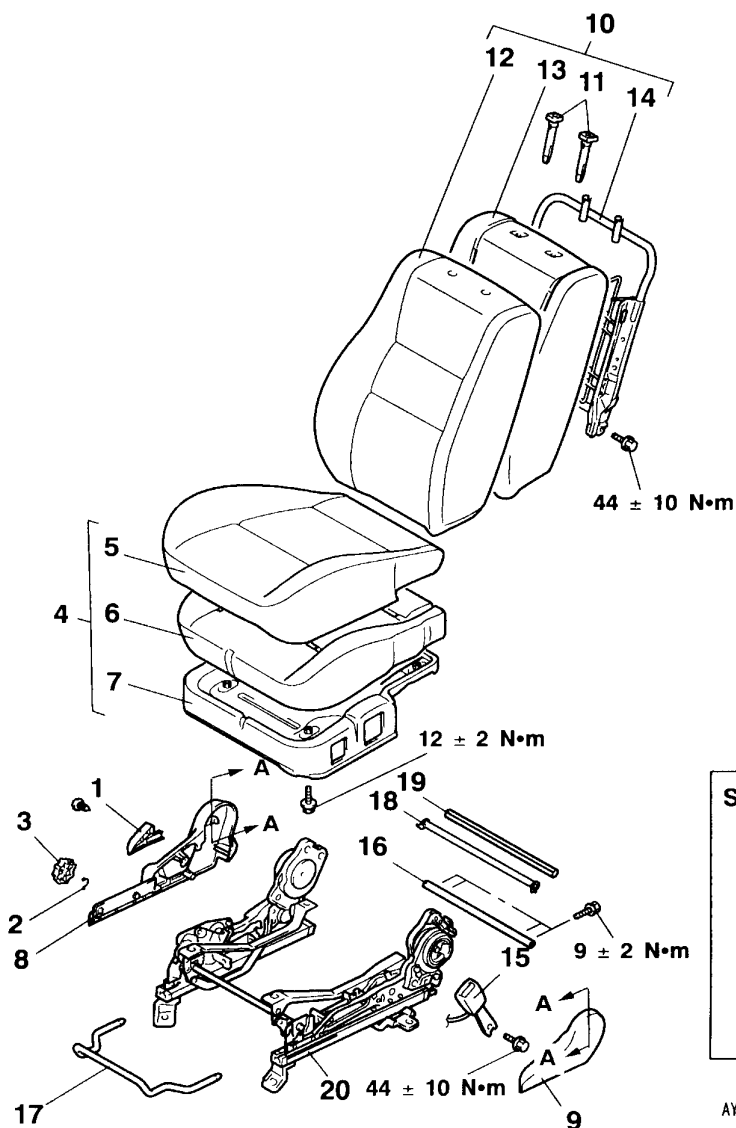
INSTALLATION SERVICE POINT

►A◄ INSTALLATION OF FRONT SEAT ASSEMBLY

- (1) Temporarily tighten the nuts and bolts in all mounting locations shown in the illustration with no load applied to the front seat cushion and check the operation of the seat slide.
- (2) Tighten the nuts and bolts in all mounting locations to the specified torque.

DISASSEMBLY AND REASSEMBLY

HIGHT ADJUSTER SEAT



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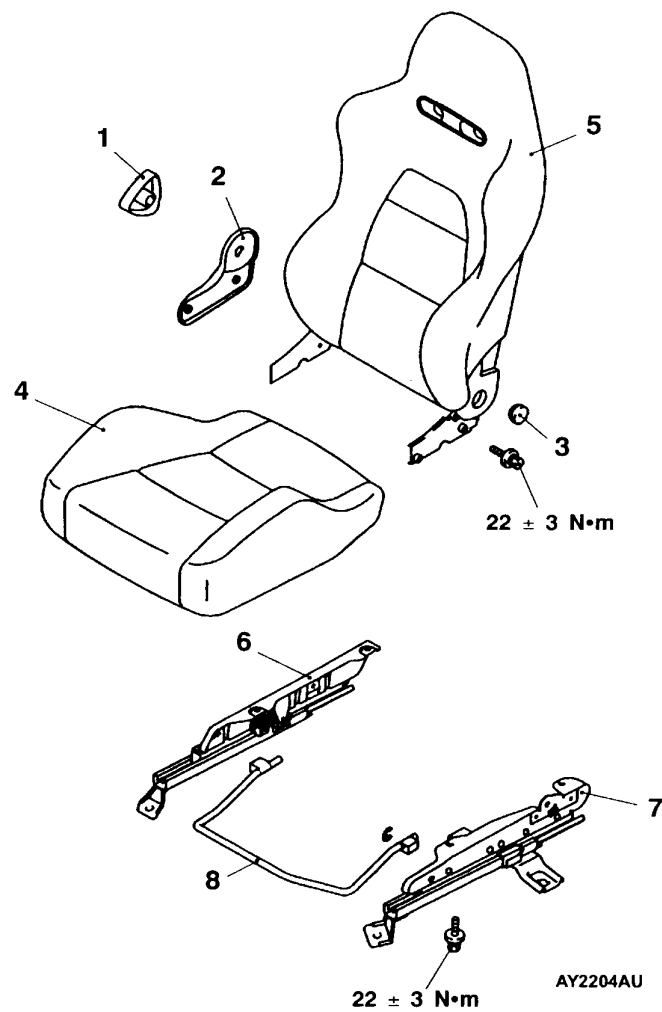
Disassembly steps

1. Reclining knob
2. Pin
3. Height adjuster knob
4. Front seat cushion assembly
5. Front seat cushion cover
6. Front seat cushion pad
7. Front seat cushion frame
8. Reclining cover
9. Shield cover
10. Front seatback assembly



11. Headrest guide
12. Front seatback cover
13. Front seatback pad
14. Front seatback frame
15. Inner seat belt
16. Shaft
17. Seat slide handle
18. Shaft
19. Shaft protector
20. Seat slide adjuster

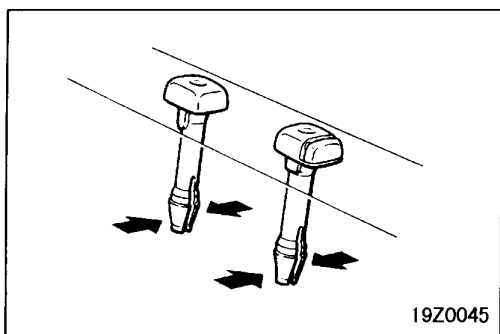
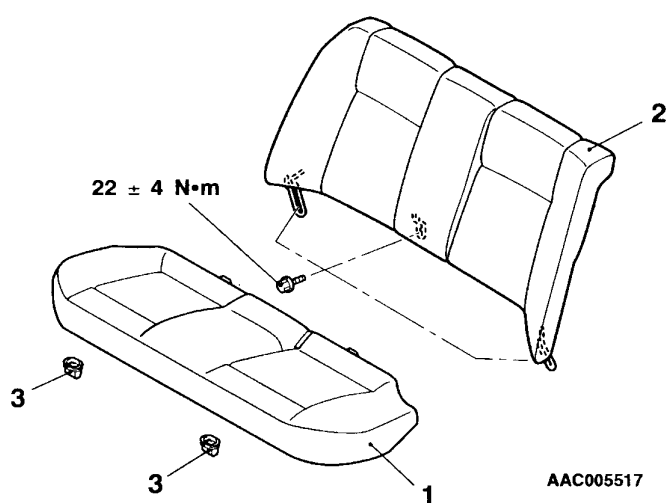
RECARO SEAT



Disassembly steps

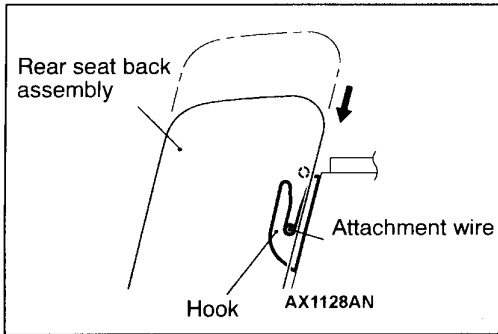
1. Reclining knob
2. Reclining cover
3. Cap
4. Front seat cushion assembly

5. Front seat back assembly
6. Seat rail R.H.
7. Seat rail L.H.
8. Seat slide lever

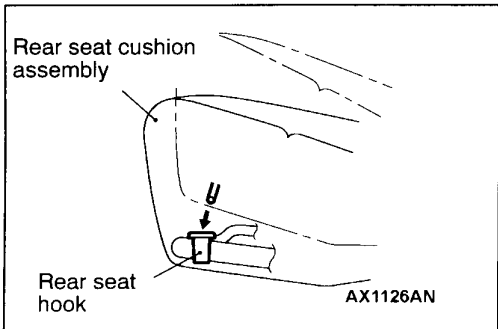
**REMOVAL SERVICE POINT**◀A▶ **REMOVAL OF HEADREST GUIDE**
**REAR SEAT
REMOVAL AND INSTALLATION**
**Disassembly steps**

1. Rear seat cushion assembly
2. Rear seatback assembly

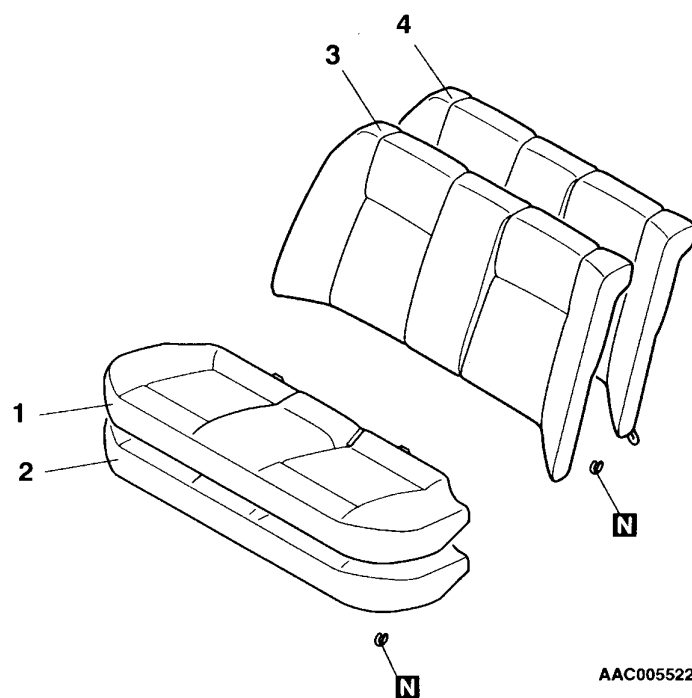
3. Rear seat hook

**INSTALLATION SERVICE POINTS****►A◄ INSTALLATION OF REAR SEATBACK ASSEMBLY/REAR SEATBACK SIDE ASSEMBLY L.H., R.H.**

Press the rear seatback assembly in the direction shown in the illustration and fit the attachment wire into the hook securely to install the rear seatback assembly.

**►B◄ INSTALLATION OF REAR SEAT CUSHION ASSEMBLY**

Fit the rear seat cushion into the rear seat hook securely.

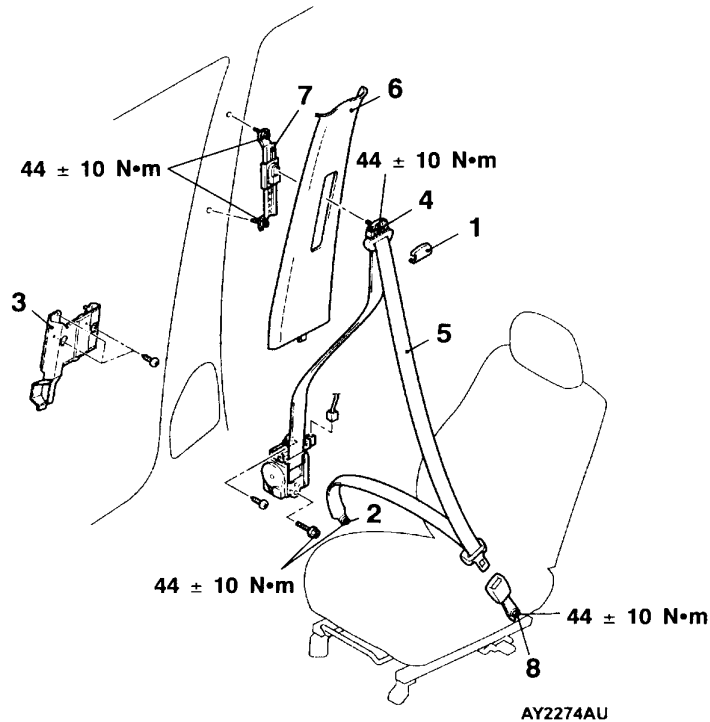
DISASSEMBLY AND REASSEMBLY

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Removal steps

1. Rear seat cushion cover
2. Rear seat cushion pad

3. Rear seatback cover
4. Rear seatback pad

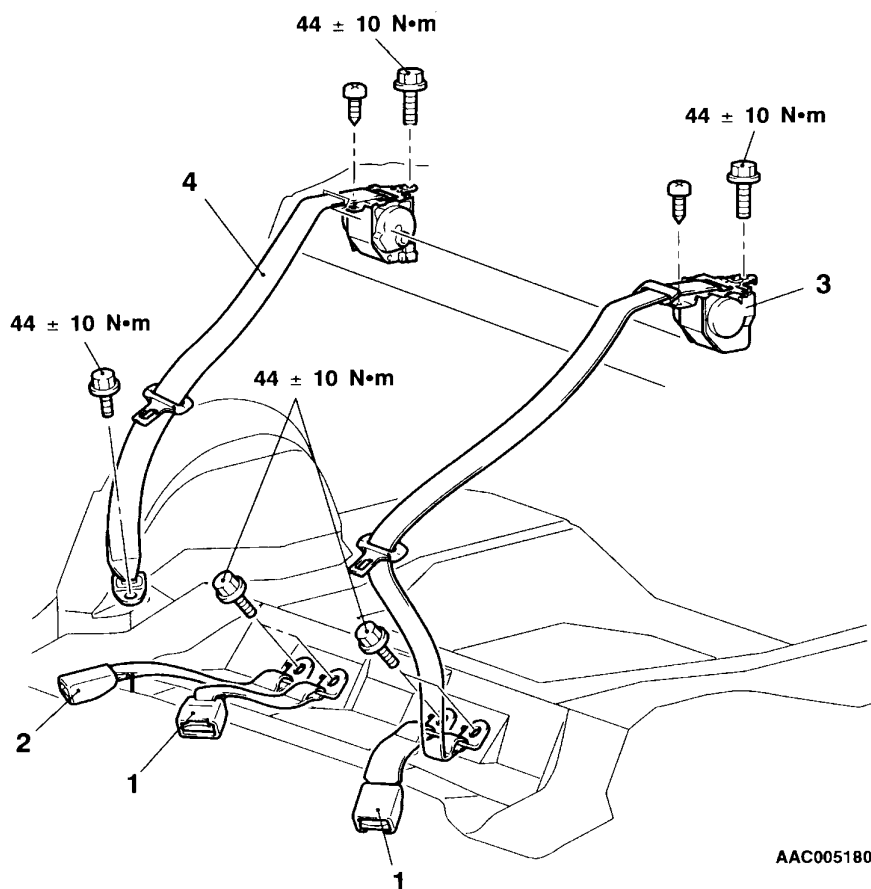
SEAT BELT**FRONT SEAT BELT****REMOVAL AND INSTALLATION****Outer seat belt removal steps**

1. Sash guide cover
2. Seat belt lower anchor bolt connection
 - Center pillar trim, lower (Refer to P.52A-15.)
3. Bracket
4. Seat belt shoulder anchor bolt connection
5. Outer seat belt with pre-tensioner
6. Center pillar trim, upper (Refer to P.52A-15.)
7. Adjustable seat belt anchor

Inner seat belt removal steps

- Shield cover (Refer to P.52A-20.)
- 8. Inner seat belt

REAR SEAT BELT REMOVAL AND INSTALLATION



Removal steps

- Rear seat cushion assembly (Refer to P.52A-22.)
- Rear seatback assembly (Refer to P.52A-22.)
- Rear shelf trim (Refer to P.52A-15.)

1. Inner seat belt
2. Center seat belt, inner
3. Center seat belt, outer
4. Outer seat belt

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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CAUTION

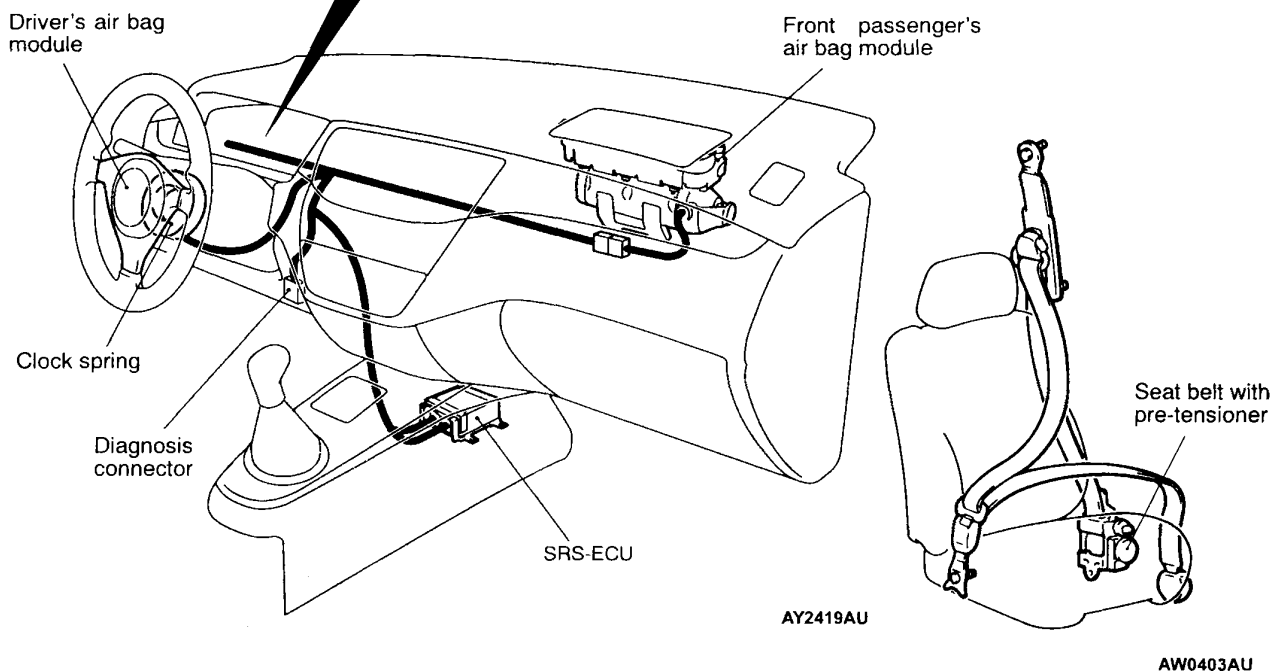
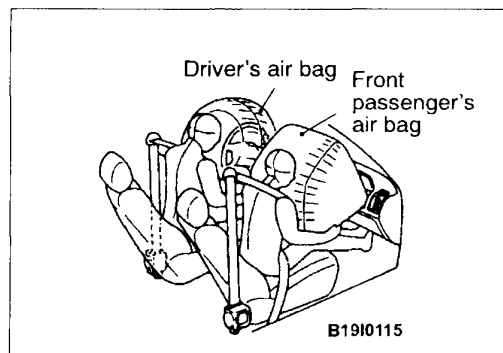
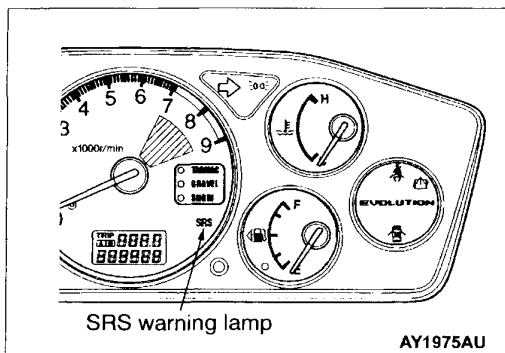
- Carefully read and observe the information in the SERVICE PRECAUTIONS (P.52B-3.) prior to any service.
 - For information concerning troubleshooting or maintenance, always observe the procedures in the Troubleshooting (P.52B-6.) section.
 - If any SRS components are removed or replaced in connection with any service procedures, be sure to follow the procedures in the INDIVIDUAL COMPONENT SERVICE section (P.52B-49.) for the components involved.
 - If you have any questions about the SRS, please contact your local distributor.
-

GENERAL INFORMATION

To improve safety, the SRS and seat belts with pre-tensioner. These systems enhance collision safety by restraining the front passengers in case of an accident. The SRS works with the pre-tensioner simultaneously when a collision is detected.

The SRS consists of two air bag modules, SRS air bag control unit (SRS-ECU), SRS warning lamp and clock spring. The air bags are located in the center of the steering wheel, above the glove box. Each air bag has a folded air bag and an inflator unit. The SRS-ECU under the floor console monitors the system and has a safing G-sensor and an analog G-sensor. The warning lamp on the

instrument panel indicates the operational status of the SRS. The clock spring is installed in the steering column. The seat belt pre-tensioner is built into the front seat belt retractor. Only authorized service personnel should do work on or around the SRS components and seat belt with pre-tensioner. 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 bags or inadvertent operation of the seat belt with pre-tensioner) or the driver (by rendering the SRS or the seat belt with pre-tensioner inoperative).

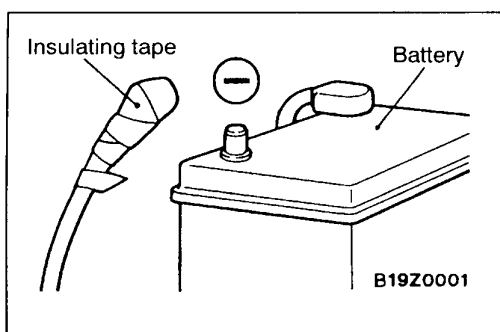


SRS SERVICE PRECAUTIONS

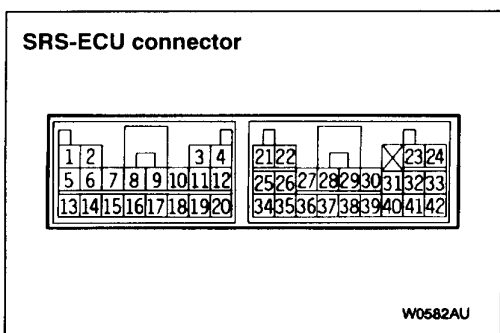
1. In order to avoid injury to yourself or others from accidental deployment of the air bag and accidental operation of the seat belt with pre-tensioner during servicing, read and carefully follow all the precautions and procedures described in this manual.
2. Do not use any electrical test equipment on or near SRS components, except those specified on P.52B-6.
3. **Never Attempt to Repair the Following Components:**
 - SRS air bag control unit (SRS-ECU)
 - Clock spring
 - Driver's and front passenger's air bag modules
 - Seat belt with pre-tensioner

NOTE

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. (Refer to P.52B-49.)



4. After disconnecting the negative (–) battery cable, wait 60 seconds at least before any service and insulate the disconnected cable with tape. The SRS retain enough voltage to deploy the air bags for a short time even after the disconnection of the battery. So, serious injury may result by accidental air bag deployment if a work is done on the SRS just after the disconnection of the battery.

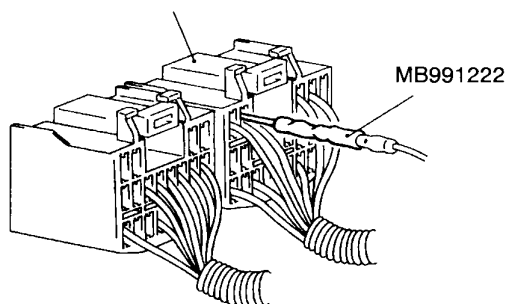


5. Do not attempt to repair the wiring harness connectors of the SRS. If the connector(s) are diagnosed as defective, replace the wiring harness(es). If the harness(es) are diagnosed as faulty, replace or repair the wiring harness(es) according to the table that follows.

SRS-ECU Terminal No.	Destination of harness	Corrective action
7	Instrument panel wiring harness → Earth	Repair or replace each wiring harness
8	Instrument panel wiring harness → Combination meter (SRS warning lamp)	
9, 10	Instrument panel wiring harness → Front passenger's air bag module	
11, 12	Instrument panel wiring harness → Clock spring → Driver's air bag module)	Repair or replace the dash wiring harness. Replace clock spring.
13	Instrument panel wiring harness → Junction block (fuse No.3)	Repair or replace each wiring harness.
16	Instrument panel wiring harness → Junction block (fuse No.2)	
20	Instrument panel wiring harness → Diagnosis connector	
29, 30	Floor wiring harness → Driver's seat belt pre-tensioner	
27, 28	Floor wiring harness → Front passenger's seat belt pre-tensioner	

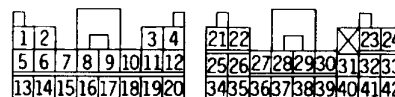
6. Inspection of the SRS-ECU harness connector should be carried out by the following procedure. Insert the special tool (probe, MB991222, in the harness set) into the connector from harness side (rear side), and connect the tester to this probe. If any tool than specified is used, damage to the harness and other components will result. Furthermore, measurement should not be carried out by touching the probe directly against the terminals from the front of the connector. The terminals are plated to increase their conductivity, so that if they are touched directly by the probe, the plating may break, which will cause drops in reliability.

