

GROUP 52B

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

CONTENTS

GENERAL INFORMATION	52B-2	SRS CONTROL UNIT (SRS-ECU)	52B-140
SERVICE PRECAUTIONS.....	52B-3	REMOVAL AND INSTALLATION	52B-140
		INSPECTION.....	52B-141
SPECIAL TOOLS.....	52B-6	AIR BAG MODULE(S) AND CLOCK SPRING.....	52B-141
TEST EQUIPMENTS	52B-7	REMOVAL AND INSTALLATION	52B-141
		INSPECTION.....	52B-145
TROUBLESHOOTING	52B-7	SIDE IMPACT SENSOR	52B-147
SRS MAINTENANCE.....	52B-129	REMOVAL AND INSTALLATION	52B-147
		INSPECTION.....	52B-148
POST-COLLISION DIAGNOSIS	52B-133		
		SEAT BELTS WITH PRE-TENSIONER.....	52B-148
INDIVIDUAL COMPONENT SERVICE	52B-136		
		REMOVAL AND INSTALLATION	52B-148
WARNING/CAUTION LABELS	52B-137	INSPECTION.....	52B-150
FRONT IMPACT SENSORS	52B-138	AIR BAG MODULE AND SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES	52B-151
REMOVAL AND INSTALLATION	52B-138		
INSPECTION	52B-139		

 **WARNING**

- Carefully read and observe the information in the **SERVICE PRECAUTIONS** prior to any service.
- For information concerning diagnosis or maintenance, always observe the procedures in the **SRS Diagnosis** or the **SRS Maintenance** sections, respectively.
- If any **SRS** components are removed or replaced in connection with any service procedures, be sure to follow the procedures in the **INDIVIDUAL COMPONENT SERVICE** section for the components involved.
- If you have any questions about the **SRS**, please contact your local distributor.

GENERAL INFORMATION

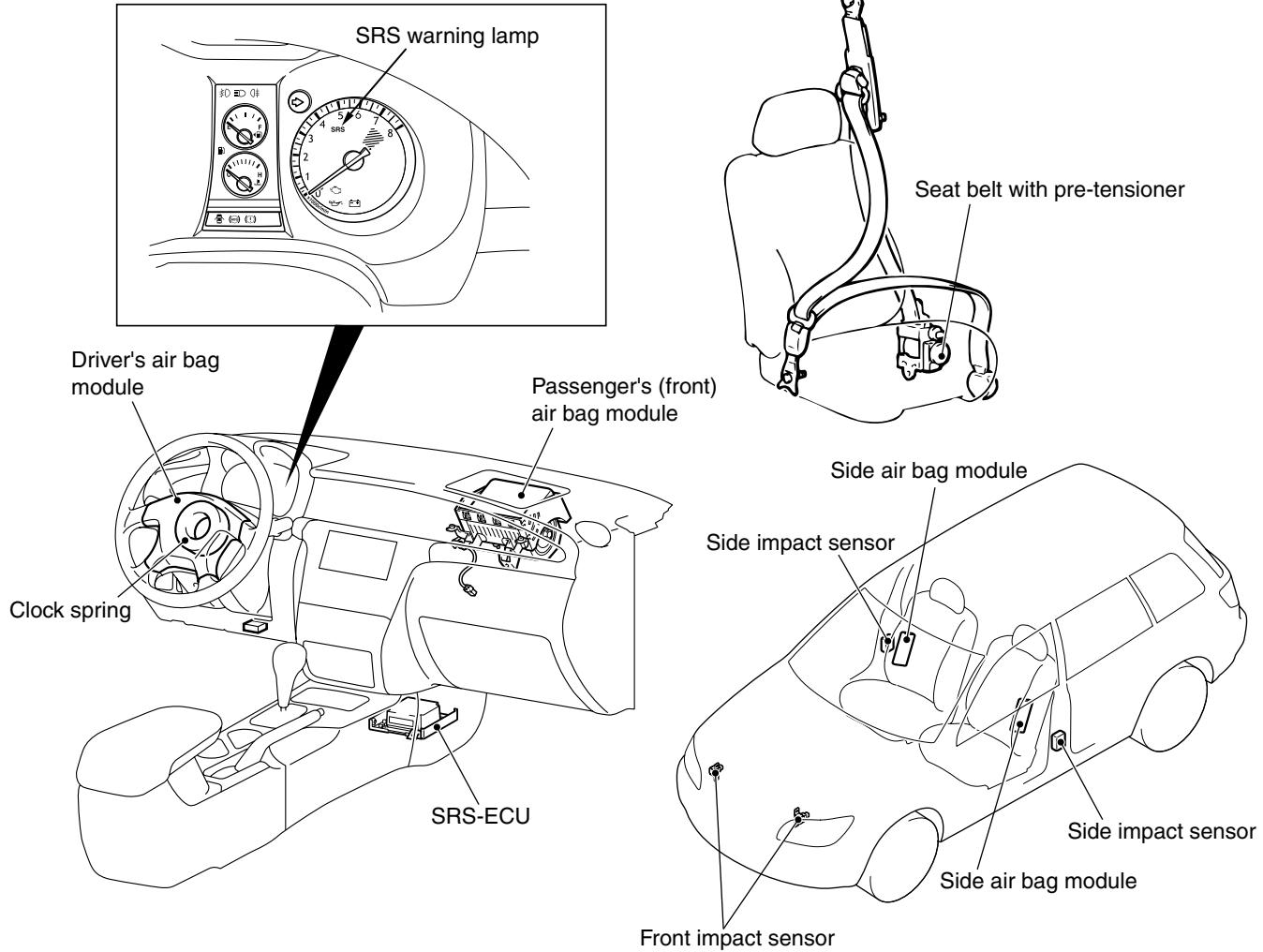
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The Supplemental Restraint System (SRS) and seat belt with pre-tensioner is designed to supplement the driver's and front passenger's seat belts to help reduce the risk or severity of injury to the driver and front passenger by activating and deploying both front air bags in certain frontal collisions.

The SRS consist of four air bag modules, SRS air bag control unit (SRS-ECU), two front impact sensors, two side impact sensors, SRS warning lamp, clock spring and seat belt pre-tensioner. Front air bags are located in the centre of the steering wheel and above the glove box. Each air bag is made up of a folded air bag and an inflator unit. Side air bags are located inside the front seatback assemblies. The SRS-ECU under the front floor console monitors the system and has a front air bag

safing G-sensor, front air bag analog G-sensor and a side air bag safing G-sensor. The front impact sensor is assembled outside the headlamp support panel to monitor impact in case of front impact. The side impact sensors inside the centre pillars monitor the shock incurred by the sides of the vehicle. 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 driver's and passenger's front seat belt retractor.

Only authorized service personnel should do work on or around the SRS components. Those service personnel should read this manual carefully before starting any such work.



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SERVICE PRECAUTIONS

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⚠ DANGER

In order to avoid injury to yourself or others from accidental deployment of the air bag during servicing, read and carefully follow all the precautions and procedures described in this manual.

⚠ CAUTION

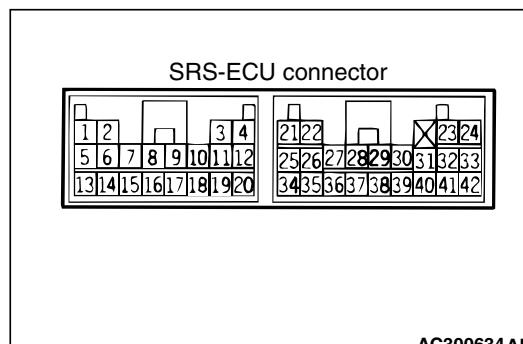
Do not use any electrical test equipment on or near SRS components, except those specified on [P.52B-7](#).

⚠ CAUTION

Never Attempt to Repair the Following Components:

1. SRS air bag control unit (SRS-ECU)
2. Front impact sensor
3. Clock spring
4. Driver's and front passenger's air bag modules
5. Side air bag module
6. Side impact sensor
7. 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, starting at page [P.52B-136](#).

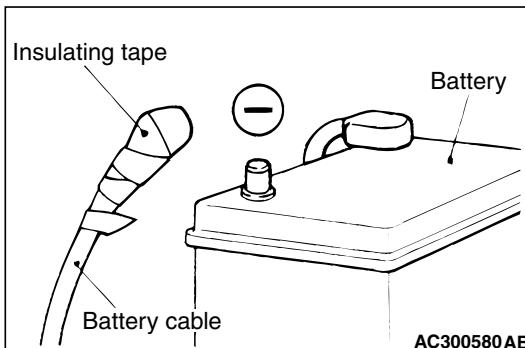
⚠ CAUTION

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Do not attempt to repair the wiring harness connectors of the SRS. If a defective wiring harness is found, repair or replace it by referring to the table below.

SRS-ECU terminal No.	Destination of harness	Remedy
1, 2	Instrument panel wiring harness → Front wiring harness (RH) → Front impact sensor (RH)	Correct or replace each wiring harness.
3, 4	Instrument panel wiring harness → Front wiring harness (LH) → Front impact sensor (LH)	Correct or replace each wiring harness.
7	Instrument panel wiring harness → Earth	Correct or replace the instrument panel wiring harness.
8	Instrument panel wiring harness → SRS warning lamp	Correct or replace the instrument panel wiring harness.
9, 10	Instrument panel wiring harness → Air bag module (Front passenger's side)	Correct or replace the instrument panel wiring harness.
11, 12	Instrument panel wiring harness → Clock spring → Air bag module (Driver's side)	Correct or replace instrument panel wiring harness. Replace the clock spring.
13	Instrument panel wiring harness → Junction block (fuse No.3)	Correct or replace the instrument panel wiring harness.
16	Instrument panel wiring harness → Junction block (fuse No.2)	Correct or replace the instrument panel wiring harness.

SRS-ECU terminal No.	Destination of harness	Remedy
20	Instrument panel wiring harness → Diagnosis connector	Correct or replace the instrument panel wiring harness.
21, 22	Floor wiring harness (RH) → Side air bag module (LH)	Correct or replace the floor wiring harness.
23, 24	Floor wiring harness (RH) → Side air bag module (RH)	Correct or replace the floor wiring harness.
27, 28	Floor wiring harness (RH) → Seat belt pre-tensioner (Front passenger's side)	Connect or replace the floor wiring harness.
29, 30	Floor wiring harness (LH) → Seat belt pre-tensioner (driver's side)	Connect or replace the floor wiring harness.
34, 36	Floor wiring harness (LH) → Side impact sensor (LH)	Connect or replace the floor wiring harness.
40, 42	Floor wiring harness (RH) → Side impact sensor (RH)	Connect or replace the floor wiring harness.

DANGER

After disconnecting the battery cable, wait 60 seconds or more before proceeding with the following work. In addition, insulate the negative battery terminal with a tape. The condenser inside the SRS-ECU is designed to retain enough voltage to deploy the air bag for a short time even after the battery has been disconnected, so serious injury may result from unintended air bag deployment if work is done on the SRS system immediately after the battery cables are disconnected.

CAUTION

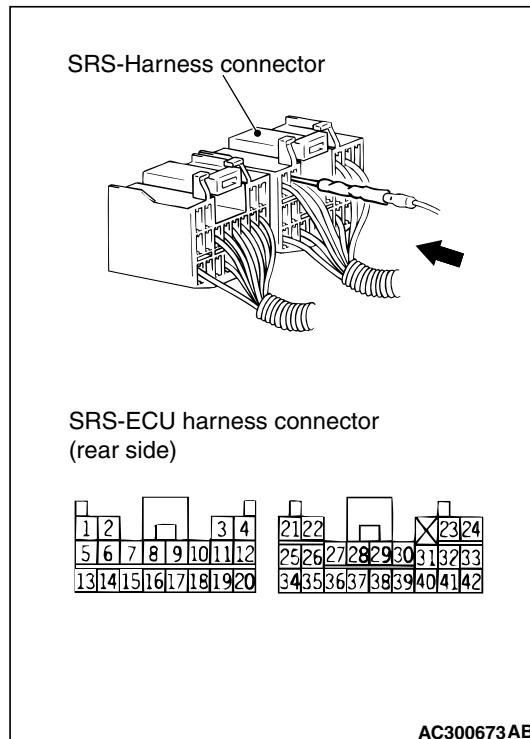
The SRS components and seat belt with pre-tensioner should not be subjected to heat, so remove the SRS-ECU, driver's and front passenger's air bag modules, clock spring, side air bag modules, and seat belt pre-tensioner before drying or baking the vehicle after painting.

- SRS-ECU, air bag modules, clock spring, impact sensors: 93°C or more
- Seat belt with pre-tensioner: 90°C or more

CAUTION

Whenever you finish servicing the SRS, always erase the diagnosis code and check warning lamp operation to make sure that the system functions properly.

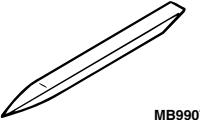
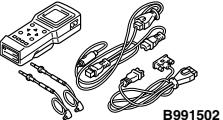
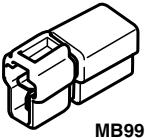
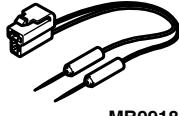
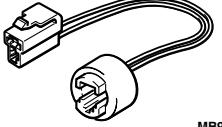
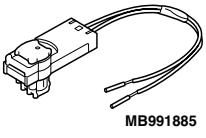
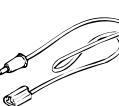
! CAUTION

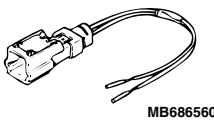


If checks are carried out by using the SRS-ECU harness connector, observe the following procedures: Insert the special tool (probe in the harness set) MB991222 into connector from harness side (rear side), and connect the tester to this probe. If any tool than special tool is used, damage to the harness and other components will result. Never insert the probe directly to 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.

SPECIAL TOOLS

M1524000700356

Tool	No.	Name	Application
 MB990784	MB990784	Ornament remover	Removal of cover.
 B991502	MB991502	MUT-II sub assembly	<ul style="list-style-type: none"> • Reading and erasing diagnosis code • Reading trouble period • Reading erase times
 MB991865	MB991865	Dummy resistor	SRS air bag and seat belt with pre-tensioner circuit check
 MB991866	MB991866	Resistor harness	SRS air bag circuit check
 MB991884	MB991884	Resistor harness (For Pre-tensioner)	Seat belt with pre-tensioner circuit check
 MB991885	MB991885	Pre-tensioner adapter harness	<ul style="list-style-type: none"> • Deployment of seat belt with pre-tensioner inside the vehicle • Deployment of seat belt with pre-tensioner outside the vehicle
A  B  C  D  MB991223AW	MB991223 A: MB991219 B: MB991220 C: MB991221 D: MB991222	Harness set A: Test harness B: LED harness C: LED harness adapter D: Probe	Checking the continuity and measuring the voltage at the SRS-ECU harness connector

Tool	No.	Name	Application
 MB686560	MB686560	SRS air bag adapter harness	<ul style="list-style-type: none"> Deployment of air bag module (Front passenger's side) inside the vehicle Deployment of air bag module (Front passenger's side) outside the vehicle

TEST EQUIPMENTS

M1524000800278

Tool	Name	Application
 AC300683	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

DIAGNOSIS TROUBLESHOOTING FLOW

M1524003100353

Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#).

DIAGNOSIS FUNCTION

M1524003200349

DIAGNOSIS CODES CHECK

CAUTION

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

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 [P.00-6](#)).

ERASING DIAGNOSIS CODE

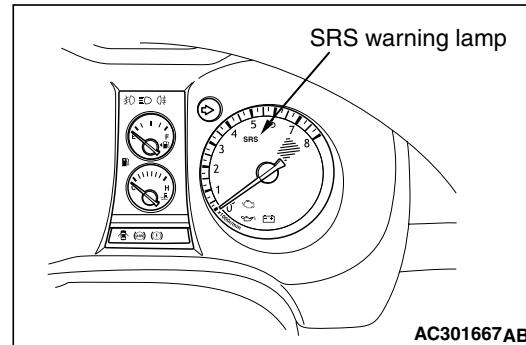
CAUTION

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

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

SRS WARNING LAMP CHECK

M1524004300297



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.

CHECK CHART FOR DIAGNOSIS CODES

M1524003300476

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

Code No.	Diagnosis item	Reference Page	
11	Front impact sensor short-circuited	P.52B-10	
12	One front impact sensor open-circuited	P.52B-10	
13	Two front impact sensor open-circuited	P.52B-10	
14	Analog G-sensor malfunction	P.52B-16	
15	Safing G-sensor (for frontal collision) short-circuited	P.52B-16	
16	Safing G-sensor (for frontal collision) open-circuited	P.52B-16	
17	Safing G-sensor (for side collision) malfunction	P.52B-16	
21* ²	Driver's air bag module (squib) system (short-circuited between terminals of the squib circuit)	P.52B-18	
22* ²	Driver's air bag module (squib) system (open-circuited in the squib circuit)	P.52B-22	
24* ²	Passenger's (front) air bag module (squib) system (short-circuited between terminals of the squib circuit)	P.52B-25	
25* ²	Passenger's (front) air bag module (squib) system (open-circuited in the squib circuit)	P.52B-28	
26* ²	Driver's pre-tensioner (squib) system (short-circuited between terminals of the squib circuit)	P.52B-31	
27* ²	Driver's seat belt pre-tensioner (squib) system (open-circuited in the squib circuit)	P.52B-36	
28* ²	Passenger's (front) seat belt pre-tensioner (squib) system (short-circuit between terminals of the squib circuit)	P.52B-40	
29* ²	Passenger's (front) seat belt pre-tensioner (squib) system (open-circuited in the squib circuit)	P.52B-44	
31	SRS-ECU capacitor circuit voltage too high	P.52B-16	
32	SRS-ECU capacitor circuit voltage too low	P.52B-16	
34* ¹	SRS-ECU connector lock out of order	P.52B-47	
35	Ignition of the air bag completed	P.52B-48	
41* ¹	Power supply voltage (IG1 (A) voltage) drops abnormally.	P.52B-49	
42* ¹	Power supply voltage (IG1 (B) voltage) drops abnormally.	P.52B-54	
43* ¹	SRS warning lamp circuit open-circuited	Lamp does not illuminate	P.52B-58
		Lamp does not switch off	P.52B-62
44* ¹	SRS warning lamp circuit malfunction	P.52B-64	
45	SRS-ECU non-volatile memory (EEPROM) and A/D converter system	P.52B-16	
51	Driver's air bag squib activating circuit short-circuited	P.52B-16	
52	Driver's air bag squib activating circuit open-circuited	P.52B-16	
54	Passenger's (front) air bag squib activating circuit short-circuited	P.52B-16	
55	Passenger's (front) air bag squib activating circuit open-circuited	P.52B-16	

Code No.	Diagnosis item	Reference Page
56	Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected short	P.52B-16
57	Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected open	P.52B-16
58	Passenger's seat belt pre-tensioner (squib ignition drive circuit) system detected short	P.52B-16
59	Passenger's seat belt pre-tensioner (squib ignition drive circuit) system detected open	P.52B-16
61	Driver's air bag module (squib) system (short-circuited to the power supply)	P.52B-65
62	Driver's air bag module (squib) system (short-circuited to the earth)	P.52B-68
64	Passenger's (front) air bag module (squib) system (short-circuited to the power supply)	P.52B-71
65	Passenger's (front) air bag module (squib) system (short-circuited to the earth)	P.52B-74
66	Driver's seat belt pre-tensioner (squib) system (short-circuited to the power supply)	P.52B-77
67	Driver's seat belt pre-tensioner (squib) system (short-circuited to the earth)	P.52B-80
68	Passenger's (front) seat belt pre-tensioner (squib) system (short-circuited to the power supply)	P.52B-84
69	Passenger's (front) seat belt pre-tensioner (squib) system (short-circuited to the earth)	P.52B-87
71*2	Side air bag module (squib) (RH) system (short-circuited between terminals of the squib circuit)	P.52B-90
72*2	Side air bag module (squib) (RH) system (open-circuited in the squib circuit)	P.52B-93
73	Side air bag squib (RH) drive circuit shorted	P.52B-16
74	Side air bag squib (RH) drive circuit open	P.52B-16
75	Side air bag module (squib) (RH) system (short-circuited to the power supply)	P.52B-96
76	Side air bag module (squib) (RH) system (short-circuited to the earth)	P.52B-99
79	Side impact sensor (LH) communication error	P.52B-102
81*2	Side air bag module (squib) (LH) system (short-circuited between terminals of the squib circuit)	P.52B-104
82*2	Side air bag module (squib) (LH) system (open-circuited in the squib circuit)	P.52B-107
83	Side air bag squib (LH) drive circuit shorted	P.52B-16
84	Side air bag squib (LH) drive circuit open	P.52B-16
85	Side air bag module (squib) (LH) system (short-circuited to the power supply)	P.52B-110
86	Side air bag module (squib) (LH) system (short-circuited to the earth)	P.52B-113

Code No.	Diagnosis item	Reference Page
89	Side impact sensor (RH) communication error	P.52B-116
91* ¹	Side impact sensor (LH) voltage error	P.52B-118
92	G-sensor of side impact sensor (LH) failure	P.52B-120
93	Side impact sensor (LH) communication impossible	P.52B-102
94* ¹	Side impact sensor (RH) voltage error	P.52B-121
95	G-sensor of side impact sensor (RH) failure	P.52B-120
96	Side impact sensor (RH) communication impossible	P.52B-116

NOTE:

- *1: If the vehicle condition returns to normal, the diagnosis code will be automatically erased, and the SRS warning lamp will return to normal.
- *2: However, if no diagnosis code resets, the SRS warning lamp will be switched off (The diagnosis code will be retained).
- If the vehicle has a discharged battery, it will store the diagnosis code 41 or 42. When these diagnosis codes are read, check the battery.

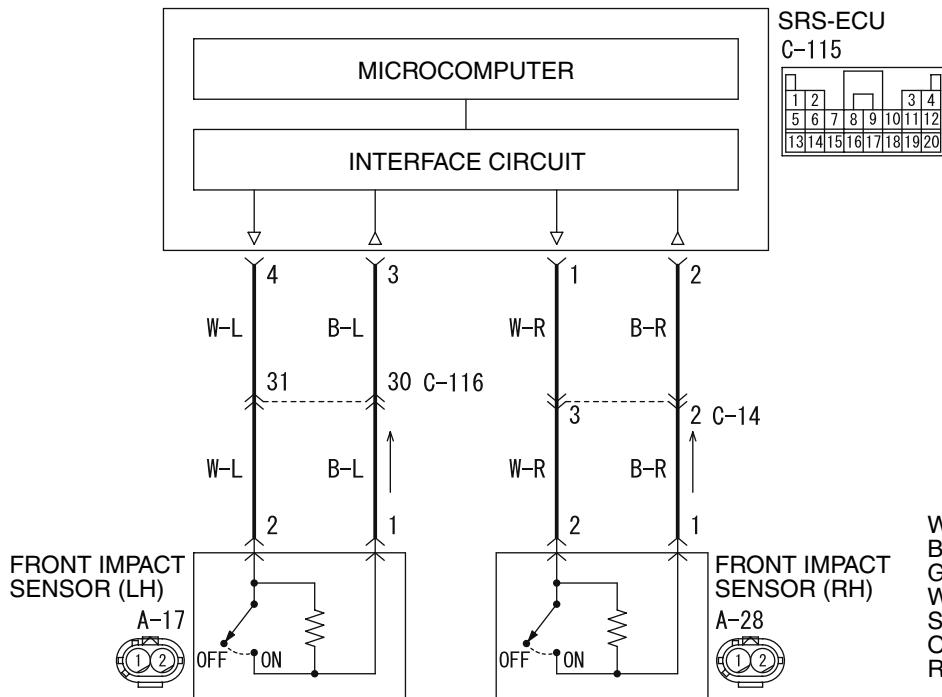
DIAGNOSTIC TROUBLE CODE PROCEDURES

Code No.11: Front impact sensor short-circuited

Code No.12: One front impact sensor open-circuited

Code No.13: Two front impact sensor open-circuited

Front Impact Sensor Circuit



OPERATION

- When the left and right front impact sensors detect a collision, the switches inside the sensors turns ON.
- SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.

DIAGNOSIS CODE SET CONDITIONS

These diagnosis codes are set if there is abnormal resistance between the input terminals of the front impact sensors.

The most likely causes for these codes to be set are shown in the table below:

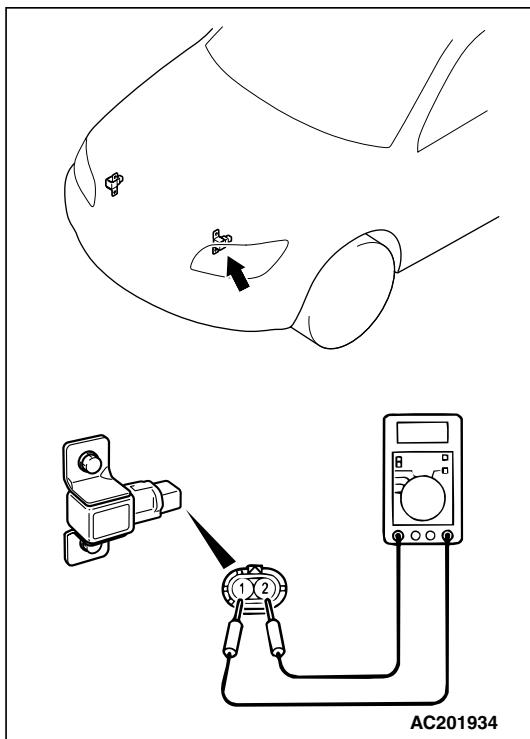
Code No.	Trouble causes
11	<ul style="list-style-type: none">• Short circuit in front impact sensor or harness• Short circuit in front impact sensor harness leading to the vehicle body earth• Short circuit in front impact sensor harness leading to the power supply
12	<ul style="list-style-type: none">• Open circuit in either left or right front impact sensor or harness• Short circuit in front impact sensor harness leading to the power supply
13	<ul style="list-style-type: none">• Open circuit in both left and right front impact sensor or harness• Short circuit in front impact sensor harness leading to the power supply

PROBABLE CAUSES

- Malfunction of the front impact sensor
- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU

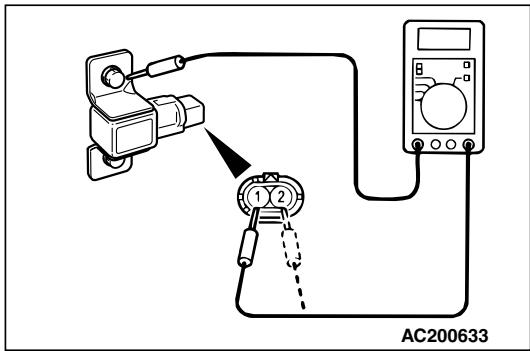
DIAGNOSIS PROCEDURE

STEP 1. Check the front impact sensor.



(1) Measure the resistance between terminals and check whether it is within the standard value.

Standard value: $820 \pm 82 \Omega$



(2) Check for continuity between the terminal and bracket.