SRS-ECU harness connector



V0132AE

SRS-ECU harness connector (rear view)



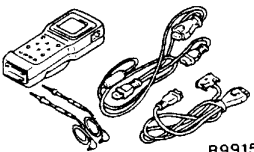
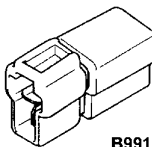
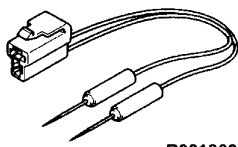
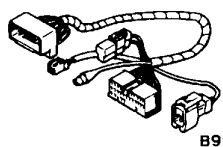
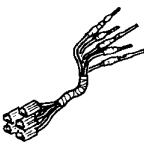
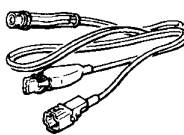
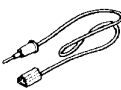
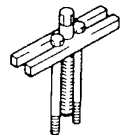
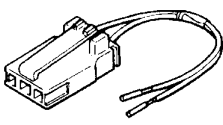
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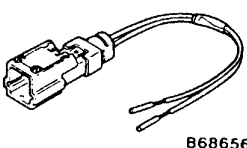
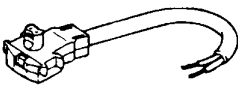
7. SRS components and seat belt with pre-tensioner should not be subjected to heat, so remove the SRS-ECU, driver's and front passenger's air bag modules, clock spring, and seat belt with pre-tensioner before drying or baking the vehicle after painting.
- SRS-ECU, air bag module, clock spring : 93°C or more
 - Seat belt with pre-tensioner : 90°C or more
8. Whenever you finish servicing the SRS, check warning lamp operation to make sure that the system functions properly. (Refer to P.52B-6.)
9. Make certain that the ignition switch is LOCK (OFF) position 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
 B991502	MB991502	MUT-II sub assembly	• Reading and erasing diagnosis codes • Reading trouble period • Reading erase times
 B991865	MB991865	Dummy resistor	Checking SRS air bag circuit
 B991866	MB991866	Resistor harness	
 B991613	MB991613	SRS check harness	Checking SRS electrical circuitry
A  B  C  D  C991223	MB991223 A: MB991219 B: MB991220 C: MB991221 D: MB991222	Harness set A: Check harness B: LED harness C: LED harness adapter D: Probe	Checking continuity and measuring voltage at SRS-ECU harness connector
 B990803	MB990803	Steering wheel puller	Removing steering wheel
 R372530	MR372530	SRS air bag adapter harness	Deploying driver's air bag module inside vehicle

Tool	Number	Name	Use
 B686560	MB686560	SRS air bag adapter harness	Deploying front passenger's air bag module inside or outside vehicle
 B628919	MR203491 or MB628919	SRS air bag adapter harness	Deploying driver's air bag module inside vehicle <RS>

TEST EQUIPMENT

Tool	Name	Use
 13R0748	Digital multi-meter	Checking SRS electrical circuitry Use multi-meter for which the maximum test current is 2 mA or less at minimum range of resistance measurement

TROUBLESHOOTING

STANDARD FLOW OF DIAGNOSTIC TROUBLESHOOTING

Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points.

DIAGNOSIS FUNCTION

DIAGNOSIS CODES CHECK

Connect the MUT-II to the diagnosis connector (16-pin) under the instrument under cover, then check diagnosis codes.

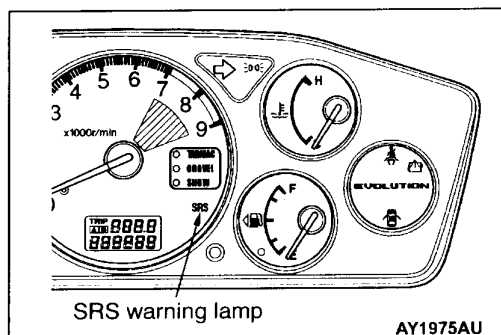
(Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points.)

ERASING DIAGNOSIS CODE

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

Caution

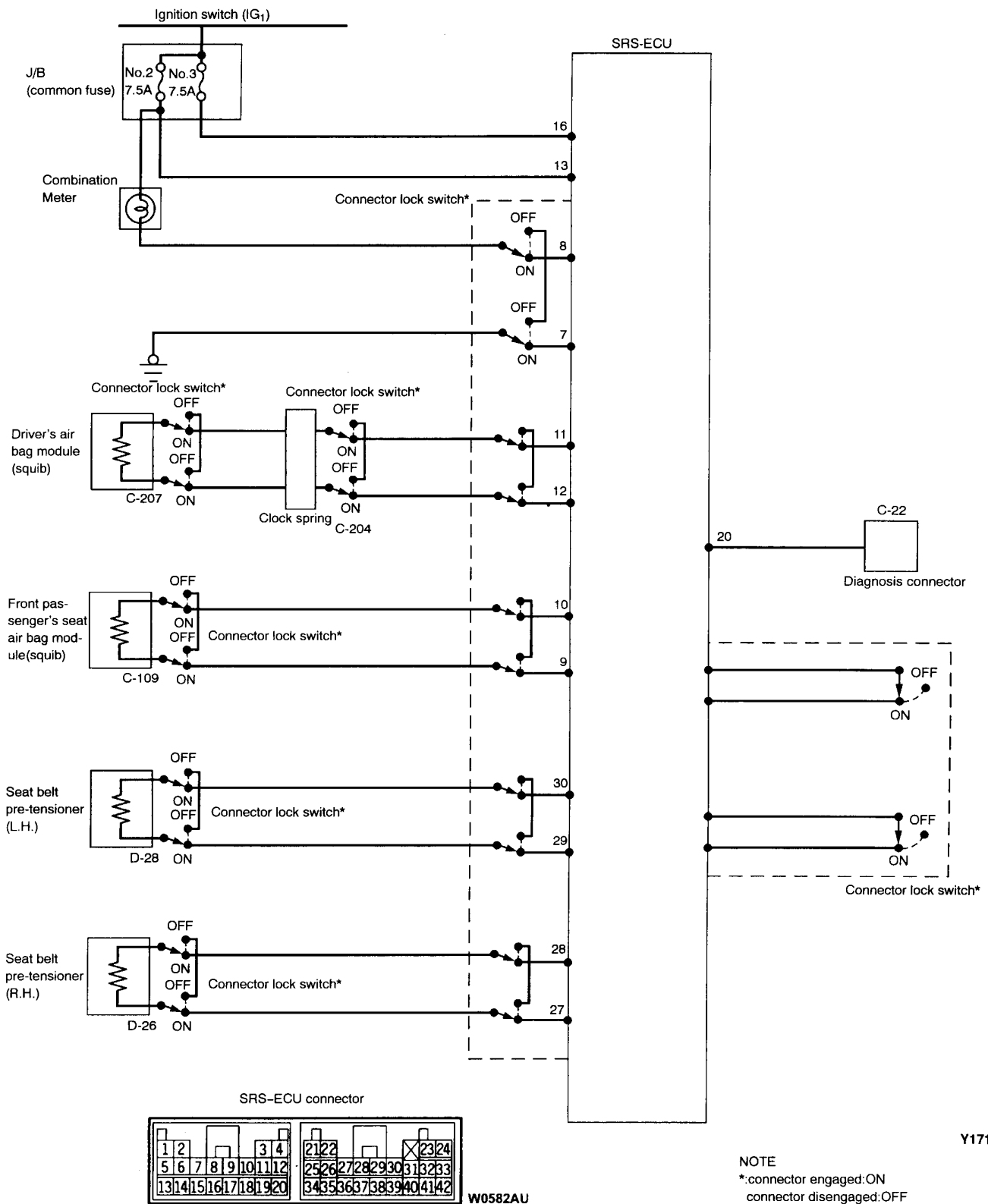
Turn off the ignition switch before connecting or disconnecting the MUT-II.



SRS WARNING LAMP CHECK

1. Check that the SRS warning lamp comes on when the ignition switch is turned ON.
2. Check that the SRS warning lamp illuminates for about 7 seconds and then goes out.
3. If this is not the cause, check the diagnosis codes.

SRS SYSTEM CIRCUIT DIAGRAM

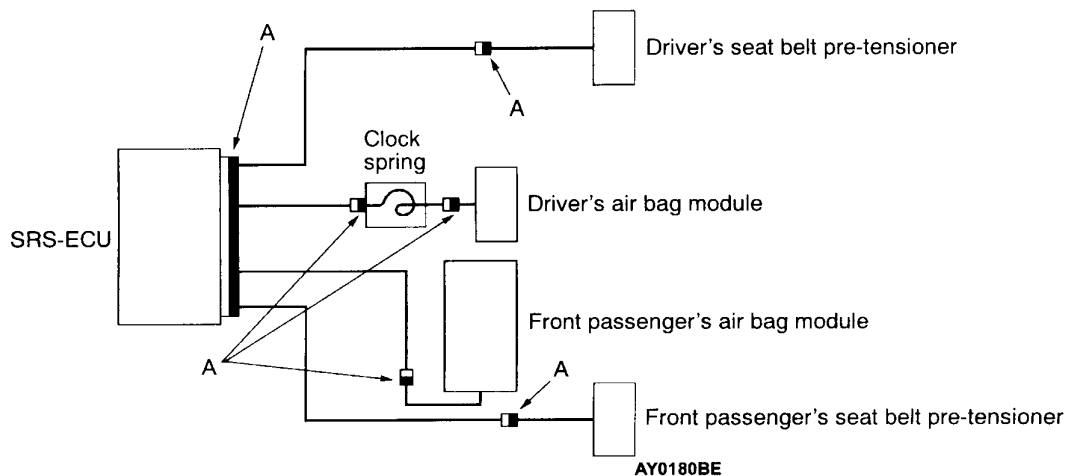


Y1717AU

CONNECTOR FOR SRS AIR BAG

The SRS air bag system connector is yellow or red.

To enhance system reliability, a connector lock switch is adopted for the SRS-ECU connector, and each air bag module and clock spring connector, each seat belt with pre-tensioner <the connector A in the following illustration (black)>).

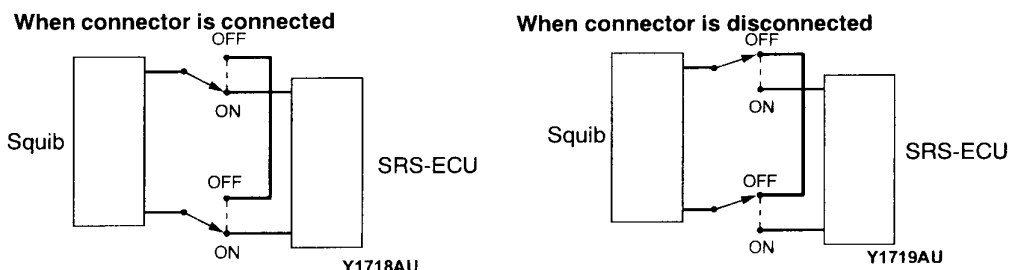


SQUIB CIRCUIT CONNECTOR LOCK SWITCH

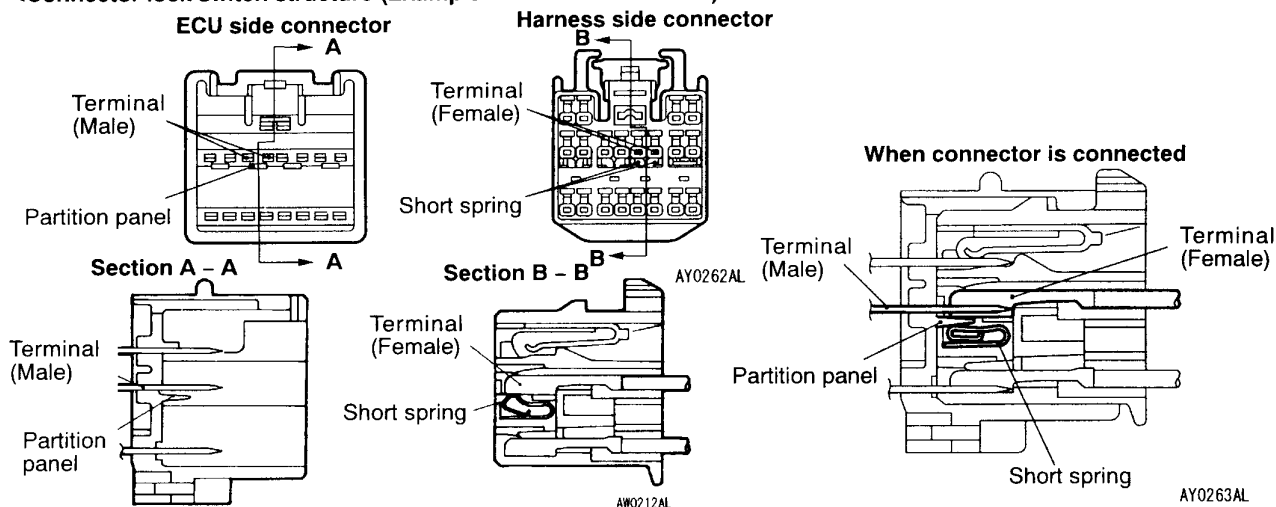
Mechanism to automatically short-circuit the power supply terminal and the earth terminal of the air bag squib circuit when the connector is disconnected. The short spring inside the connector allows to short-circuit the power supply terminal and the earth terminal of the squib (no difference in voltage occurs between the terminals) to prevent the squib from getting charged with static electricity.

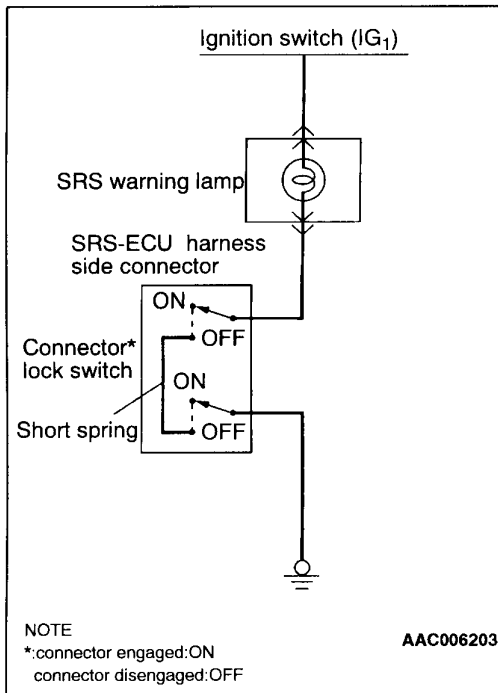
CAUTION

When the connector is disconnected, it is normal for short-circuiting to occur between the connector terminals.



<Connector lock switch structure (Example: SRS-ECU connector)>



**WARNING LAMP CIRCUIT CONNECTOR LOCK SWITCH**

Mechanism to automatically short-circuit the power supply terminal and the earth terminal of the warning lamp circuit when the SRS-ECU connector is disconnected. The structure is the same as that of squib circuit connector lock switch.

INSPECTION CHART FOR DIAGNOSIS CODES

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

Code no.	Diagnostic item		Page
14	SRS-ECU front impact analog G-sensor system		52B-11
15	SRS-ECU front impact safing G-sensor system	Short circuit in the sensor	52B-11
16	SRS-ECU front impact safing G-sensor system	Open circuit in the sensor	
21* ¹	Driver's air bag module (squib) system	Short circuit between terminals of the squib circuit	52B-12
22* ¹	Driver's air bag module (squib) system	Open in the squib circuit	52B-16
24* ¹	Front passenger's air bag module (squib) system	Short circuit between terminals of the squib circuit	52B-20
25* ¹	Front passenger's air bag module (squib) system	Open in the squib circuit	52B-22
26* ¹	Driver's seat belt pre-tensioner (squib) system	Short circuit between terminals of the squib circuit	52B-23
27* ¹	Driver's seat belt pre-tensioner (squib) system	Open in the squib circuit	52B-25
28* ¹	Front passenger's seat belt pre-tensioner (squib) system	Short circuit between terminals of the squib circuit	52B-26
29* ¹	Front passenger's seat belt pre-tensioner (squib) system/	Open in the squib circuit	52B-28
31	SRS-ECU DC-DC converter system	Increased terminal voltage	52B-11
32	SRS-ECU DC-DC converter system	Decreased terminal voltage	

Code no.	Diagnostic item		Page
34*2	Connector lock system		52B-29
35	SRS-ECU (deployed air bag) system		52B-29
41*2	Power supply circuit system (fuse No.2 circuit)		52B-30
42*2	Power supply circuit system (fuse No.3 circuit)		52B-32
43*2	SRS warning lamp drive circuit system	Lamp does not illuminate.	52B-33
	SRS warning lamp drive circuit system	Lamp does not go out.	52B-33
44*2	SRS warning lamp drive circuit system		52B-33
45	SRS-EUC internal circuit system including non-volatile memory (EEPROM)		52B-11
51	Driver's air bag module (squib) ignition drive circuit system	Short in the ignition drive circuit	52B-11
52	Driver's air bag module (squib) ignition drive circuit system	Open in the ignition drive circuit	
54	Front passenger's air bag (squib) ignition drive circuit system	Short in the ignition drive circuit	52B-11
55	Front passenger's air bag (squib) ignition drive circuit system	Open in the ignition drive circuit	
56	Driver's seat belt pre-tensioner (squib) ignition drive circuit system	Short in the ignition drive circuit	52B-11
57	Driver's seat belt pre-tensioner (squib) ignition drive circuit system	Open in the ignition drive circuit	
58	Front passenger's seat belt pre-tensioner (squib) ignition drive circuit system	Short in the ignition drive circuit	52B-11
59	Front passenger's seat belt pre-tensioner (squib) ignition drive circuit system	Open in the ignition drive circuit	
61	Driver's air bag module (squib) system	Short-circuited to power supply	52B-34
62	Driver's air bag module (squib) system	Short-circuited to earth	
64	Front passenger's air bag module (squib) system	Short-circuited to power supply	52B-38
65	Front passenger's air bag module (squib) system	Short-circuited to earth	
66	Driver's seat belt pre-tensioner (squib) system	Short-circuited to power supply	52B-39
67	Driver's seat belt pre-tensioner (squib) system	Short-circuited to earth	
68	Front passenger's seat belt pre-tensioner (squib) system	Short-circuited to power supply	52B-40
69	Front passenger's seat belt pre-tensioner (squib) system	Short-circuited to earth	

NOTE

- (1) *1: If the trouble(s) are removed, the SRS warning lamp go out with diagnosis code history stored.
- (2) *2: If the trouble(s) are removed, the SRS warning lamp will go out with diagnosis code history automatically erased.
- (3) When the battery has been discharged, diagnosis code No.41 or 42 is stored. Check the battery when either of these is displayed.

INSPECTION PROCEDURE CLASSIFIED BY DIAGNOSIS CODE

Code No.14, 15, 16, 31, 32, 45, 51, 52, 54, 55, 56, 57, 58, 59 System inside SRS-ECU	Probable cause
Malfunction is present inside SRS-ECU. See table below for what each code tells.	• Malfunction of SRS-ECU

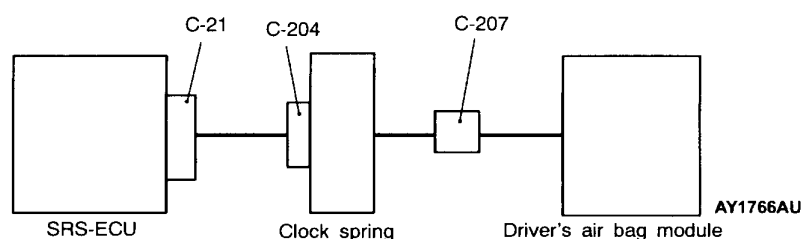
Code No.	Defective parts	Trouble
14	Front impact analog G-sensor	• Not operating • Abnormal characteristics • Abnormal output
15	Front impact safing G-sensor	• Short in the circuit
16		• Open in the circuit
31	DC-DC converter	• Terminal voltage of the converter higher than specified for five seconds or more
32		• Terminal voltage of the converter lower than specified for 5 seconds or more (this code is not detected when code No.41 or 42, which indicates discharged battery, has been detected)
45	Non-volatile memory (EEPROM)	• Defective parts inside
51	Driver's air bag module (squib) ignition drive circuit	• Short in the circuit
52		• Open in the circuit
54	Front passenger's air bag module (squib) ignition drive circuit	• Short in the circuit
55		• Open in the circuit
56	Driver's seat belt pre-tensioner (squib) ignition drive circuit	• Short in the circuit
57		• Open in the circuit
58	Front passenger's seat belt pre-tensioner (squib) ignition drive circuit	• Short in the circuit
59		• Open in the circuit

If the above-mentioned code No. is output, replace the SRS-ECU.

Code No.21 Driver's air bag module (squib) system	Possible Cause
This code is output when short circuit occurs between terminals of the SRS-ECU driver's air bag module (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Connector engagement faulty or short bar faulty* • Short circuit in the clock spring • Short circuit between terminals of the driver's air bag module (squib) circuit • Faulty connector • SRS-ECU inoperable

NOTE:

- (1) *: The connector of the squib circuit contains a short bar (short-circuiting the positive (+) cable and the negative (-) cable to avoid an erroneous deployment caused by static electricity when a connector is not connected). Thus, when a connector is connected, the short bar may not be released due to improper engagement of the connector or faulty connector as shown in the illustration below. Disconnect the connector as shown in the illustration below, then reconnect it. Check that a diagnosis code is output again after erasing the memory. If the diagnosis code is not output, the above-mentioned code is output due to improper engagement of the connector.

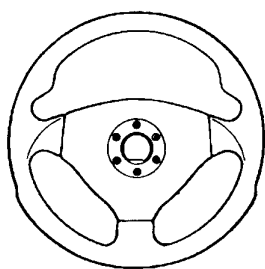


- (2) Two different types of driver's air bag modules by model are featured. Thus, two types of air bag module by model are described in the following flowchart.

RS: Steering wheel and air bag module separate type

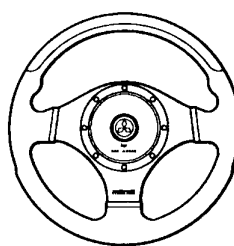
RS-II: Steering wheel and air bag module incorporate type

<RS>



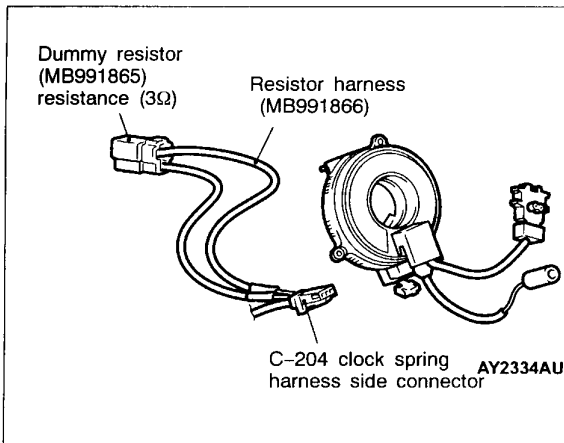
13R0025

<RS-II>



Y2058AU

<RS>



<Clock spring check>

MUT-II self-diag code

- Release the clock spring connector (2-pin) C-204.
- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Insert the resistor harness (MB991866) behind the harness side connector C-204.

Caution

- Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.**
- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory. Is code No.21 output?

YES

NO

<Check the circuit between the SRS-ECU and clock spring>

Measure at the SRS-ECU connector C-21.

- Disconnect the SRS-ECU connector C-21.
- Release the clock spring connector C-204.

Caution

Disconnect the connector and short-circuit the squib circuit before releasing the short bar of the SRS-ECU connector in the following operation.

- Cable bands between terminals 11, 12 and the short bar (width:3 mm, thickness:0.5 mm) between terminals 11 and 12 and the short bar, and release the short bar. (See Figure A.)

Caution

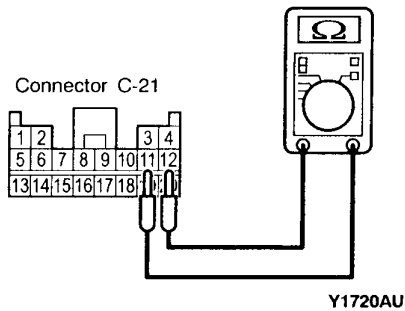
As the short bar may not be releasable if inserted insufficiently, insert more than 4 mm.

- Measure at the harness side
- Continuity check between terminals 11 and 12

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity



OK

Replace the SRS-ECU.

Check the clock spring (Refer to P.52B-59.)

YES

NO

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

Replace the clock spring.

NG

Check connector: C-21, C-204

OK

Check the trouble symptoms.

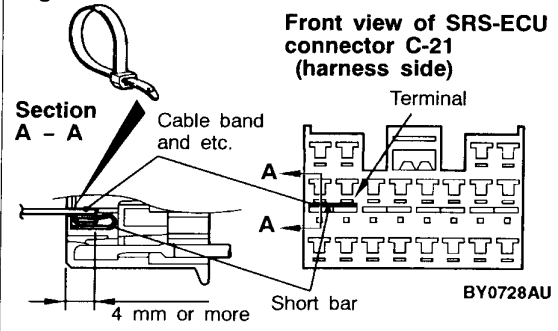
NG

Check the harness between the clock spring and the SRS-ECU, and repair if necessary.