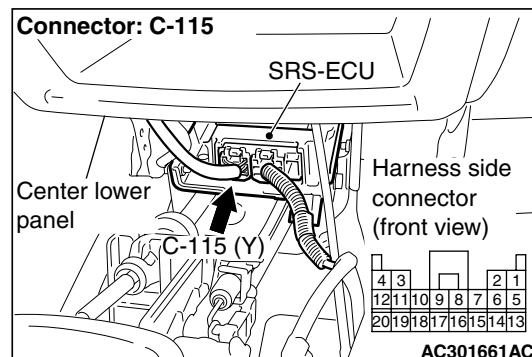
OK: No continuity

Q: Does the resistance meet the value above, and is there no continuity?

YES : Go to Step 2.

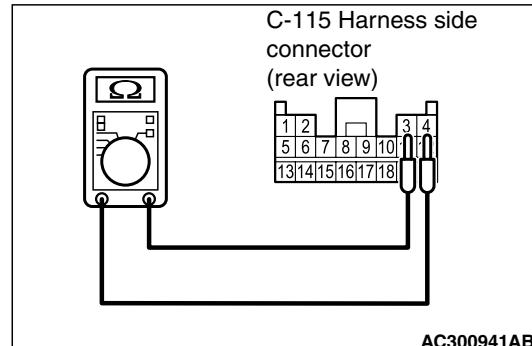
NO : Replace front impact sensor. Refer to P.52B-138.

STEP 2. Measure the resistance at SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115 and measure at the harness side (rear side).

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

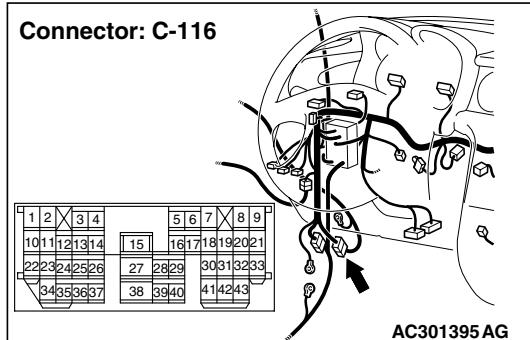
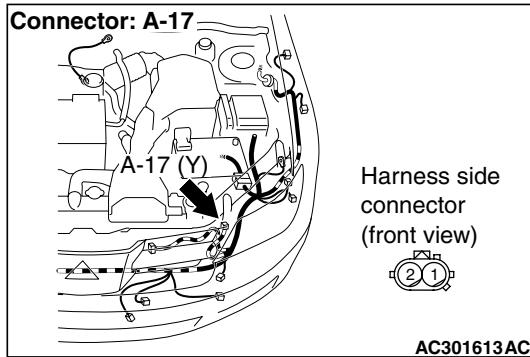
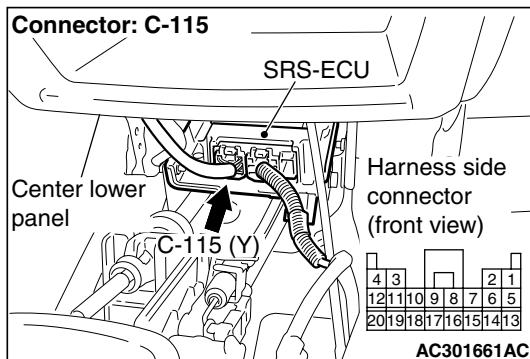
(2) Measure the resistance between terminal 3 and terminal 4.

OK: $820 \pm 82 \Omega$

Q: Is the check result normal?

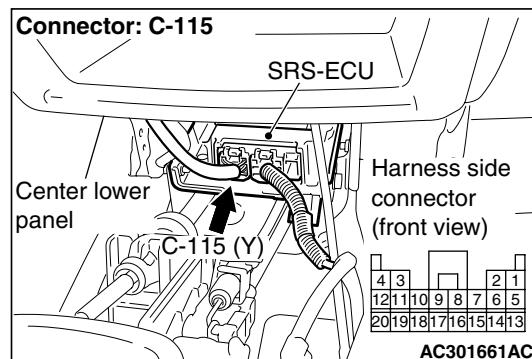
YES : Go to Step 4.

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-115, front impact sensor (LH) connector A-17 and intermediate connector C-116**Q: Is the check result normal?**

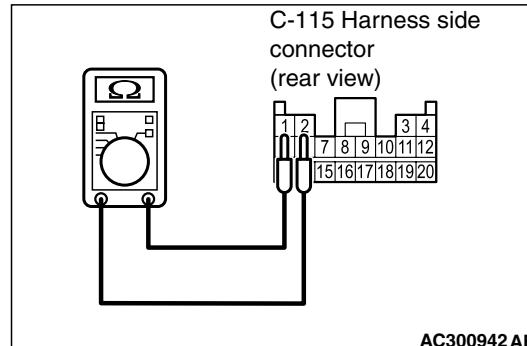
YES : Check the harness wires for open or short circuit between SRS-ECU connector C-115 (terminal No.3 and 4) and front impact sensor (LH) connector A-17 (terminal No.1 and 2), and repair if necessary. Then go to Step 6.

NO : Repair or replace it. Then go to Step 6.

STEP 4. Measure the resistance at SRS-ECU connector C-115.

(1) Disconnect SRS-ECU connector C-115 and measure at the harness side (rear side).

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Measure the resistance between terminal 1 and terminal 2.

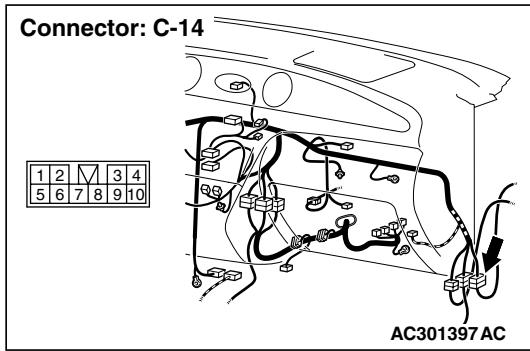
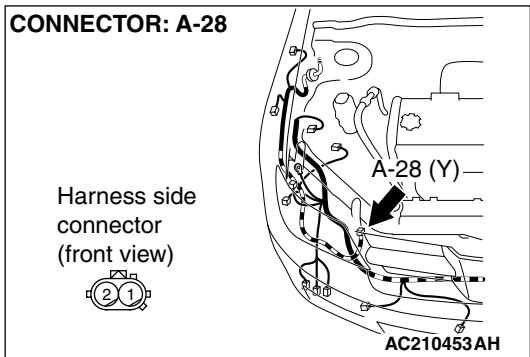
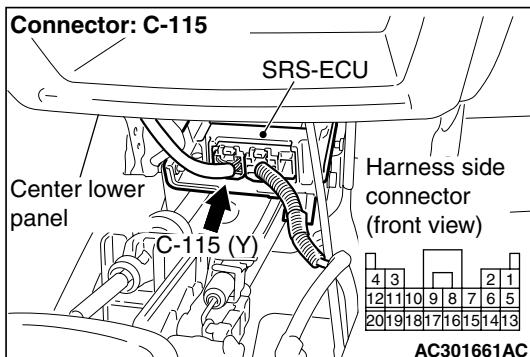
OK: $820 \pm 82 \Omega$

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 11, 12 or 13 sets, replace the SRS-ECU. Refer to [P.52B-140](#). Then go to Step 6 .

NO : Go to Step 5.

STEP 5. Connector check: SRS-ECU connector C-115, front impact sensor (RH) connector A-28 and intermediate connector C-14



Q: Is the check result normal?

YES : Check the harness wires for open or short circuit between SRS-ECU connector C-115 (terminal No.1 and 2) and front impact sensor (RH) connector A-28 (terminal No.1 and 2), and repair if necessary. Then go to Step 6.

NO : Repair or replace it. Then go to Step 6.

STEP 6. Recheck the diagnosis code.

Q: Is any of diagnosis code 11, 12 or 13 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.14: Analog G-sensor malfunction
Code No.15: Safing G-sensor (for frontal collision) short-circuited
Code No.16: Safing G-sensor (for frontal collision) open-circuited
Code No.17: Safing G-sensor (for side collision) malfunction
Code No.31: SRS-ECU capacitor circuit voltage too high
Code No.32: SRS-ECU capacitor circuit voltage too low
Code No.45: SRS-ECU non-volatile memory (EEPROM) and A/D converter system
Code No.51: Driver's air bag squib activating circuit short-circuited
Code No.52: Driver's air bag squib activating circuit open-circuited
Code No.54: Passenger's (front) air bag squib activating circuit short-circuited
Code No.55: Passenger's (front) air bag squib activating circuit open-circuited
Code No.56: Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected short
Code No.57: Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected open
Code No.58: Passenger's seat belt pre-tensioner (squib ignition drive circuit) system detected short
Code No.59: Passenger's seat belt pre-tensioner (squib ignition drive circuit) system detected open
Code No.73: Side air bag squib (RH) drive circuit shorted
Code No.74: Side air bag squib (RH) drive circuit open
Code No.83: Side air bag squib (LH) drive circuit shorted
Code No.84: Side air bag squib (LH) drive circuit open

DIAGNOSIS CODE SET CONDITIONS

- These diagnosis codes are set when a fault is detected in the SRS-ECU. The most likely causes for this code to be set are shown in the table below:

PROBABLE CAUSE

- Malfunction of the SRS-ECU

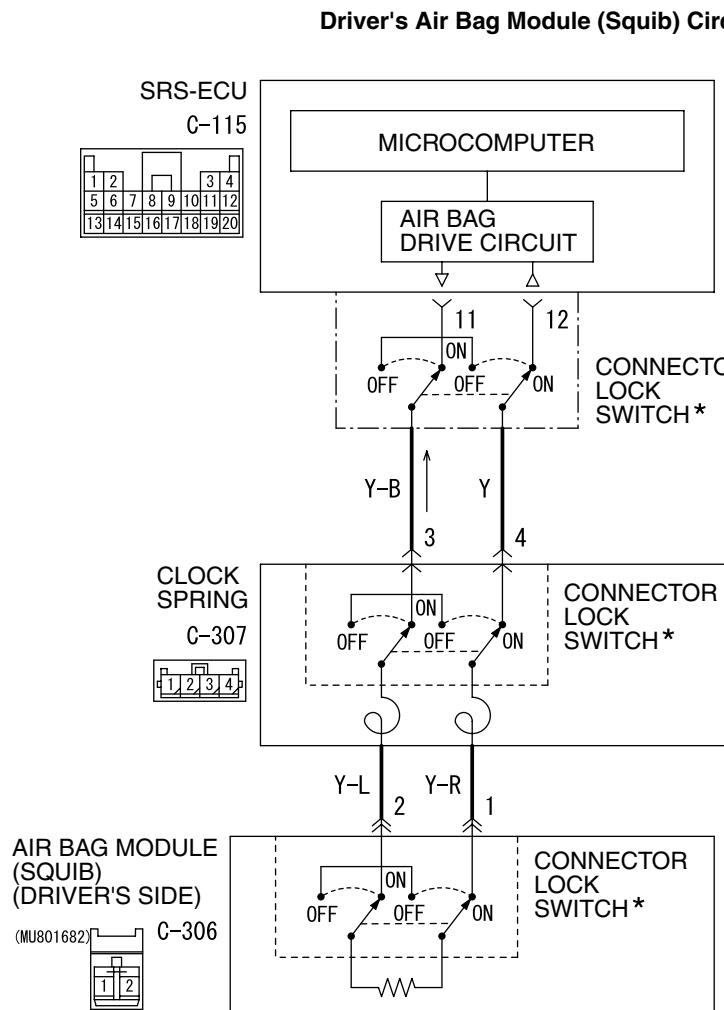
Code No.	Part/Circuit integral to SRS-ECU	Trouble causes
14	Analog G-sensor	<ul style="list-style-type: none"> • When the analog G-sensor is not operating • When the characteristics of the analog G-sensor are abnormal • When the output from the analog G-sensor is abnormal
15	Safing G-sensor (for frontal collision)	<ul style="list-style-type: none"> • Short circuit in the safing G-sensor
16		<ul style="list-style-type: none"> • Open circuit in the safing G-sensor
17	Safing G-sensor (for side collision)	<ul style="list-style-type: none"> • When the safing G-sensor is not operating • When the characteristics of the safing G-sensor are abnormal • When the output from the safing G-sensor is abnormal
31	Capacitor circuit	<ul style="list-style-type: none"> • Voltage at the capacitor terminal is higher than the specified value for five seconds or more
32		<ul style="list-style-type: none"> • Voltage at the capacitor terminal is lower than the specified value for five seconds or more (This is not detected if diagnosis code No.41 or 42 indicating battery positive voltage drop has been output).
45	Non-volatile memory (EEPROM) and A/D converter	<ul style="list-style-type: none"> • When the non-volatile memory (EEPROM) and A/D converter system are abnormal
51	Driver's air bag module (squib ignition drive circuit)	<ul style="list-style-type: none"> • Short circuit in the squib ignition drive circuit
52		<ul style="list-style-type: none"> • Open circuit in the squib ignition drive circuit
54	Front passenger's air bag module (squib ignition drive circuit)	<ul style="list-style-type: none"> • Short circuit in the squib ignition drive circuit
55		<ul style="list-style-type: none"> • Open circuit in the squib ignition drive circuit

Code No.	Part/Circuit integral to SRS-ECU	Trouble causes
56	Driver's seat belt pre-tensioner (squib ignition drive circuit)	<ul style="list-style-type: none">• Short circuit in the squib ignition drive circuit
57		<ul style="list-style-type: none">• Open circuit in the squib ignition drive circuit
58	Passenger's seat belt pre-tensioner (squib ignition drive circuit)	<ul style="list-style-type: none">• Short circuit in the squib ignition drive circuit
59		<ul style="list-style-type: none">• Open circuit in the squib ignition drive circuit
73	Side air bag module (RH) (squib ignition drive circuit)	<ul style="list-style-type: none">• Short circuit in the squib ignition drive circuit
74		<ul style="list-style-type: none">• Open circuit in the squib ignition drive circuit
83	Side air bag module (LH) (squib ignition drive circuit)	<ul style="list-style-type: none">• Short circuit in the squib ignition drive circuit
84		<ul style="list-style-type: none">• Open circuit in the squib ignition drive circuit

DIAGNOSIS PROCEDURE

Replace the SRS-ECU (Refer to [P.52B-140](#)).

Code No.21: Driver's air bag module (squib) system (short-circuited between terminals of the squib circuit)



Wire colour code
 B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301790AB
W3Z02E01AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one driver's air bag squib wire shorted to the other. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short circuit in the clock spring
- Short circuit between the driver's air bag module (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). Therefore, if connector C-115, C-307 or C-306 is damaged or improperly engaged, the short spring may not be released when the connector is connected.

DIAGNOSIS PROCEDURE

STEP 1. Using MUT-II, read the diagnosis code.

⚠ CAUTION

To prevent damage to MUT-II, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting MUT-II.

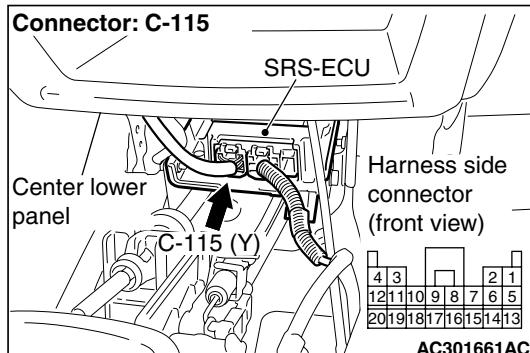
- (1) Turn the ignition switch to the "ON" position.
- (2) Check if the diagnosis code is set.
- (3) Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-115



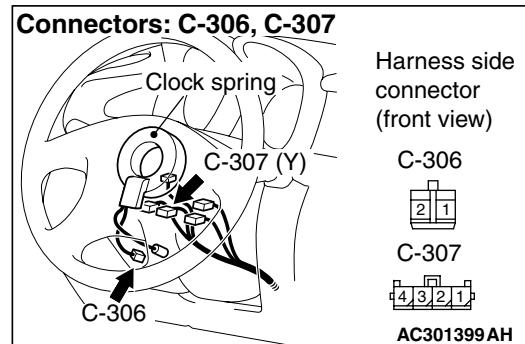
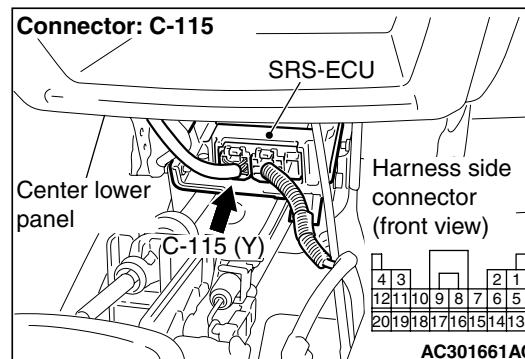
Q: Is the connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 7.

STEP 3. Connector check: SRS-ECU connector C-115, clock spring connector C-307 and driver's air bag module connector C-306

- (1) Disconnect the negative battery terminal.



- (2) Disconnect connectors C-115, C-307 and C-306, and then reconnect them.

- (3) Connect the negative battery terminal.

- (4) Erase the diagnosis code memory, and check the diagnosis code.

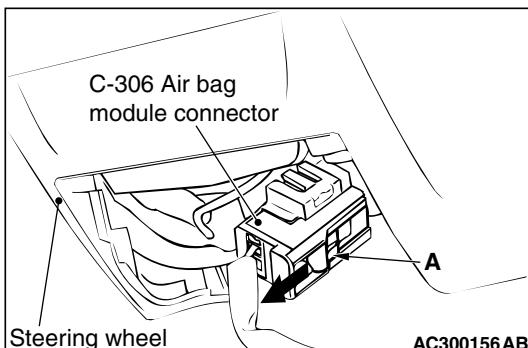
Q: Is diagnosis code 21 set?

YES : Go to Step 4.

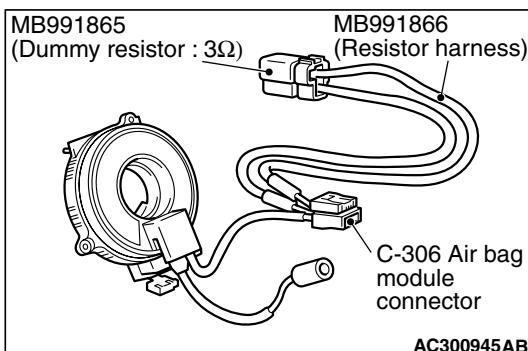
NO : The procedure is complete. It is assumed that diagnosis code 21 set as connector C-115, C-307 or C-306 was engaged improperly.

STEP 4. Check the driver's air bag module.

(1) Disconnect the negative battery terminal.



(2) By sliding the A section (in the figure) of air bag module connector C-306 in the arrow direction, disconnect the connector.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into clock spring side air bag module connector C-306 by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

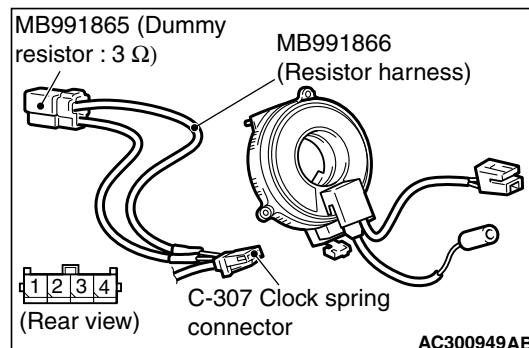
Q: Is diagnosis code 21 set?

YES : Go to Step 5.

NO : Replace the driver's air bag module (Refer to [P.52B-141](#)). Then go to Step 7.

STEP 5. Check the clock spring.

(1) Disconnect the negative battery terminal.



(2) Disconnect the clock spring connector C-307.

(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

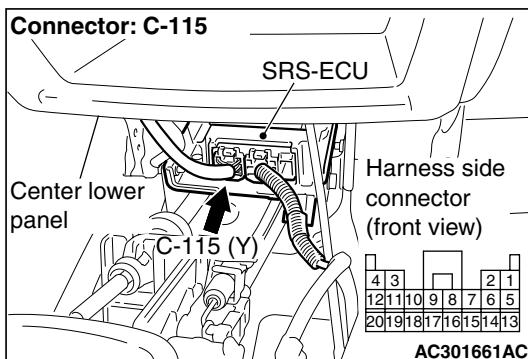
(4) Insert special tool (MB991866) into clock spring harness side connector C-307 (terminal No.3 and 4) by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 21 set?

YES : Go to Step 6.

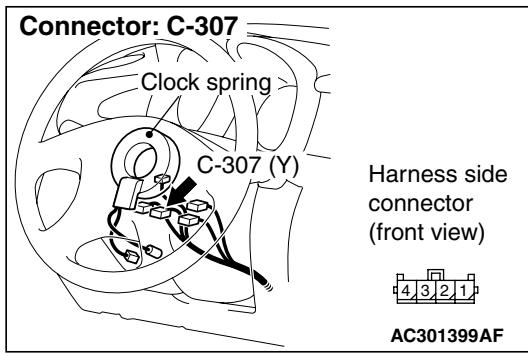
NO : Replace the clock spring (Refer to [P.52B-141](#)). Then go to Step 7.

STEP 6. Measure the resistance at the SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115.

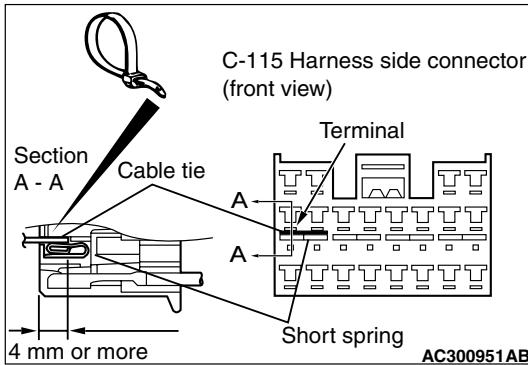
⚠ DANGER



To prevents the air bag from deploying unintentionally, disconnect the clock spring connector C-307 to short the squib circuit.

(2) Disconnect the clock spring connector C-307.

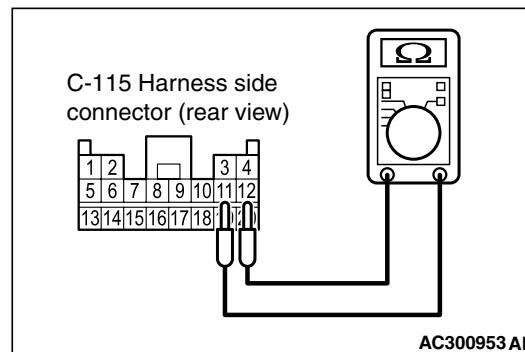
⚠ CAUTION



Insert an insulator such as a cable tie to a depth of 4 mm or more, otherwise the short spring will not be released.

(3) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 11, 12 and the short bar to release the short spring.

⚠ CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the resistance between C-115 harness side connector terminals 11 and 12.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 21 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 7 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.11 and 12) and clock spring connector C-307 (terminal No.3 and 4). Then go to Step 7.

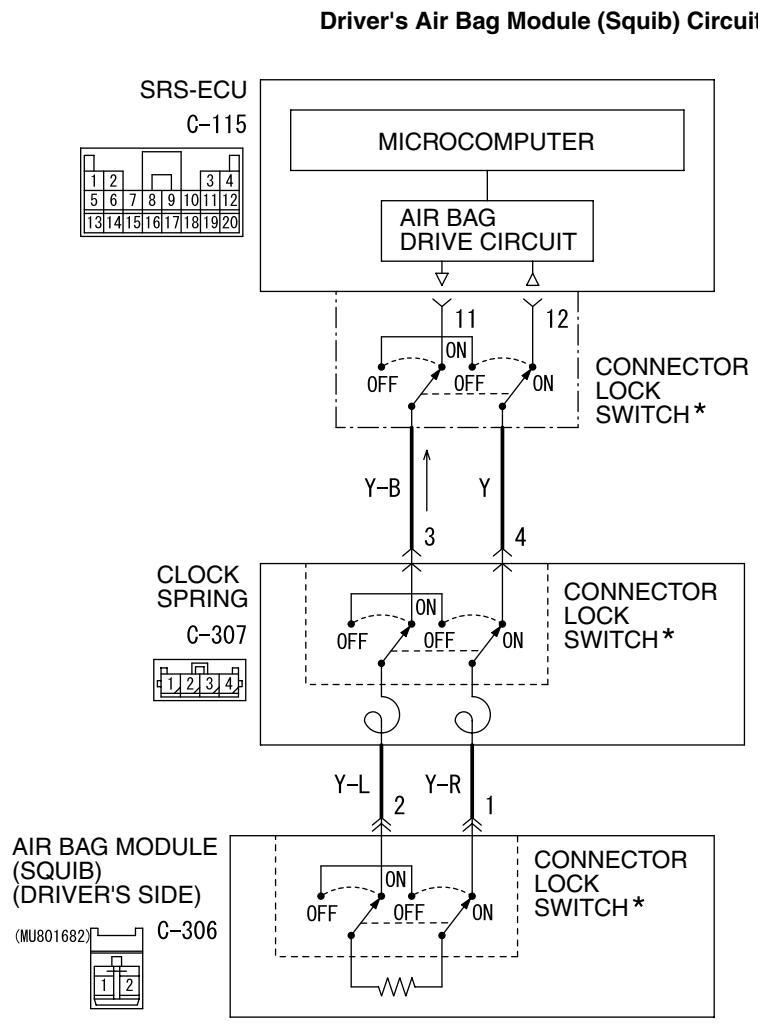
STEP 7. Recheck the diagnosis code.

Q: Is diagnosis code 21 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.22: Driver's air bag module (squib) system (open-circuited in the squib circuit)



Wire colour code
 B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301790AB
W3Z02E01AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

PROBABLE CAUSES

- Open circuit in the clock spring
- Open circuit due to improper neutral position of the clock spring
- Open circuit in the driver's air bag module (squib) circuit
- Disengaged driver's air bag module (squib) connector
- Improper connector contact
- Malfunction of the SRS-ECU

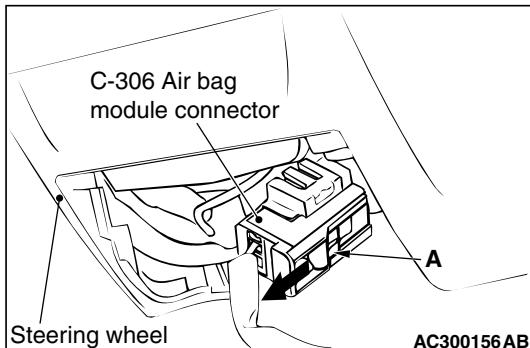
DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if driver's air bag squib wire(s) are open-circuited. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

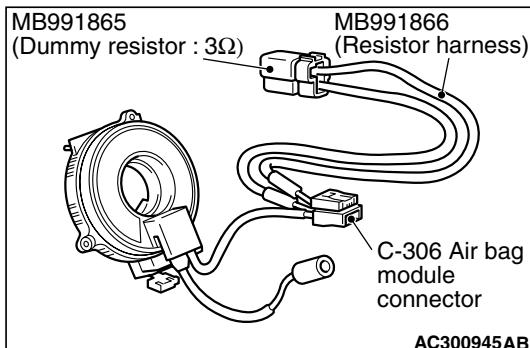
DIAGNOSIS PROCEDURE

STEP 1. Check the driver's air bag module.

(1) Disconnect the negative battery terminal.



(2) By sliding the A section (in the figure) of air bag module connector C-306 in the arrow direction, disconnect the connector.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into clock spring side air bag module connector C-306 by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

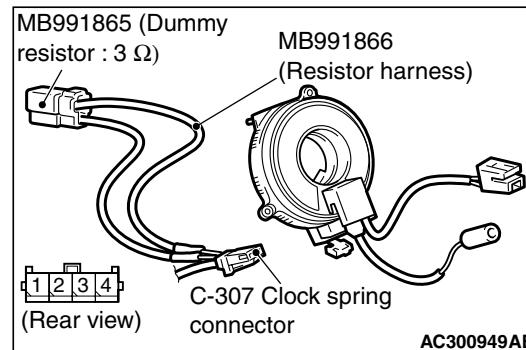
Q: Is diagnosis code 22 set?

YES : Go to Step 2.

NO : Replace the driver's air bag module (Refer to [P.52B-141](#)). Then go to Step 4.

STEP 2. Check the clock spring.

(1) Disconnect the negative battery terminal.
 (2) Disconnect the clock spring connector C-307.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

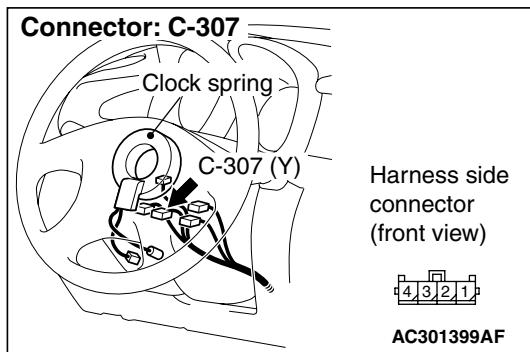
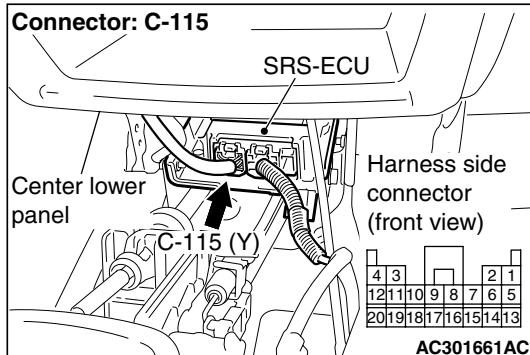
(4) Insert special tool (MB991866) into clock spring harness side connector C-307 (terminal No.3 and 4) by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 22 set?

YES : Go to Step 3.

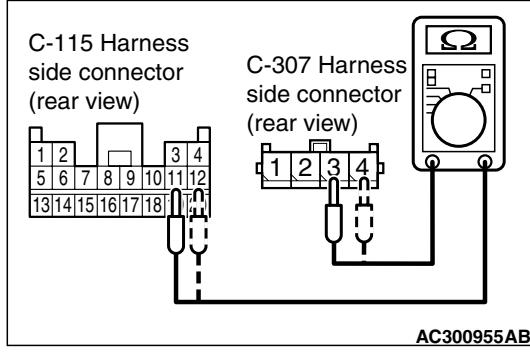
NO : Replace the clock spring (Refer to [P.52B-141](#)). Then go to Step 4.

STEP 3. Measure the resistance between the SRS-ECU connector C-115 (terminal No.11 and 12) and the clock spring connector C-307 (terminal No.3 and 4).



(1) Disconnect SRS-ECU connector C-115 and clock spring connector C-307.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Measure the resistance between the following terminals.

- SRS-ECU connector C-115 terminal No.11 and the clock spring connector C-307 terminal No.3
- SRS-ECU connector C-115 terminal No.12 and the clock spring connector C-307 terminal No.4

OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 22 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4.

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.11 and 12) and clock spring connector C-307 (terminal No.3 and 4). Then go to Step 4.

STEP 4. Recheck the diagnosis code.

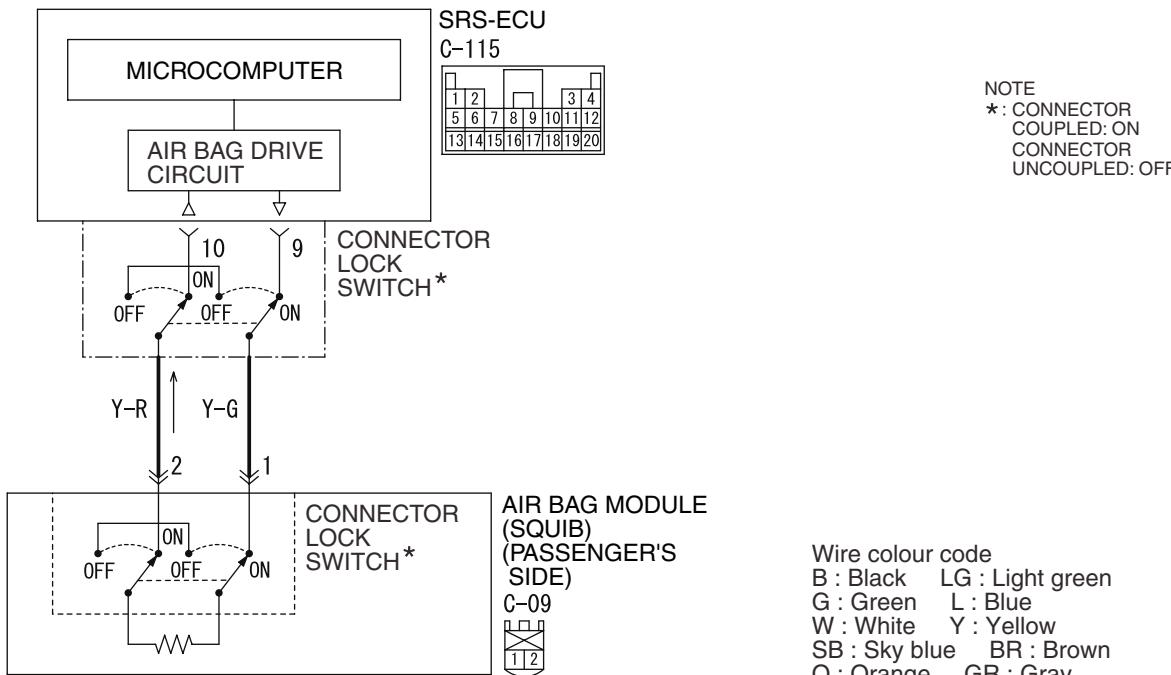
Q: Is diagnosis code 22 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.24: Passenger's (front) air bag module (squib) system (short-circuited between terminals of the squib circuit)

Passenger's (Front) Air Bag Module (Squib) Circuit



AC301794AB
W3Z02E05AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one passenger's (front) air bag squib wire shorted to the other. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short circuit between the passenger's air bag module (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

*NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). Therefore, if connector C-115 or C-09 is damaged or improperly engaged, the short spring may not be released when the connector is connected.*

DIAGNOSIS PROCEDURE

STEP 1. Check the diagnosis code.

⚠ CAUTION

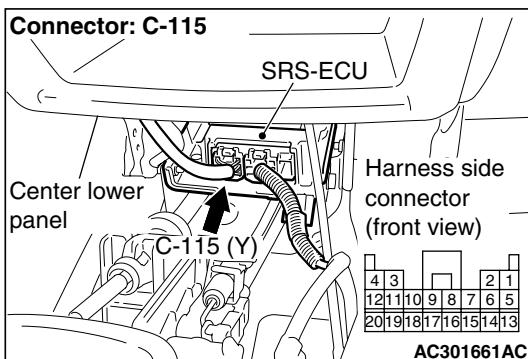
To prevent damage to MUT-II, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting MUT-II.

- Turn the ignition switch to the "ON" position.
- Check if the diagnosis code is set.
- Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-115

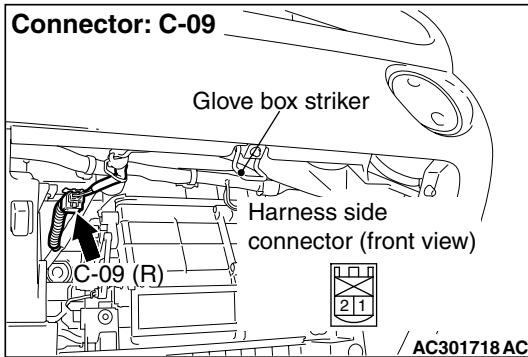
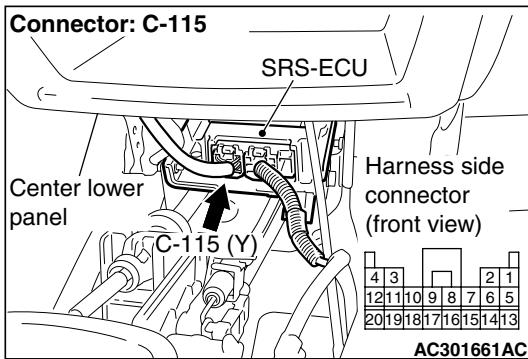
Q: Is the connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 6.

STEP 3. Connector check: SRS-ECU connector C-115 and passenger's air bag module connector C-09

(1) Disconnect the negative battery terminal.



- (2) Disconnect connectors C-115 and C-09, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnosis code memory, and check the diagnosis code.

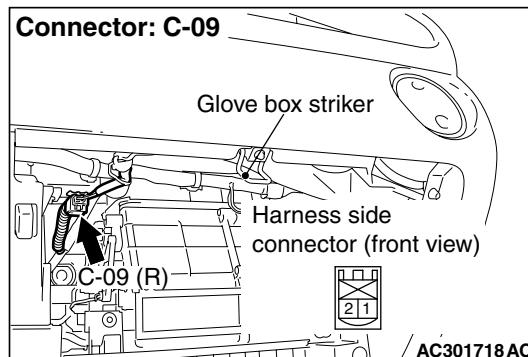
Q: Is diagnosis code 24 set?

YES : Go to Step 4.

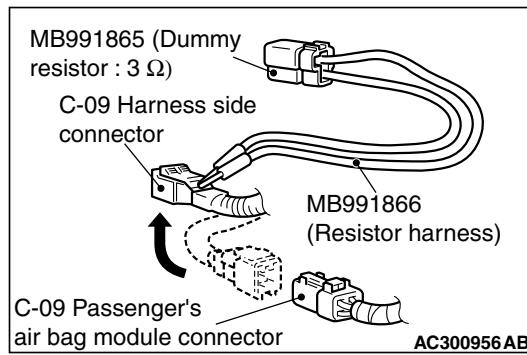
NO : The procedure is complete. It is assumed that diagnosis code 24 set as connector C-115 or C-09 was engaged improperly.

STEP 4. Check the passenger's air bag module.

(1) Disconnect the negative battery terminal.



(2) Unclip passenger's air bag module connector C-09.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

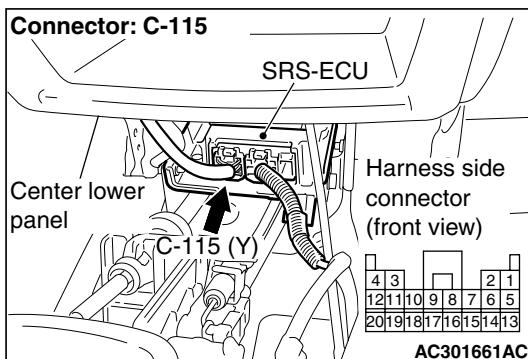
- (4) Disconnect the passenger's air bag module connector C-09 and insert special tool (MB991866) into the harness side connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 24 set?

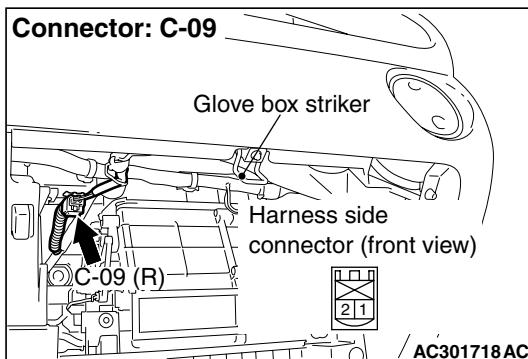
YES : Go to Step 5.

NO : Replace the passenger's air bag module (Refer to P.52B-141). Then go to Step 6.

STEP 5. Measure the resistance at SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115.



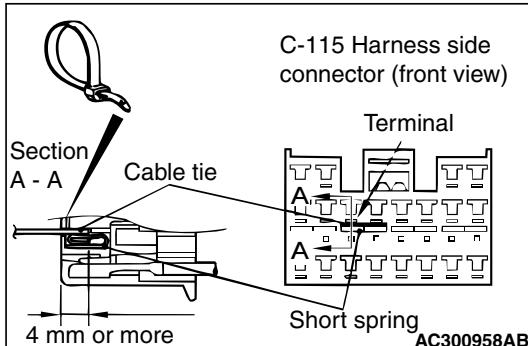
(2) Unclip passenger's air bag module connector C-09.

DANGER

To prevents the air bag from deploying unintentionally, disconnect the passenger's air bag module connector C-09 to short the squib circuit.

(3) Disconnect the passenger's air bag module connector C-09.

CAUTION

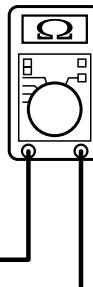
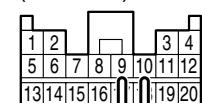


Insert an insulator such as a cable tie to a depth of 4 mm or more, otherwise the short spring will not be released.

(4) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 9, 10 and the short spring to release the short spring.

CAUTION

C-115 Harness side connector (rear view)



AC300971AB

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Measure the resistance between C-115 harness side connector terminals 9 and 10.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 24 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 6 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.9 and 10) and passenger's air bag module connector C-09 (terminal No.1 and 2). Then go to Step 6 .

STEP 6. Recheck the diagnosis code.

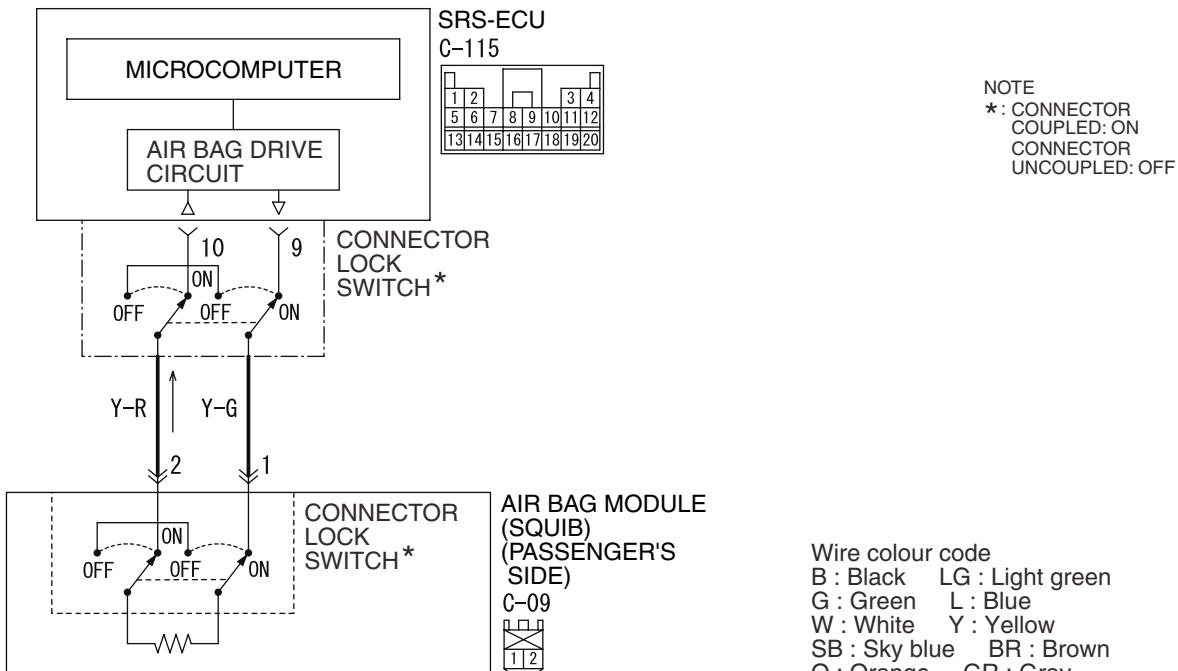
Q: Is diagnosis code 24 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.25: Passenger's (front) air bag module (squib) system (open-circuited in the squib circuit)

Passenger's (Front) Air Bag Module (Squib) Circuit

AC301794AB
W3Z02E05AA**OPERATION**

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if passenger's (front) air bag squib wire(s) are open-circuited. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

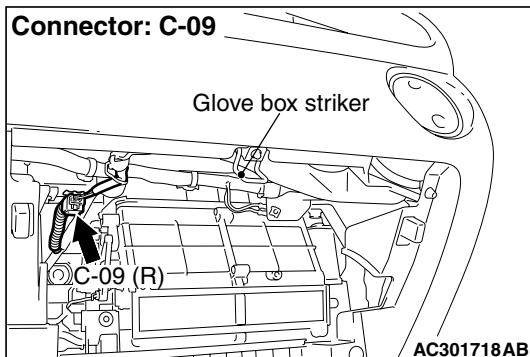
PROBABLE CAUSES

- Open circuit in the passenger's air bag module (squib) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

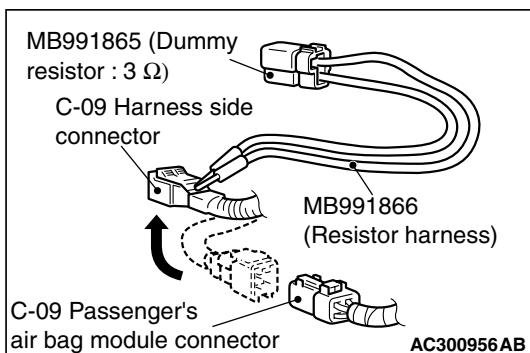
DIAGNOSIS PROCEDURE

STEP 1. Check the passenger's air bag module.

(1) Disconnect the negative battery terminal.



(2) Unclip passenger's air bag module connector C-09.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

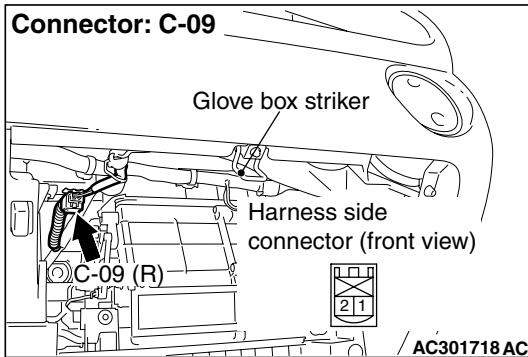
(4) Disconnect the passenger's air bag module connector C-09, and insert special tool (MB991866) into the harness side connector by backprobing.
(5) Connect the negative battery terminal.
(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 25 set?

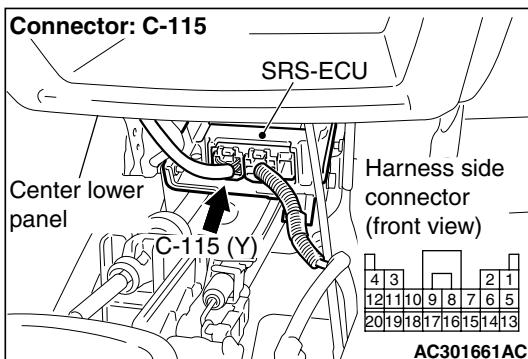
YES : Go to Step 2.

NO : Replace the passenger's air bag module (Refer to P.52B-141). Then go to Step 3.

STEP 2. Measure the resistance between SRS-ECU connector C-115 (terminal No.9 and 10) and the passenger's air bag module connector C-09 (terminal No.1 and 2).

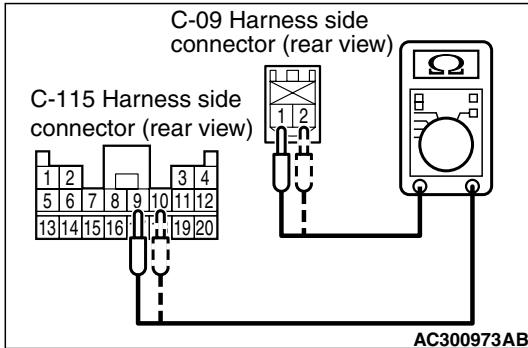


(1) Unclip passenger's air bag module connector C-09.



(2) Disconnect SRS-ECU connector C-115 and passenger's air bag module connector C-09.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between the following terminals.

- SRS-ECU connector C-115 terminal No.9 and the passenger's air bag module connector C-09 terminal No.1
- SRS-ECU connector C-115 terminal No.10 and the passenger's air bag module connector C-09 terminal No.2

OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 25 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.9 and 10) and passenger's air bag module connector C-09 (terminal No.1 and 2). Then go to Step 3.

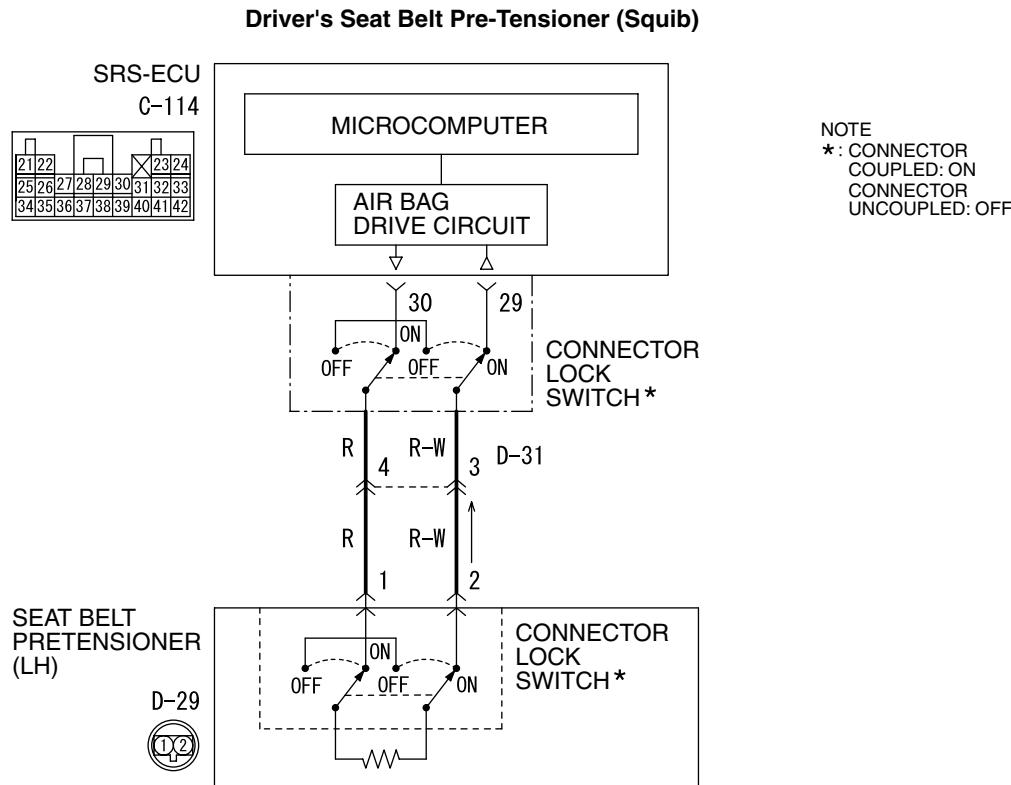
STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 25 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.26: Driver's pre-tensioner (squib) system (short-circuited between terminals of the squib circuit)



OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one driver's pre-tensioner squib wire shorted to the other.

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short circuit between the driver's seat belt pre-tensioner (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). Therefore, if connector C-114 or D-29 is damaged or improperly engaged, the short spring may not be released when the connector is connected.

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DIAGNOSIS PROCEDURE

STEP 1. Check the diagnosis code.

CAUTION

To prevent damage to MUT-II, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting MUT-II.

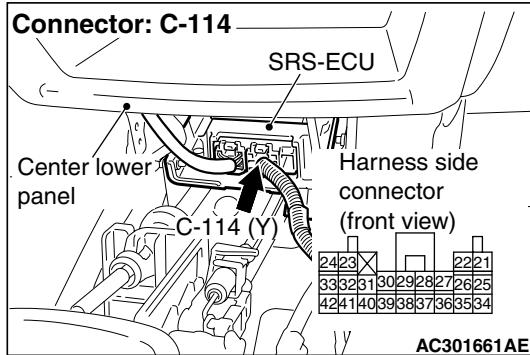
- (1) Turn the ignition switch to the "ON" position.
- (2) Check if the diagnosis code is set.
- (3) Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-114



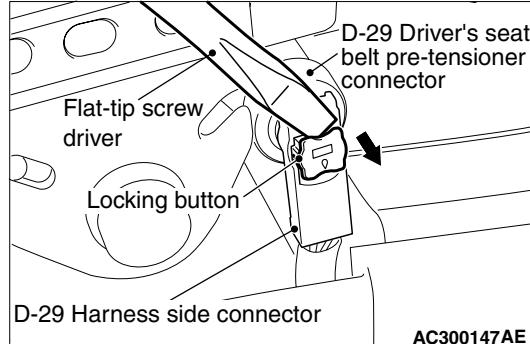
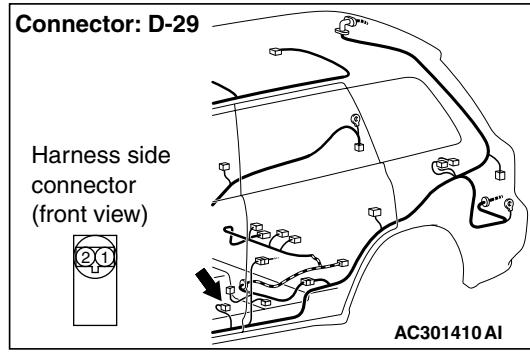
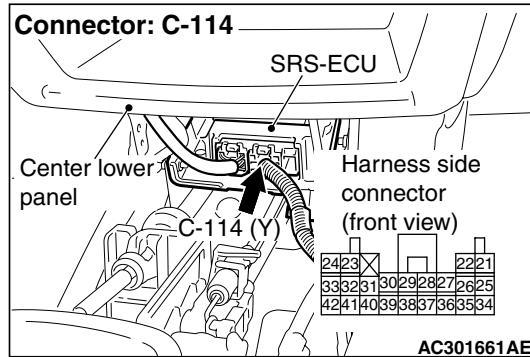
Q: Is the connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 7.

STEP 3. Connector check: SRS-ECU connector C-114 and driver's seat belt pre-tensioner connector D-29

- (1) Disconnect the negative battery terminal.