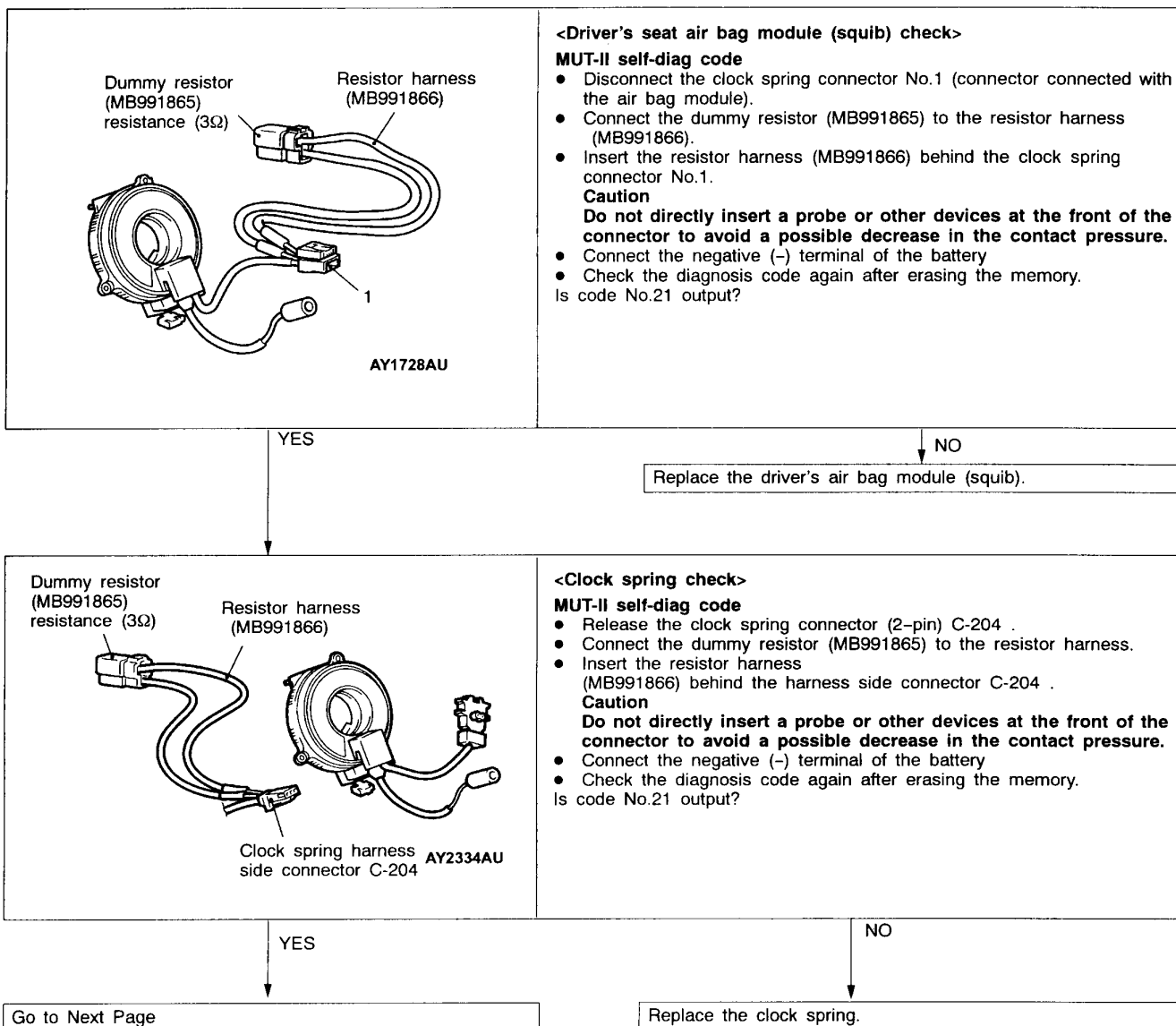
NG

Correct

Figure A



<RS-II>



From Previous Page

YES

<Check the circuit between the SRS-ECU and clock spring>

Measure at the SRS-ECU connector C-21 .

- Disconnect the SRS-ECU connector C-21.
- Release the clock spring connector C-204.

Caution

Disconnect the connector and short-circuit the squib circuit before releasing the short bar of the SRS-ECU connector in the following operation.

- Cable bands between terminals 11, 12 and the short bar (width:3 mm, thickness:0.5 mm) between terminals 11 and 12 and the short bar, and release the short bar. (See Figure A.)

Caution

As the short bar may not be releasable if inserted insufficiently, insert more than 4 mm.

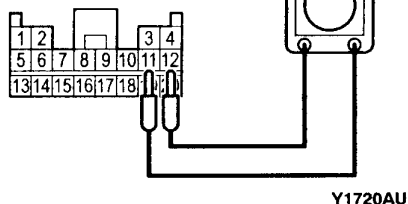
- Measure at the harness side
- Continuity check between terminals 11 and 12

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity

Connector C-21



OK

Replace the SRS-ECU.

NG

Check connector: C-21, C-204

OK

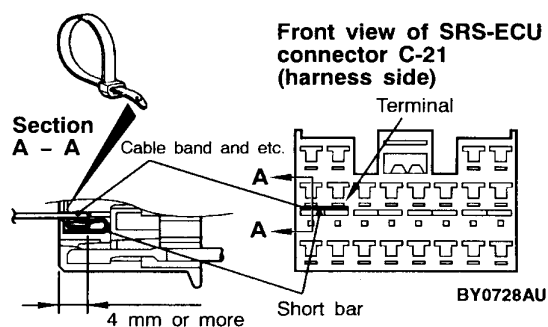
Check the trouble symptoms.

NG

Check the harness between the clock spring and the SRS-ECU, and repair if necessary.

Correct

Figure A



Code No.22 Driver's air bag module (squib) system	Possible Cause
This code is output when open circuit occurs in the SRS-ECU driver's air bag module (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Open in the clock spring • Half open in the circuit due to improper neutral positioning of the clock spring • Open in the driver's air bag module (squib) circuit • Driver's air bag module (squib) connector falling out • Connector improper contact • SRS-ECU inoperable

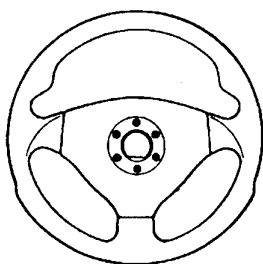
NOTE:

Two different types of driver's air bag modules by model are featured. Thus, two types of air bag module by model are described in the following flowchart.

RS: Steering wheel and air bag module separate type

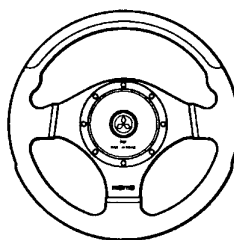
RS-II: Steering wheel and air bag module incorporate type

<RS>



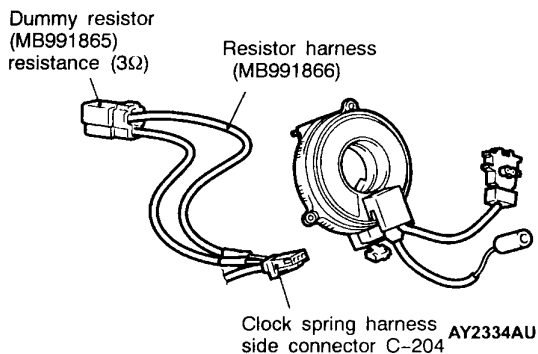
13R0025

<RS-II>



Y2058AU

<RS>



<Clock spring check>

MUT-II self-diag code

- Release the clock spring connector (2-pin) C-204.
- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Insert the resistor harness (MB991866) behind the harness side connector C-204.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
- Check the diagnosis code again after erasing the memory. Is code No.22 output?

YES

NO

<Check the circuit between the SRS-ECU and clock spring>

Measure at the SRS-ECU connector C-21 and the clock spring connector C-204.

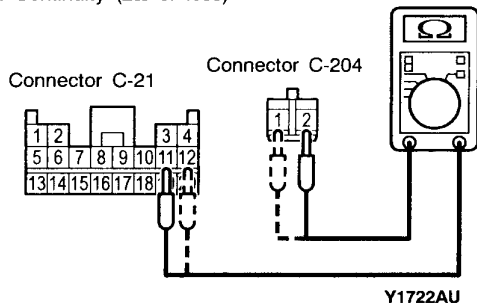
- Disconnect the SRS-ECU connector C-21 and the clock spring connector C-204 and measure at the harness side.
- Continuity check between the following terminals

Connector C-21		Connector C-204
11	-	2
12	-	1

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: Continuity (2Ω or less)



OK

Replace the SRS-ECU.

Check the clock spring (Refer to P.52B-59.)

YES

NO

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

Replace the clock spring.

NG

Check connector: C-21, C-204

OK

NG

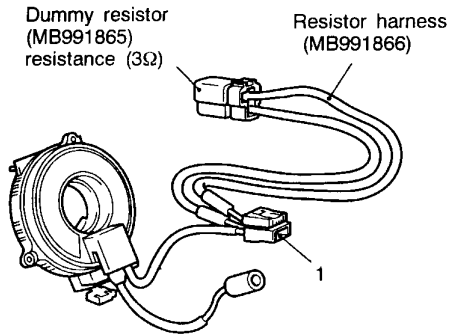
Check the trouble symptoms.

Correct

NG

Check the harness between the clock spring and the SRS-ECU, and repair if necessary.

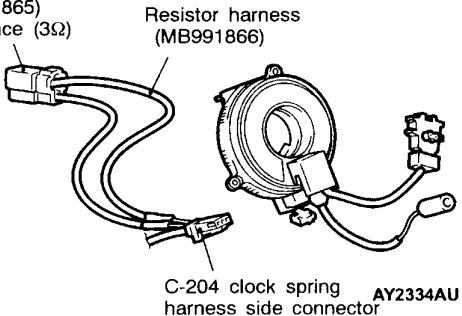
<RS-II>

 Dummy resistor (MB991865) resistance (3Ω) Resistor harness (MB991866) 1 AY1728AU	<Driver's seat air bag module (squib) check> MUT-II self-diag code • Disconnect the clock spring connector No.1 (connector connected with the air bag module). • Connect the dummy resistor (MB991865) to the resistor harness (MB991866). • Insert the resistor harness (MB991866) behind the clock spring connector No.1. Caution Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure. • Connect the negative (-) terminal of the battery • Check the diagnosis code again after erasing the memory. Is code No.22 output?
--	--

YES

NO

Replace the steering wheel-driver's air bag module assembly.

 Dummy resistor (MB991865) resistance (3Ω) Resistor harness (MB991866) C-204 clock spring harness side connector AY2334AU	<Clock spring check> MUT-II self-diag code • Release the clock spring connector (2-pin) C-204. • Connect the dummy resistor (MB991865) to the resistor harness (MB991866). • Insert the resistor harness (MB991866) behind the harness side connector C-204. Caution Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure. • Connect the negative (-) terminal of the battery • Check the diagnosis code again after erasing the memory. Is code No.22 output?
---	---

YES

NO

Go to Next Page

Replace the clock spring.

From Previous Page

YES

<Check the circuit between the SRS-ECU and clock spring>

Measure at the C-21 SRS-ECU connector and C-204 clock spring connector.

- Disconnect the SRS-ECU connector C-21 and the clock spring connector C-204 and measure at the harness side.
- Continuity check between the following terminals

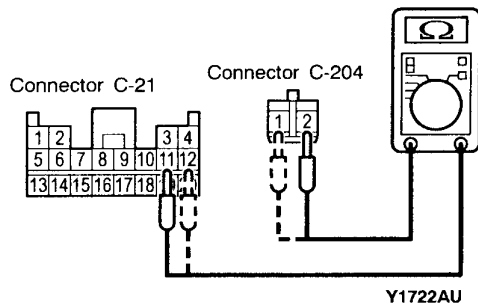
C-21 connector C-204 connector

11 – 2

12 – 1

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: Continuity (2Ω or less)

OK

Replace the SRS-ECU.

NG

Check connector: C-21, C-204

OK

Check the trouble symptoms.

NG

Check the harness between the clock spring and the SRS-ECU, and repair if necessary.

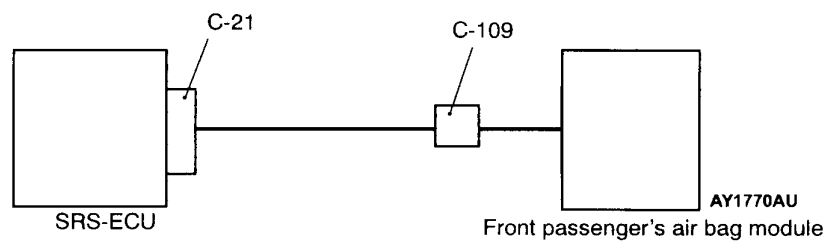
NG

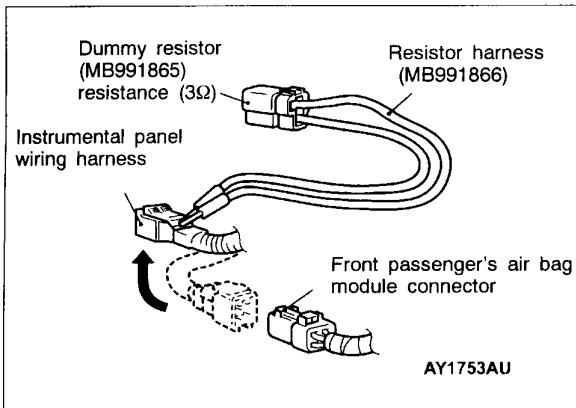
Correct

Code No.24 Front passenger's air bag module (squib) system	Possible Cause
This code is output when short circuit occurs between terminals of the SRS-ECU front passenger's air bag (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Connector engagement faulty or short bar faulty* • Short circuit between terminals of the front passenger's air bag (squib) circuit • Faulty connector • SRS-ECU inoperable

NOTE:

*: The connector of the squib circuit contains a short bar (short-circuiting the positive (+) cable and the negative (-) cable to avoid an erroneous deployment caused by static electricity when a connector is not connected). Thus, when a connector is connected, the short bar may not be released due to improper engagement of the connector or faulty connector as shown in the illustration below. Disconnect the connector as shown in the illustration below, then reconnect it. Check that a diagnosis code is output again after erasing the memory. If the diagnosis code is not output, the above-mentioned code is output due to improper engagement of the connector.





<Check the front passenger's air bag module (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's air bag module connector C-109 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory.
- Is code No.24 output?

YES

<Check the circuit between the SRS-ECU and the front passenger's air bag module>

Measure at the C-21 SRS-ECU connector.

- Disconnect the SRS-ECU connector C-21.
- Disconnect the front passenger's air bag module connector C-109.

Caution

Disconnect the connector and short-circuit the squib circuit before releasing the short bar of the SRS-ECU connector in the following operation.

- Cable bands between terminals 9, 10 and the short bar (width:3 mm, thickness:0.5 mm) between terminals 11 and 12 and the short bar, and release the short bar. (See Figure A.)

Caution

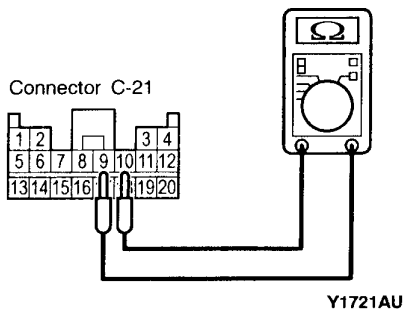
As the short bar may not be releasable if inserted insufficiently, insert more than 4 mm.

- Measure at the harness side
- Continuity check between terminals 9 and 10

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity



OK

Replace the SRS-ECU.

NO

Replace the front passenger's seat air bag module (squib).

NG

Check connector: C-21, C-109

YES

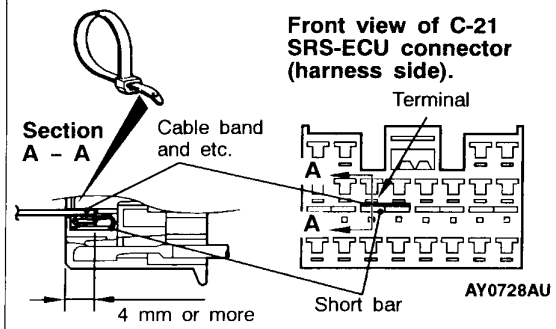
Check the trouble symptoms.

NG

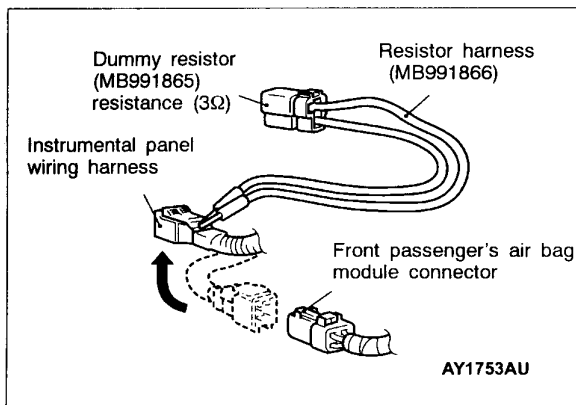
Check the harness between the front passenger's air bag module and the SRS-ECU, and repair if necessary.

Correct

Figure A



Code No.25 Front passenger's air bag module (squib) system	Possible Cause
This code is output when open circuit occurs in the SRS-ECU front passenger's air bag (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Open in the front passenger's air bag module (squib) circuit • Connector improper contact • SRS-ECU inoperable



<Check the front passenger's air bag module (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's air bag module connector C-109 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

- Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.
- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory. Is code No.25 output?

YES

NO

<Check the circuit between the SRS-ECU and the front passenger's air bag module>

Measure at the SRS-ECU connector C-21 and front passenger's air bag module connector C-109 .

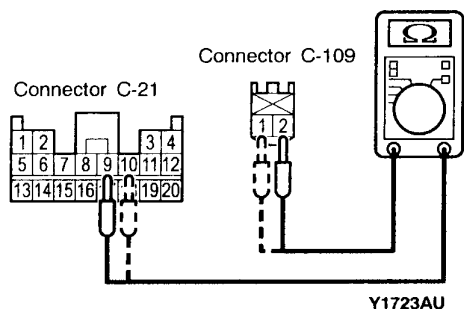
- Disconnect the SRS-ECU connector C-21 and the front passenger's air bag module connector C-109 , and measure at the harness side.
- Continuity check between the following terminals

Connector C-21		Connector C-109
9	—	2
10	—	1

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: Continuity (2Ω or less)



OK

Replace the SRS-ECU.

Replace the front passenger's seat air bag module (squib).

NG

Check connector: C-21, C-109

OK

Check the trouble symptoms.

NG

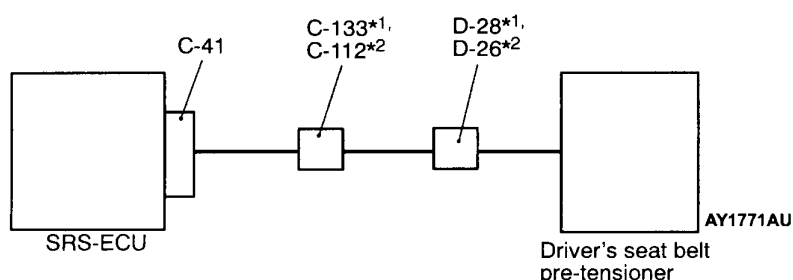
Check the harness between the front passenger's air bag module and the SRS-ECU, and repair if necessary.

Correct

Code No.26 Driver's seat belt pre-tensioner (squib) system	Possible Cause
This code is output when short circuit occurs between terminals of the SRS-ECU driver's seat belt pre-tensioner (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Connector engagement faulty or short bar faulty* • Short circuit between terminals of the driver's seat belt pre-tensioner (squib) circuit • Faulty connector • SRS-ECU inoperable

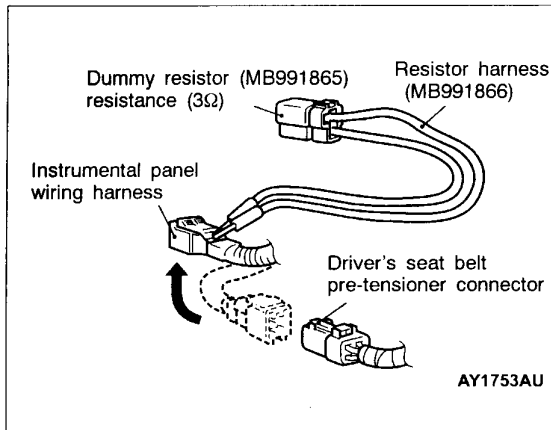
NOTE:

*: The connector of the squib circuit contains a short bar (short-circuiting the positive (+) cable and the negative (-) cable to avoid an erroneous deployment caused by static electricity when a connector is not connected). Thus, when a connector is connected, the short bar may not be released due to improper engagement of the connector or faulty connector as shown in the illustration below. Disconnect the connector as shown in the illustration below, then reconnect it. Check that a diagnosis code is output again after erasing the memory. If the diagnosis code is not output, the above-mentioned code is output due to improper engagement of the connector.

**NOTE**

*1: L.H. drive vehicles

*2: R.H. drive vehicles



<Check the driver's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the driver's seat belt pre-tensioner connector D-28*¹ and D-26*² and connect to the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory.
- Is code No.26 output?

YES

NO

<Check the circuit between the SRS-ECU and the driver's seat belt pretensioner>

Measure at the SRS-ECU connector C-41.

- Disconnect the SRS-ECU connector C-41.
- Disconnect the driver's seat belt pre-tensioner connector D-28*¹ and D-26*².

Caution

Disconnect the connector and short-circuit the squib circuit before releasing the short bar of the SRS-ECU connector in the following operation.

- Cable bands between terminals 29, 30 and the short bar (width:3 mm, thickness:0.5 mm) between terminals 11 and 12 and the short bar, and release the short bar. (See Figure A.)

Caution

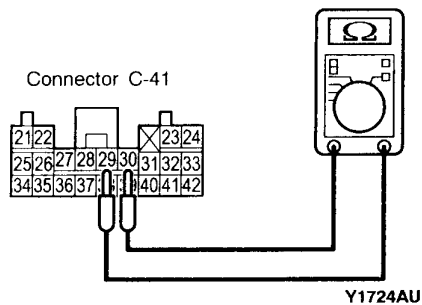
As the short bar may not be releasable if inserted insufficiently, insert more than 4 mm.

- Measure at the harness side
- Continuity check between terminals 29 and 30

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity



OK

Replace the SRS-ECU.

Replace the driver's seat belt pre-tensioner.

NG

Check connector: D-28*¹, D-26*², C-133*¹, C-112*², C-41

YES

NG

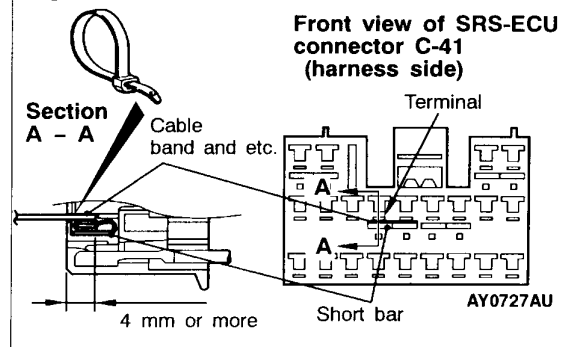
Check the trouble symptoms.

Correct

NG

Check the harness between the driver's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

Figure A

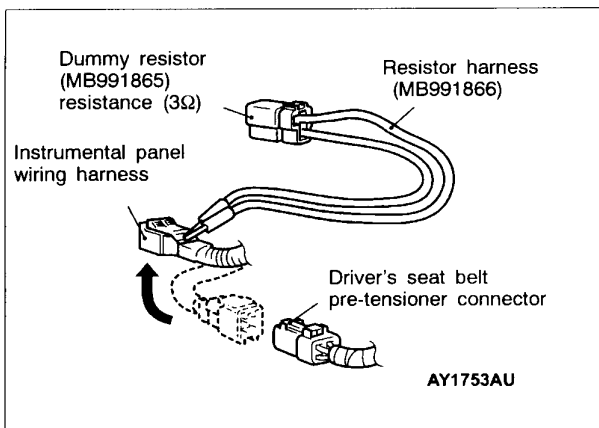


NOTE

*1: L.H. drive vehicles

*2: R.H. drive vehicles

Code No.27 Driver's seat belt pre-tensioner (squib) system	Possible Cause
This code is output when open circuit occurs in the SRS-ECU driver's seat belt pre-tensioner (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	- Connector improper contact - Open in the driver's seat pre-tensioner (squib) circuit - SRS-ECU inoperable



<Check the driver's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy harness (MB991865) to the resistor harness (MB991866).
- Disconnect the driver's seat belt pre-tensioner connector D-28*1 and D-26*2 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory.
- Is code No.27 output?

YES

NO

<Check the circuit between the SRS-ECU and the driver's seat belt pretensioner>

Measure at the SRS-ECU connector C-41, the driver's seat belt pre-tensioner connector D-28*1 and D-26*2.

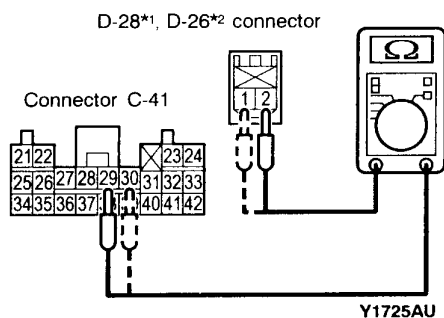
- Disconnect the SRS-ECU connector C-41, the driver's seat belt pre-tensioner connector D-28*1 and D-26*2, and then measure at the harness side.
- Continuity check between the following terminals

Connector C-41		D-28*1, D-26*2
29	—	2
30	—	1

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: Continuity (2Ω or less)



OK

Replace the SRS-ECU.