- (2) Disconnect connectors C-114 and D-29, and then reconnect them. For connector D-29, use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

- (3) Connect the negative battery terminal.

- (4) Erase the diagnosis code memory, and check the diagnosis code.

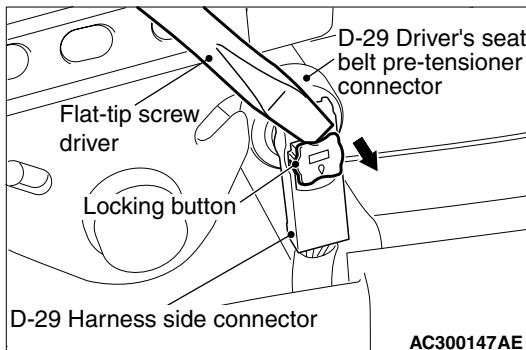
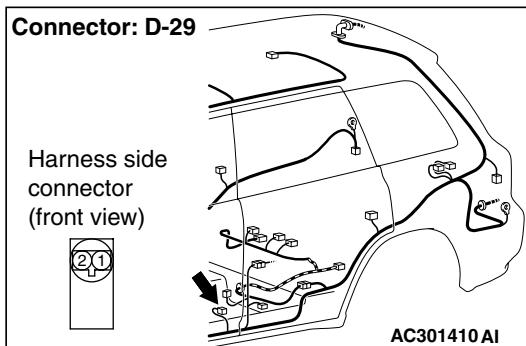
Q: Is diagnosis code 26 set?

YES : Go to Step 4.

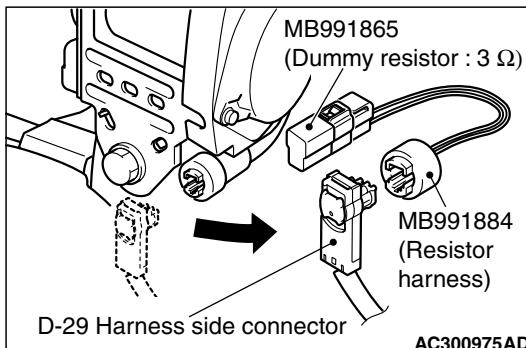
NO : The procedure is complete. It is assumed that diagnosis code 26 set as connector C-114 or D-29 was engaged improperly.

STEP 4. Check the driver's seat belt pre-tensioner.

(1) Disconnect the negative battery terminal.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



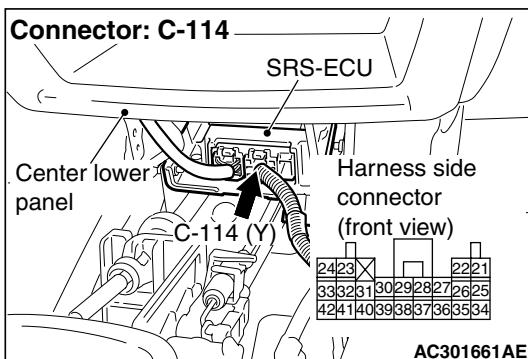
(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
 (4) Connect special tool (MB991884) to the D-29 harness side connector.
 (5) Connect the negative battery terminal.
 (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 26 set?

YES : Go to Step 5.

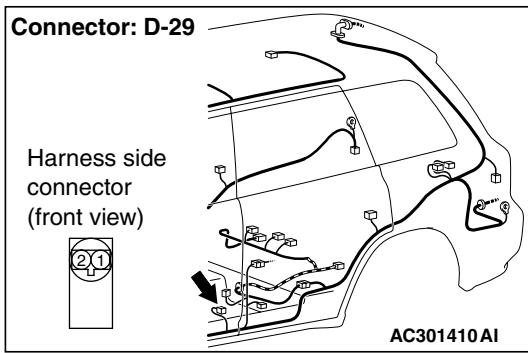
NO : Replace the driver's seat belt pre-tensioner (Refer to P.52B-148). Then go to Step 7.

STEP 5. Measure the resistance at the SRS-ECU connector C-114.

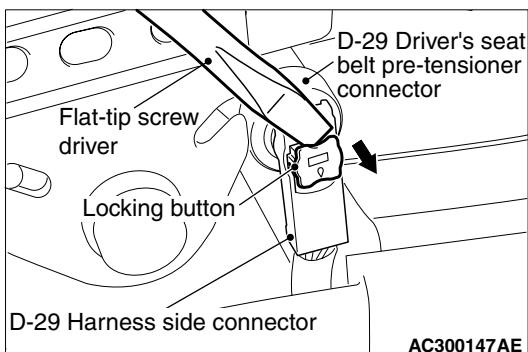


(1) Disconnect SRS-ECU connector C-114.

DANGER

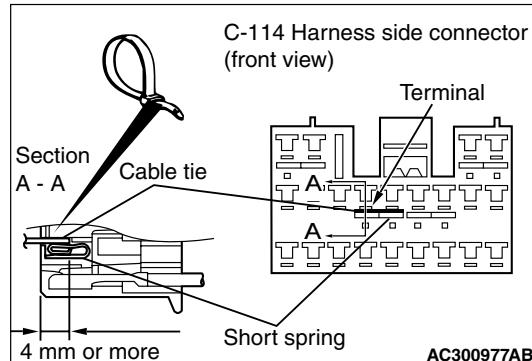


To prevents the air bag from deploying unintentionally, disconnect the driver's seat belt pre-tensioner connector D-29 to short the squib circuit.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

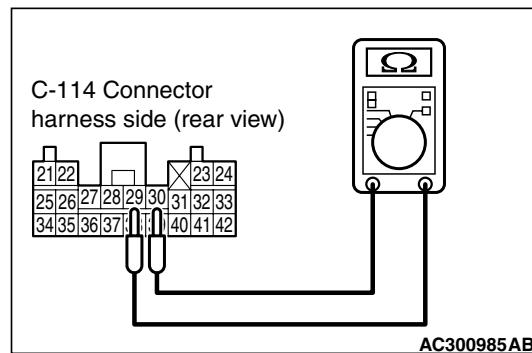
CAUTION



Insert an insulator such as a cable tie to a depth of 4mm or more, otherwise the short bar will not be released.

(3) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 29, 30 and the short bar to release the short spring.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the resistance between C-114 harness side connector terminals 29 and 30.

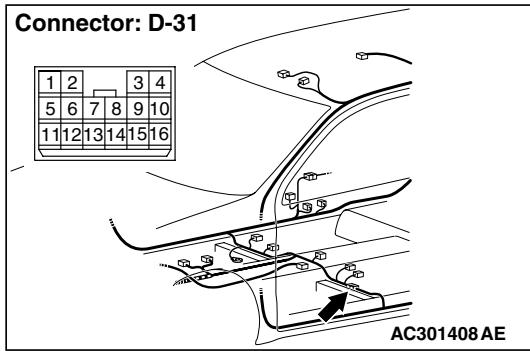
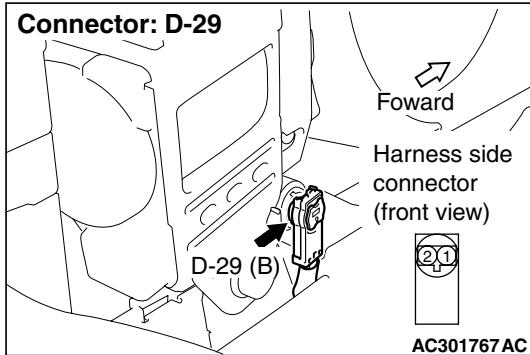
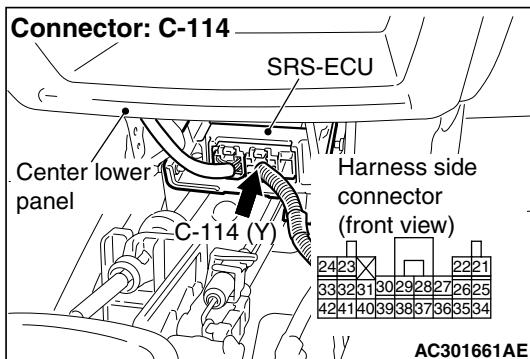
OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 26 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 7 .

NO : Go to Step 6.

STEP 6. Connector check: SRS-ECU connector C-114, driver's seat belt pre-tensioner connector D-29 and intermediate connector D-31



Q: Is the check result normal?

YES : Check the harness wires for short circuit between SRS-ECU connector C-114 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-29 (terminal No.1 and 2), and repair if necessary. Then go to Step 7.

NO : Repair or replace it. Then go to Step 7.

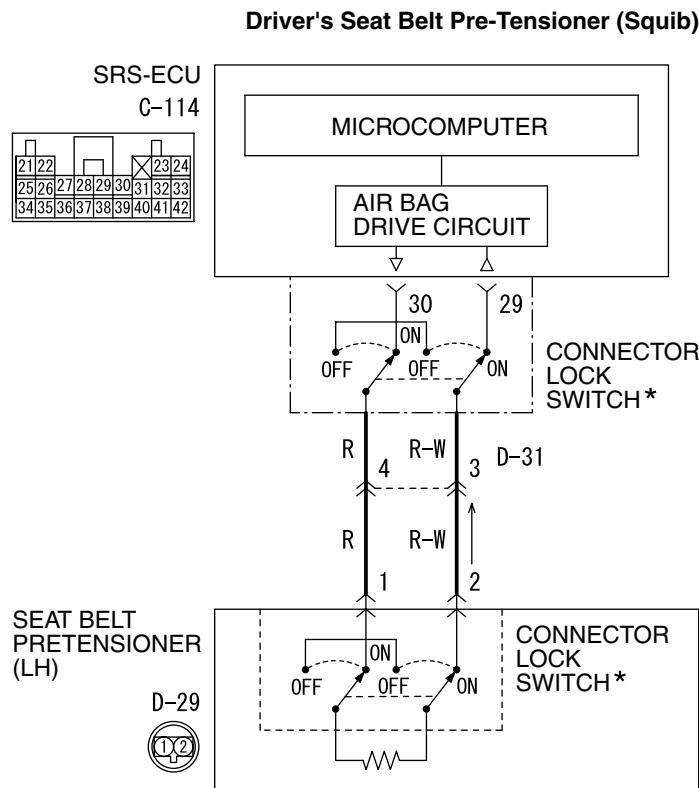
STEP 7. Recheck the diagnosis code.

Q: Is diagnosis code 26 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.27: Driver's seat belt pre-tensioner (squib) system (open-circuited in the squib circuit)



NOTE
 * : CONNECTOR
 COUPLED: ON
 CONNECTOR
 UNCOUPLED: OFF

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OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if driver's seat belt pre-tensioner squib wire(s) are open-circuited.

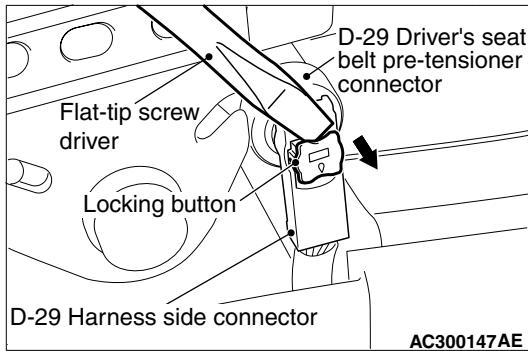
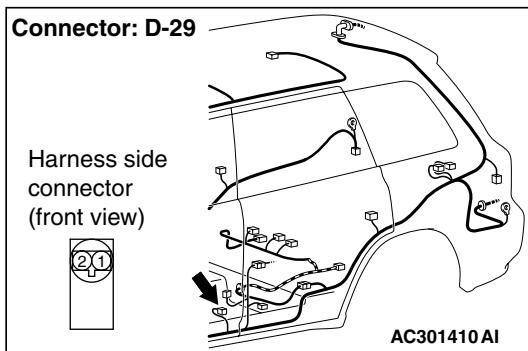
PROBABLE CAUSES

- Improper connector contact
- Open circuit in the driver's seat belt pre-tensioner (squib) circuit
- Malfunction of the SRS-ECU

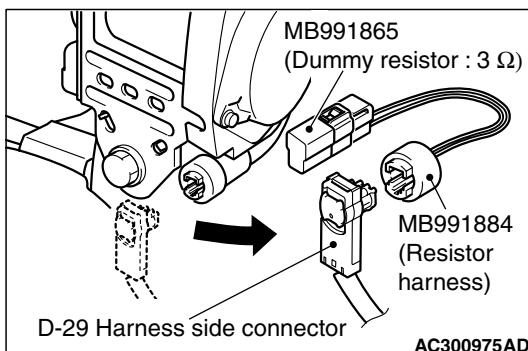
DIAGNOSIS PROCEDURE

STEP 1. Check the driver's seat belt pre-tensioner.

(1) Disconnect the negative battery terminal.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



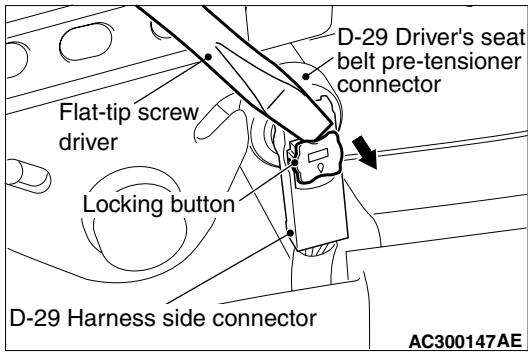
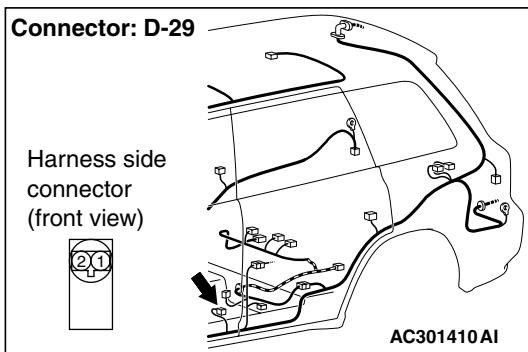
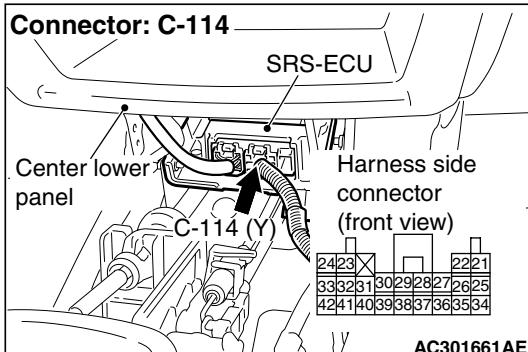
(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
 (4) Connect special tool (MB991884) to the D-29 harness side connector.
 (5) Connect the negative battery terminal.
 (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 27 set?

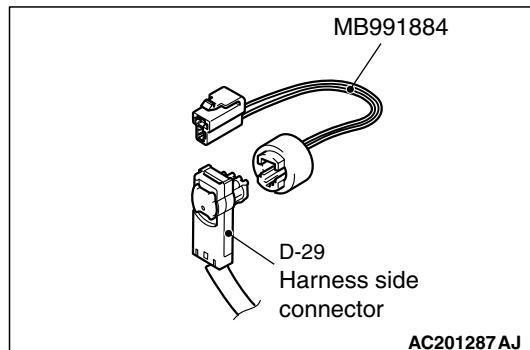
YES : Go to Step 2.

NO : Replace the driver's seat belt pre-tensioner (Refer to P.52B-148). Then go to Step 4.

STEP 2. Measure the resistance between SRS-ECU connector C-114 (terminal No.29 and 30) and the driver's seat belt pre-tensioner D-29 (terminal No.1 and 2).

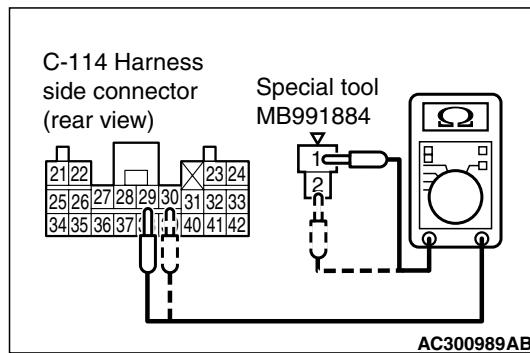


(1) Disconnect SRS-ECU connector C-114 and driver's seat belt pre-tensioner connector D-29, and measure at the wiring harness side. For connector D-29, use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



(2) Connect D-29 harness side connector to special tool resistor harness (MB991884).

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between the following terminals.

- SRS-ECU connector C-114 terminal No.29 and special tool terminal No.1
- SRS-ECU connector C-114 terminal No.30 and special tool terminal No.2

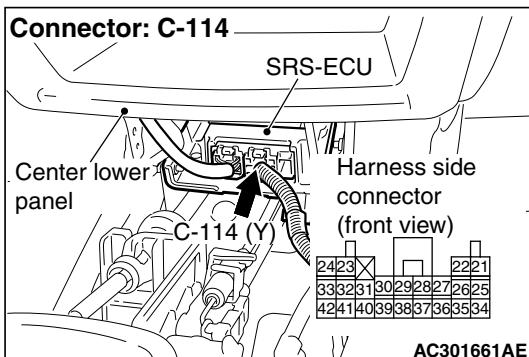
OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and recheck if any diagnosis code sets. If diagnosis code 27 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4.

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-114, driver's seat belt pre-tensioner connector D-29 and intermediate connector D-31

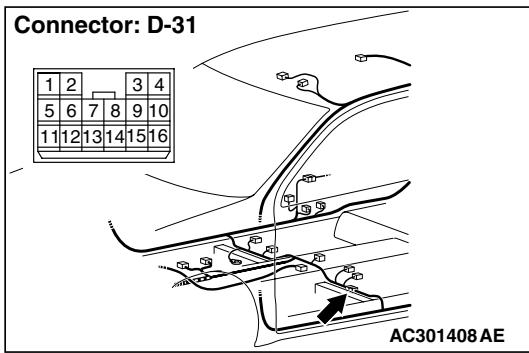
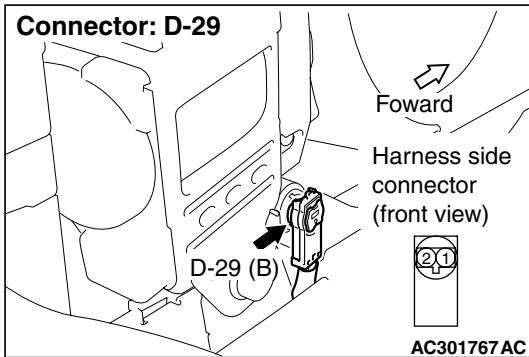


STEP 4. Recheck the diagnosis code.

Q: Is diagnosis code No.27 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).



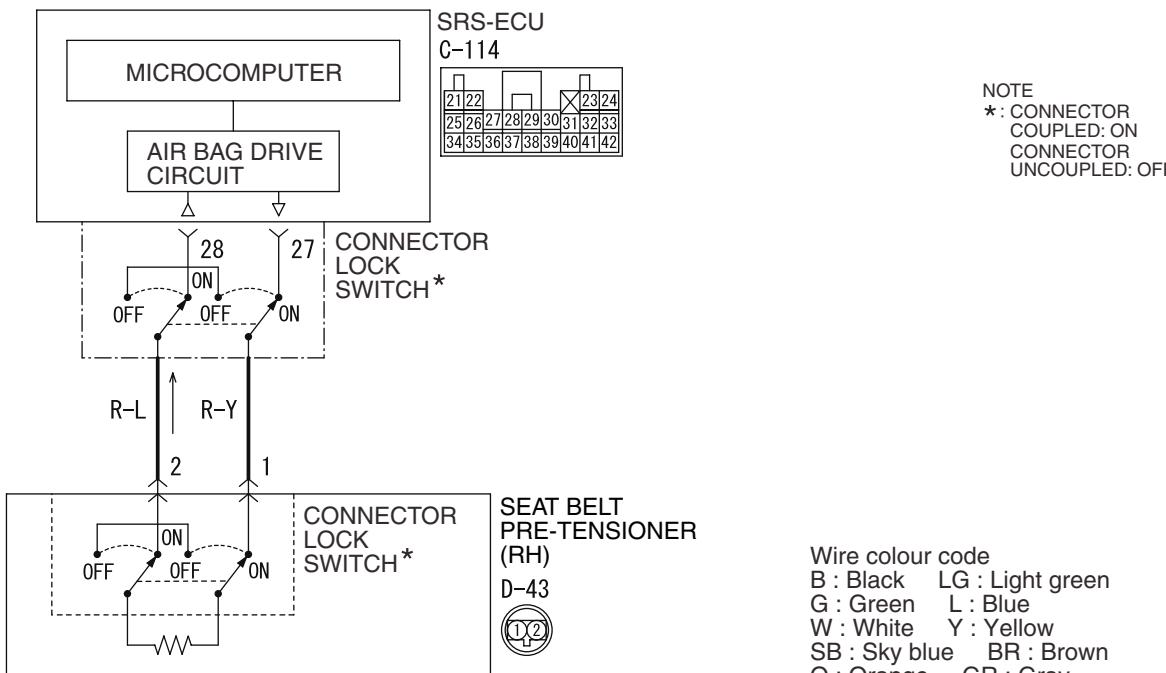
Q: Is the check result normal?

YES : Check the harness wires for open circuit between SRS-ECU connector C-114 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-29 (terminal No.1 and 2), and repair if necessary. Then go to Step 4.

NO : Repair or replace it. Then go to Step 4.

Code No.28: Passenger's (front) seat belt pre-tensioner (squib) system (short-circuit between terminals of the squib circuit)

Passenger's (Front) Seat Belt Pre-tensioner (Squib)



OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one passenger's seat belt pre-tensioner squib wire shorted to the other.

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short circuit between the passenger's seat belt pre-tensioner (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

*NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). Therefore, if connector C-114 or D-43 is damaged or improperly engaged, the short spring may not be released when the connector is connected.*

DIAGNOSIS PROCEDURE

STEP 1. Check the diagnosis code.

CAUTION

To prevent damage to MUT-II, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting MUT-II.

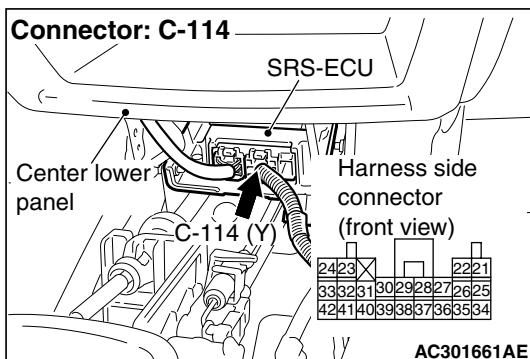
- (1) Turn the ignition switch to the "ON" position.
- (2) Check if the diagnosis code is set.
- (3) Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-114



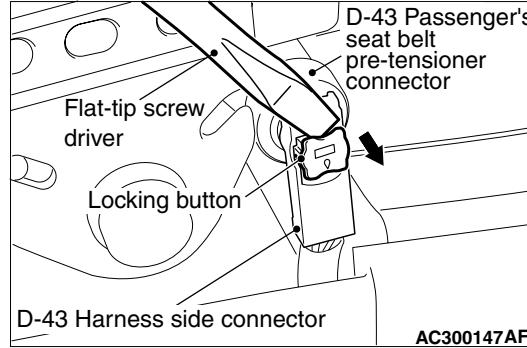
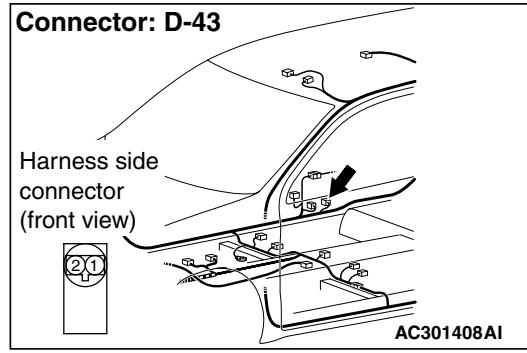
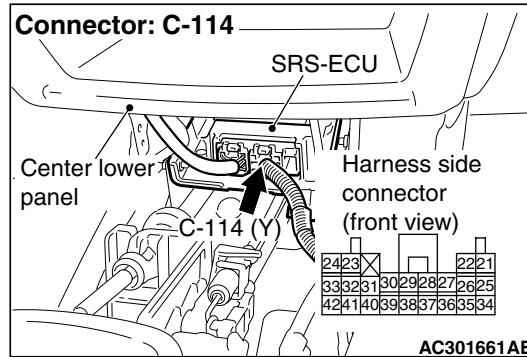
Q: Is connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 6.

STEP 3. Connector check: SRS-ECU connector C-114 and passenger's seat belt pre-tensioner connector D-43

(1) Disconnect the negative battery terminal.



(2) Disconnect connectors C-114 and D-43, and then reconnect them. For connector D-43, use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

(3) Connect the negative battery terminal.

(4) Erase the diagnosis code memory, and check the diagnosis code.

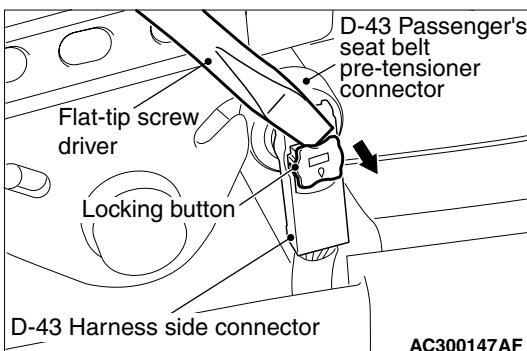
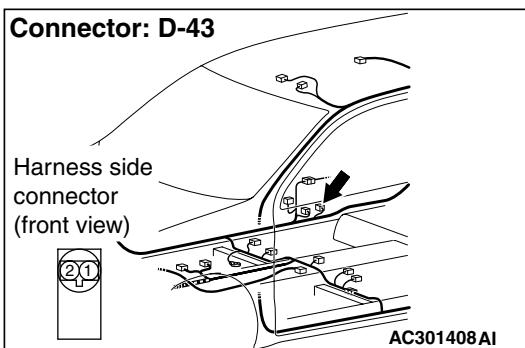
Q: Is diagnosis code 28 set?

YES : Go to Step 4.

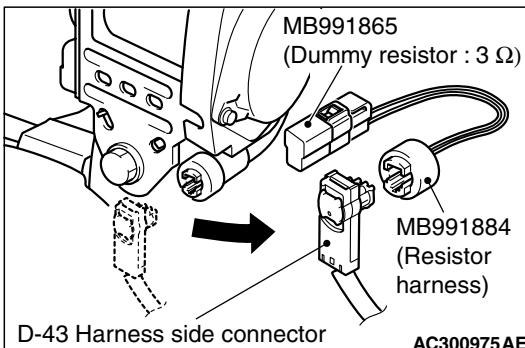
NO : The procedure is complete. It is assumed that diagnosis code 28 set as connector C-114 or D-43 was engaged improperly.

STEP 4. Check the passenger's seat belt pre-tensioner.

- (1) Disconnect the negative battery terminal.



- (2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



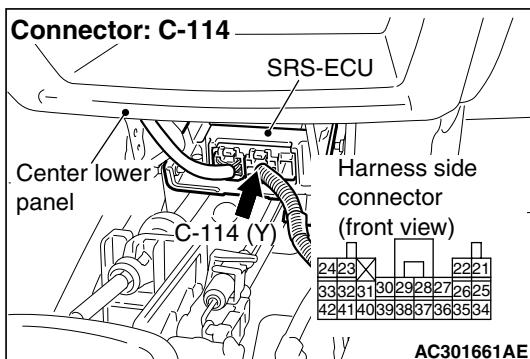
- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
- (4) Connect special tool (MB991884) to the D-43 harness side connector.
- (5) Connect the negative battery terminal.
- (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 28 set?

YES : Go to Step 5.

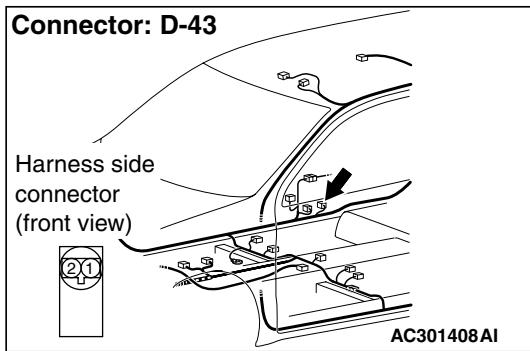
NO : Replace the passenger's seat belt pre-tensioner (Refer to [P.52B-148](#)). Then go to Step 6.

STEP 5. Measure the resistance at the SRS-ECU connector C-114.

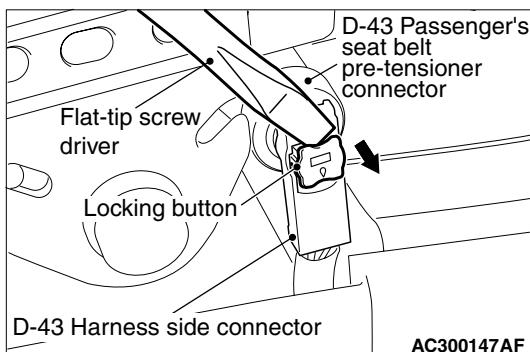


(1) Disconnect SRS-ECU connector C-114.

DANGER

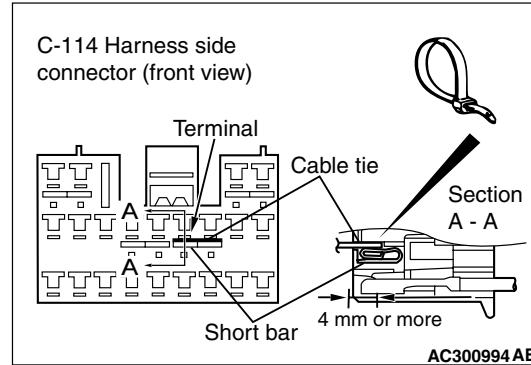


To prevents the air bag from deploying unintentionally, disconnect the passenger's seat belt pre-tensioner connector D-43 to short the squib circuit.



(2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

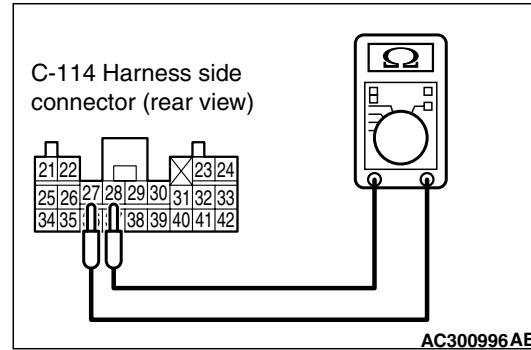
CAUTION



Insert an insulator such as a cable tie to a depth of 4 mm or more, otherwise the short bar will not be released.

(3) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 27, 28 and the short bar to release the short spring.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the resistance between C-114 harness side connector terminals 27 and 28.

OK: Open circuit.

Q: Is the check result normal?

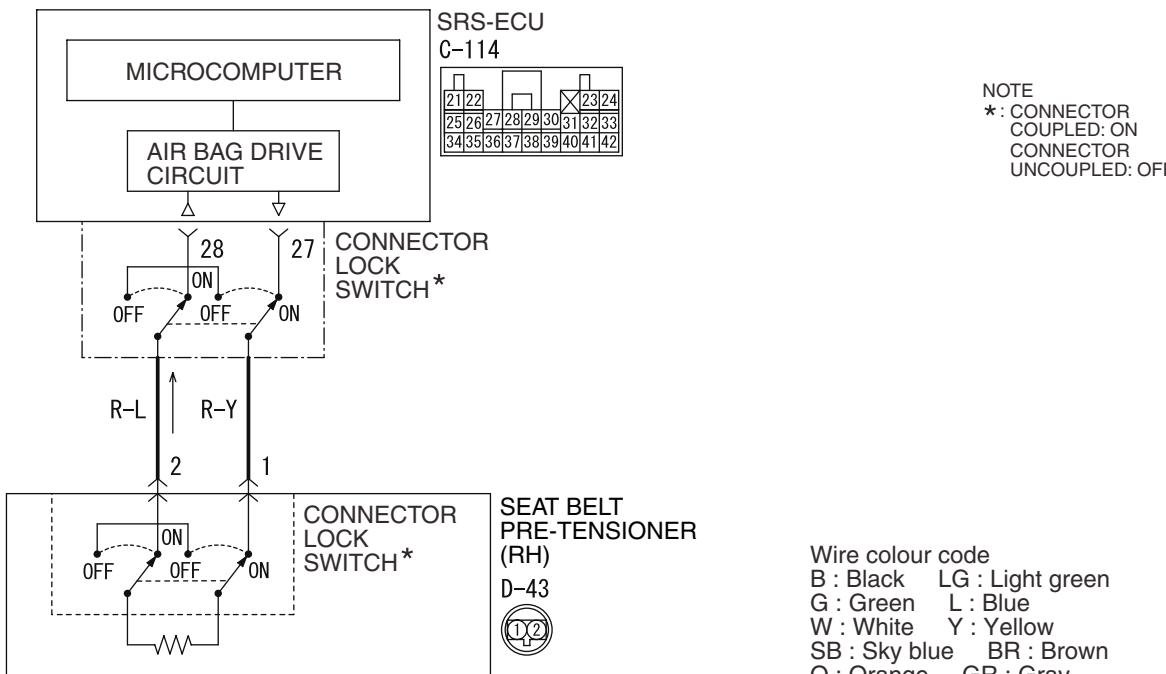
YES : Erase the diagnosis code memory, and check diagnosis code. If diagnosis code 28 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 6.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-43 (terminal No.1 and 2). Then go to Step 6.

STEP 6. Recheck for diagnosis code.**Q: Is diagnosis code 28 set?**

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.29: Passenger's (front) seat belt pre-tensioner (squib) system (open-circuited in the squib circuit)**Passenger's (Front) Seat Belt Pre-tensioner (Squib)****OPERATION**

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the passenger's seat belt pre-tensioner squib wire(s) are open-circuited.

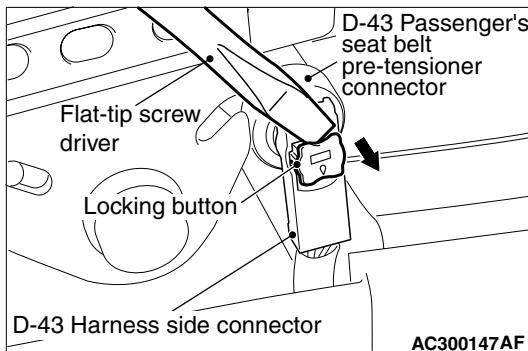
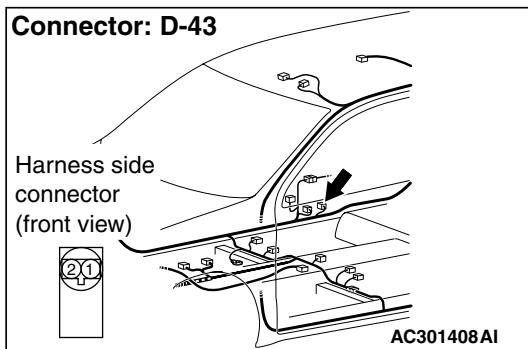
PROBABLE CAUSES

- Open circuit in the passenger's seat belt pre-tensioner (squib) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

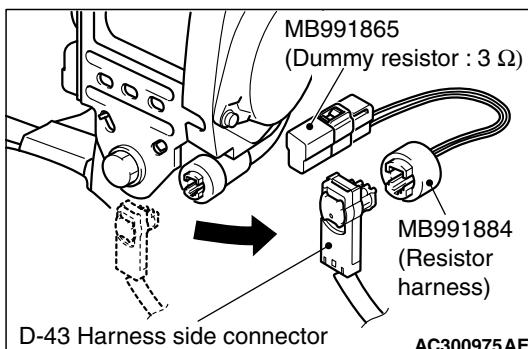
DIAGNOSIS PROCEDURE

STEP 1. Check the passenger's seat belt pre-tensioner.

- (1) Disconnect the negative battery terminal.



- (2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



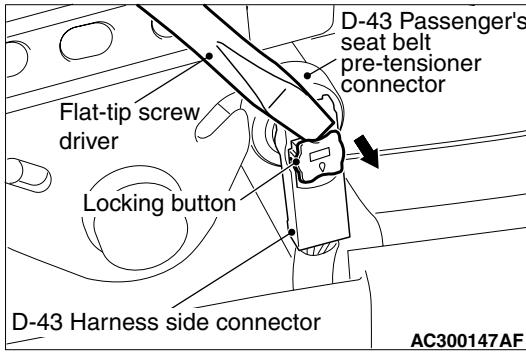
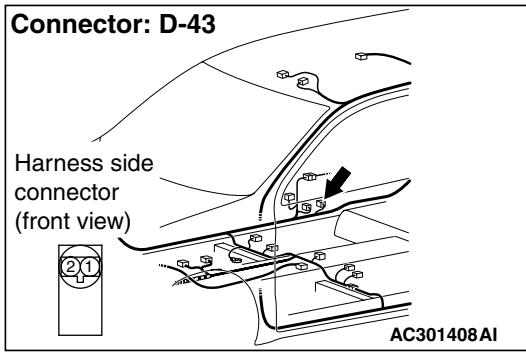
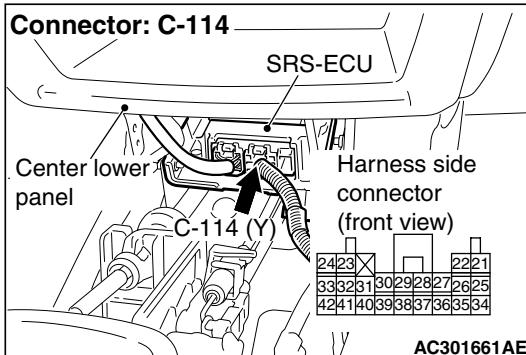
- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
- (4) Connect special tool (MB991884) to the D-43 harness side connector.
- (5) Connect the negative battery terminal.
- (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 29 set?

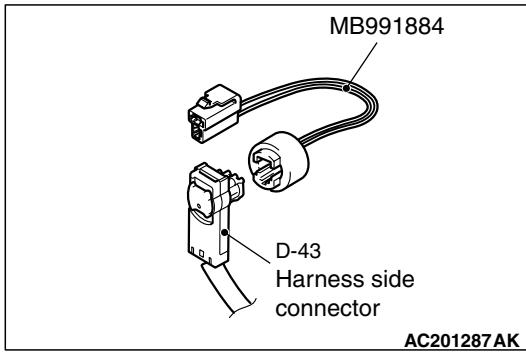
YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner (Refer to P.52B-148). Then go to Step 3.

STEP 2. Measure the resistance between SRS-ECU connector C-114 (terminal No.27 and 28) and the passenger's seat belt pre-tensioner connector D-43 (terminal No.1 and 2).

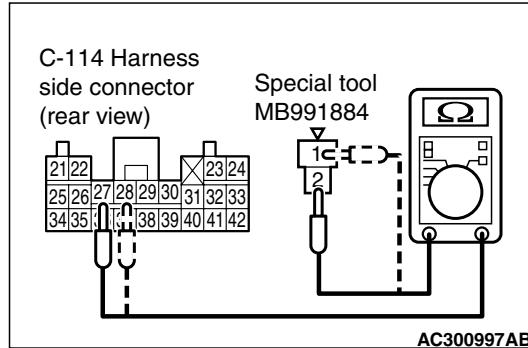


(1) Disconnect SRS-ECU connector C-114 and passenger's seat belt pre-tensioner connector D-43. For connector D-43, use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



(2) Connect D-43 harness side connector to special tool resistor harness (MB991884).

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between the following terminals.

- SRS-ECU connector C-114 terminal No.27 and the special tool terminal No.2
- SRS-ECU connector C-114 terminal No.28 and the special tool terminal No.1

OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 29 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.27 and 28) passenger's seat belt pre-tensioner connector D-43 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 29 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.34: SRS-ECU connector lock out of order

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if a poor connection at the SRS-ECU is detected. However, if the vehicle condition returns to normal, diagnosis code number 34 will be automatically erased, and the SRS warning lamp will go out.

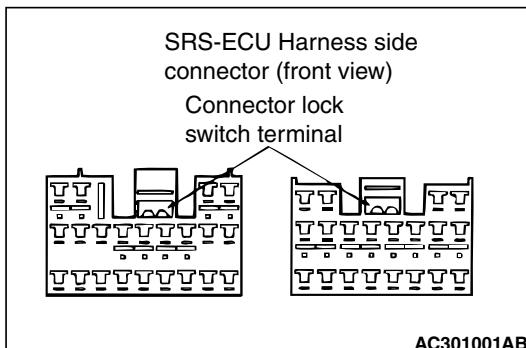
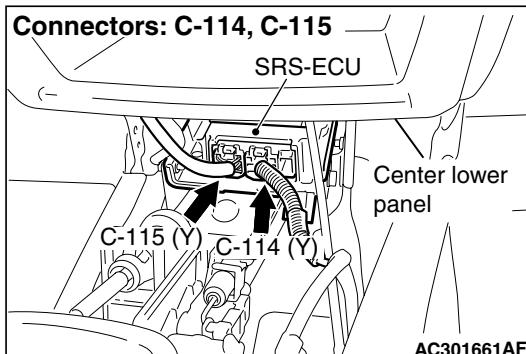
PROBABLE CAUSES

- Damaged connectors
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

STEP 1. Connector check: SRS-ECU connector C-114 and C-115.

(1) Disconnect SRS-ECU connectors C-114 and C-115.



(2) Check the connector lock switch terminal inside the harness side connector for improper contact or deformation.

Q: Are the SRS-ECU connector C-114 and C-115 in good condition?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 34 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 2 .

NO : Repair or replace the SRS-ECU connector C-114 and C-115. Then go to Step 2.

STEP 2. Recheck the diagnosis code.

Q: Is diagnosis code 34 set?

YES : There is no action to be taken.
NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.35: Ignition of the air bag completed

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set after the air bag has deployed. If this diagnosis code is set before the air bag has deployed, the cause is probably a malfunction inside the SRS-ECU.

PROBABLE CAUSE

Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

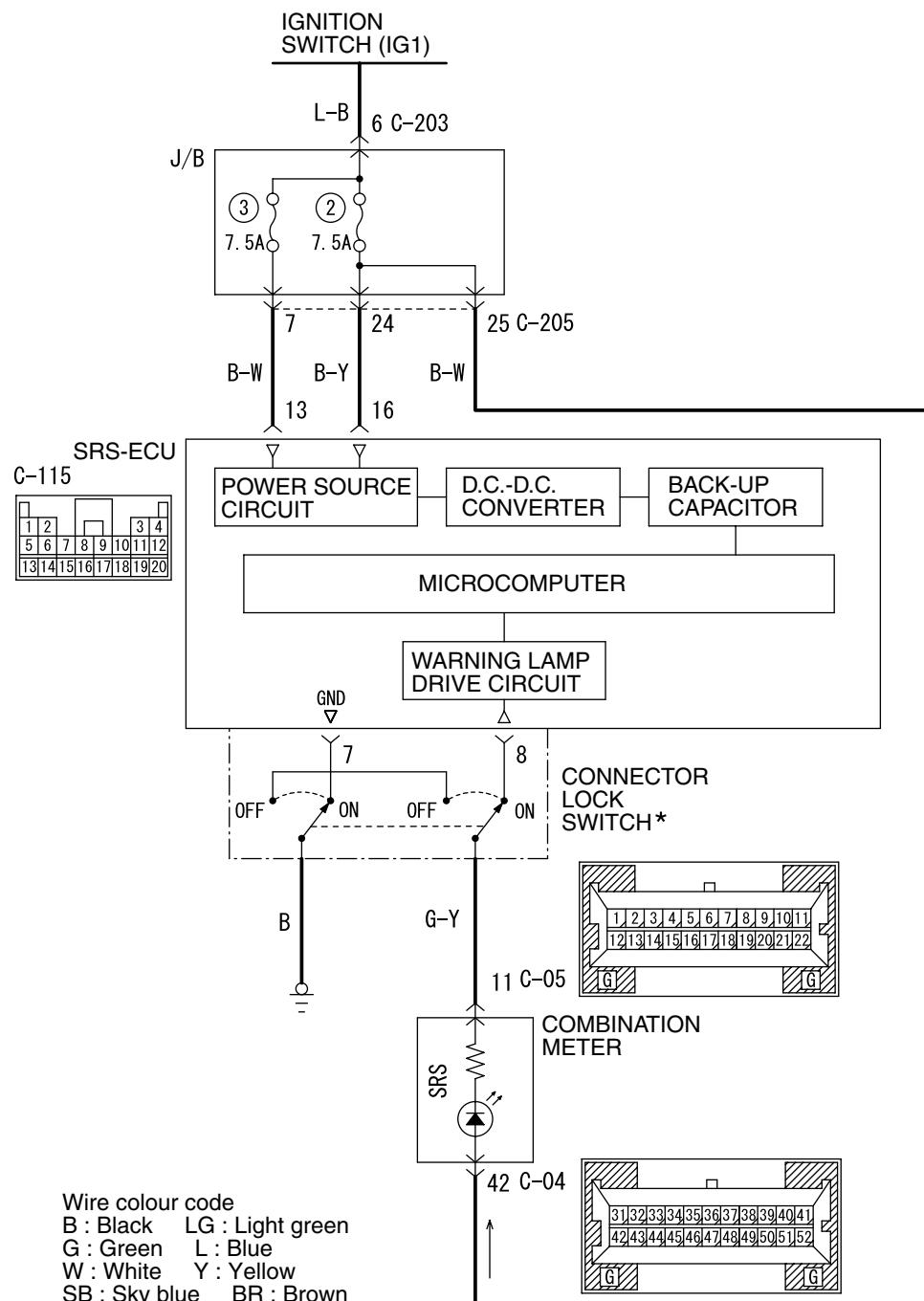
Replace the SRS-ECU. (Refer to [P.52B-140](#)).
Check the diagnosis code.

Q: Is diagnosis code 35 set?

YES : There is no action to be taken.
NO : The procedure is complete.

Code No.41: Power supply voltage (IG1 (A) voltage) drops abnormally.

IG1 Power Supply Circuit System (Fuse No.2 Circuit)



NOTE
*: CONNECTOR
COUPLED: ON
CONNECTOR
UNCOUPLED: OFF

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OPERATION

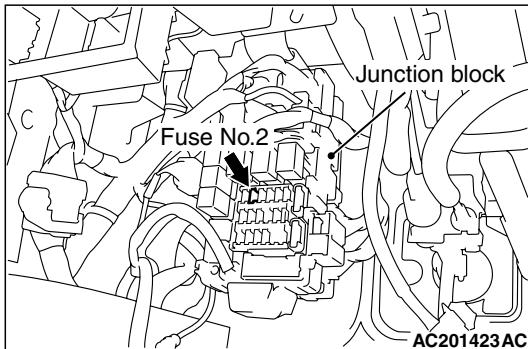
- The SRS-ECU is powered from the ignition switch (IG1).
- The SRS-ECU power is supplied from two circuits. Even if one circuit is shut off, the air bag can inflate.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the voltage between the IG1 terminals (fuse No.2 circuit) and earth is lower than a predetermined value for a continuous period of 5 second or more. However, if the vehicle condition returns to normal, diagnosis code number 41 will be automatically erased, and the SRS warning lamp will switch off.

PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE**STEP 1. Check junction block fuse number 2.**

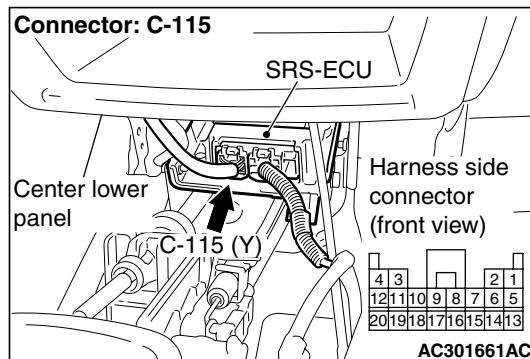
Q: Is the fuse burned out?

YES : Go to Step 4.

NO : Go to Step 2.

STEP 2. Measure the voltage at the SRS-ECU connector C-115.

- (1) Disconnect the negative battery terminal.

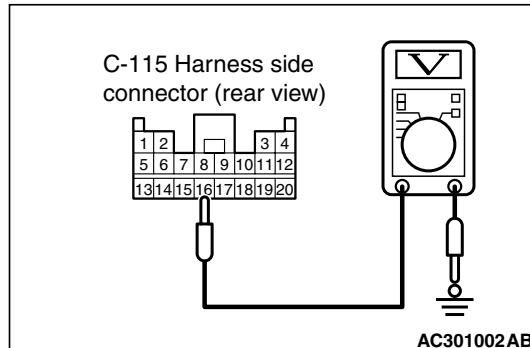


- (2) Disconnect SRS-ECU connector C-115.

- (3) Connect the negative battery terminal.

- (4) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (5) Measure the voltage between C-115 harness side connector terminal 16 and body earth.

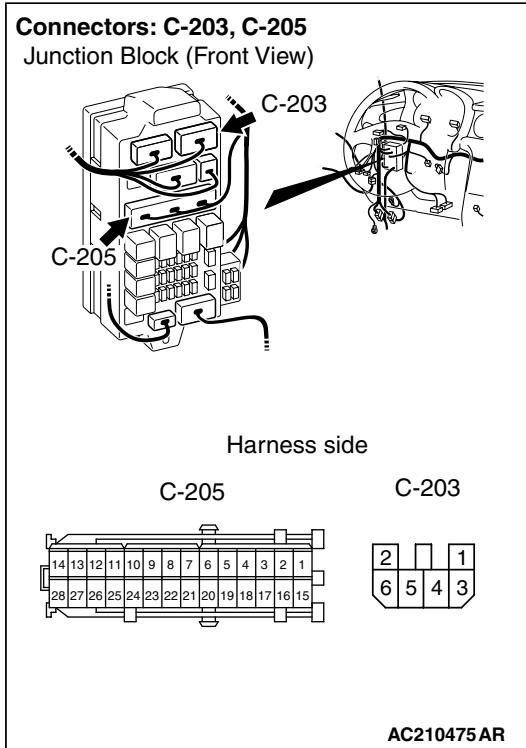
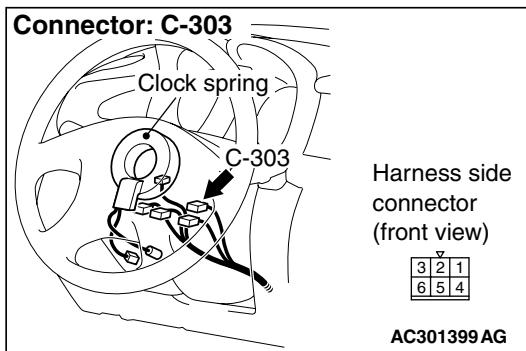
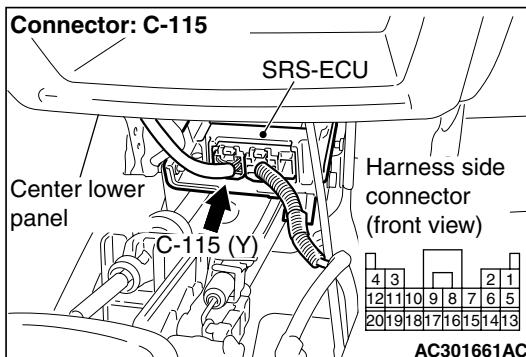
OK: 9 V or more.

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 41 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 10 .

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-115, ignition switch connector C-303, junction block connector C-203 and C-205.



Q: Is the check result normal?

YES : Check the harness wire for open circuit between SRS-ECU connector C-115 (terminal No.16) and the ignition switch connector C-303 (terminal No.2), and repair if necessary. Then go to Step 10.

NO : Repair or replace it. Then go to Step 10.

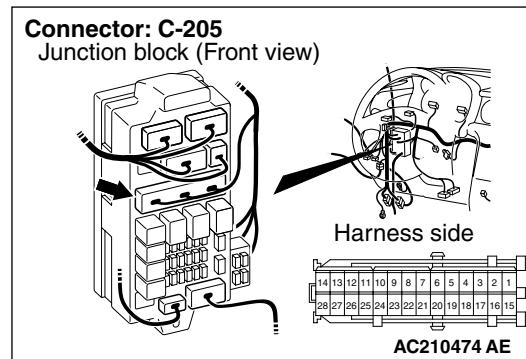
STEP 4. Check a burned-out fuse.

- (1) Replace the fuse.
- (2) Turn the ignition switch to the "ON" position, wait for at least one minute and then turn the ignition switch to the "LOCK" (OFF) position.
- (3) Check the fuse.

Q: Is the fuse in good condition?

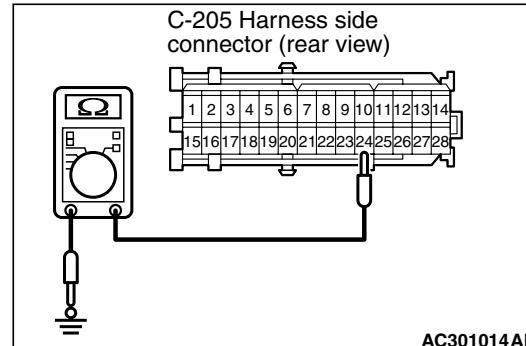
YES : Go to Step 10.
NO : Go to Step 5.

STEP 5. Measure the resistance at the junction block connector C-205.



- (1) Disconnect junction block connector C-205, and measure at the wiring harness side.