Replace the driver's seat belt pre-tensioner.

NG

Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-124

OK

Check the trouble symptoms.

NG

Check the harness between the driver's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

Correct

NOTE

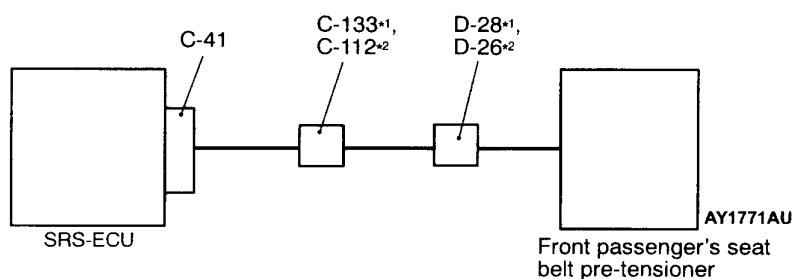
*1: L.H. drive vehicles

*2: R.H. drive vehicles

Code No.28 Front passenger's seat belt pre-tensioner (squib) system	Possible Cause
This code is output when short circuit occurs between terminals of the SRS-ECU front passenger's seat belt pre-tensioner (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Connector engagement faulty or short bar faulty* • Short circuit between terminals of the front passenger's seat belt pre-tensioner (squib) circuit • Faulty connector • SRS-ECU inoperable

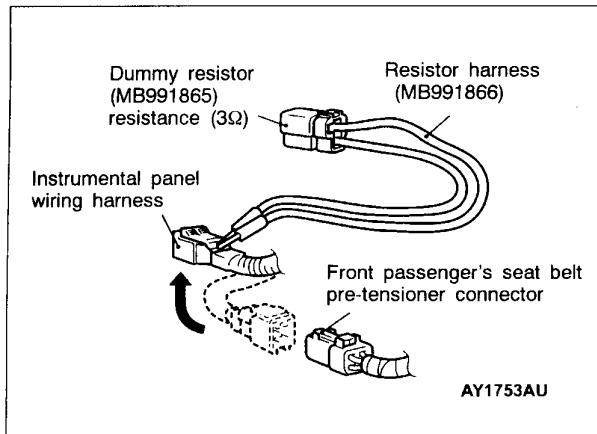
NOTE

*: The connector of the squib circuit contains a short bar (short-circuiting the positive (+) cable and the negative (-) cable to avoid an erroneous deployment caused by static electricity when a connector is not connected). Thus, when a connector is connected, the short bar may not be released due to improper engagement of the connector or faulty connector as shown in the illustration below. Disconnect the connector as shown in the illustration below, then reconnect it. Check that a diagnosis code is output again after erasing the memory. If the diagnosis code is not output, the above-mentioned code is output due to improper engagement of the connector.

**NOTE**

*1: L.H. drive vehicles

*2: R.H. drive vehicles



<Check the front passenger's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy harness (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
- Check the diagnosis code again after erasing the memory. Is code No.28 output?

YES

<Check the circuit between the SRS-ECU and the front passenger's seat belt pre-tensioner>

Measure at the SRS-ECU connector C-41.

- Disconnect the SRS-ECU connector C-41.
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2.

Caution

Disconnect the connector and short-circuit the squib circuit before releasing the short bar of the SRS-ECU connector in the following operation.

- Cable bands between terminals 27, 28 and the short bar (width:3 mm, thickness:0.5 mm) between terminals 11 and 12 and the short bar, and release the short bar. (See Figure A.)

Caution

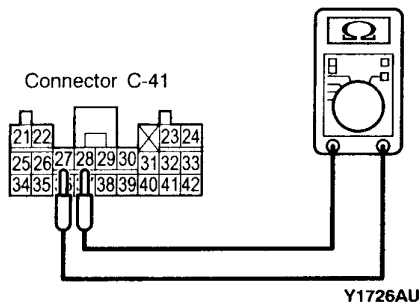
As the short bar may not be releasable if inserted insufficiently, insert more than 4 mm.

- Measure at the harness side
- Continuity check between terminals 27 and 28

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity



OK

Replace the SRS-ECU.

NO

Replace the front passenger's seat belt pre-tensioner.

NG

Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

OK

Check the trouble symptoms.

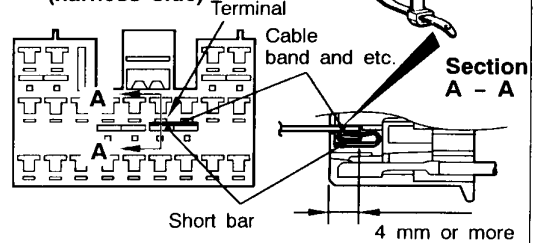
NG

Check the harness between the front passenger's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

Correct

Figure A

Front view of SRS-ECU connector C-41 (harness side)

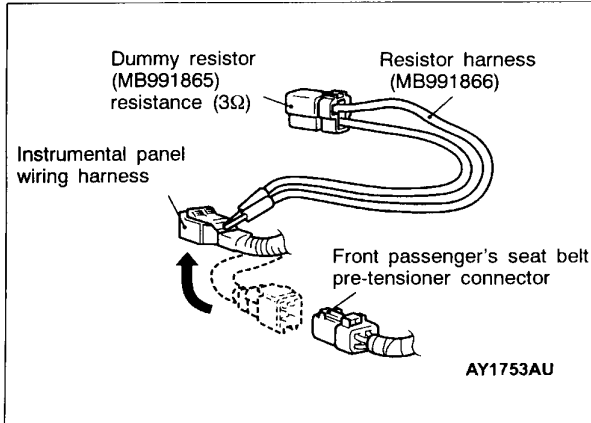


NOTE

*1: L.H. drive vehicles

*2: R.H. drive vehicles

Code No.29 Front passenger's seat belt pre-tensioner (squib) system	Possible Cause
This code is output when open circuit occurs in the SRS-ECU front passenger's seat belt pre-tensioner (squib) circuit. However, SRS warning lamp goes out when a normal operation is resumed (diagnosis code is not cleared.)	• Open in the front passenger's seat pre-tensioner (squib) circuit • Connector improper contact • SRS-ECU inoperable



<Check the front passenger's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy harness (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
 - Check the diagnosis code again after erasing the memory.
- Is code No.29 output?

YES

NO

<Check the circuit between the SRS-ECU and the front passenger's seat belt pre-tensioner>

Measure at the SRS-ECU connector C-41, the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2.

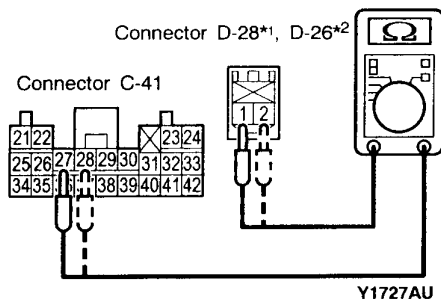
- Disconnect the SRS-ECU connector C-41, the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2, and then measure at the harness side.
- Continuity check between the following terminals

Connector C-41		D-28*1, Connector D-26*2
28	—	2
27	—	1

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: Continuity (2Ω or less)



OK

Replace the SRS-ECU.

Replace the front passenger's seat belt pre-tensioner.

NG → Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

OK

NG

Check the trouble symptoms.

Correct

NG

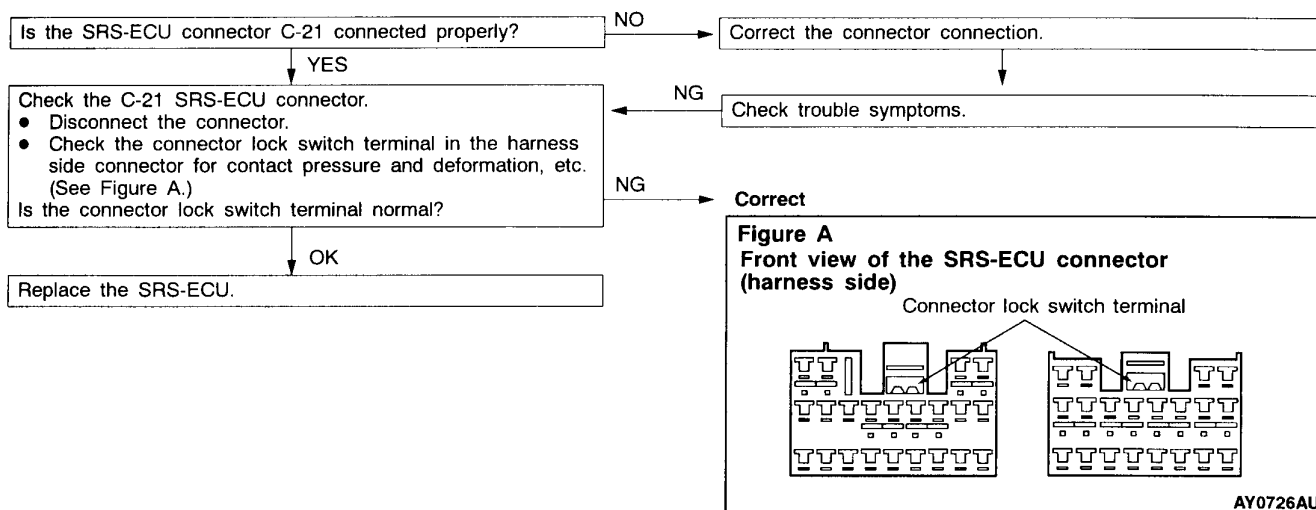
Check the harness between the front passenger's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

NOTE

*1: L.H. drive vehicles

*2: R.H. drive vehicles

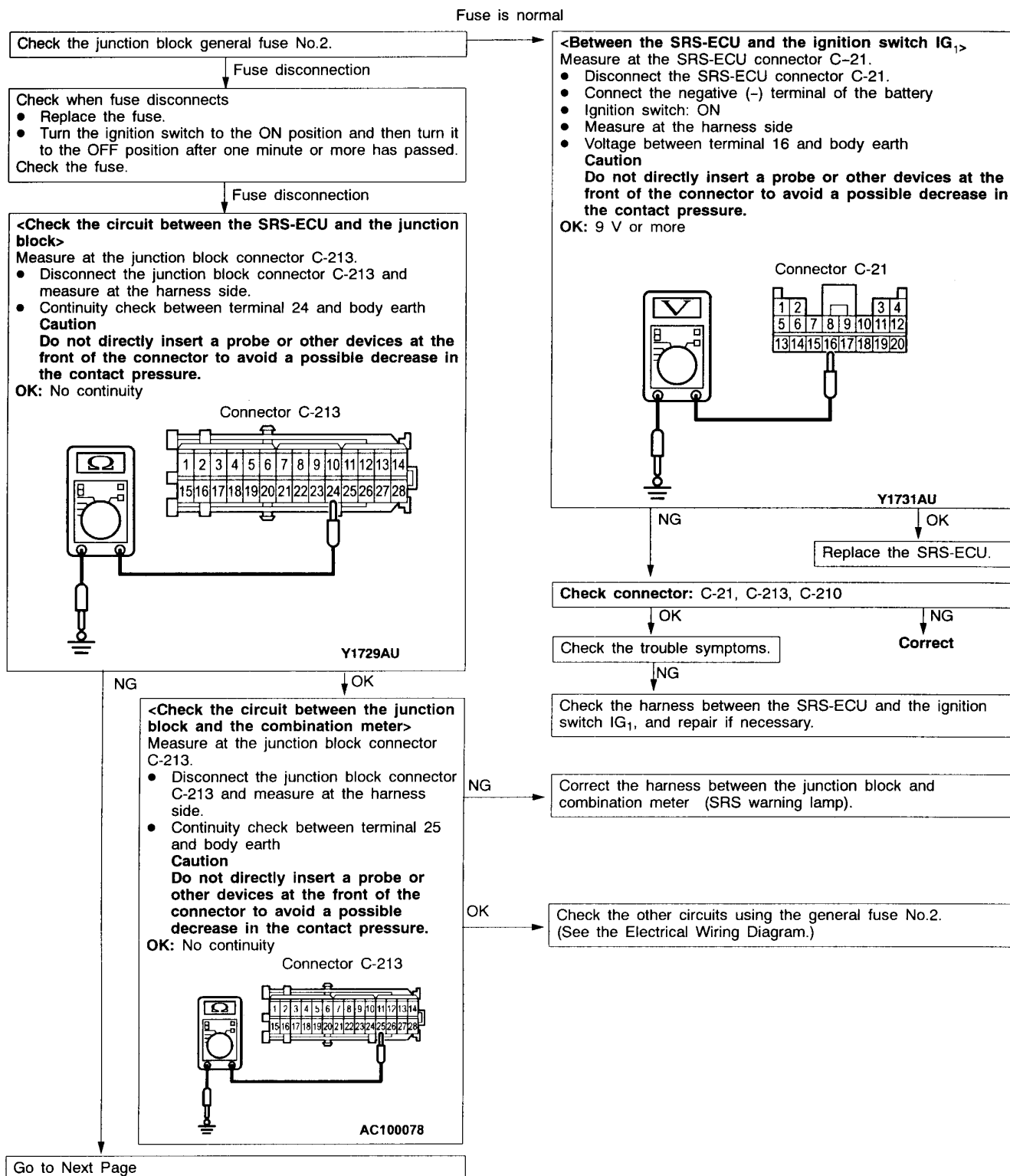
Code No.34 Connector Lock System	Probable Cause
The SRS-ECU connector is mounted with a connector lock switch terminal for detecting the connected state of the connector. SRS-ECU connector is poorly connected. However, when the vehicle condition returns to normal, this code will be automatically erased, and the SRS warning lamp will go out.	- Faulty connector - SRS-ECU inoperable



Code No.35 SRS-ECU (deployed air bag) system	Probable cause
This code is displayed after deployment of air bags. If displayed before deployment, the code indicates malfunction probably present in SRS-ECU.	SRS-ECU inoperable

If the above-mentioned code No. is output, replace the SRS-ECU.

Code No.41 Power supply circuit system (fuse No.2 circuit)	Possible Cause
This codes output when the voltage between terminal IG ₁ (SRS-ECU, terminal No.16) and earth has been below the standard value for 5 seconds. However, code No.41 is automatically erased and SRS warning lamp goes out when a normal operation is resumed. If code No.41 and 42 are output at the same time, check the battery first since the battery voltage may have decreased.	• Harness or connector fault • SRS-ECU inoperable



From Previous Page

NG

<Check the circuit between the SRS-ECU and the junction block>

Measure at the SRS-ECU connector C-21.

- Disconnect the SRS-ECU connector C-21 and measure at the harness side.

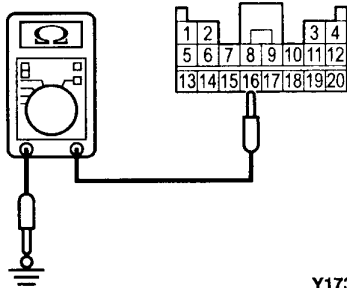
- Continuity check between terminal 16 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity

Connector C-41



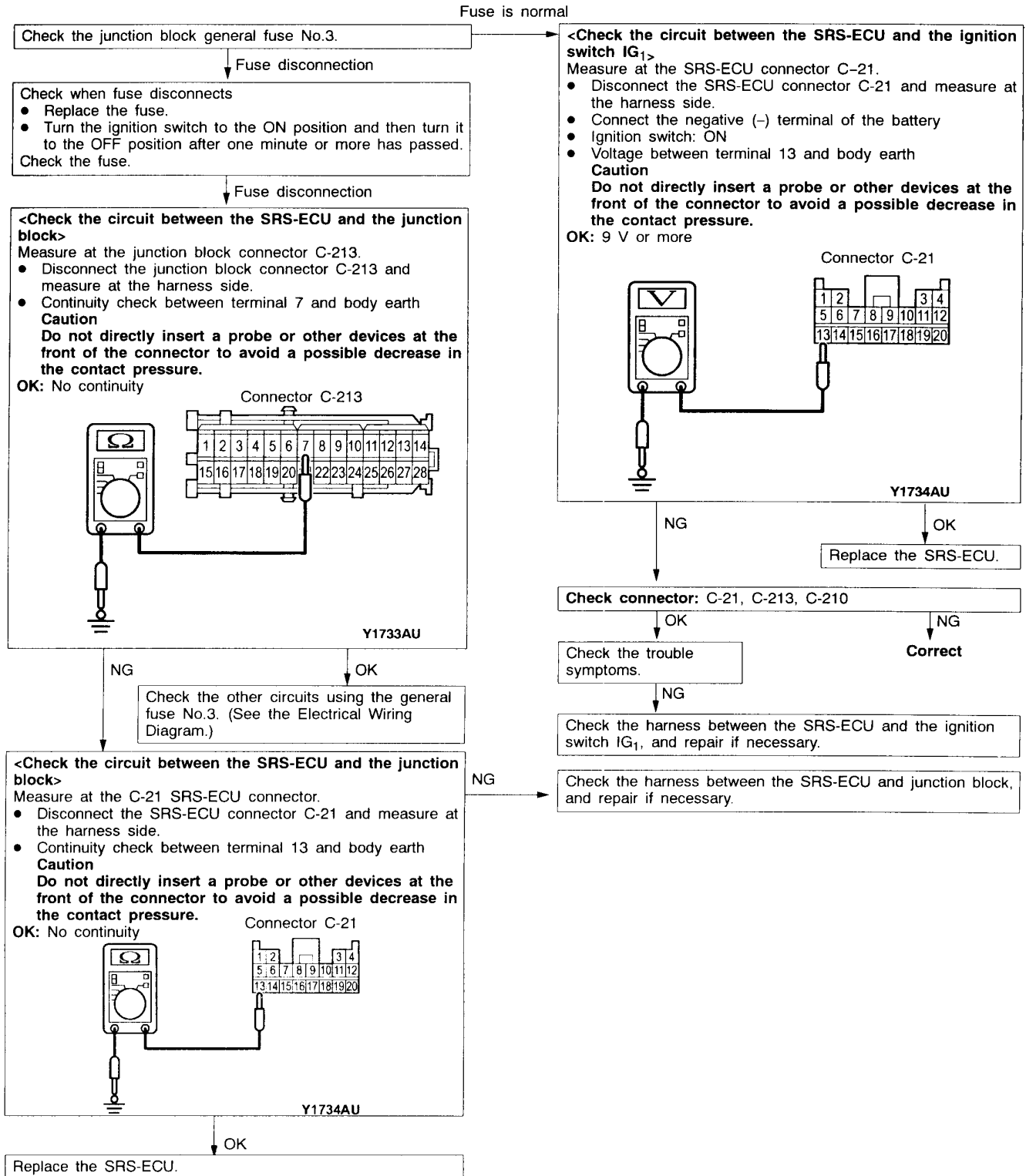
OK

Replace the SRS-ECU.

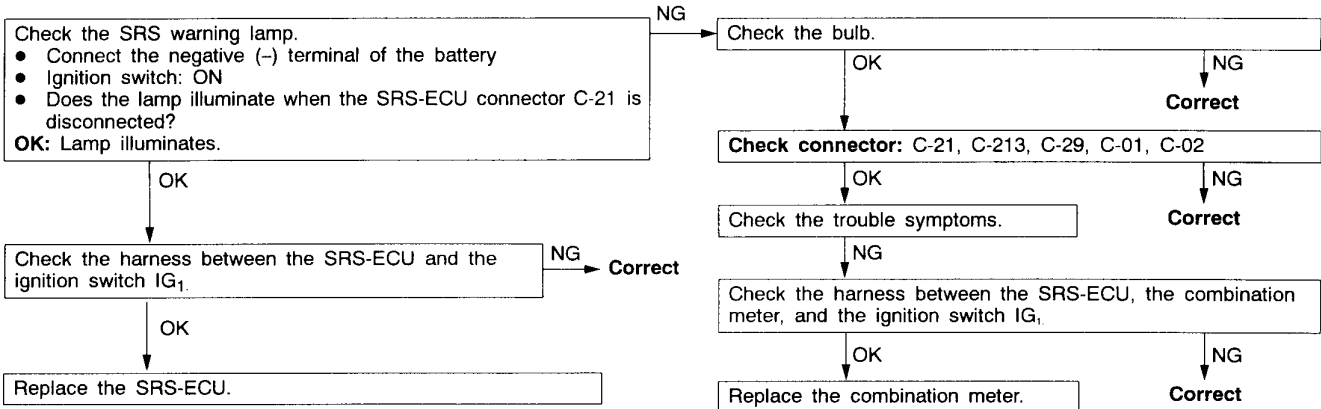
NG

Check the harness between the SRS-ECU and junction block, and repair if necessary.

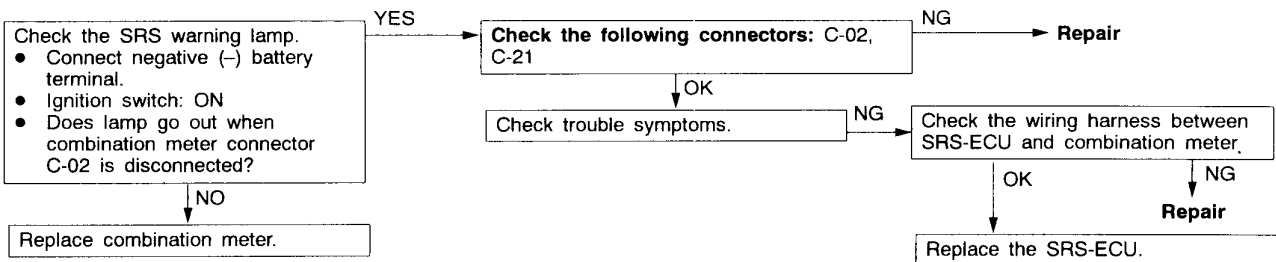
Code No.42 Power supply circuit system (fuse No.3 circuit)	Possible Cause
This code is output when the voltage between terminal IG₁ (SRS-ECU, terminal No.13) and earth has been below the standard value for 5 seconds. However, code No.42 is automatically erased and SRS warning lamp goes out when a normal operation is resumed. If code No.41 and 42 are output at the same time, check the battery first since the battery voltage may have decreased.	• Harness or connector fault • SRS-ECU inoperable



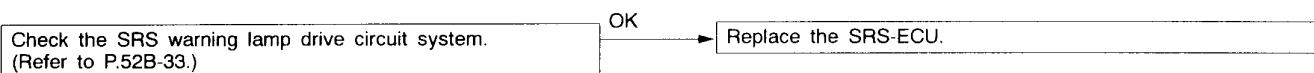
Code No.43 SRS warning lamp drive circuit system (lamp does not illuminate)	Possible Cause
This code is output when open circuit has occurred in the SRS warning lamp drive circuit for 5 seconds or more. However, if the code is output due to open circuit faulty, code No.43 is automatically erased and the SRS warning lamp functions normally as soon as a normal operation is resumed.	• Harness or connector fault • Bulb fault • SRS-ECU inoperable • Combination meter fault



Code No.43 SRS warning lamp drive circuit system (Lamp does not go out)	Probable cause
Harness between SRS warning lamp and SRS-ECU is being shorted to earth. However, once trouble is extinguished, this code will be automatically erased, and SRS warning lamp will go out.	• Harnesses or connector fault • SRS-ECU inoperable • Combination meter fault



Code No.44 SRS warning lamp drive circuit system	Probable cause
Short is present in SRS warning lamp drive circuit, or output transistor in SRS-ECU is defective. However, once trouble is extinguished, this code will be automatically erased, and SRS warning lamp will go out.	• Harnesses or connector fault • SRS-ECU inoperable



Code No.61 Driver's air bag module (squib) system (short-circuited to power supply)	Possible Cause
Code No.62 Driver's air bag module (squib) system (short-circuited to earth)	
This code is output when the input terminal of the SRS-ECU driver's air bag module (squib) is short-circuited to power supply (code No.61) or short-circuited to earth (code No.62).	• Clock spring fault • Harness or connector fault • The harness of the driver's air bag module (squib) is short-circuited to power supply (code No.61) or short-circuited to earth (code No.62) • SRS-ECU inoperable

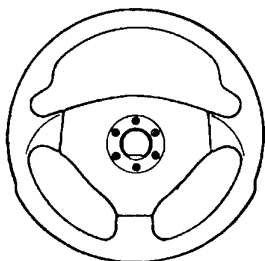
NOTE

Two different types of driver's air bag modules by model are featured. Thus, two types of air bag module by model are described in the following flowchart.