⚠ CAUTION



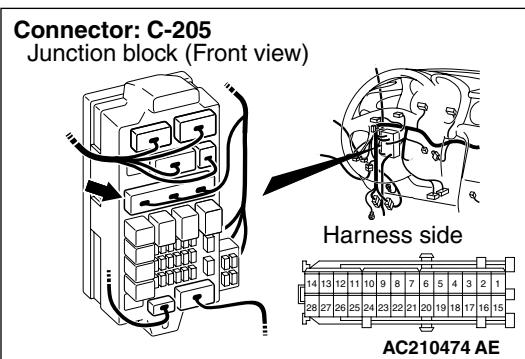
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Measure the resistance between terminal 24 and body earth.

OK: Open circuit

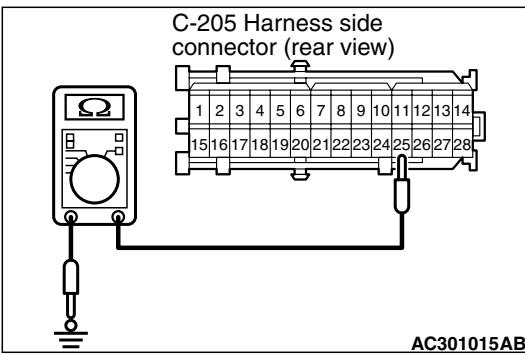
Q: Is the check result normal?

YES : Go to Step 6.
NO : Go to Step 8.

STEP 6. Measure the resistance at junction block connector C-205.

(1) Disconnect junction block connector C-205, and measure at the wiring harness side.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

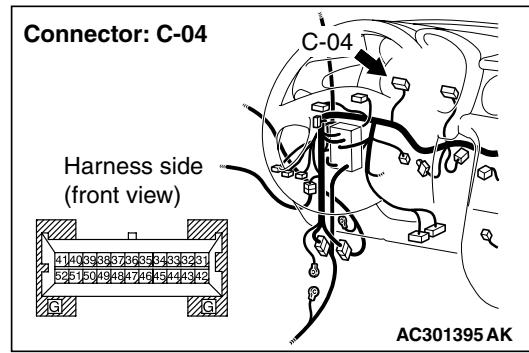
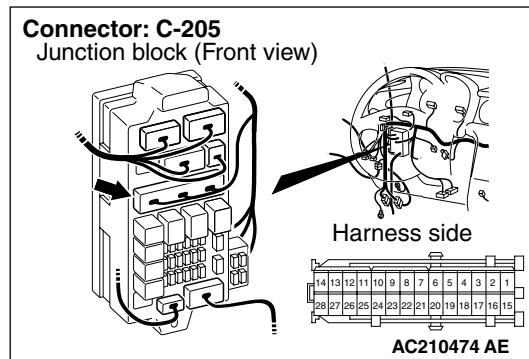
(2) Measure the resistance between terminal 25 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Check the other circuit, which flows through fuse number 2.

NO : Go to Step 7.

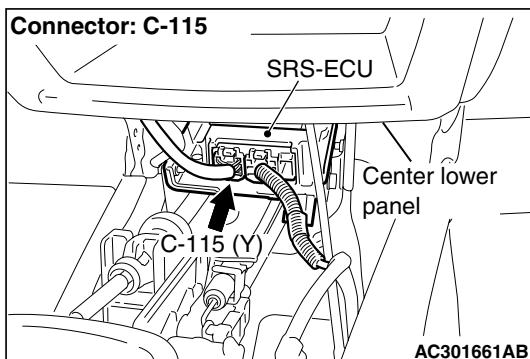
STEP 7. Connector check: junction block connector C-205 and combination meter connector C-04

Q: Is the check result normal?

YES : Check the harness wire for short circuit between junction block connector C-205 (terminal No.25) and combination meter connector C-04 (terminal No.42), and repair if necessary. Then go to Step 10.

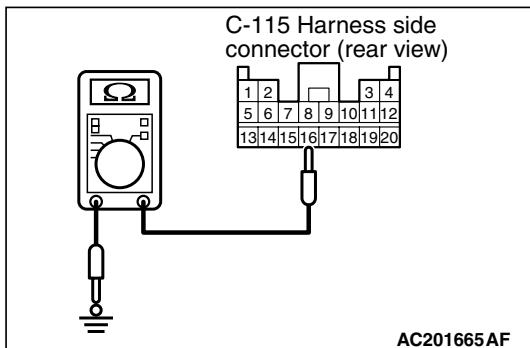
NO : Repair or replace it. Then go to Step 10.

STEP 8. Measure the resistance at the SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115, and measure at the wiring harness side.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Measure the resistance between terminal 16 and body earth.

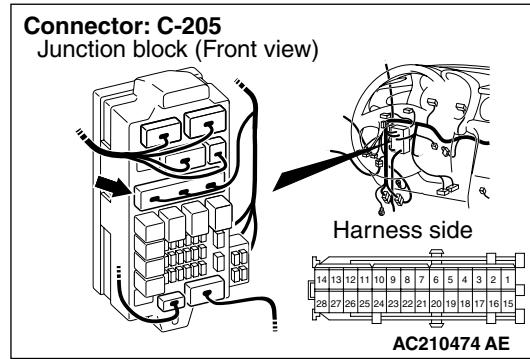
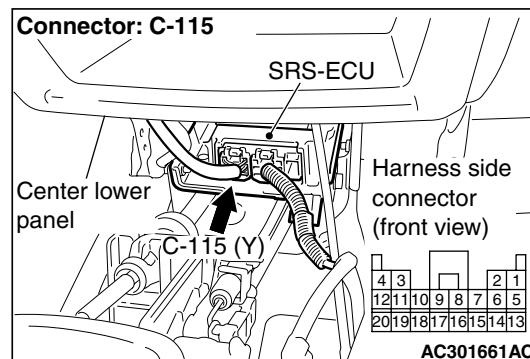
OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 41 sets, replace the SRS-ECU. (Refer to P.52B-140). Then go to Step 10 .

NO : Go to Step 9.

STEP 9. Connector check: SRS-ECU connector C-115 and junction block connector C-205



Q: Is the check result normal?

YES : Check the harness wire for short circuit between SRS-ECU connector C-115 (terminal No.16) and junction block connector C-205 (terminal No.24), and repair if necessary. Then go to Step 10.

NO : Repair or replace it. Then go to Step 10.

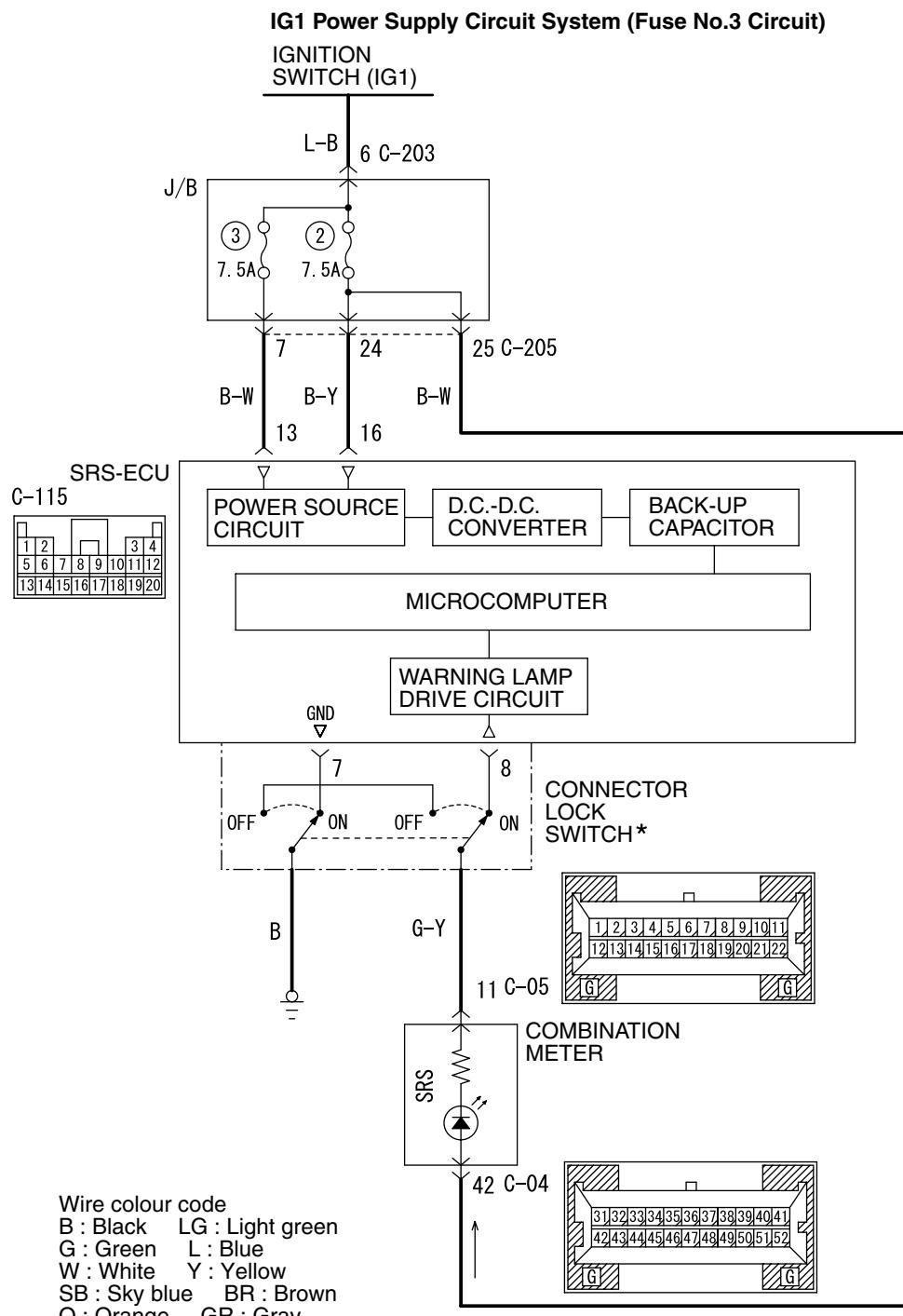
STEP 10. Recheck the diagnosis code.

Q: Is diagnosis code 41 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.42: Power supply voltage (IG1 (B) voltage) drops abnormally.



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OPERATION

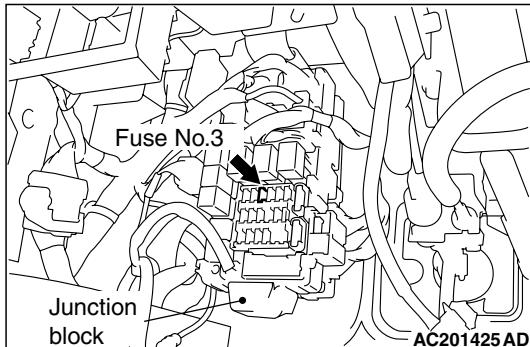
- The SRS-ECU is powered from the ignition switch (IG1).
- The SRS-ECU power is supplied from two circuits. Even if one circuit is shut off, the air bag can inflate.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the voltage between the IG1 terminals (fuse No.3 circuit) and earth is lower than a predetermined value for a continuous period of 5 second or more. However, if the vehicle condition returns to normal, diagnosis code number 42 will be automatically erased, and the SRS warning lamp will switch off.

PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE**STEP 1. Check junction block fuse number 3.**

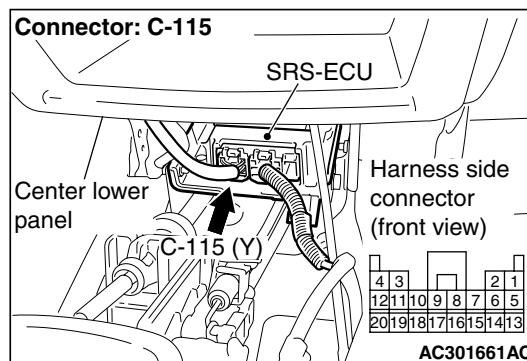
Q: Is the fuse burned out?

YES : Go to Step 4.

NO : Go to Step 2.

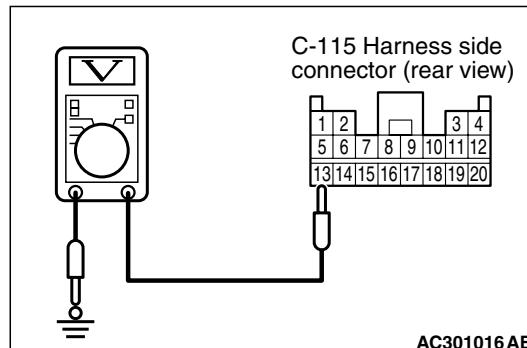
STEP 2. Measure the voltage at SRS-ECU connector C-115.

- (1) Disconnect the negative battery terminal.



- (2) Disconnect SRS-ECU connector C-115.
- (3) Connect the negative battery terminal.
- (4) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

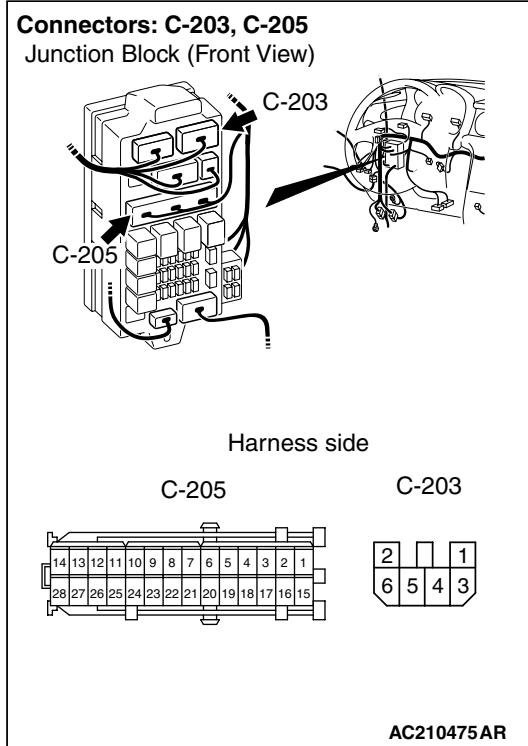
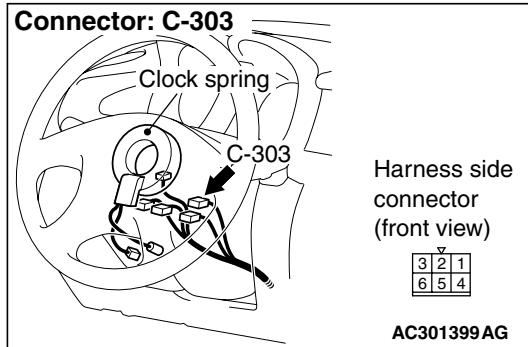
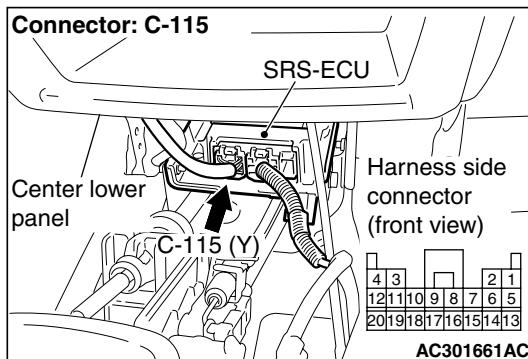
- (5) Measure the voltage between C-115 harness side connector terminal 13 and body earth.

OK: 9 V or more

Q: Is the check result normal?

YES : Erase the diagnosis connector memory, and check the diagnosis code. If diagnosis code 42 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 8.

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-115, ignition switch connector C-303, junction block connector C-203 and C-205**Q: Is the check result normal?**

YES : Check the harness wire for open circuit between SRS-ECU connector C-115 (terminal No.13) and the ignition switch connector C-303 (terminal No.2), and repair if necessary. Then go to Step 8.

NO : Repair or replace it. Then go to Step 8.

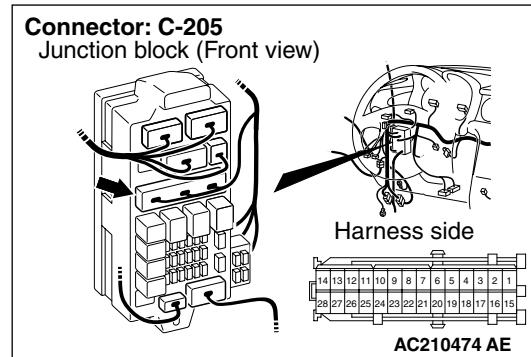
STEP 4. Check a burned-out fuse.

- (1) Replace the fuse.
- (2) Turn the ignition switch to the "ON" position, wait for at least one minute and then turn the ignition switch to the "LOCK" (OFF) position.
- (3) Check the fuse.

Q: Is the fuse in good condition?

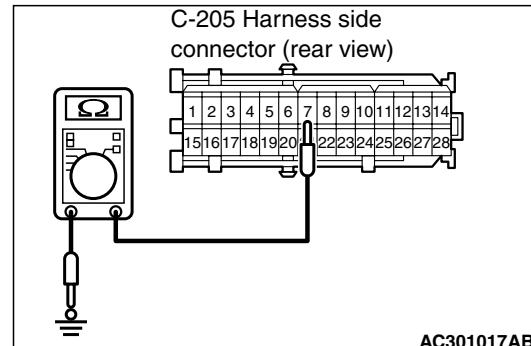
YES : Go to Step 8.

NO : Go to Step 5.

STEP 5. Measure the resistance at the junction block connector C-205.

- (1) Disconnect junction block connector C-205, and measure at the wiring harness side.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Measure the resistance between terminal 7 and body earth.

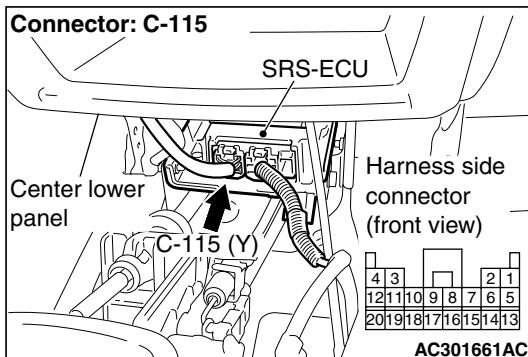
OK: Open circuit

Q: Is the check result normal?

YES : Check the other circuit, which flows through fuse number 3.

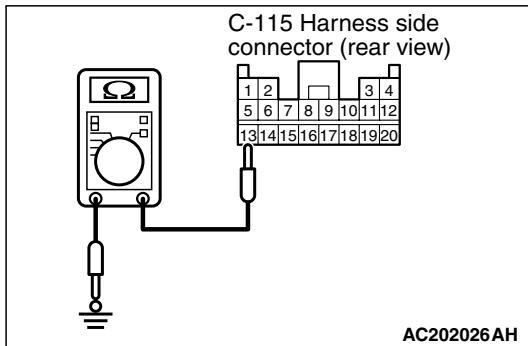
NO : Go to Step 6.

STEP 6. Measure the resistance at the SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115, and measure at the wiring harness side.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Measure the resistance between terminal 13 and body earth.

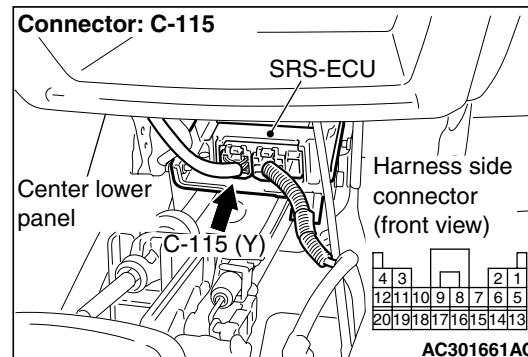
OK: Open circuit

Q: Is the check result normal?

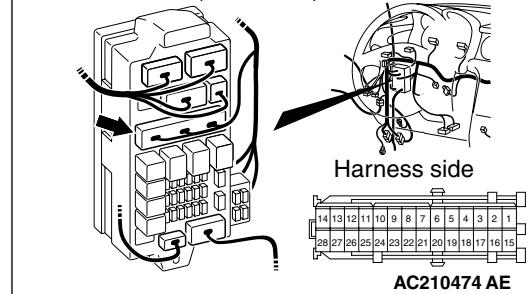
YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 42 sets, replace the SRS-ECU. (Refer to P.52B-140). Then go to Step 8 .

NO : Go to Step 7.

STEP 7. Connector check: SRS-ECU connector C-115 and junction block connector C-205



Connector: C-205
Junction block (Front view)



Q: Is the check result normal?

YES : Check the harness wire for short circuit between SRS-ECU connector C-115 (terminal No.13) and junction block connector C-205 (terminal No.7), and repair if necessary. Then go to Step 8.

NO : Repair or replace it. Then go to Step 8.

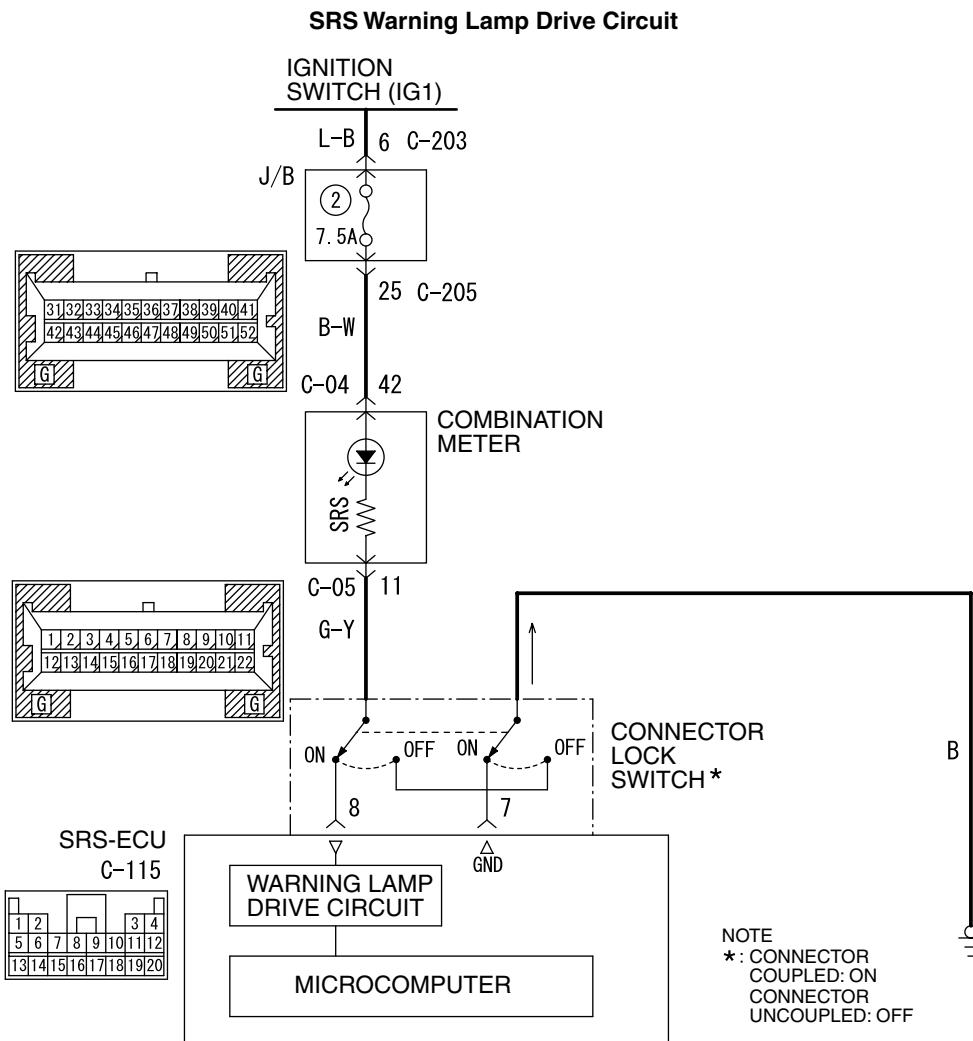
STEP 8. Recheck the diagnosis code.

Q: Is diagnosis code 42 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.43: SRS warning lamp circuit open-circuited (Lamp does not illuminate).



Wire colour code

Wire colour code : B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

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W3Z02E10AA

OPERATION

- Power for the SRS warning lamp is supplied from the ignition switch (IG1).
- The SRS warning lamp illuminates when the ignition switch is turned to the "ON" position and goes out after approximately 7 seconds if there is not a malfunction in the SRS system.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set when an open circuit is detected for a continuous period of 5 seconds while the SRS-ECU is monitoring the SRS warning lamp and the lamp is OFF (transistor OFF). However, if the vehicle condition returns to normal, diagnosis code 43 will be automatically erased, and the SRS warning lamp will go out.

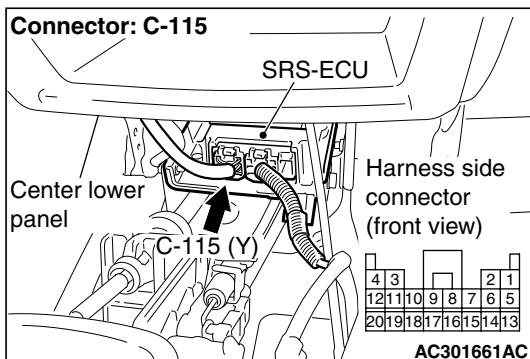
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU
- Malfunction of the combination meter

DIAGNOSIS PROCEDURE

STEP 1. Check the SRS warning lamp.

(1) Disconnect the negative battery terminal.



(2) Disconnected the SRS-ECU connector C-115.

(3) Connect the negative battery terminal.

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

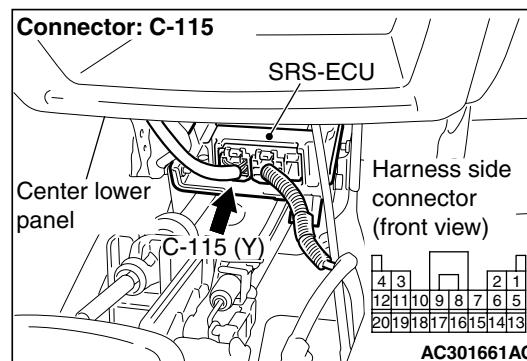
Q: Does the warning lamp illuminate?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 43 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 5 .

NO : Go to Step 2.

STEP 2. Measure the resistance at the SRS-ECU connector C-115.

(1) Disconnect the negative battery terminal.

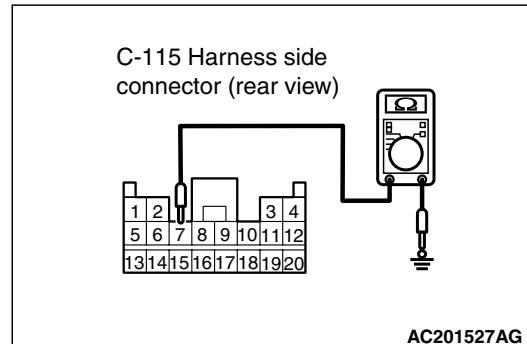


(2) Disconnected the SRS-ECU connector C-115.

(3) Connect the negative battery terminal.

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

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Measure the resistance between C-115 harness side connector terminal 7 and earth.