RS: Steering wheel and air bag module separate type

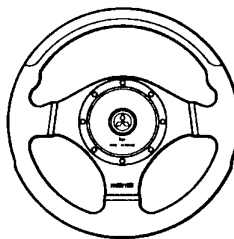
RS-II: Steering wheel and air bag module incorporate type

<RS>



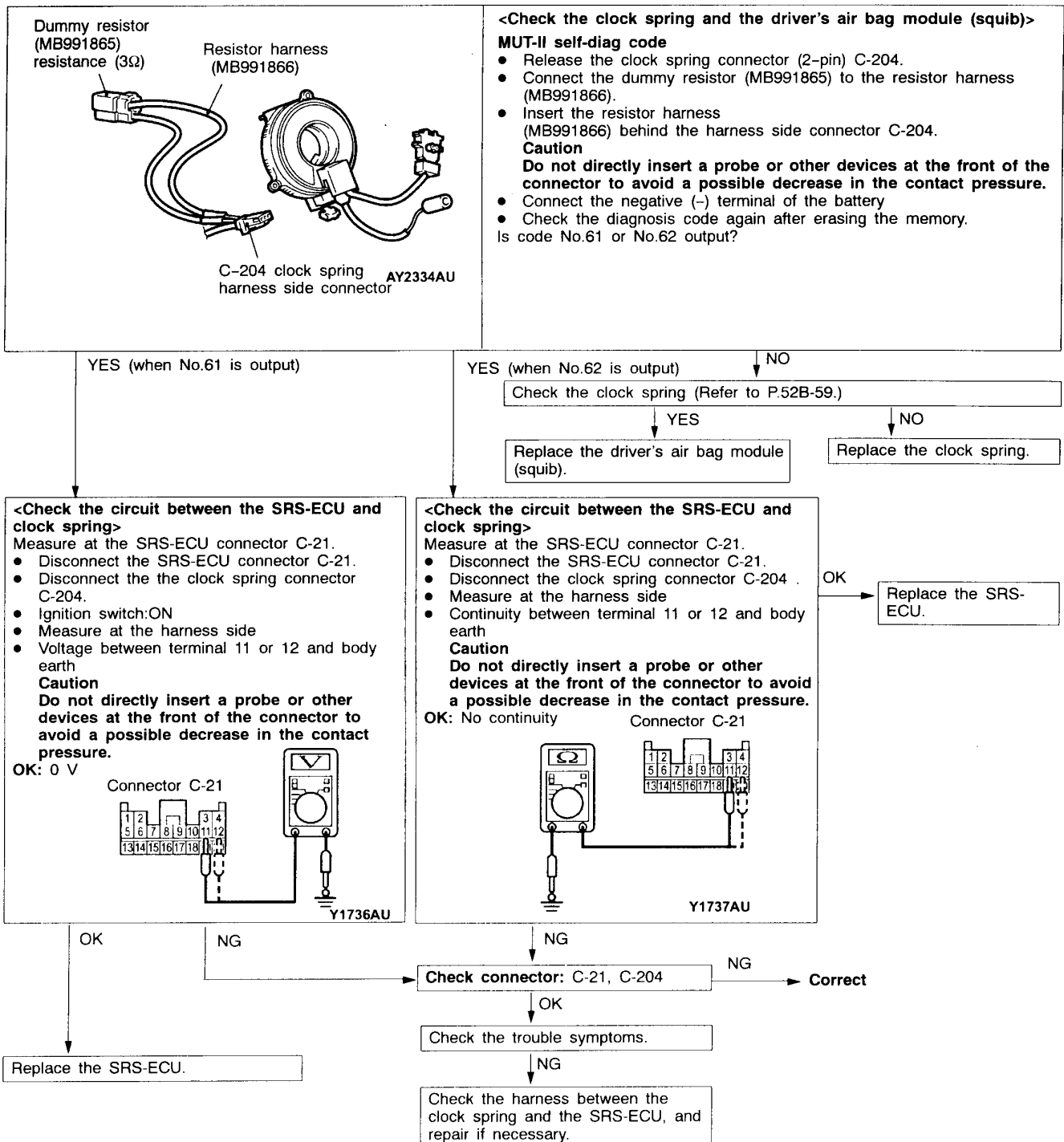
13R0025

<RS-II>

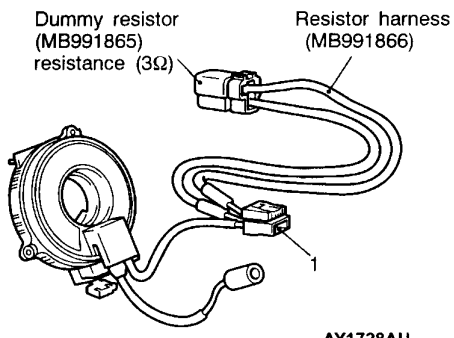


Y2058AU

<RS>



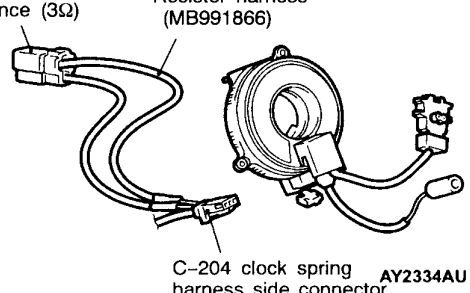
<RS-II>

 Dummy resistor (MB991865) resistance (3Ω) Resistor harness (MB991866) 1 AY1728AU	<Driver's air bag module (squib) check> MUT-II self-diag code • Disconnect the clock spring connector No.1 (connector connected with the air bag module). • Connect the dummy resistor (MB991865) to the resistor harness (MB991866). • Insert the resistor harness (MB991866) behind the clock spring connector No.1. Caution Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure. • Connect the negative (-) terminal of the battery • Check the diagnosis code again after erasing the memory. Is code No.61 or No.62 output?
--	---

YES

NO

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

 Dummy resistor (MB991865) resistance (3Ω) Resistor harness (MB991866) C-204 clock spring harness side connector AY2334AU	<Clock spring check> MUT-II self-diag code • Release the clock spring connector (2-pin) C-204 . • Connect the dummy resistor (MB991865) to the resistor harness (MB991866). • Insert the resistor harness (MB991866) behind the harness side connector C-204. Caution Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure. • Connect the negative (-) terminal of the battery • Check the diagnosis code again after erasing the memory. Is code No.61 or No.62 output?
---	--

YES (when No.61 is output)

YES (when No.62 is output)

NO

Go to Next Page

Replace the clock spring.

From Previous Page

YES (when No.61 is output)

<Check the circuit between the SRS-ECU and clock spring>

Measure at the SRS-ECU connector C-21.

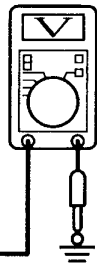
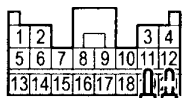
- Disconnect the SRS-ECU connector C-21.
- Disconnect the clock spring connector C-204.
- Ignition switch: ON
- Measure at the harness side
- Voltage between terminal 11 or 12 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: 0 V

Connector C-21



Y1736AU

OK

NG

Replace the SRS-ECU.

YES (when No.62 is output)

<Check the circuit between the SRS-ECU and clock spring>

Measure at the SRS-ECU connector C-21.

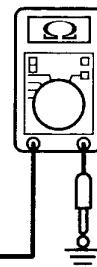
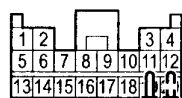
- Disconnect the SRS-ECU connector C-21.
- Disconnect the clock spring connector C-204 .
- Measure at the harness side
- Continuity between terminal 11 or 12 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity

Connector C-21



Y1737AU

OK

Replace the SRS-ECU.

NG

Check connector: C-21, C-204

NG

Correct

OK

Check the trouble symptoms.

NG

Check the harness between the clock spring and the SRS-ECU, and repair if necessary.

Code No.64 Front passenger's air bag module (squib) system (short-circuited to power supply)	Possible Cause
Code No.65 Front passenger's air bag module (squib) system (short-circuited to earth)	
This code is output when the input terminal of the SRS-ECU front passenger's air bag module (squib) is short-circuited to power supply (code No.64) or short-circuited to earth (code No.65).	● Harness or connector fault ● The harness of the front passenger's air bag module (squib) is short-circuited to power supply (code No.64) or short-circuited to earth (code No.65). ● SRS-ECU inoperable

Dummy resistor (MB991865) resistance (3Ω)

Resistor harness (MB991866)

Instrumental panel wiring harness

Front passenger's air bag module connector

AY1753AU

<Check the front passenger's air bag module (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's air bag module connector C-109 and insert the resistor harness (MB991866) behind the harness side connector.

Caution
Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
- Check the diagnosis code again after erasing the memory.

Is code No.64 or No.65 output?

YES (when No.64 is output)

YES (when No.65 is output)

NO

Replace the front passenger's seat air bag module (squib).

<Check the circuit between the SRS-ECU and the front passenger's air bag module>

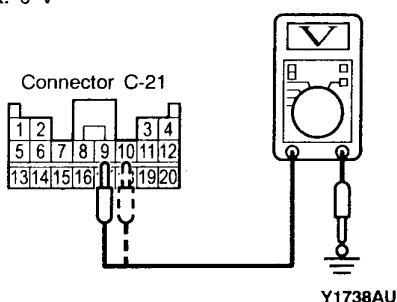
Measure at the SRS-ECU connector C-21.

- Disconnect the SRS-ECU connector C-21.
- Disconnect the front passenger's air bag module connector C-109.
- Ignition switch: ON
- Measure at the harness side
- Voltage between terminal 9 or 10 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: 0 V



OK

NG

Replace the SRS-ECU.

<Check the circuit between the SRS-ECU and the front passenger's air bag module>

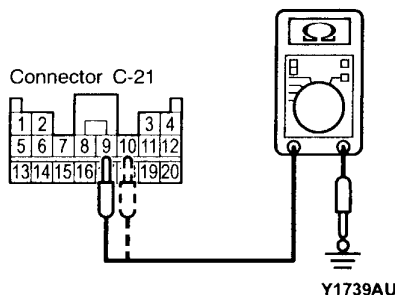
Measure at the SRS-ECU connector C-21.

- Disconnect the SRS-ECU connector C-21.
- Disconnect the front passenger's air bag module connector C-109.
- Measure at the harness side
- Continuity between terminal 9 or 10 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity



NG

OK

Replace the SRS-ECU.

Check connector: C-21, C-109

NG

Correct

Check the trouble symptoms.

NG

Check the harness between the front passenger's air bag module and the SRS-ECU, and repair if necessary.

Code No.66 Driver's seat belt pre-tensioner (squib) system (short-circuited to power supply)	Possible Cause
Code No.67 Driver's seat belt pre-tensioner (squib) system (short-circuited to earth)	
This code is output when the input terminal of the SRS-ECU driver's seat belt pre-tensioner (squib) is short-circuited to power supply (code No.66) or short-circuited to earth (code No.67).	● Harness or connector fault ● The harness of the driver's seat belt pre-tensioner (squib) is short-circuited to power supply (code No.66) or short-circuited to earth (code No.67). ● SRS-ECU inoperable

Dummy resistor (MB991865) resistance (3Ω)

Resistor harness (MB991866)

Instrumental panel wiring harness

Driver's seat belt pre-tensioner connector

AY1753AU

<Check the driver's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the driver's seat belt pre-tensioner connector D-28*1 and D-26*2 and insert the resistor harness (MB991866) behind the harness side connector.

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
- Check the diagnosis code again after erasing the memory.

Is code No.66 or No.67 output?

YES (when No.66 is output)

<Check the circuit between the SRS-ECU and the driver's seat belt pre-tensioner>

Measure at the SRS-ECU connector C-41 .

- Disconnect the SRS-ECU connector C-41.
- Disconnect the driver's seat belt pre-tensioner D-28*1 and D-26*2.
- Ignition switch:ON
- Measure at the harness side
- Voltage between terminal 29 or 30 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: 0 V

Y1740AU

OK → Replace the SRS-ECU.

NG → Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

YES (when No.67 is output)

Replace the driver's seat belt pre-tensioner.

<Check the circuit between the SRS-ECU and the driver's seat belt pre-tensioner>

Measure at the SRS-ECU connector C-41 .

- Disconnect the SRS-ECU connector C-41.
- Disconnect the driver's seat belt pre-tensioner D-28*1 and D-26*2.
- Measure at the harness side
- Continuity between terminal 29 or 30 and body earth

Caution

Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity

Y1741AU

OK → Replace the SRS-ECU.

NG → Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

Check the trouble symptoms.

NG → Check the harness between the driver's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

NOTE

- *1: L.H. drive vehicles
 *2: R.H. drive vehicles

Code No.68 Front passenger's seat belt pre-tensioner (squib) system (short-circuited to power supply)	Possible Cause
Code No.69 Front passenger's seat belt pre-tensioner (squib) system (short-circuited to earth)	
This code is output when the input terminal of the SRS-ECU front passenger's seat belt pre-tensioner (squib) is short-circuited to power supply (code No.68) or short-circuited to earth (code No.69).	• Harness or connector fault • The harness of the front passenger's seat belt pre-tensioner (squib) is short-circuited to power supply (code No.68) or short-circuited to earth (code No.69). • SRS-ECU inoperable

Dummy resistor (MB991865) resistance (3Ω)

Resistor harness (MB991866)

Instrumental panel wiring harness

Front passenger's seat belt pre-tensioner connector

AY1753AU

<Check the front passenger's seat belt pre-tensioner (squib)>

MUT-II self-diag code

- Connect the dummy resistor (MB991865) to the resistor harness (MB991866).
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2 and insert the resistor harness (MB991866) behind the harness side connector.

Caution
Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

- Connect the negative (-) terminal of the battery
- Check the diagnosis code again after erasing the memory. Is code No.68 or No.69 output?

YES (when No.68 is output)

<Check the circuit between the SRS-ECU and the front passenger's seat belt pre-tensioner>
Measure at the SRS-ECU connector C-41 .

- Disconnect the SRS-ECU connector C-41.
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2.
- Ignition switch:ON
- Measure at the harness side
- Voltage between terminal 27 or 28 and body earth

Caution
Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: 0 V

Connector C-41

Y1742AU

OK → Replace the SRS-ECU.

NG → Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

YES (when No.69 is output)

<Check the circuit between the SRS-ECU and the front passenger's seat belt pre-tensioner>
Measure at the SRS-ECU connector C-41 .

- Disconnect the SRS-ECU connector C-41.
- Disconnect the front passenger's seat belt pre-tensioner connector D-28*1 and D-26*2
- Measure at the harness side
- Continuity between terminal 27 or 28 and body earth

Caution
Do not directly insert a probe or other devices at the front of the connector to avoid a possible decrease in the contact pressure.

OK: No continuity

Connector C-41

Y1743AU

OK → Replace the SRS-ECU.

NG → Check connector: D-28*1, D-26*2, C-133*1, C-112*2, C-41

Correct

Check the trouble symptoms.

NG → Check the harness between the front passenger's seat belt pre-tensioner and the SRS-ECU, and repair if necessary.

NOTE

*1: L.H. drive vehicles

*2: R.H. drive vehicles

INSPECTION CHART FOR TROUBLE SYMPTOMS

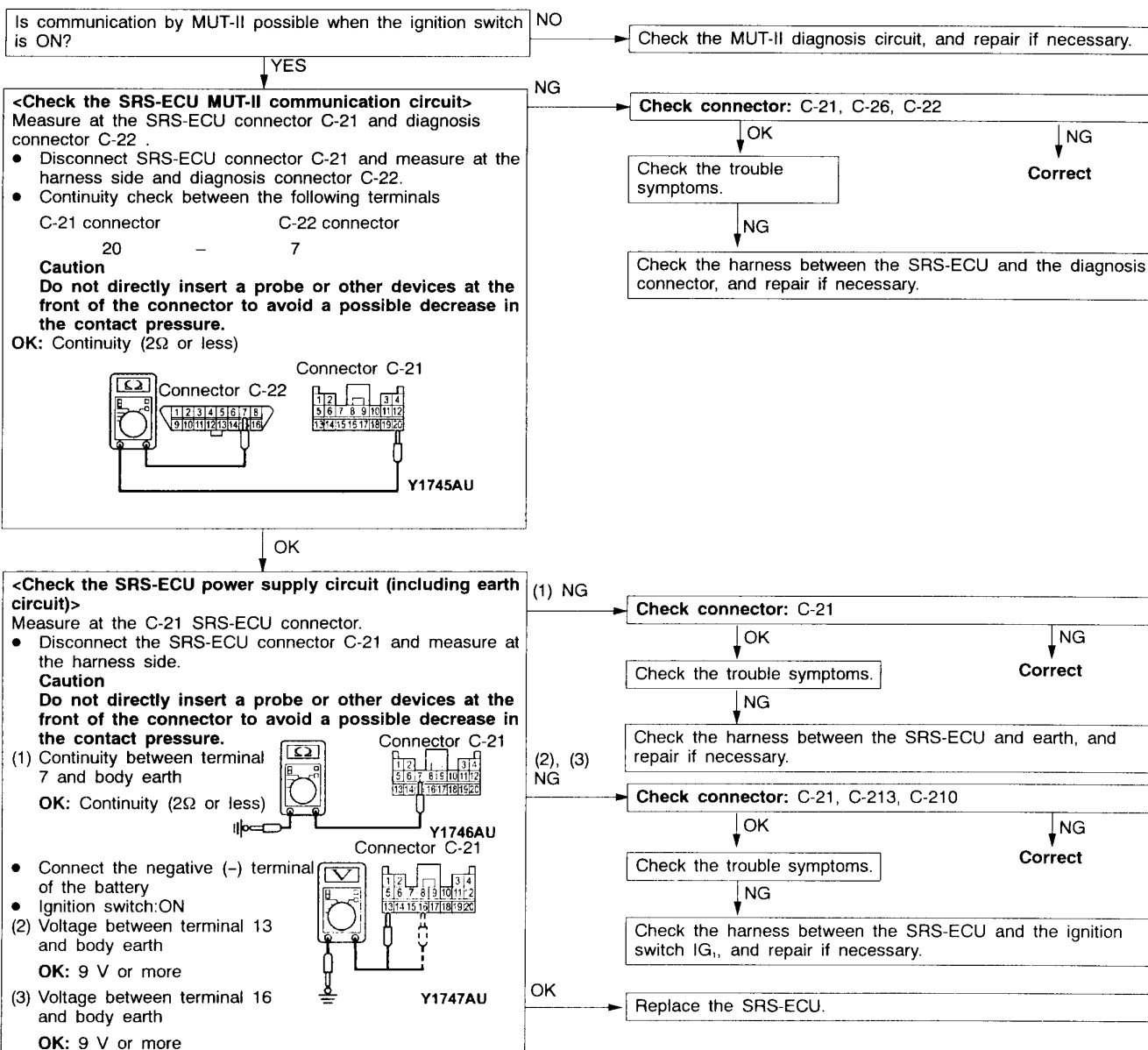
Study the trouble symptoms and check according to the inspection procedure chart.

Trouble	Inspection procedure No(s).	Reference page
Communication with MUT-II is impossible.	1	52B-41
SRS warning lamp does not illuminate.	See diagnosis code No.43.	52B-33
SRS warning lamp does not go out.	See diagnosis code No.43, 44.	52B-33

INSPECTION PROCEDURE FOR TROUBLE SYMPTOMS

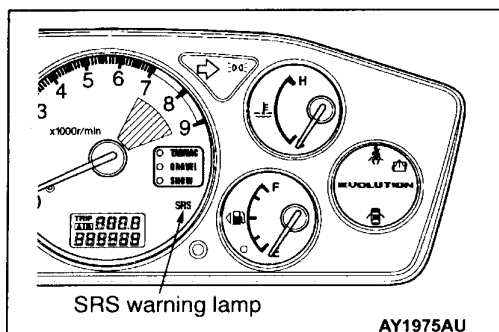
Inspection Procedure 1

Communication with MUT-II is impossible.	Probable cause
When communication with all systems is impossible, diagnosis circuit is suspected as faulty. When only communication with SRS air bags is impossible, open in diagnosis output circuit or power supply circuit including earth circuit may be present.	• Harness, connector malfunction • SRS-ECU malfunction • MUT ROM pack unmatching



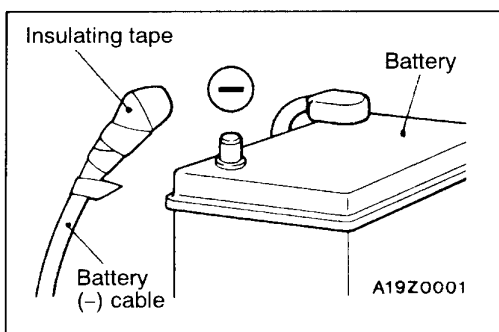
SRS MAINTENANCE

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



SRS WARNING LAMP CHECK

Turn the ignition switch to the ON position. Does the SRS warning lamp illuminate for about 7 seconds, and then go out? If yes, SRS system is functioning properly. If no, refer to page 52B-6.

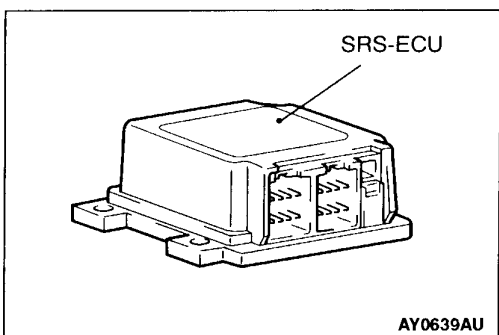


SRS COMPONENT VISUAL CHECK

Turn the ignition key to LOCK (OFF) 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-3.)



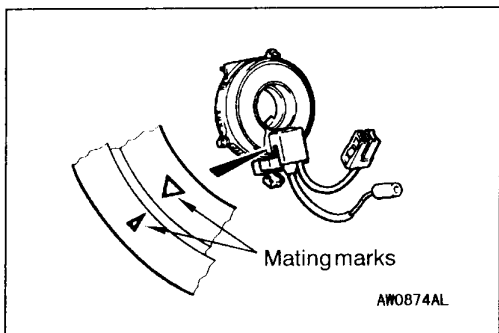
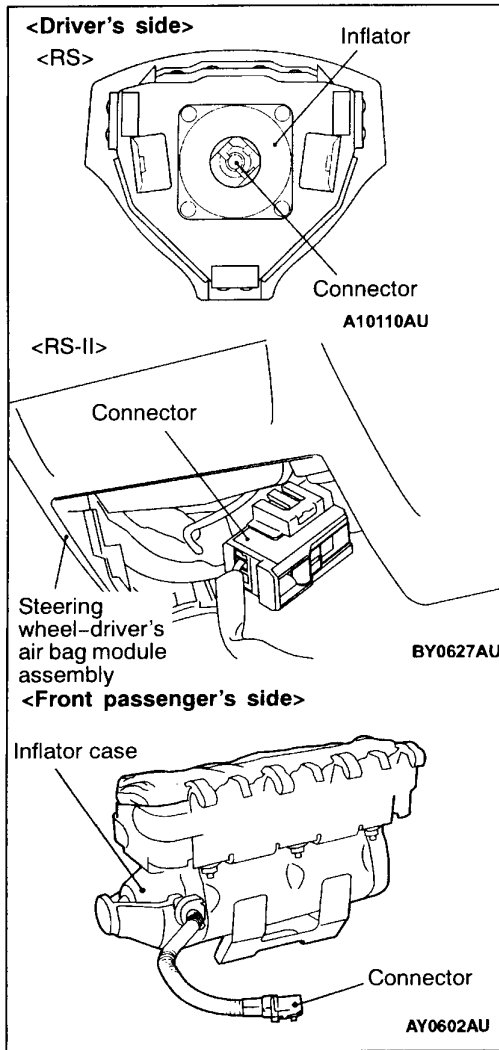
SRS CONTROL UNIT (SRS-ECU)

1. Check SRS-ECU case and brackets for dents, cracks, deformation or rust.

Caution

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

2. Check connector for damage, and terminals for deformation or rust.
Replace SRS-ECU if it fails visual check.
(Refer to P.52B-50.)



AIR BAG MODULES, STEERING WHEEL AND CLOCK SPRING AND SEAT BELT WITH PRE-TENSIONER

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

Caution

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

2. Check cover for dents, cracks or deformation.
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 and connectors for damage, and terminals for deformation.

6. Check clock spring connectors and protective tube for damage, and terminals for deformation.
7. Visually check the clock spring case for damage.
8. Align the mating marks of the clock spring and, after turning the vehicle's front wheels to straight-ahead position, install the clock spring to the column switch.

Mating Mark Alignment

Turn the clock spring clockwise fully, and then turn back it approx. 3 times counterclockwise to align the mating marks.

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 or front passenger.

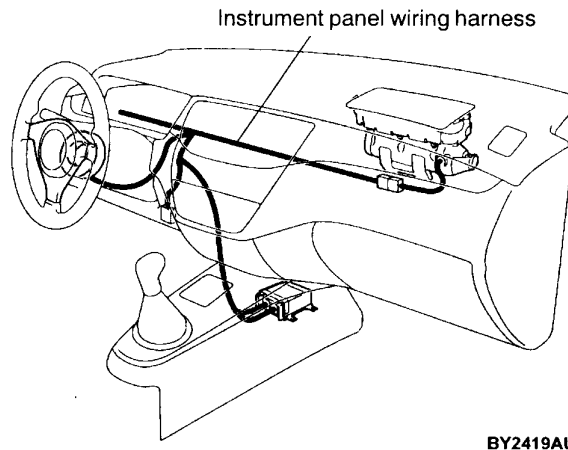
9. Install the steering column covers, steering wheel and the air bag module.
10. Check steering wheel for noise, binds or difficult operation.
11. Check steering wheel for excessive free play.

REPLACE ANY VISUALLY INSPECTED PART IF IT FAILS THAT INSPECTION. (Refer to P.52B-52.)

Caution

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

INSTRUMENT PANEL WIRING HARNESS

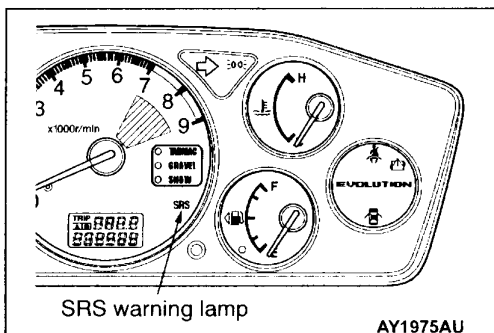


1. Check connector for poor connection.
2. Check harnesses for binds, connectors for damage, and terminals for deformation.

REPLACE ANY CONNECTORS OR HARNESS THAT FAIL THE VISUAL INSPECTION. (Refer to P.52B-3.)

Caution

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



POST-INSTALLATION INSPECTION

Reconnect the negative battery terminal. Turn the ignition switch to the ON position. Does the SRS warning lamp illuminate for about 7 seconds, and then go out? If yes, SRS system is functioning properly. If no, consult page 52B-6.

POST-COLLISION DIAGNOSIS

Whether or not the air bags have deployed, check and service the vehicle after collision as follows:

SRS-ECU MEMORY CHECK

1. Connect the MUT-II to the diagnosis connector. (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points.)

Caution

Refer to that the ignition switch is LOCK(OFF) when connecting or disconnecting MUT-II.

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

NOTE

If battery power supply has been shut down by the collision, the MUT-II cannot communicate with the SRS-ECU. Check and, repair if necessary, the instrument panel wiring harness before the next job.

3. Use the the MUT-II to read the data list (how long trouble(s) have continued and how often memory have been erased).

Data list

No	Service Data Item	Applicability
92	Number indication how often the memory is cleared.	Maximum time to be stored: 250
93	How long problem have lasted (How long it takes from the occurrence of the problem till the first air bag squib igniting signal)	Maximum time to be stored: 9999 minutes (approximately 7 days)
94	How long problem(s) have lasted (How long it takes from the first air bag squib igniting signal till now.)	

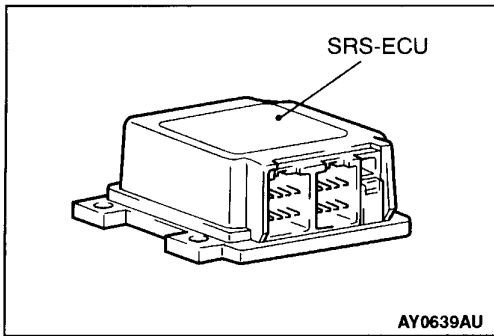
4. Erase the diagnosis codes and after waiting 5 seconds or more read (and write down) all displayed diagnosis codes. (Refer to P.52B-9.)

REPAIR PROCEDURE**DEPLOYED DRIVER'S AND FRONT PASSENGER'S AIR BAGS OR OPERATED SEAT BELT PRE-TENSIONER.**

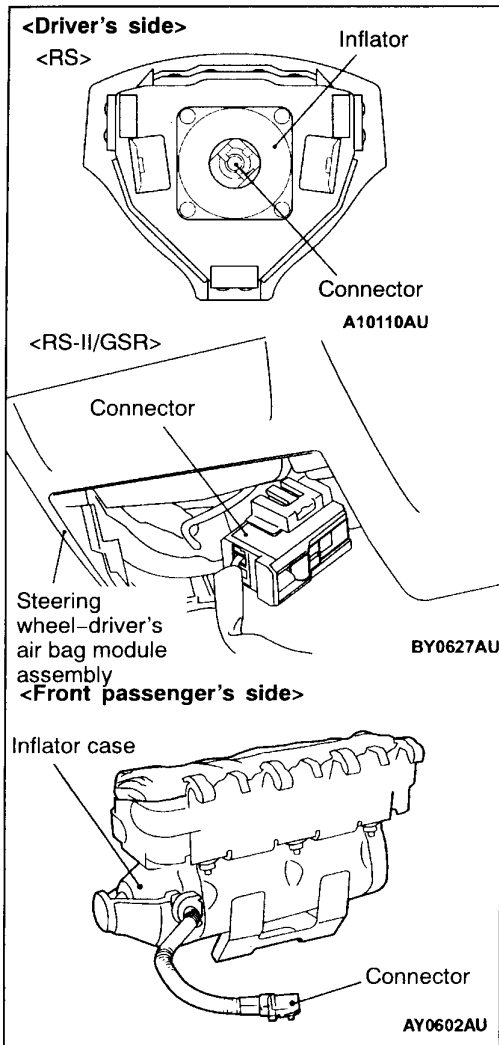
1. Replace the following parts with new ones.
 - SRS-ECU (Refer to P.52B-50.)
 - Driver's air bag module (Refer to P.52B-52.)
 - Front passenger's air bag module (Refer to P.52B-52.)
 - Seat belt with pre-tensioner (Refer to P.52B-61.)
2. Check the following parts and replace if malfunction is found:
 - Clock spring (Refer to P.52B-52.)
 - Steering wheel, steering column and intermediate joint
 - (1) Check the wiring harness (built into steering wheel) and connectors for damage, and terminals for deformation.
 - (2) Check the driver's air bag module for proper installation to the steering wheel.<RS>
 - (3) Check the steering wheel for noise, binds or difficult operation and excessive free play.
3. Check the harness for binding, connectors for damage, poor connections, and terminals for deformation. (Refer to P.52B-44.)

UNDEPLOYED AIR BAGS OR UNOPERATED SEAT BELT WITH PRE-TENSIONER IN LOW-SPEED COLLISION

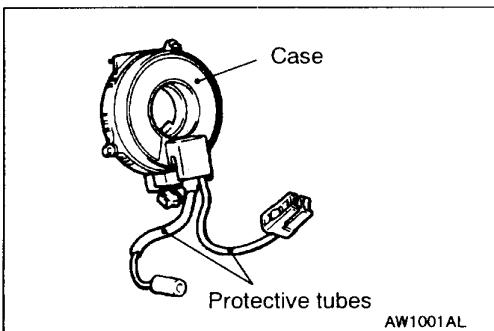
Check the SRS components and seat belt with pre-tensioner. If visible damage such as dents, cracks, or deformation are found on the SRS components and seat belt with pre-tensioner, replace them with new ones. Concerning parts removed for inspection, replacement with new parts and cautions in working, refer to INDIVIDUAL COMPONENT SERVICE, P.52B-49.

**SRS-ECU**

1. Check the SRS-ECU case and bracket for dents, cracks or deformation.
2. Check the connector for damage, and terminals for deformation.
3. Check the SRS-ECU and bracket for proper installation.

**Driver's and passenger's air bag modules**

1. Check the covers for dents, cracks or deformation.
2. Check the connectors for damage, the terminals deformities, and the harness for binds.
3. Check the air bag inflator cases for dents, cracks or deformities.
4. Check the air bag modules for proper installation.

**Clock spring**

1. Check the clock spring connectors and protective tubes for damage, and terminals for deformation.
2. Visually check the case for damage.

Steering wheel, steering column and intermediate joint

1. Check the driver's air bag module for proper installation to the steering wheel.
2. Check the steering wheel for noise, binds or difficult operation and excessive free play.

Harness connector (Instrument panel wiring harness, Floor wiring harness)

Check the harness for binds, the connector for damage and the terminals for deformation. (Refer to P.52B-44.)

Seat belt with pre-tensioner

1. Check the seat belt for damage or deformation.
2. Check the pre-tensioner for cracks or deformation.
3. Check the harness or the connector for damage, and the terminal for deformation.
4. Check that the unit is installed correctly to the vehicle body.

INDIVIDUAL COMPONENT SERVICE

If the SRS components and seat belt with pre-tensioner are to be removed or replaced as a result of maintenance, troubleshooting etc., follow the service procedures that follow.

Caution

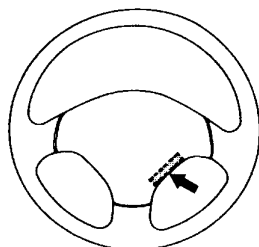
1. SRS components and seat belt with pre-tensioner should not be subjected to heat, so remove the SRS-ECU, driver's air bag module<RS>, steering wheel-air bag module<RS-II>, front passenger's air bag module, clock spring, and seat belt with pre-tensioner before drying or baking the vehicle after painting.
 - Front impact sensor, SRS-ECU, Air bag module, clock spring: 93°C or more
 - Seat belt with pre-tensioner: 90°C or more
 Recheck SRS system operability after re-installing them.
2. If the SRS components and seat belt with pre-tensioner 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

Caution labels on the SRS are attached in the vehicle as shown. Follow label instructions when

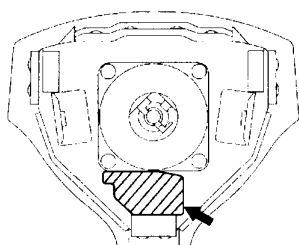
servicing the SRS. If the label(s) are dirty or damaged, replace with new one(s).

Steering wheel<RS>



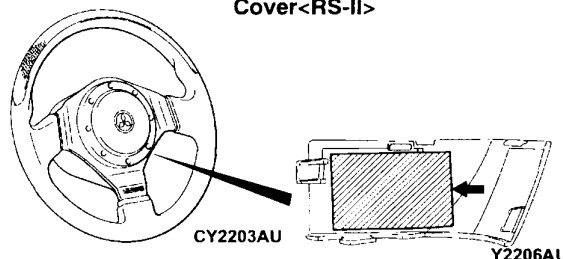
19M0026

Driver's air bag module<RS>



A10109AU

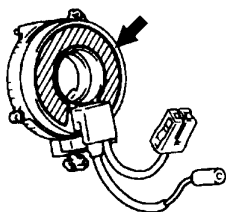
Cover<RS-II>



CY2203AU

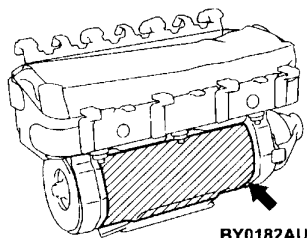
Y2206AU

Clock spring



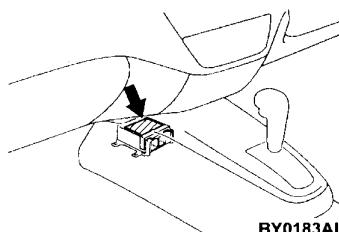
AW0963AL

Front passenger's
air bag module



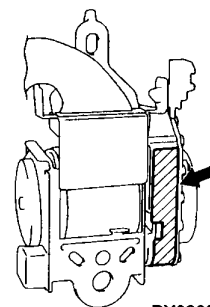
BY0182AU

SRS-ECU



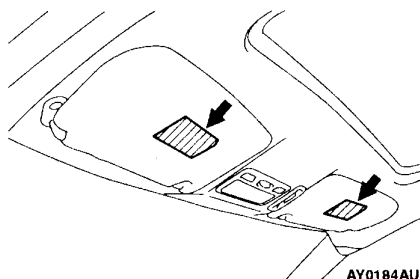
BY0183AU

Seat belt with pre-tensioner



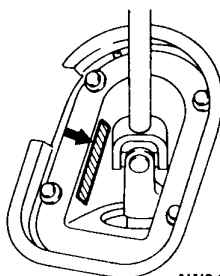
BY0269AU

Sun visor



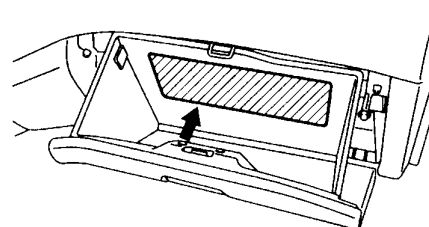
AY0184AU

Steering joint cover



AW0402AU

Glove box



AY1270AU

SRS AIR BAG CONTROL UNIT (SRS-ECU)

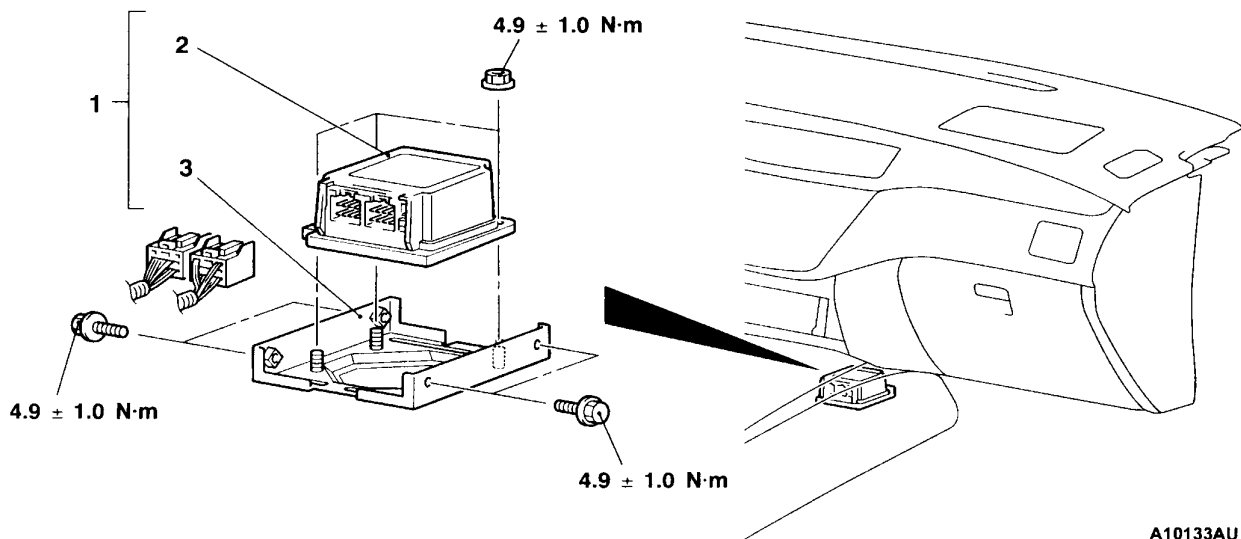
Caution

1. Disconnect the negative (-) battery terminal and wait for 60 seconds or more before starting work. Also, the disconnected battery terminal should be insulated with tape. (Refer to P.52B-3.)
2. Never attempt to disassemble or repair the SRS-ECU. If faulty, just replace with a new one.
3. Do not drop or subject the SRS-ECU to impact or vibration. If denting, cracking, deformation, or rust are found in the SRS-ECU, replace it with a new one. Discard the old one.
4. After deployment of the air bags, replace the SRS-ECU with a new one.
5. Never use an ohmmeter on or near the SRS-ECU, and use only the special test equipment described on P.52B-6.

REMOVAL AND INSTALLATION

Pre-removal Operation

- Turn Ignition Key to LOCK (OFF) Position.
- Disconnect the Negative (-) Battery Terminal.



A10133AU

Removal steps

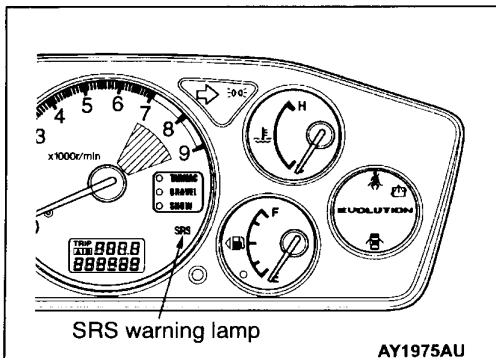
- Front floor console (Refer to GROUP 52A – Front floor console.)
 - Rear heater duct B <Vehicles with rear heater duct>
1. SRS-ECU and SRS-ECU bracket assembly
 2. SRS-ECU
 3. SRS-ECU bracket

Installation steps

3. SRS-ECU bracket
 2. SRS-ECU
 1. SRS-ECU and SRS-ECU bracket assembly
- Rear heater duct B <Vehicles with rear heater duct>
 - Front floor console (Refer to GROUP 52A – Front floor console.)
 - Negative (-) battery terminal connection
- B◄
- Post-installation inspection

INSTALLATION SERVICE POINTS**►A◄ SRS-ECU INSTALLATION****Caution**

Be sure to install the SRS-ECU properly. Otherwise, the SRS air bags do not activate, which results in serious injury or death of vehicle's occupants.

**►B◄ POST-INSTALLATION CHECK**

1. Turn the ignition switch to ON.
2. Does the SRS warning lamp illuminate for about 7 seconds and then go out.
Yes: The SRS warning lamp is working properly
No: Go to Troubleshooting. (Refer to P.52B-6.)

INSPECTION

1. Check the SRS-ECU and brackets for dents, cracks or deformation.
2. Check connector for damage, and terminals for deformation.

Caution

If a dent, crack, deformation or rust are present, replace the SRS-ECU with a new one.

NOTE

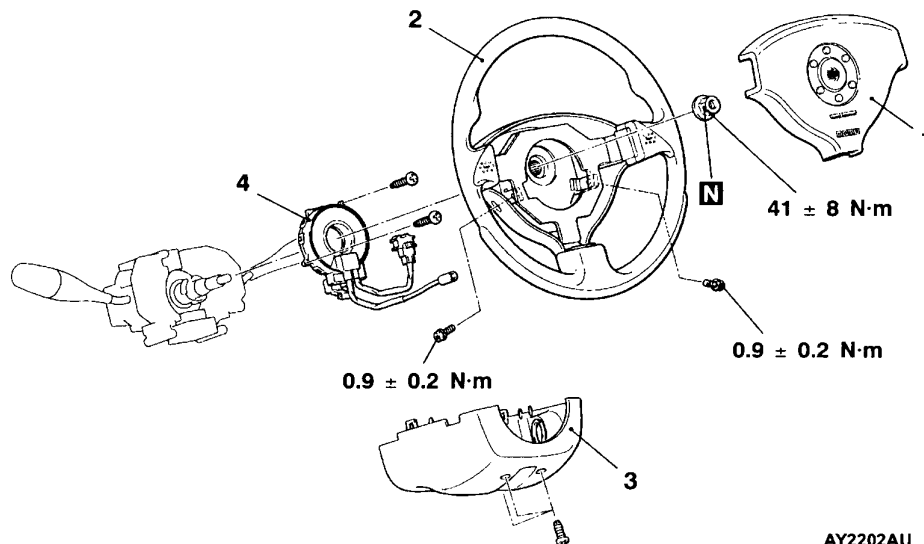
To check the SRS-ECU in other items than described above, go to Troubleshooting. (Refer to P.52B-6.)

AIR BAG MODULES AND CLOCK SPRING**Caution**

1. Disconnect the negative (-) battery terminal and wait for 60 seconds or more before starting work. Also, the disconnected battery terminal should be insulated with tape. (Refer to P.52B-3.)
2. Never attempt to disassemble or repair the air bag modules and clock spring. If faulty, just replace with new one(s).
3. Do not drop the air bag modules or clock spring or allow contact with water, grease or oil.
Replace if a dent, crack, deformation or rust are present.
4. Store the air bag modules on a flat surface with the deployment surface facing up. Do not place anything on top of them.
5. Do not store the air bag modules in a place more than 93°C.
6. When the driver's and front passenger's air bags have been deployed, replace the driver's and passenger's air bag modules with new ones.
7. Put on gloves and safety glasses when handling deployed air bags.
8. When discarding the undeployed air bag module(s), be sure to deploy the air bag(s) in advance as specified in the service procedure. (Refer to to P.52B-64.)

REMOVAL AND INSTALLATION**<Driver's air bag module, clock spring>****Pre-removal Operation**

Disconnect the Negative (-) Battery Terminal.

<RS: Steering wheel and air bag module separate type>

AY2202AU

Driver's air bag module removal steps

◀A▶

1. Driver's air bag module

Clock spring removal steps

◀A▶

◀B▶

◀C▶

1. Driver's air bag module
2. Steering wheel
3. Lower column cover
4. Clock spring

Driver's air bag module installation steps

▶A▶

- Pre-installation inspection
- 1. Driver's air bag module
- Negative (-) terminal of the battery connection
- ▶D▶ • Post-installation inspection

Clock spring installation steps

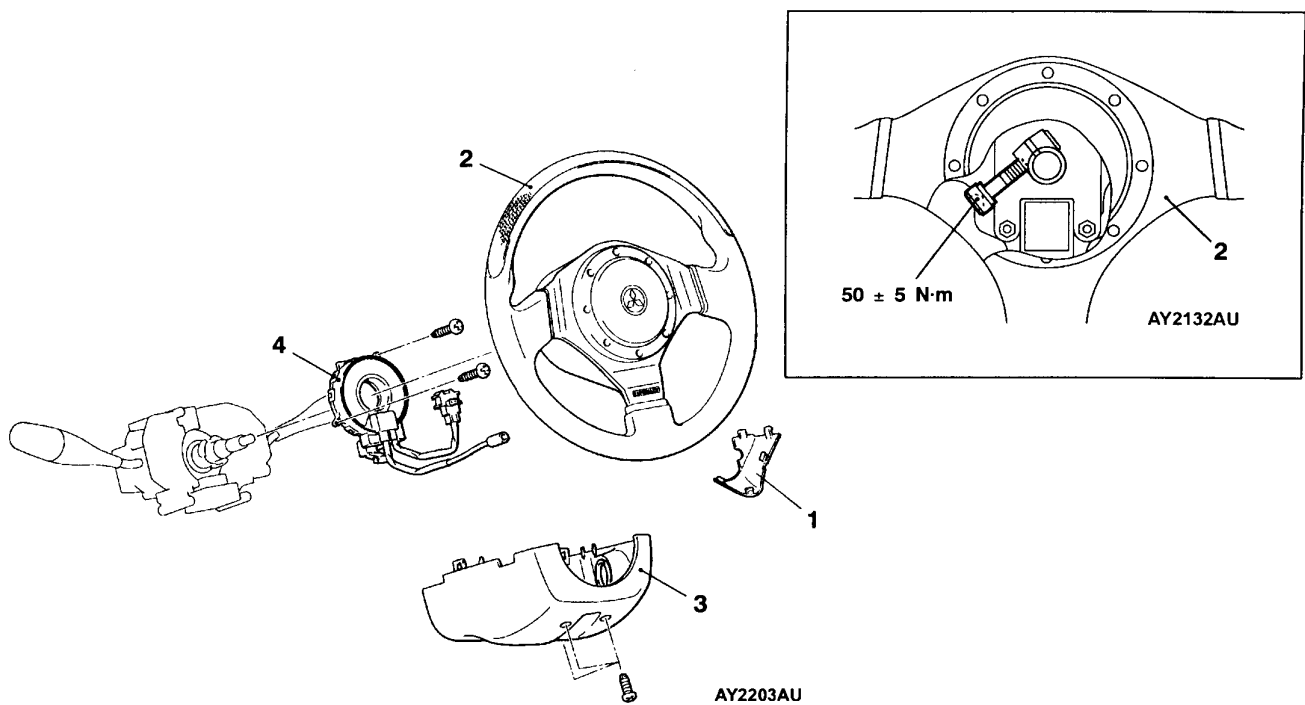
▶A▶

▶B▶

▶C▶

- Pre-installation inspection
- 4. Clock spring
- 3. Lower Column Cover
- 2. Steering wheel
- 1. Driver's air bag module
- Negative (-) terminal of the battery connection
- ▶D▶ • Post-installation inspection

<RS-II: Steering wheel and air bag module incorporate type>



Steering wheel-driver's air bag module assembly removal steps



1. Cover
2. Steering wheel-driver's air bag module assembly

Steering wheel-driver's air bag module assembly installation steps



- Pre-installation inspection
- 2. Steering wheel-driver's air bag module assembly
 1. Cover
 - Negative (-) terminal of the battery connection
- Post-installation inspection

Clock spring removal steps



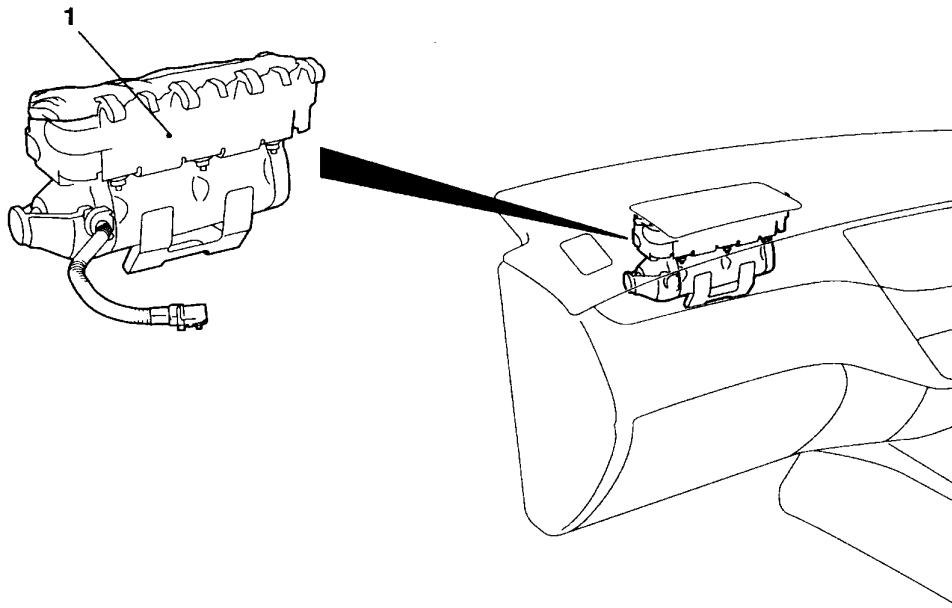
1. Cover
2. Steering wheel-driver's air bag module assembly
3. Lower Column Cover
4. Clock spring

Clock spring installation steps



- Pre-installation inspection
- 4. Clock spring
- 3. Lower Column Cover
- 2. Steering wheel-driver's air bag module assembly
 1. Cover
 - Negative (-) terminal of the battery connection
- Post-installation inspection

<Front passenger's air bag module>



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Removal steps

- Instrument panel assembly (Refer to GROUP 52A – Instrument panel.)
- 1. Passenger's air bag module

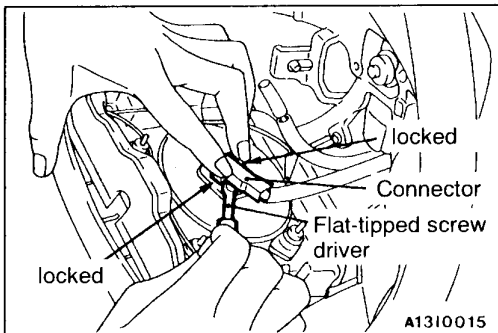
◀F▶

Installation steps

- ▶A◀ • Pre-installation inspection
- 1. Passenger's air bag module
- Instrument panel assembly (Refer to GROUP 52A – Instrument panel.)
- Negative (–) battery cable connection
- ▶D◀ • Post-installation inspection

REMOVAL SERVICE POINTS**◀A▶ DRIVER'S AIR BAG MODULE REMOVAL**

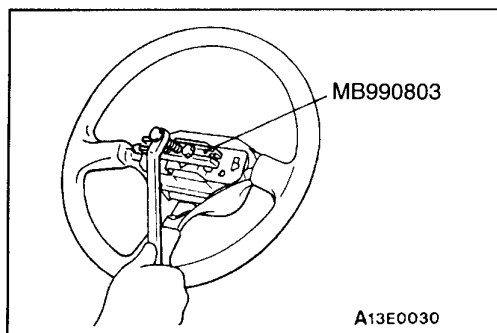
1. Remove the air bag module mounting screw (torque screw) from the steering wheel side.