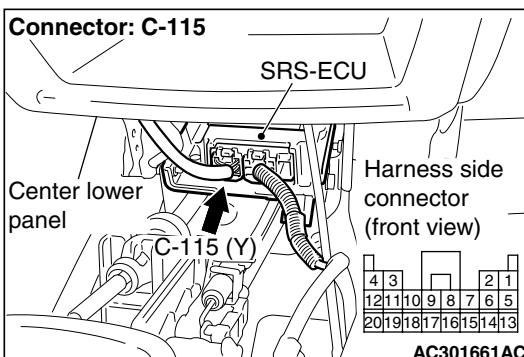
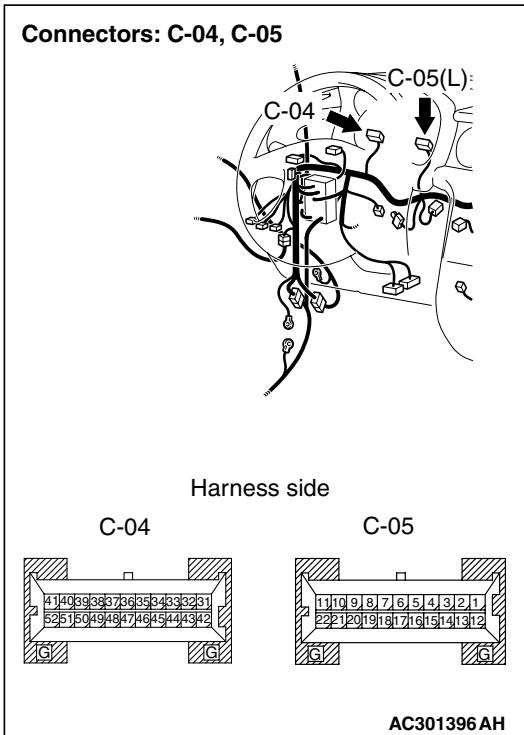
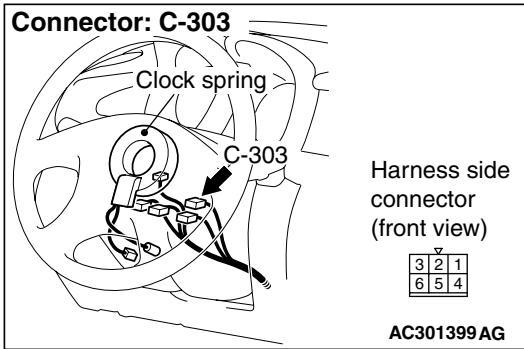
OK: Less than 2 Ω

Q: Is the check result normal?

YES : Go to Step 3.

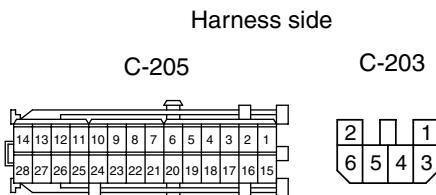
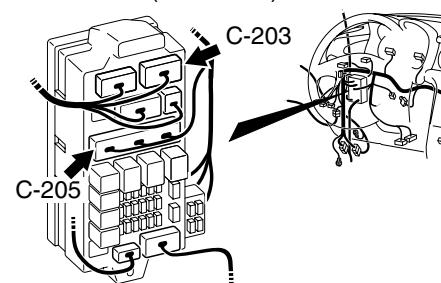
NO : Go to Step 4.

STEP 3. Check the harness for open circuit between ignition switch connector C-303 (terminal No.2) and combination meter C-04 (terminal No.42), and between combination meter C-05 (terminal No.11) and SRS-ECU connector C-115 (terminal No.8).



Connectors: C-203, C-205

Junction Block (Front View)



AC210475AR

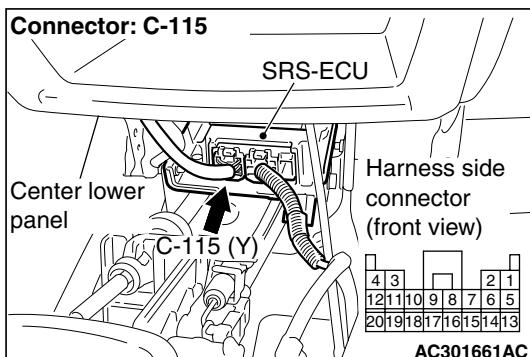
NOTE: After inspecting intermediate connectors C-05, C-04, C-205 and C-203 inspect the wiring harness. If intermediate connectors C-05, C-04, C-205 and C-203 are damaged, repair or replace them. Then go to Step 5.

Q: Is the check result normal?

YES : Replace the combination meter (Refer to GROUP 54A – Combination Meters Assembly and Vehicle Speed Sensor [P.54A-46](#)). Then go to Step 5 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.8) and the ignition switch connector C-303 (terminal No.2). Then go to Step 5.

STEP 4. Connector check: SRS-ECU connector C-115 and earth

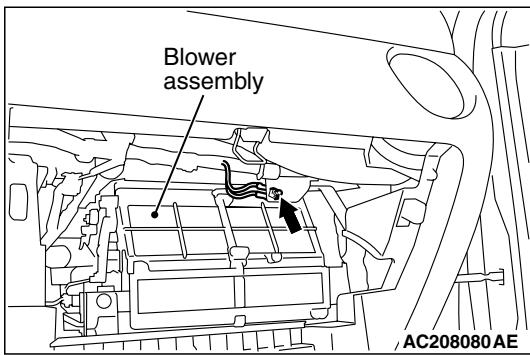


STEP 5. Recheck the diagnosis code.

Q: Is diagnosis code 43 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

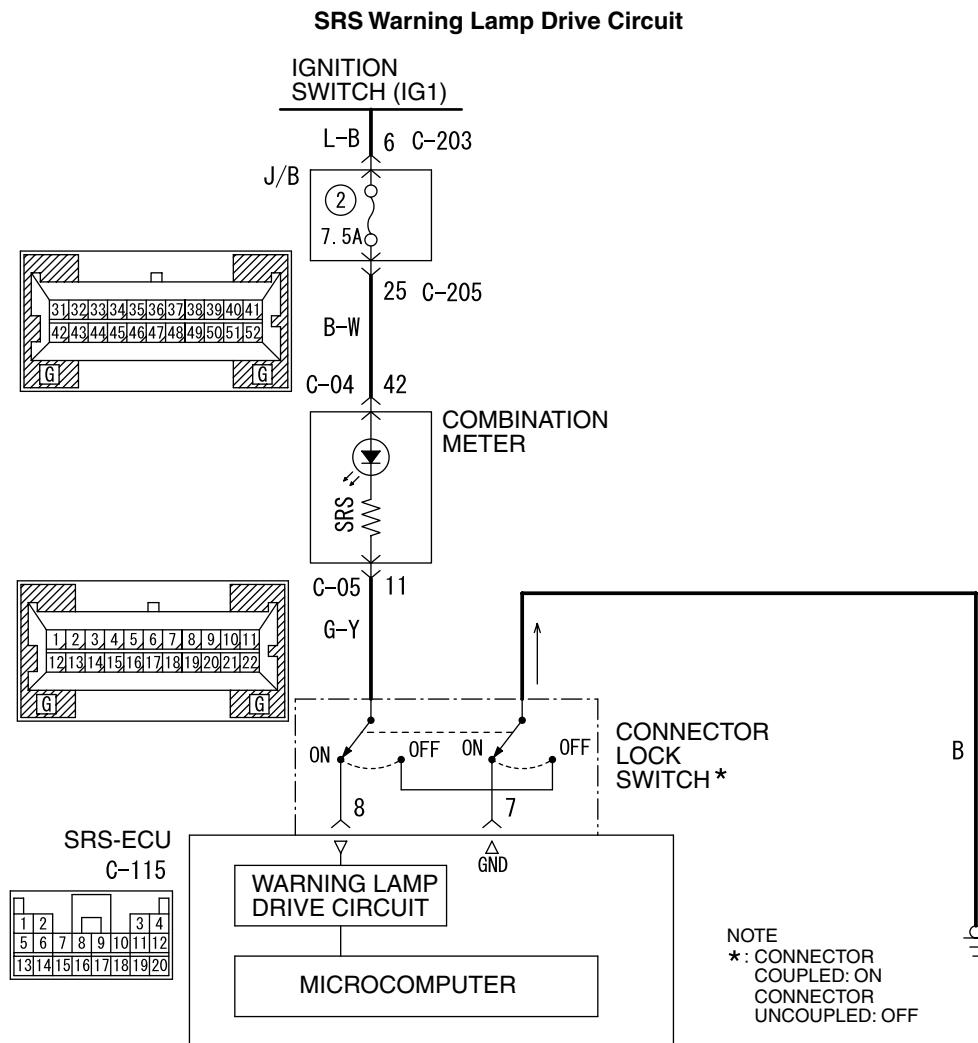


Q: Is the check result normal?

YES : Repair the harness wires between SRS-ECU connector C-115 (terminal No.7) and earth. Then go to Step 5.

NO : Repair or replace it. Then go to Step 5.

Code No.43: SRS warning lamp circuit open-circuited (Lamp does not Switch Off).



Wire colour code

B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301799AB
W3Z02E10AA

OPERATION

- Power for the SRS warning lamp is supplied from the ignition switch (IG1).
- The SRS warning lamp illuminates when the ignition switch is turned to the "ON" position and goes out after approximately 7 seconds if there is not a malfunction in the SRS system.

DIAGNOSIS CODE SET CONDITIONS

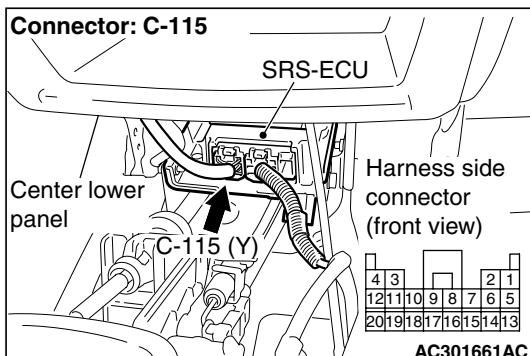
This diagnosis code is set when a short to earth occurs in the harness between the SRS warning lamp and SRS-ECU while SRS-ECU is monitoring the lamp and the lamp is ON. However, if the vehicle condition returns to normal, diagnosis code 43 will be automatically erased, and the SRS warning lamp will go out.

PROBABLE CAUSES

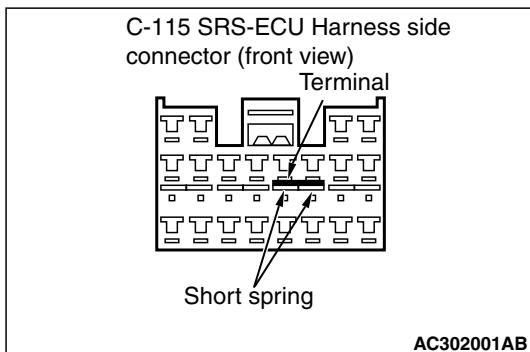
- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU
- Malfunction of the combination meter

DIAGNOSIS PROCEDURE

STEP 1. Connector check: SRS-ECU connector C-115



(1) Disconnect SRS-ECU connectors C-115.



(2) Check the short spring for the warning lamp inside the harness side connector for improper contact or deformation.

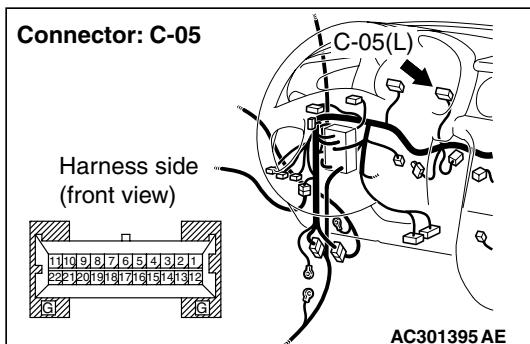
Q: Is the check result normal?

YES : Then go to Step 2.

NO : Repair or replace the SRS-ECU connector C-115. Then go to Step 4.

STEP 2. Check the SRS warning lamp.

(1) Disconnect the negative battery cable.



(2) Disconnect the combination meter connector C-05.

(3) Connect the negative battery cable.

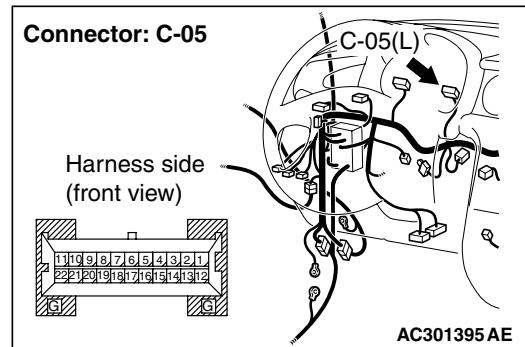
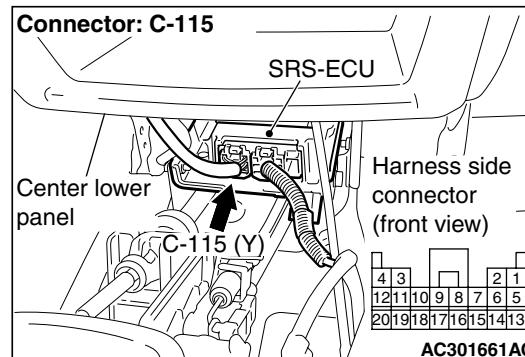
(4) Turn the ignition switch to the "ON" position.

Q: Does the SRS warning lamp go out?

YES : Go to Step 3.

NO : Replace the combination meter (Refer to GROUP 54A – Combination Meters Assembly and Vehicle Speed Sensor P.54A-46). Then go to Step 4 .

STEP 3. Check the harness for short circuit to earth between SRS-ECU connector C-115 (terminal No.8) and combination meter connector C-05 (terminal No.11).



Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 43 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4 .

NO : Repair the harness wire between SRS-ECU connector C-115 (terminal No.8) and combination meter connector C-05 (terminal No.11). Then go to Step 4.

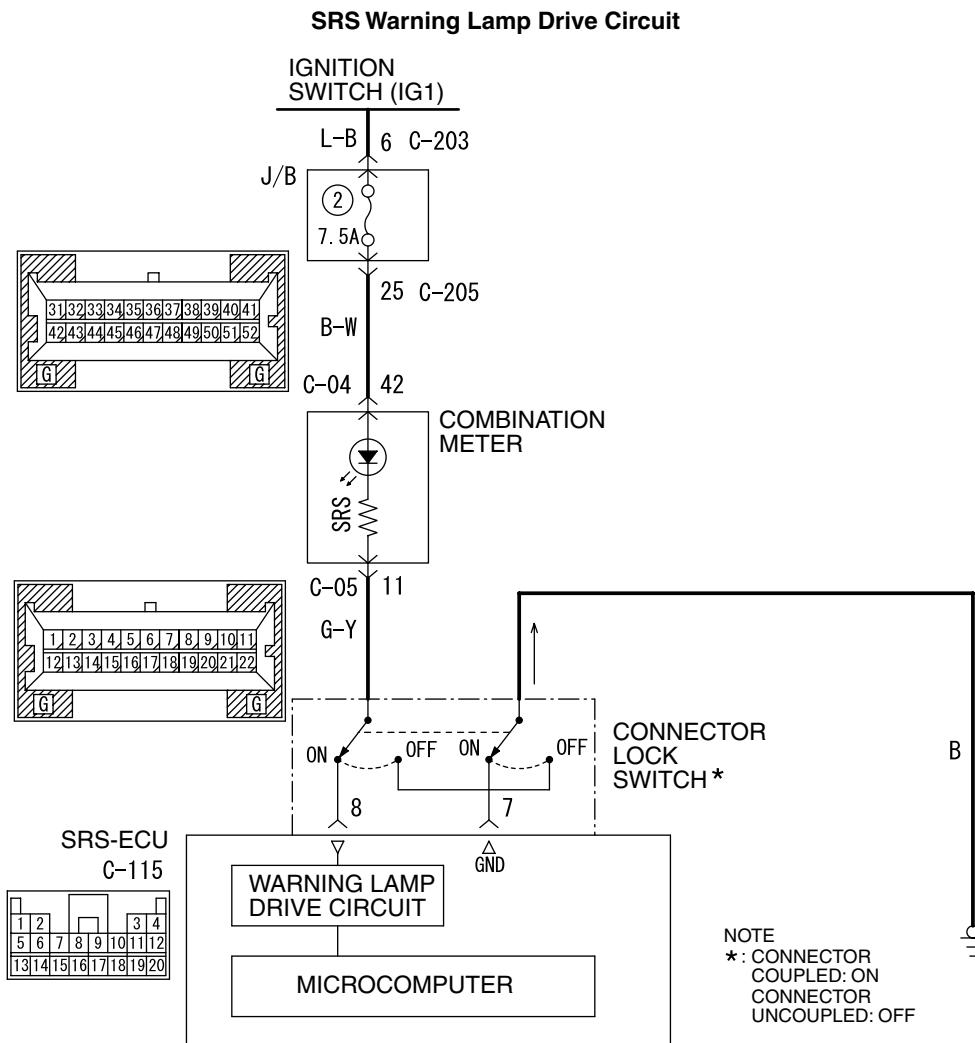
STEP 4. Recheck the diagnosis code.

Q: Is diagnosis code 43 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.44: SRS warning lamp circuit malfunction



Wire colour code

B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301799AB
 W3Z02E10AA

CIRCUIT OPERATION

- Power for the SRS warning lamp is supplied from the ignition switch (IG1).
- The SRS warning lamp illuminates when the ignition switch is turned to the "ON" position and goes out after approximately 7 seconds if there is not a malfunction in the SRS system.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set under one of the following cases while the SRS-ECU is monitoring the warning lamp drive circuit:

- When a short circuit occurs in the warning lamp drive circuit.
- When a malfunction is detected in the output transistor inside the SRS-ECU.

However, if the vehicle condition returns to normal, diagnosis code 44 will be automatically erased, and the SRS warning lamp will go out.

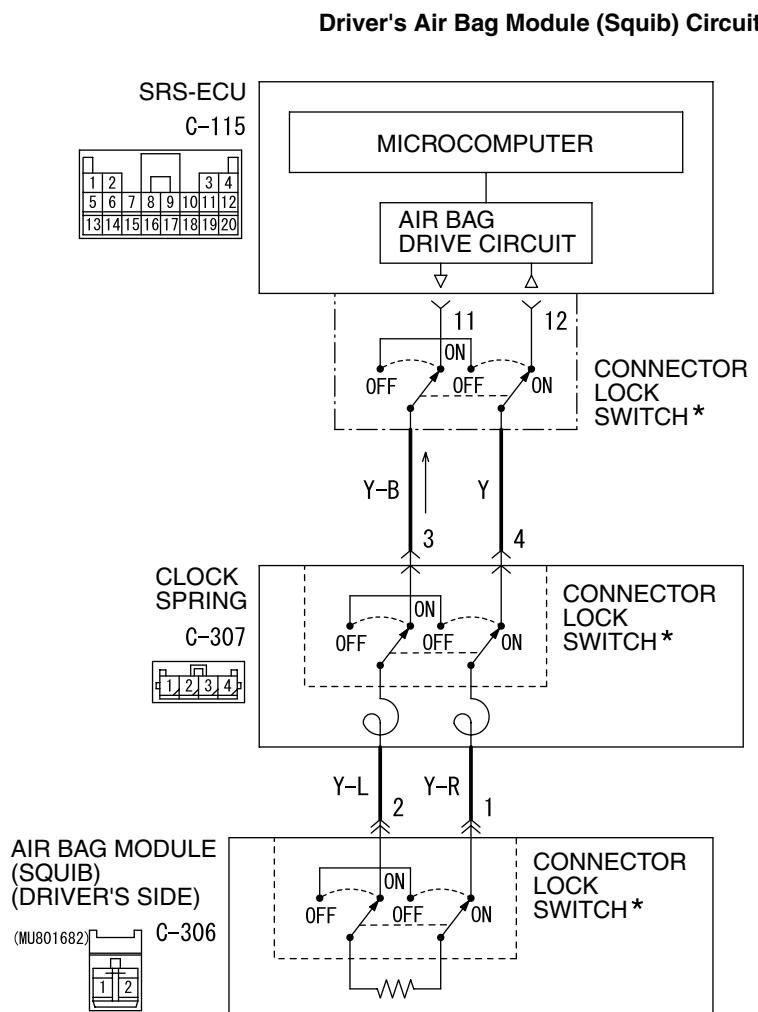
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

Check the SRS warning lamp drive circuit system. Refer to [P.52B-7](#).

Code No.61: Driver's air bag module (squib) system (short-circuited to the power supply)



Wire colour code
 B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301790AB
W3Z02E01AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the driver's air bag squib wire(s) are short-circuited to the power supply. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

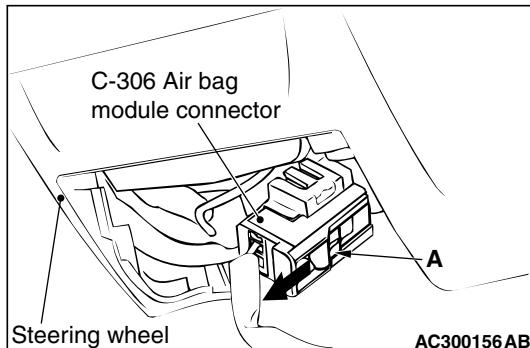
PROBABLE CAUSES

- Malfunction of the clock spring
- Damaged harness wires and connectors
- Short to the power supply in the driver's air bag module (squib) harness
- Malfunction of the SRS-ECU

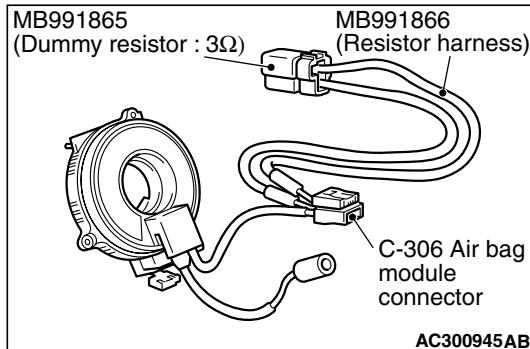
DIAGNOSIS PROCEDURE

STEP 1. Check the driver's air bag module.

(1) Disconnect the negative battery terminal.



(2) By sliding the A section (in the figure) of air bag module connector C-306 in arrow direction, disconnect the connector.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into clock spring side air bag module connector C-306 by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

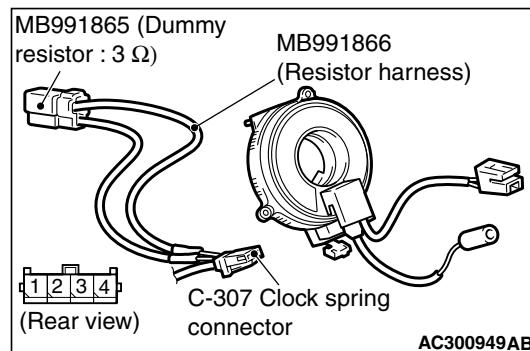
Q: Is diagnosis code 61 out put?

YES : Go to Step 2.

NO : Replace the driver's air bag module (Refer to P.52B-141). Then go to Step 4.

STEP 2. Check the clock spring.

(1) Disconnect the negative battery terminal.



(2) Disconnect the clock spring connector C-307.

(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

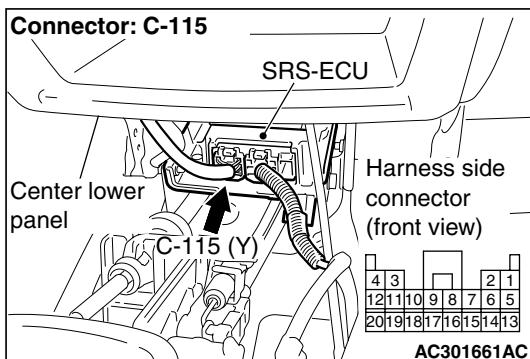
(4) Insert special tool (MB991866) into clock spring harness side connector C-307 (terminal No.3 and 4) by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 61 set?

YES : Go to Step 3.

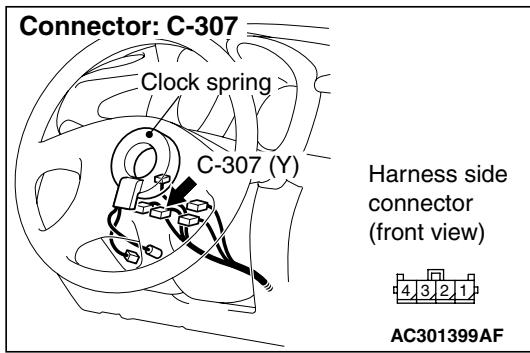
NO : Replace the clock spring (Refer to P.52B-141). Then go to Step 4.

STEP 3. Measure the voltage at the SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115.

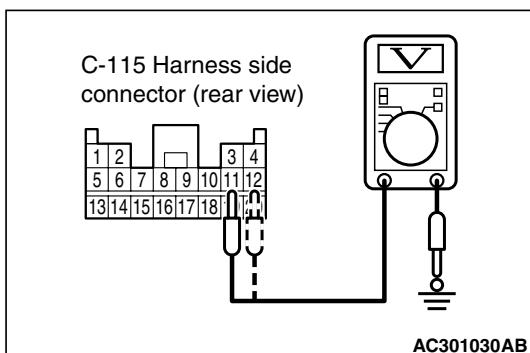
DANGER



To prevents the air bag from deploying unintentionally, disconnect the clock spring connector C-307 to short the squib circuit.

(2) Disconnect the clock spring connector C-307.
(3) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-115 harness side connector terminals 11, 12 and body earth.

OK: 0 V

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 61 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.11 and 12) and clock spring connector C-307 (terminal No.3 and 4). Then go to Step 4.