2. Spread the lock outward to remove the connector by prying with a flat-tipped screw driver as shown in the illustration at left.

Caution

- (1) Be careful not to remove the connector forcibly.
- (2) Keep the removed driver's air bag module facing the pad surface upward in a clean and dry place.

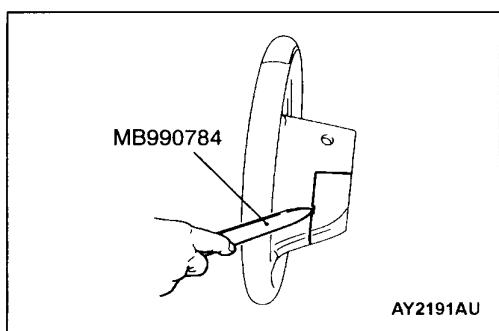


◀B▶ STEERING WHEEL REMOVAL

◀C▶ CLOCK SPRING REMOVAL

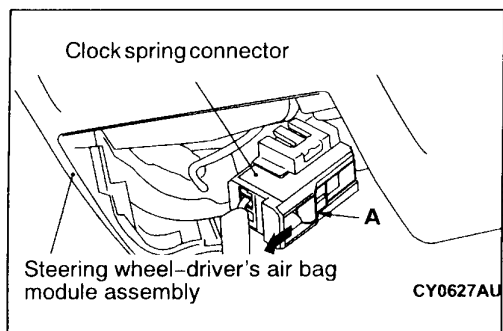
Caution

Keep the removed clock spring in a clean and dry place.



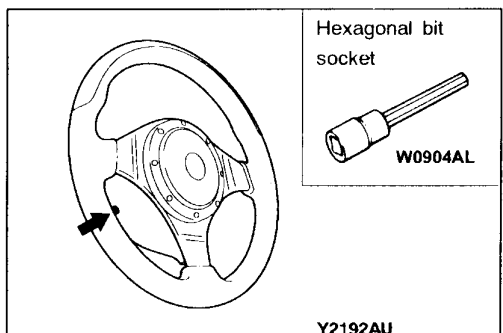
◀D▶ COVER REMOVAL

Use the special tool to insert into the notch as shown in the illustration and remove the cover.



◀E▶ STEERING WHEEL-DRIVER'S AIR BAG MODULE ASSEMBLY REMOVAL

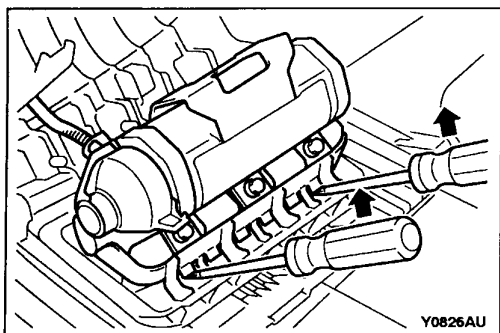
1. By sliding the A section (in the figure) of the clock spring connector in the arrow direction, disconnect the connector.



2. Insert the hexagonal bit socket into the arrow section in the figure. Completely loosen the bolt, and then remove the steering wheel-driver's air bag module assembly.

NOTE

Use a hexagonal bit socket or a hexagonal wrench having an effective length of 75 mm or more in the hexagonal section and the diameter of 8 mm or more.



◀F▶ PASSENGER'S AIR BAG MODULE REMOVAL

Insert the screwdriver (–) into the position specified in the figure and lift the screwdriver upward to release the pawls engaged, and then remove the passenger's air bag module.

Caution

1. When the passenger's air bag module is removed, do not damage the engagement of the pawls.
2. The removed passenger's air bag module should be stored in a clean, dry place with facing the deployment surface facing up.

INSTALLATION SERVICE POINTS

▶A◀ PRE-INSTALLATION INSPECTION

1. Pre-installation inspection is carried out even if installing a new air bag module or clock spring. (Refer to P.52B-59.)

Caution

A used air bag module must be discarded after deployment according to the specified procedure. (Refer to P.52B-64.)

2. Connect the negative (–) terminal of the battery.
3. Connect the MUT-II to the diagnosis connector (16 pin).

Caution

Connection and disconnection of the MUT-II must be carried out after turning the ignition switch to the LOCK (OFF) position.

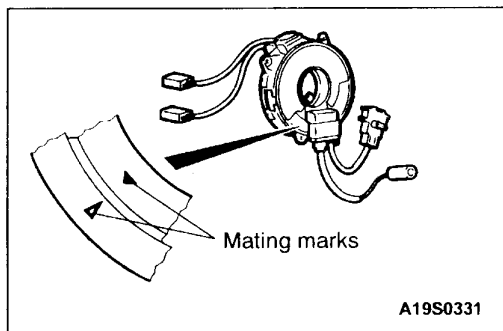
4. Turn the ignition switch to ON.
5. Check that there is no abnormality except for open circuit in the air bag module after reading diagnostic codes.
6. Turn the ignition switch to LOCK (OFF) position.
7. Release the negative (–) terminal cable of the battery and wrap a tape around it for insulation.

Caution

Wait for at least 60 seconds after disconnecting the negative (–) battery cable before starting any operation. (Refer to P.52B-3.)

▶B◀ CLOCK SPRING INSTALLATION

1. Check that the steering wheel is positioned in the forward direction.



2. Install the column switch to the clock spring after centering of the clock spring is carried out as follows.

Centering of the clock spring

After turning the clock spring clockwise fully, turning approximately 3 rounds in the opposite direction, and align mating marks.

Caution

If centering of the clock spring is not properly done, the SRS air bag system does not function normally due to possible malfunctions that the steering wheel may not turn in the way or cables in the clock spring may be torn.

►C◄ STEERING WHEEL/STEERING WHEEL-AIR BAG MODULE ASSEMBLY INSTALLATION

1. After checking that centering of the clock spring has been done, install the steering wheel or the steering wheel-air bag module assembly.

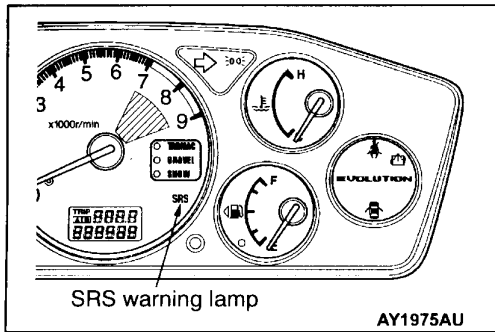
Caution

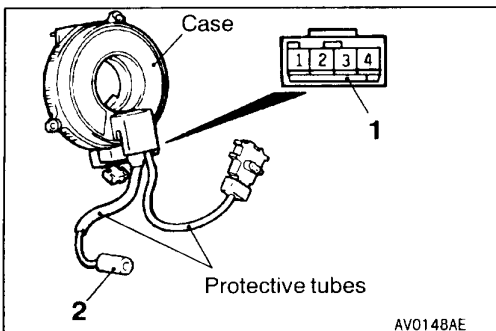
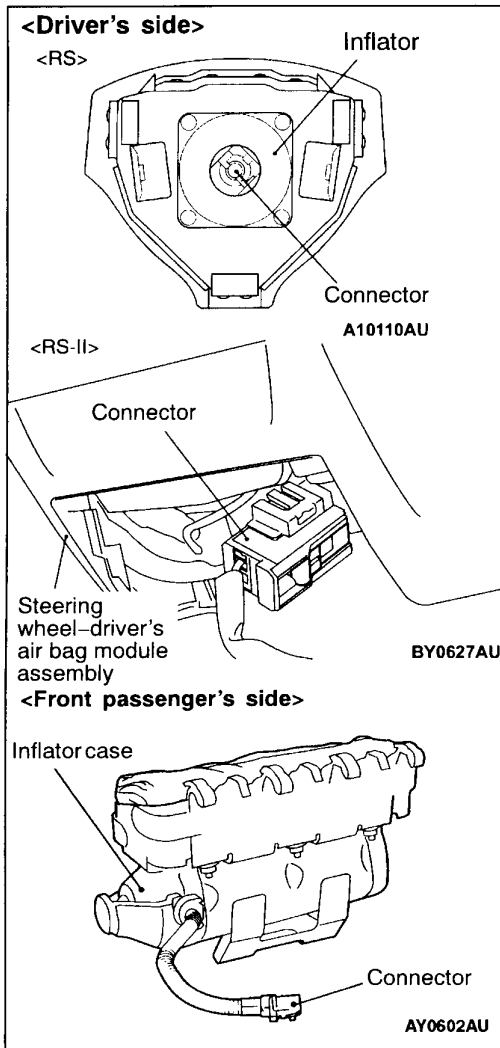
Do not engage the harness of the clock spring when installing the steering wheel or the steering wheel-air bag module assembly.

2. After installation, check that no abnormalities occur when the steering wheel is fully turned to the left or the right.

►D◄ POST-INSTALLATION INSPECTION

1. Check that no abnormal noise or improper operation can be caused by rotating the steering wheel in left and right directions slightly.
(driver's air bag module, clock spring)
2. Turn the ignition switch to the ON position.
3. Check that the SRS warning lamp illuminates for 6 to 8 seconds and goes out.
4. Carry out troubleshooting if the lamp does not go out.
(Refer to P.52-6.)





INSPECTION

DRIVER'S AND PASSENGER'S AIR BAG MODULE INSPECTION

If any malfunction is found in the following inspection, replace the air bag module(s) with new one(s).

Discard the old one(s) after deployment as specified in the service procedure. (Refer to P.52B-64.)

Caution

Never measure circuit resistance in the air bag modules (squib) even with the specified tester. Measuring the circuit resistance with a tester causes accidental air bag deployment due to current that flows or static, resulting in serious personal injury.

1. Check the cover for dents, cracks or deformation.
2. Check the connectors for damage, terminals for deformation, and harness for binds.
3. Check the air bag inflator cases for dents, cracks or deformation.
4. With air bag module installed

Caution

If dents, cracks, deformation, or rust are present in the air bag module(s), replace with new one(s).

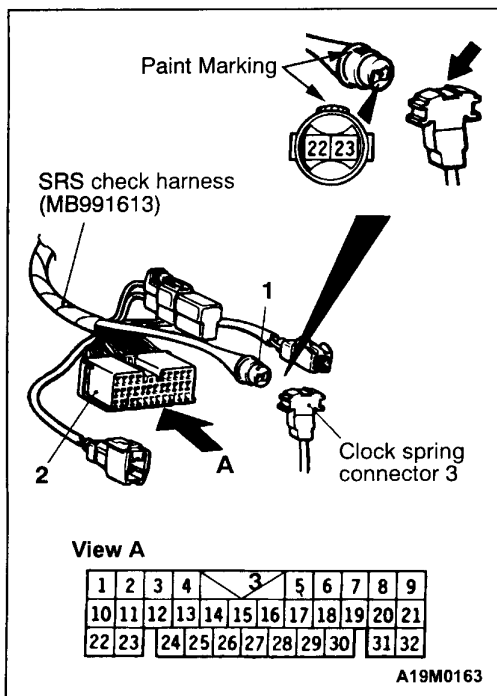
Discard the old one(s) as specified in the service procedure. (Refer to P.52B-64.)

CLOCK SPRING CHECK

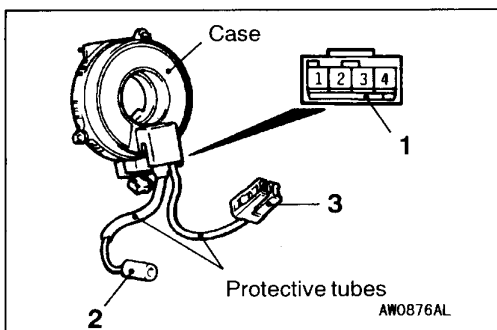
If any malfunction is found in the following inspections, replace the clock spring with a new one.

<RS>

1. Check the connectors and protective tubes for damage, and terminals for deformation.
2. Visually check the case for damage.
3. Refer to that the clock spring has continuity between connector No.2 and terminal No.4 of connector No.1.

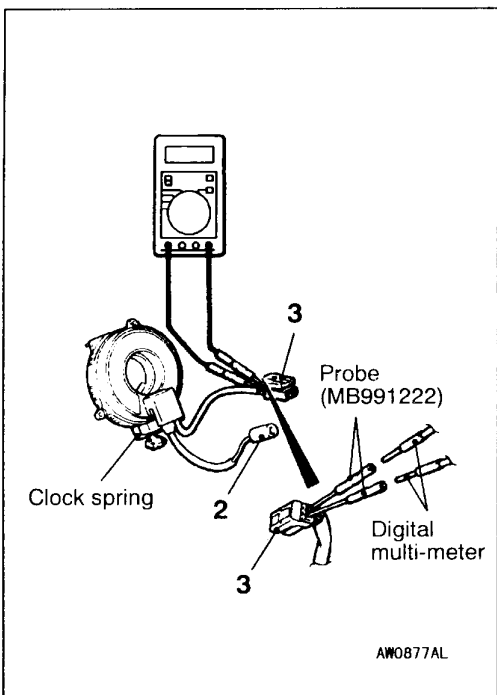


- Align the paint mark on the connector No.1 of the SRS check harness (MB991606 or MB991613) with the mark indicated by an arrow on the connector No.3 of the clock spring for connector connection.
- Check that there is continuity between the terminals 22 and 23 of the SRS check harness connector No.2.



<RS-II>

- Check the connectors and protective tubes for damage, and terminals for deformation.
- Visually check the case for damage.
- Refer to that the clock spring has continuity between connector No.2 and terminal No.4 of connector No.1.



- Insert the probe (MB991222) from the rear of connector No.3 of the clock spring.

Caution

The probe must not be inserted directly to the terminals from the front of the connector.

- Connect a digital multi-meter to the probe (MB991222), as shown, to check that conductivity is present between the terminals.

SEAT BELT WITH PRE-TENSIONER

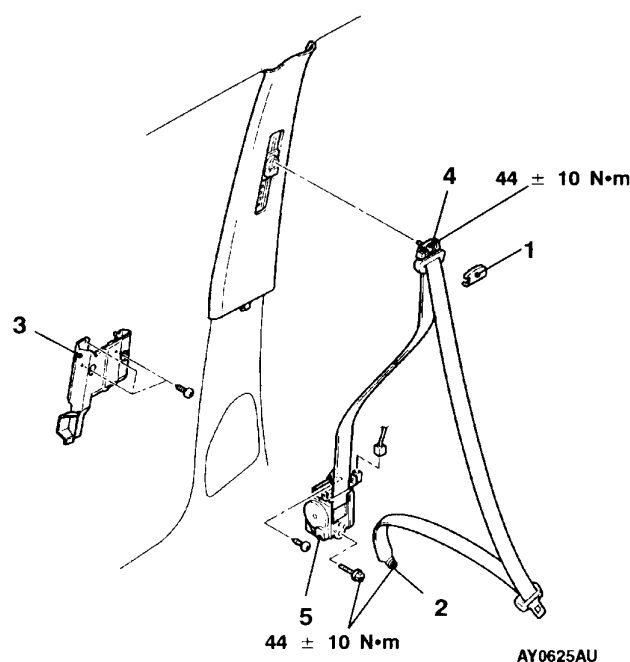
Caution:

1. Wait for at least 60 seconds after disconnecting the negative (-) terminal of the battery before starting any operation. The removed negative (-) terminal must be protected by wrapping the tape. (Refer to P.52B-3.)
2. Never disassemble or repair the seat belt with pre-tensioner. Replace the part with a new one when it malfunctions.
3. Take an extra care to deal with the seat belt with pre-tensioner by avoiding dropping or wetting it with water or oil. If any dent, crack, or deformation is found, be sure to replace the seat belt with pre-tensioner with a new part.
4. Do not place a heavy object on top of the seat belt pre-tensioner.
5. Never keep the seat belt with pre-tensioner in a place where the temperature can exceed over 90°C.
6. Replace the seat belt with pre-tensioner with a new one after operating the seat belt pre-tensioner.
7. Wear gloves or protective glasses when handling the seat belt with pre-tensioner after operation.
8. If the seat belt with pre-tensioner before operation needs to be discarded, be sure to do so after operating the seat belt pre-tensioner. (Refer to P.52B-64.)

REMOVAL AND INSTALLATION

Pre-removal operation

- Turn the ignition key to the LOCK(OFF) position.
- Disconnect the negative (-) terminal of the battery.



Removal steps

1. Sash cover guide
2. Seat belt lower anchor bolt
3. Bracket
4. Seat belt shoulder anchor bolt
 - Center pillar lower trim (Refer to GROUP 52A – Trim.)
5. Seat belt pre-tensioner

Installation steps

- A◄
- Pre-installation inspection
 - 5. Seat belt pre-tensioner
 - 4. Seat belt shoulder anchor bolt
 - 3. Bracket
 - 2. Seat belt lower anchor bolt
 - Center pillar lower trim (Refer to GROUP 52A – Trim.)
 - 1. Sash cover guide
 - Negative (-) terminal of the battery connection
- B◄
- Post-installation inspection

INSTALLATION SERVICE POINTS**►A◄ PRE-INSTALLATION INSPECTION**

1. Pre-installation inspection must be carried out even when installing a new seat belt with pre-tensioner. (Refer to Inspections.)

Caution

If the seat belt with pre-tensioner is discarded, discard it after operating the seat belt pre-tensioner according to the specified procedure. (Refer to P.52B-64.)

2. Connect the negative (-) terminal of the battery.
3. Connect the MUT-II to the diagnosis connector (16 pin).

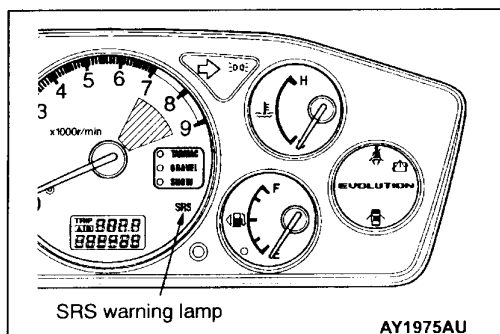
Caution

Connection and disconnection of the MUT-II must be carried out after turning the ignition switch to the LOCK (OFF) position.

4. Turn the ignition switch to ON position.
5. Check that there is no abnormality except for open circuit in the seat belt pre-tensioner after reading diagnostic codes.
6. Turn the ignition key to LOCK (OFF) position.
7. Release the negative (-) terminal cable of the battery and wrap a tape around it for insulation.

Caution

Wait for at least 60 seconds after disconnecting the negative (-) battery cable before starting any operation. (Refer to P.52B-3.)

**►B◄ POST-INSTALLATION INSPECTION**

1. Turn the ignition switch to the ON position.
2. Check that the SRS warning lamp illuminates for 6 to 8 seconds and goes out.
3. Carry out troubleshooting if the lamp does not go out. (Refer to P.52B-6.)

INSPECTION**SEAT BELT PRE-TENSIONER**

If any faulty is discovered by the following inspections, replace the seat belt with pre-tensioner with a new one.

Discard the old parts according to the specified procedure after operating the seat belt pre-tensioner. (Refer to P.52B-64.)

Caution

Do not measure the circuit resistance of the seat belt pre-tensioner even if it is done with a specified tester.

If a tester is used to measure the circuit resistance, squib charged with current or erroneous activation by static may cause critical damage.

1. Seat belt pre-tensioner for dent, crack, or deformation
2. Harness or connector for damage and terminal for deformation

AIR BAG MODULE AND SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES

Carry out the following procedure of air bag deployment and seat belt pre-tensioner operation before disposing the air bag module and seat belt

with pre-tensioner or the vehicle with SRS air bag and seat belt with pre-tensioner.

DISPOSAL OF AIR BAG MODULE BEFORE DEPLOYMENT OR SEAT BELT WITH PRE-TENSIONER BEFORE OPERATION

Caution

1. Carry out deployment of all the air bag modules and operation of all seat belt pre-tensioners before disposing the vehicle with SRS air bag and seat belt with pre-tensioner inside the vehicle.
2. Carry out deployment of the used air bag or operation of the used seat belt pre-tensioner outside the vehicle when replacing the air bag module or the seat belt with pre-tensioner.
3. Carry out deployment of air bag or operation of seat belt pre-tensioner in a well ventilated place since a lot of smoke is generated. Do not carry out operation near a smoke detector.
4. Avoid carrying out operation in a residential area as much as possible and give a warning when any person is near by since air bag deployment or seat belt pre-tensioner operation causes loud operation sound.
5. Prepare ear plugs for those are engaged in air bag deployment or seat belt pre-tensioner operation or for those who are near by.

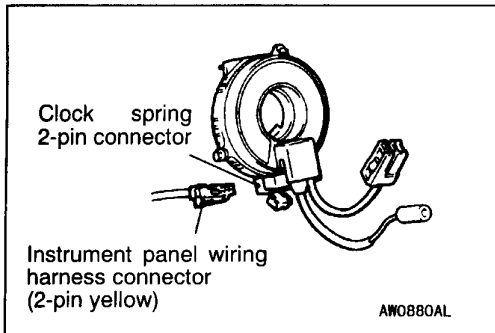
DEPLOYMENT OR OPERATION INSIDE THE VEHICLE

1. Move the vehicle to flat and 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 the disconnection of the battery cables before any further job. (Refer to P.52B-3.)

3. Carry out deployment of the air bag module and operation of the seat belt pre-tensioner according to the following procedure.



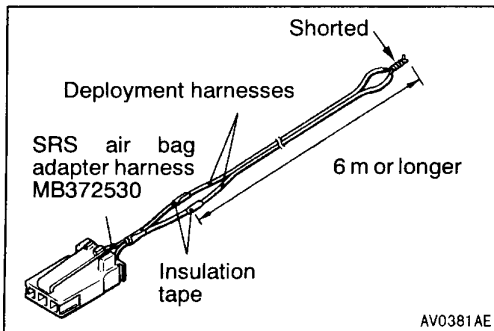
Driver's air bag module

- (1) Remove the steering column cover, lower.
(Refer to GROUP 52A – Instrument Panel.)
- (2) Disconnect the clock spring 2-pin connector and instrument panel wiring harness connector (2-pin, yellow).

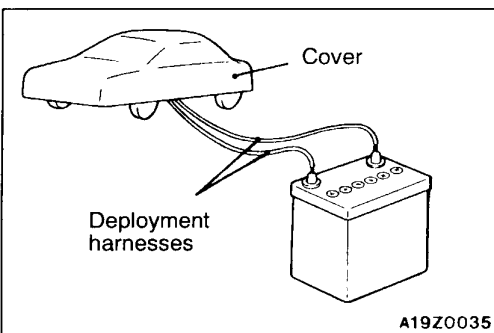
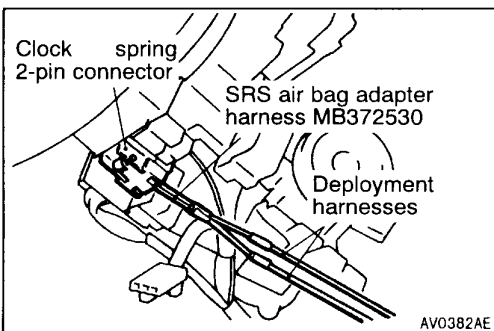
NOTE

Once disconnected from the instrument panel wiring harness, both electrodes of the clock spring connector short automatically. This prevents the driver's air bag from accidental deployment caused by static, etc.

- (3) Connect deployment harnesses longer than 6 m to each SRS air bag adapter harness and insulate the connections with plastic tape.
Also, connect the deployment harnesses in the other ends to short, thereby preventing the driver's air bag from accidental deployment caused by static etc.



- (4) Connect the SRS air bag adapter harness to the clock spring 2-pin connector and route the deployment harnesses out of the vehicle.



- (5) Close all the doors with the windows fully closed and put a cover over the vehicle to minimize report.

Caution

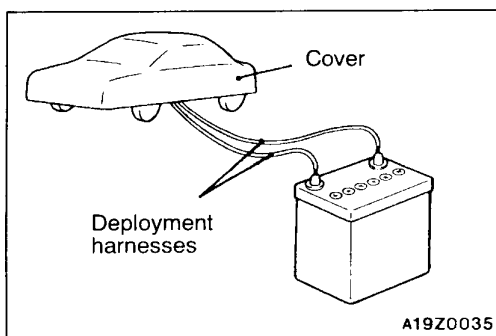
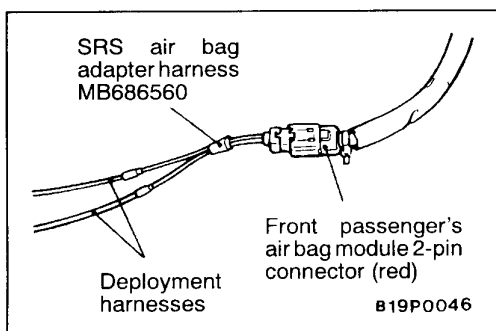
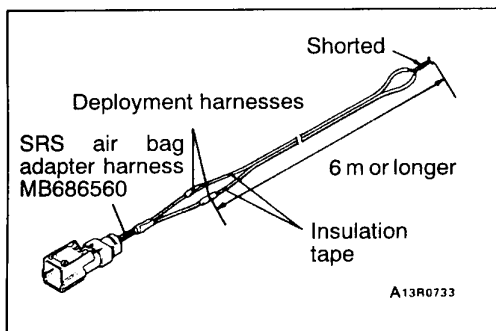
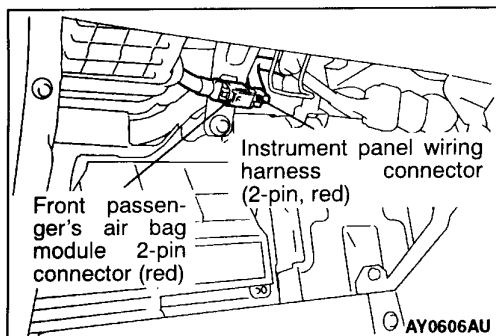
The cover is required as the glass, if already damaged, may break.

- (6) Separate the deployment harnesses as far from the vehicle as possible and connect to the terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) **Before deploying the air bag, see that no one is in and near the vehicle. Also, put on safety glasses.**
- 2) **The deployment makes the inflator of the driver's air bag very hot. Before handling the inflator, wait more than 30 minutes for cooling.**
- 3) **If the driver's air bag module fails to deploy although the procedure is respected, do not go near the module. Contact your local distributor.**

- (7) Discard the deployed air bag module according to Deployed Air Bag Module Disposal Procedures.
(Refer to P.52B-75.)



Front passenger's air bag module

- (1) Remove the glove box.
(Refer to GROUP 52A – Instrument Panel.)
- (2) Disconnect the front passenger's air bag module 2-pin connector (red) and instrument panel wiring harness connector (2-pin, red).

NOTE

Once disconnected from the instrument panel wiring harness, both electrodes of the front passenger's air bag module short automatically. This prevents the front passenger air bag from accidental deployment caused by static, etc.

- (3) Connect deployment harnesses longer than 6 m to each SRS air bag adapter harness and insulate the connections with plastic tape.
Also, connect the deployment harnesses in the other ends to short, thereby preventing the front passenger's air bag from accidental deployment caused by static etc.

- (4) Connect the SRS air bag adapter harness to the front passenger's air bag module 2-pin connector (red) and route the deployment harnesses out of the vehicle.

- (5) Close all the doors with the windows fully closed and put a cover over the vehicle to minimize report.

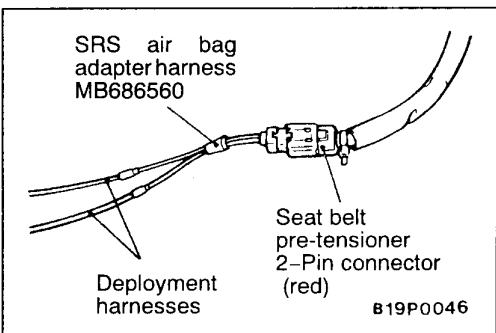
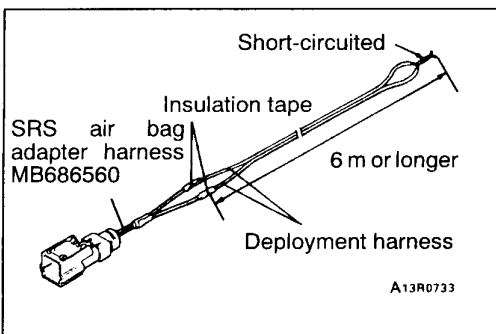
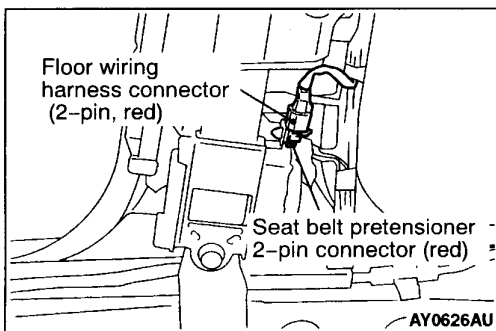
Caution

The cover is required as the glass, if already damaged, may break.

- (6) Separate the deployment harnesses as far from the vehicle as possible and connect to the terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) **Before deploying the air bag, see that no one is in and near the vehicle. Also, put on safety glasses.**
 - 2) **The deployment makes the inflator of the front passenger's air bag very hot. Before handling the inflator, wait more than 30 minutes for cooling.**
 - 3) **If the front passenger's air bag module fails to deploy although the procedure is respected, do not go near the module. Contact your local distributor.**
- (7) Discard the deployed air bag module according to Deployed Air Bag Module Disposal Procedures. (Refer to P.52B-75.)



Seat belt pre-tensioner

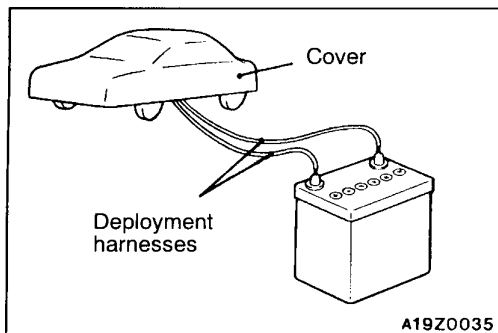
- (1) Remove the center pillar lower trim. (Refer to GROUP 52A – Instrument Panel.)
- (2) Disconnect the seat belt pre-tensioner 2-pin connector (red) from the floor wiring harness connector (2-pin, red).

NOTE

Once disconnected from the floor wiring harness, both electrodes of the seat belt pre-tensioner connector short-circuit automatically. This prevents the seat belt pre-tensioner from accidental deployment caused by static, and etc.

- (3) Connect deployment harnesses longer than 6 m to each SRS air bag adapter harness and insulate the connections with plastic tape. Also, connect the deployment harnesses in the other ends to short, thereby preventing the seat belt pre-tensioner from accidental deployment caused by static etc.

- (4) Connect the SRS air bag adapter harness to the seat belt pre-tensioner 2-pin connector (red) and pull out the operation harness.



- (5) Close all the doors with the windows fully closed and put a cover over the vehicle to minimize report.

Caution

The cover is required as the glass, if already damaged, may break.

- (6) Separate the deployment harnesses as far from the vehicle as possible and connect to the terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) **Before operating the seat belt pre-tensioner, see that no one is in or near the vehicle.**

- 2) **The operation makes the insulator of the seat belt pre-tensioner very hot. Before handling the inflator, wait more than 30 minutes for cooling.**

- 3) **If the seat belt pre-tensioner fails to operate although the procedure is respected, do not go near the seat belt pre-tensioner. Contact your local distributor.**

- (7) Discard the operated seat belt pre-tensioner according to Disposal Procedure. (Refer to P.52B-75.)

DEPLOYMENT OUTSIDE THE VEHICLE

Caution

1. **Carry out air bag deployment or seat belt pre-tensioner operation on large flat place at least 6 m away from any object or person.**
2. **Avoid a strong wind weather when carrying out deployment or operation outside the vehicle. Ignite the air bag at a place upwind from the air bag module and the seat belt pre-tensioner even in a breeze weather.**

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 before any further job after the disconnection of the battery cables. (Refer to P.52B-3.)

2. Carry out deployment of the air bag module and operation of the seat belt pre-tensioner according to the following procedure.

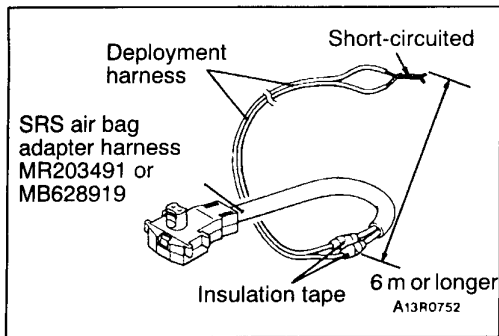
Driver's side air bag module

<RS: steering wheel and air bag module separate type>

- (1) Remove the driver's air bag module from the vehicle. (Refer to P.52B-52.)

Caution

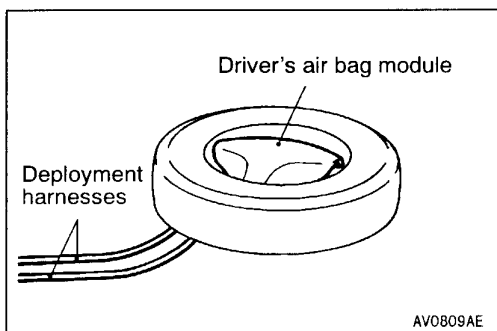
Once disconnected, both electrodes of the driver's air bag module connector short automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything on it.



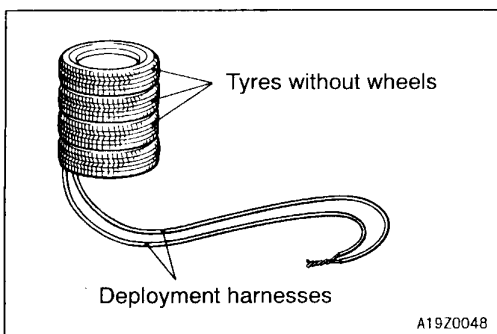
- (2) Connect deployment harnesses longer than 6 m to each SRS air bag adapter harness and insulate the connections with plastic tape. Also, connect the deployment harness in the other ends to connect (short-circuit). This prevents the driver's air bag module from accidental deployment caused by static and etc.
- (3) Touch the vehicle's body with bare hands to discharge static in you.

Caution

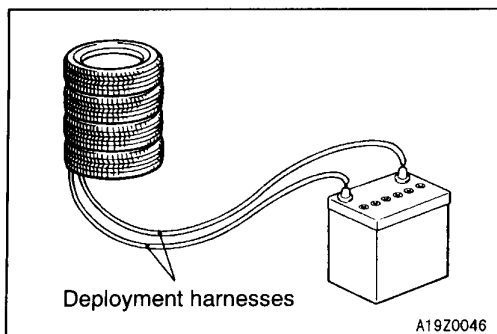
Never fail to do Step (3) in order to prevent accidental deployment caused by static.



- (4) Install a nut to the bolt behind the driver's air bag module and tie thick wire there for securing.
- (5) Route the deployment harnesses connected to the driver's air bag module beneath an old tyre and wheel assembly. Then, using the wire tied to the bolt, secure the driver's air bag module to the tyre and wheel assembly with the deployment surface facing up.



- (6) Place three old tyres without wheels on the tyre secured with the driver's air bag module.



- (7) Separate the deployment harnesses as far from the driver's side air bag module as possible and connect to the terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) Before the deployment, see that no one is near around the driver's air bag module.
 - 2) The deployment makes the inflator of the driver's air bag very hot. Before handling the inflator, wait more than 30 minutes for cooling.
 - 3) If the driver's air bag module fails to deploy although the procedure is respected, do not go near the module. Contact your local distributor.
- (8) Discard the deployed air bag module as specified in Deployed Air Bag Module Disposal Procedures. (Refer to P.52B-75.)

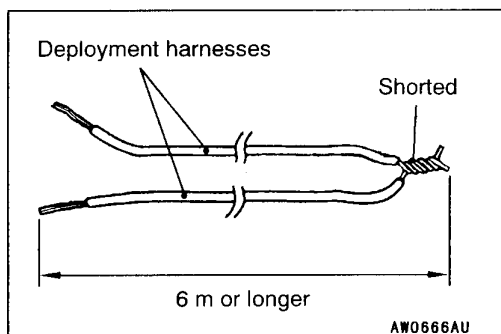
Driver's side air bag module

<RS-II: steering wheel and air bag module incorporate type>

- (1) Remove the steering wheel–air bag module assembly from the vehicle. (Refer to P.52B-52.)

Caution

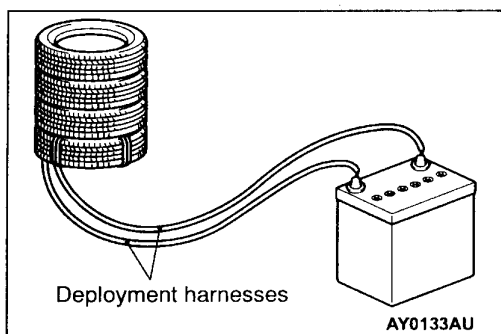
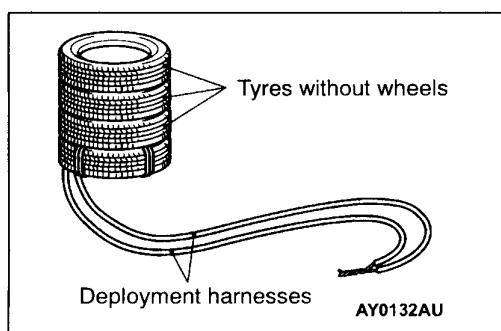
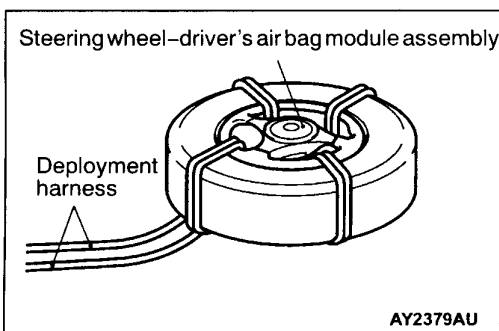
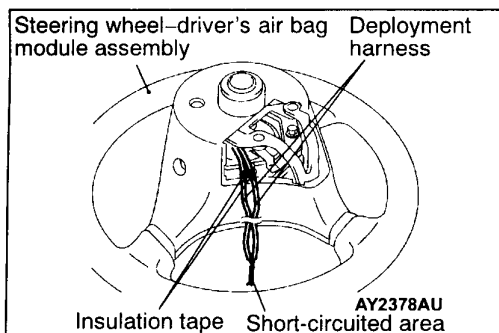
Once disconnected, both electrodes of the driver's air bag module connector short automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything on it.



- (2) Prepare two deployment harnesses longer than 6 m for deployment and connect the terminals in one end to short-circuit. This is to prevent accidental deployment caused by static etc.
- (3) Touch the vehicle's body with bare hands to discharge static in you.

Caution

Never fail to do Step (3) in order to prevent accidental deployment caused by static.



(4) Release the secured connector of the steering wheel-driver's air bag module assembly to cut off the connector from the harness with a nipper and etc. Connect deployment harnesses to each of two separated harnesses and cover the area with insulation tape.

(5) Use a rope to tie the steering wheel-driver's air bag module assembly to secure old tyres with wheels.

(6) Route the deployment harness connected to driver's air bag module beneath old tyres with wheels. Then, secure the steering wheel-driver's air bag module assembly with the deployment surface facing up.

(7) Place three old tyres without wheels on the tyre secured with the driver's air bag module.

(8) Separate the deployment harnesses as far from the driver's side air bag module as possible and connect to the terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) Before the deployment, see that no one is near around the driver's air bag module.
- 2) The deployment makes the inflator of the driver's air bag very hot. Before handling the inflator, wait more than 30 minutes for cooling.
- 3) If the driver's air bag module fails to deploy although the procedure is respected, do not go near the module. Contact your local distributor.

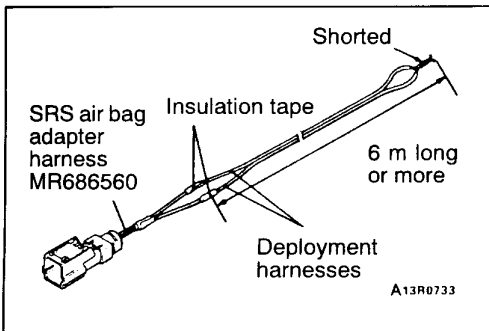
(9) Discard the deployed air bag module as specified in Deployed Air Bag Module Disposal Procedures. (Refer to P.52B-75.)

Front passenger's air bag module

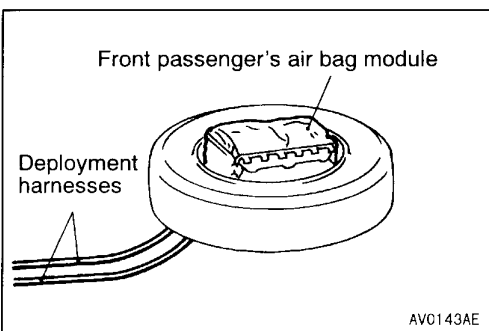
- (1) Remove the front passenger's air bag module from the vehicle. (Refer to P.52B-52.)

Caution

Once disconnected, both electrodes of the front passenger's air bag module connector short automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything on it.



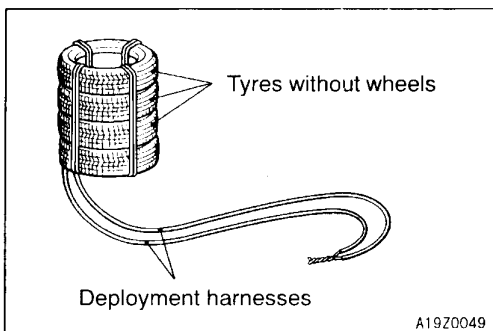
- (2) Connect deployment harness 6 m or longer with the SRS air bag adapter harness respectively. Insulate the connection with tape. Also, connect the other ends of the deployment harness each other to short, thereby preventing the front passenger's air bag from accidental deployment caused by static etc.



- (3) Route the SRS air bag adapter harness with the deployment harnesses beneath an old tyre and wheel assembly. Then, connect the harnesses to the front passenger's air bag module.
- (4) Route a thick wire through the holes in the front passenger's air bag module bracket. With the deployment surface facing up, secure the front passenger's air bag module to the old tyre and wheel assembly.

Caution

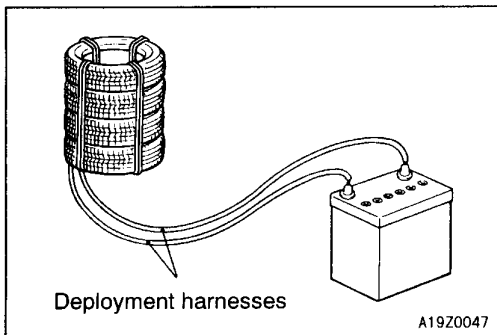
- 1) The adapter harness below the wheel should be loose. If it is too tight, the reaction when the air bag deploys could damage the adapter harness.
- 2) Place the connector of the SRS air bag adapter harness so that it is not clamped by the tyre at deployment.



- (5) Put three old tyres without wheels on the tyre secured to the front passenger's air bag module. Secure all the tyres with ropes (4 locations).

NOTE

The tyres must be bound because the passenger's air bag inflates more than the driver's air bag.



- (6) Disconnect the deployment harnesses as far from the front passenger's air bag module as possible and connect the harnesses to the battery removed from the vehicle.

Caution

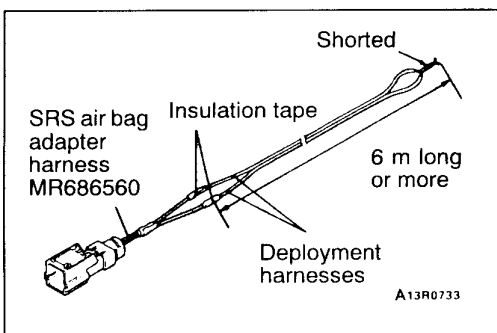
- 1) **Before the deployment, see that no one is near the front passenger's air bag module.**
 - 2) **The deployment makes the inflator of the front passenger's air bag very hot. Before handling the inflator, wait more than 30 minutes for cooling.**
 - 3) **If the front passenger's air bag module fails to deploy although the procedure is respected, do not go near the module. Contact your local distributor.**
- (7) Discard the deployed air bag module as specified in Deployed Air Bag Module Disposal Procedures. (Refer to P.52B-75.)

Seat belt pre-tensioner

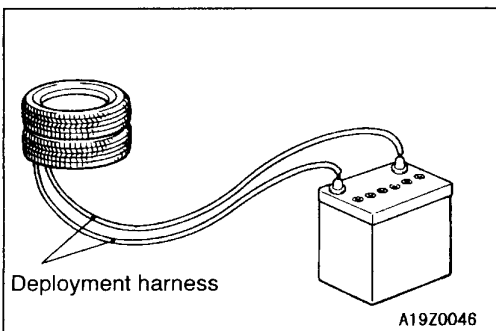
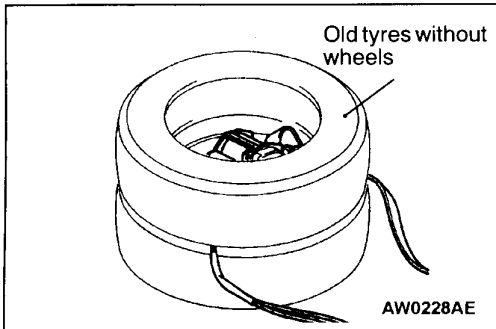
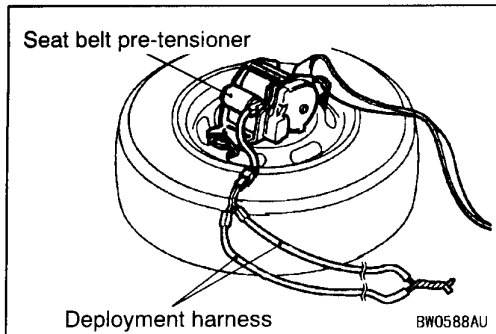
- (1) Remove the seat belt with pre-tensioner from the vehicle. (Refer to P.52B-61.)

Caution

Once disconnected, both electrodes of the seat belt pre-tensioner are short-circuited automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything on it.



- (2) Connect deployment harness 6 m or longer with the SRS air bag adapter harness respectively. Insulate the connection with tape. Moreover, the ends of the operation harness should be connected (short-circuited) to each other. Thus, it prevents the seat belt pre-tensioner from accidental deployment caused by static and etc.



- (3) Route a thick wire through the holes in the seat belt retractor bracket to secure at the top of the wheel (convex part). (two locations)
- (4) Connect the seat belt pre-tensioner connector to the the SRS air bag adapter harness with the operation harness attached.
- (5) Pull out the seat belt outside the tyre.

Caution

Place the connector of the SRS air bag adapter harness so that it is not clamped by the tyres at deployment.

- (6) Place an old tyre (without a wheel) on the tyre, which the seat belt with pre-tensioner is secured on.

- (7) Disconnect the deployment harness as far from the seat belt pre-tensioner as possible and connect the both terminals of the battery removed from the vehicle. Then deploy.

Caution

- 1) **Before the deployment, see that no one is near the seat belt pre-tensioner.**
- 2) **Before handling the insulator, wait for a while for cooling.**
- 3) **If the seat belt pre-tensioner fails to operate although the procedure is respected, do not go near the seat belt pre-tensioner. Contact your local distributor.**

- (8) Discard the operated seat belt pre-tensioner according to Disposal Procedure. (Refer to P.52B-75.)

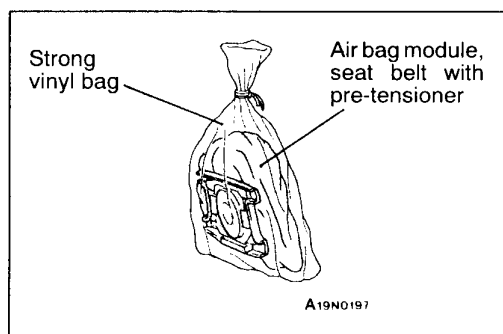
DEPLOYED AIR BAG MODULE OR OPERATED SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES

Discard the deployed air bag module or the operated seat belt with pre-tensioner paying attention to the following items.

1. The deployment makes the inflator of the air bag or the operation of the seat belt pre-tensioner very hot. Wait for more than 30 minutes for cooling before handling the inflator.
2. Do not apply any water or oil onto the deployed air bag module or the operated seat belt pre-tensioner.
3. Wear gloves and protective glasses before handling the deployed air bag module or the operated seat belt pre-tensioner since materials on those parts may cause irritation to eyes or skin.

Caution

If after following these precautions, any 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. Discard the air bag module and the seat belt with pre-tensioner after placing them into a strong vinyl bag for sealing.
5. Be sure to always wash your hands after completing this operation.