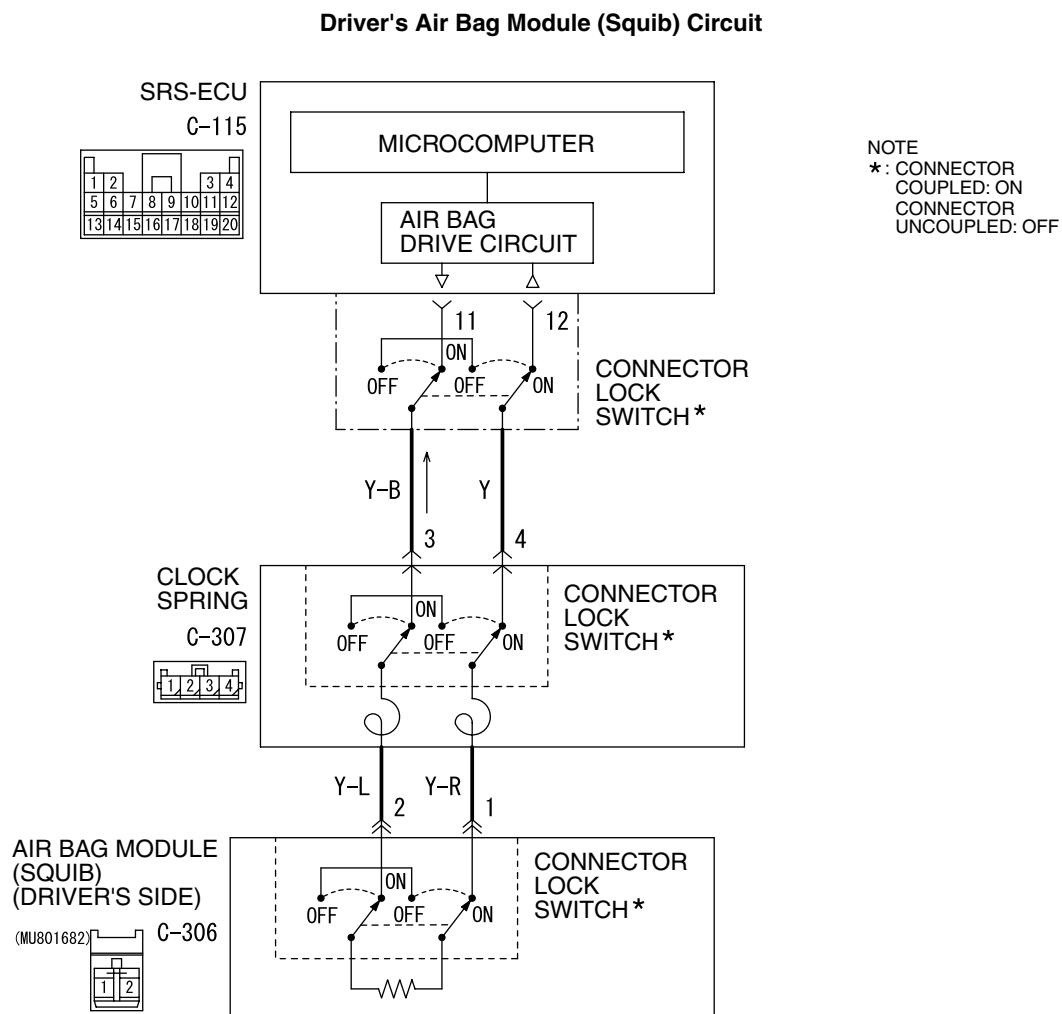
STEP 4. Recheck the diagnosis code.

Q: Is diagnosis code 61 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.62: Driver's air bag module (squib) system (short-circuited to the earth)



Wire colour code
 B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301790AB
W3Z02E01AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the driver's air bag squib wire(s) are short-circuited to the earth. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

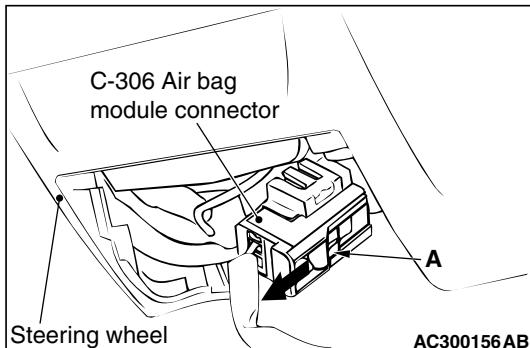
PROBABLE CAUSES

- Malfunction of the clock spring
- Damaged harness wires and connectors
- Short to the earth in the driver's air bag module (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

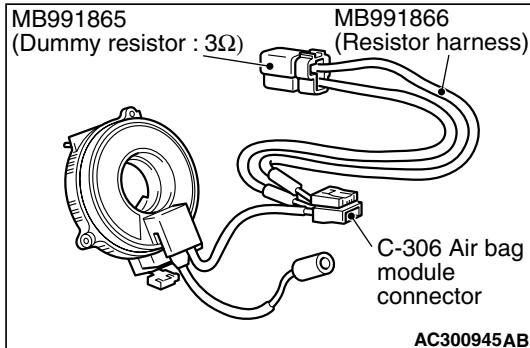
STEP 1. Check the driver's air bag module.

(1) Disconnect the negative battery terminal.



(2) By sliding the A section (in the figure) of air bag module connector C-306 in arrow direction, disconnect the connector.
 (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into clock spring side air bag module connector C-306 by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

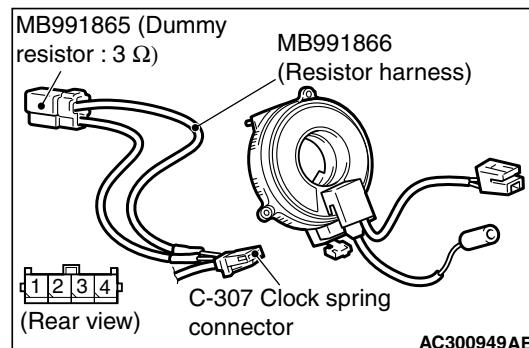
Q: Is diagnosis code 62 set?

YES : Go to Step 2.

NO : Replace the driver's air bag module (Refer to [P.52B-141](#)). Then go to Step 4.

STEP 2. Check the clock spring.

(1) Disconnect the negative battery terminal.



(2) Disconnect the clock spring connector C-307.
 (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

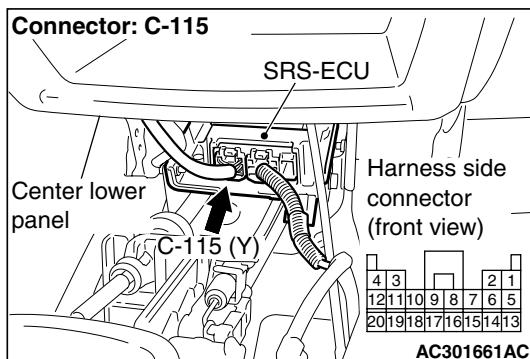
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into clock spring harness side connector C-307 (terminal No.3 and 4) by backprobing.
 (5) Connect the negative battery terminal.
 (6) Erase the diagnosis code memory, and check the diagnosis code.

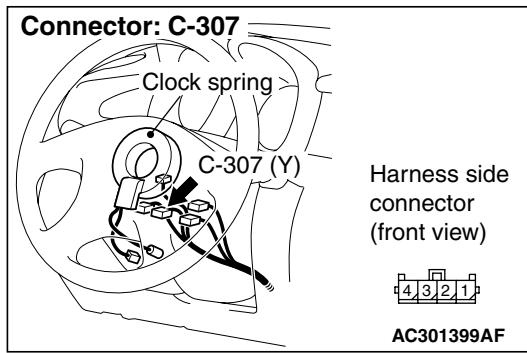
Q: Is diagnosis code 62 set?

YES : Go to Step 3.

NO : Replace the clock spring (Refer to [P.52B-141](#)). Then go to Step 4.

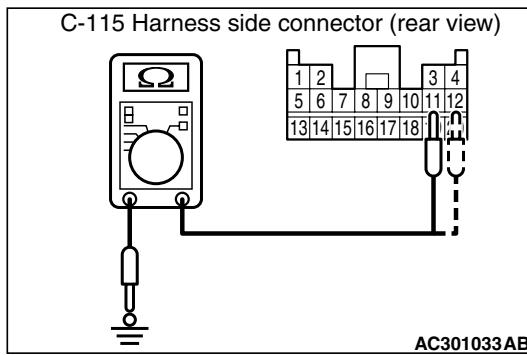
STEP 3. Check the driver's air bag module circuit at the SRS-ECU connector C-115.

(1) Disconnect SRS-ECU connector C-115.

DANGER

To prevents the air bag from deploying unintentionally, disconnect the clock spring connector C-307 to short the squib circuit.

(2) Disconnect the clock spring connector C-307.

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Check for continuity between C-115 harness side connector terminals 11, 12 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 62 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.11 and 12) and clock spring connector C-307 (terminal No.3 and 4). Then go to Step 4.

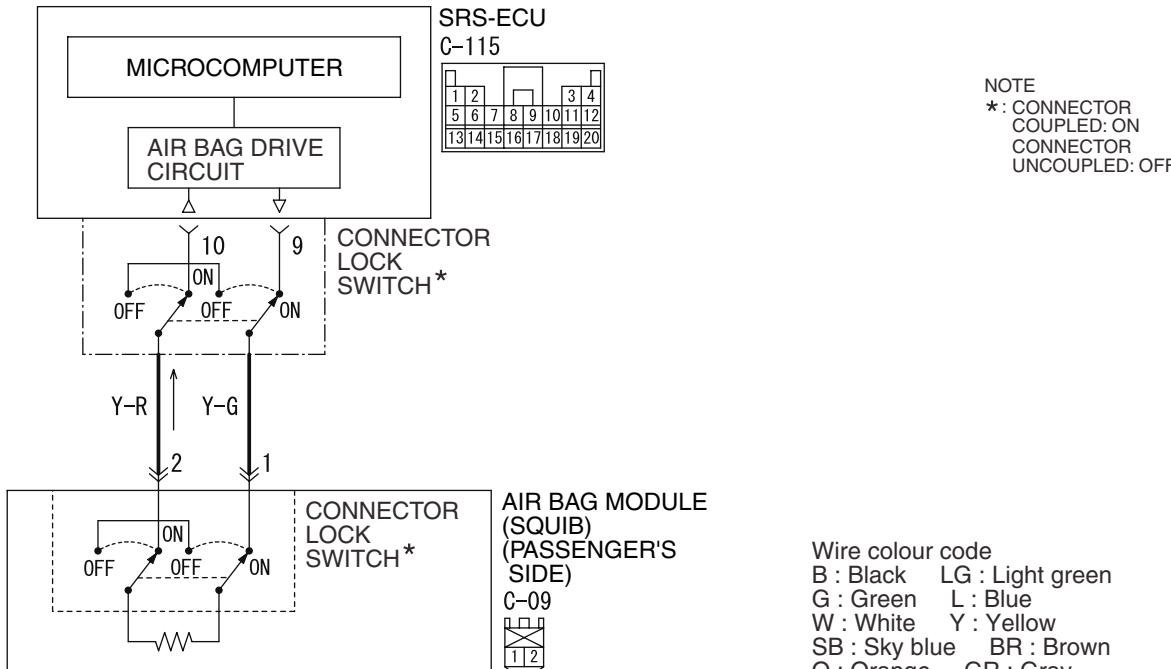
STEP 4. Recheck the diagnosis code.**Q: Is diagnosis code 62 set?**

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.64: Passenger's (front) air bag module (squib) system (short-circuited to the power supply)

Passenger's (Front) Air Bag Module (Squib) Circuit



AC301794AB
W3Z02E05AA

OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safety G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the passenger's (front) air bag squib wire(s) are short-circuited to the power supply. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

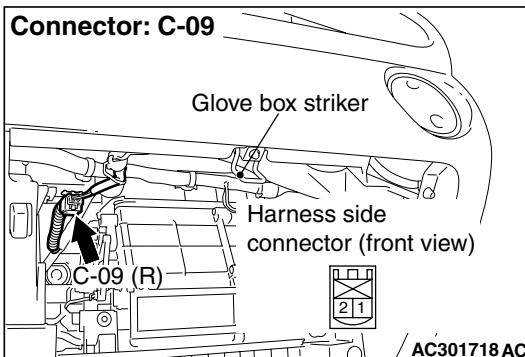
PROBABLE CAUSES

- Damaged harness wires and connectors
- Short to the power supply in the passenger's air bag module (squib) harness
- Malfunction of the SRS-ECU

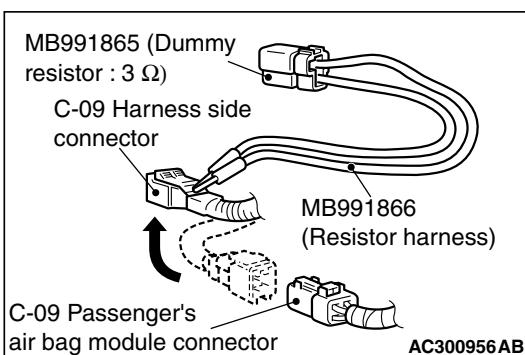
DIAGNOSIS PROCEDURE

STEP1. Check the passenger's air bag module.

- (1) Disconnect the negative battery terminal.



- (2) Unclip passenger's air bag module connector C-09.



- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

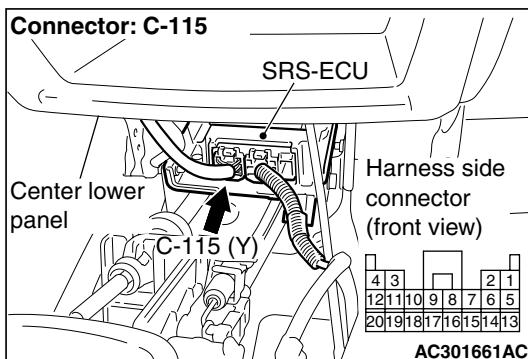
- (4) Disconnect the passenger's air bag module connector C-09, and insert special tool (MB991866) into the harness side connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 64 set?

YES : Go to Step 2.

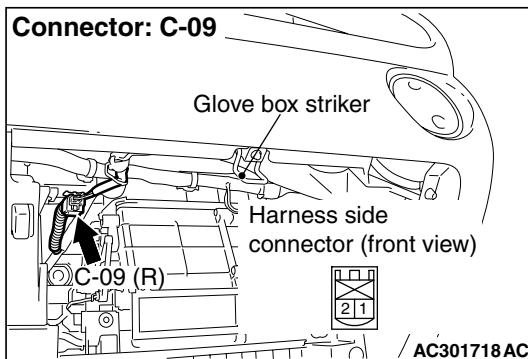
NO : Replace the passenger's air bag module (Refer to [P.52B-141](#)). Then go to Step 3.

STEP 2. Measure the voltage at the SRS-ECU connector C-115.



(1) Disconnect SRS-ECU connector C-115.

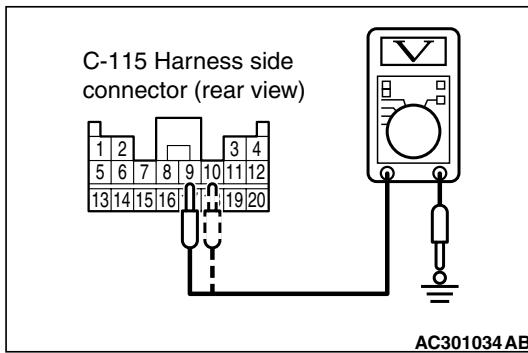
⚠ CAUTION



To prevents the air bag from deploying unintentionally, disconnect the passenger's air bag module connector C-09 to short the squib circuit.

(2) Disconnect the passenger's air bag module connector C-09.
(3) Turn the ignition switch to the "ON" position.

⚠ CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-115 harness side connector terminals 9, 10 and body earth.

OK: 0 V

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 64 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.9 and 10) and passenger's air bag module connector C-09 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

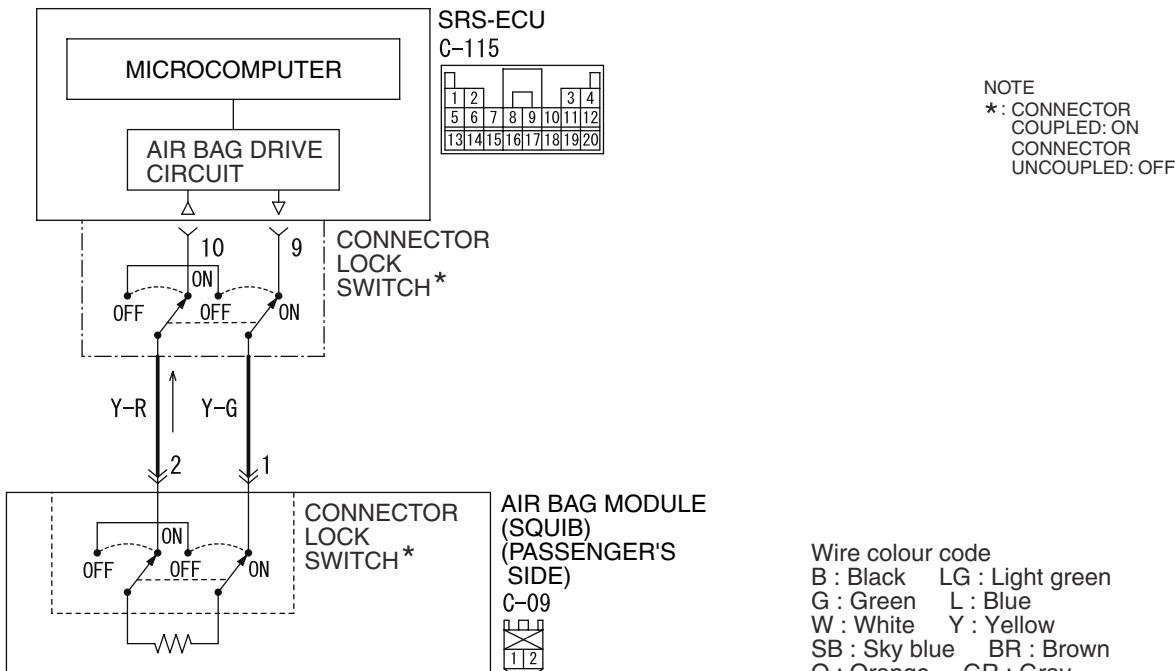
Q: Is diagnosis code 64 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.65: Passenger's (front) air bag module (squib) system (short-circuited to the earth)

Passenger's (Front) Air Bag Module (Squib) Circuit



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the SRS air bag will inflate.
- The ignition signal is input to the air bag module via the clock spring to inflate the air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the passenger's (front) air bag squib wire(s) are short-circuited to the earth. However, if no diagnosis code resets, the SRS warning lamp will be switched off (diagnosis code will be retained).

PROBABLE CAUSES

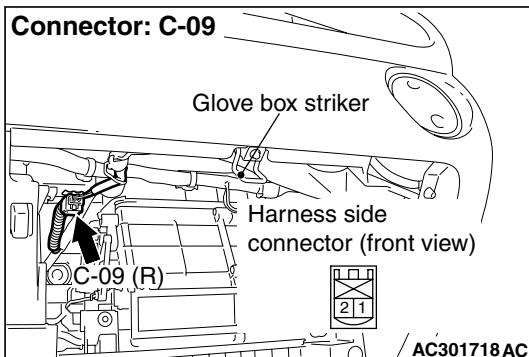
- Damaged harness wires and connectors
- Short to the earth in the passenger's air bag module (squib) harness
- Malfunction of the SRS-ECU

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W3Z02E05AA

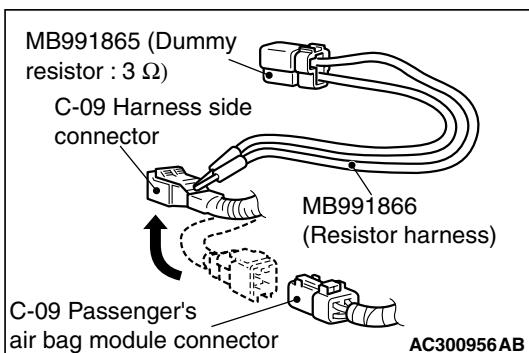
DIAGNOSIS PROCEDURE

STEP 1. Check the passenger's air bag module.

(1) Disconnect the negative battery terminal.



(2) Unclip passenger's air bag module connector C-09.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

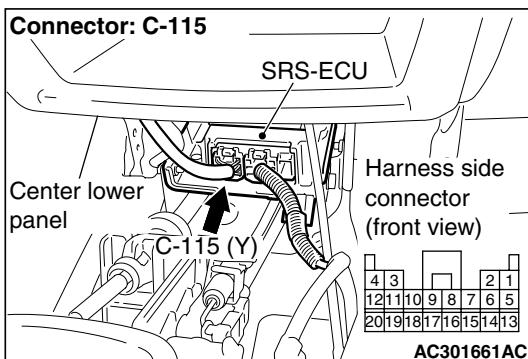
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Disconnect the passenger's air bag module connector C-106, and insert special tool (MB991866) into the harness side connector by backprobing.
(5) Connect the negative battery terminal.
(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 65 set?

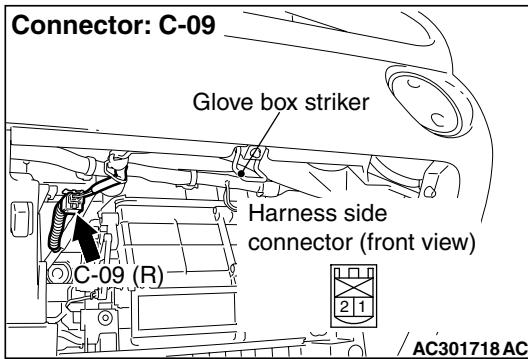
YES : Go to Step 2.

NO : Replace the passenger's air bag module (Refer to [P.52B-141](#)). Then go to Step 3.

STEP 2. Measure the resistance at the SRS-ECU connector C-115.

(1) Disconnect SRS-ECU connector C-115.

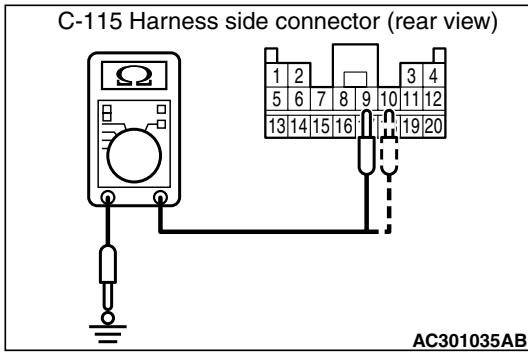
⚠ CAUTION



To prevents the air bag from deploying unintentionally, disconnect the passenger's air bag module connector C-09 to short the squib circuit.

(2) Unclip passenger's air bag module connector C-09.

⚠ CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between C-115 harness side connector terminals 9, 10 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 65 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-115 (terminal No.9 and 10) and passenger's air bag module connector C-09 (terminal No.1 and 2). Then go to Step 3.

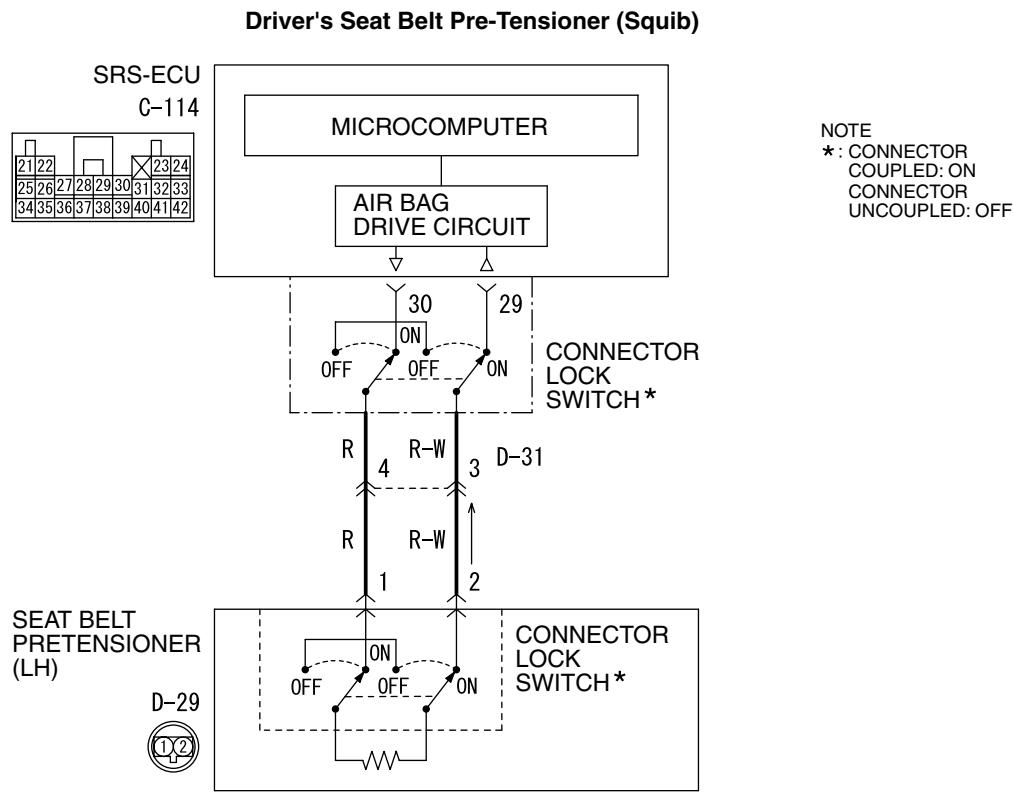
STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 65 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.66: Driver's seat belt pre-tensioner (squib) system (short-circuited to the power supply)



OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the driver's seat belt pre-tensioner wire(s) are short-circuited to the power supply.

PROBABLE CAUSES

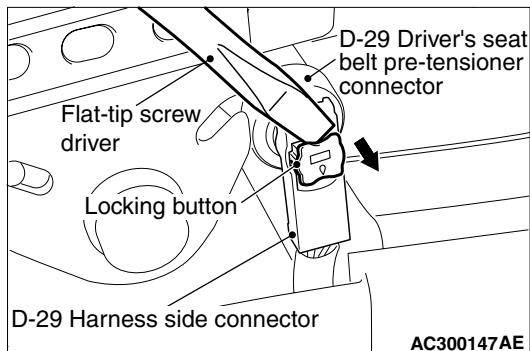
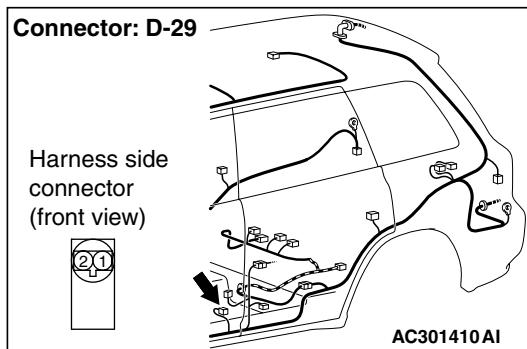
- Damaged wiring harnesses or connectors
- Short to the power supply in the driver's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

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W3Z02E00AA

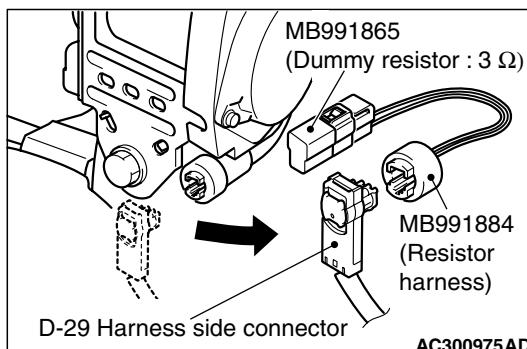
DIAGNOSIS PROCEDURE

STEP 1. Check the driver's seat belt pre-tensioner.

(1) Disconnect the negative battery terminal.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



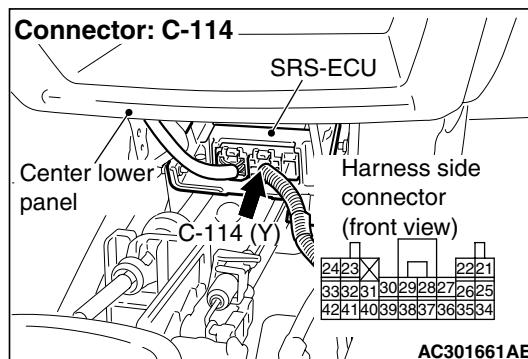
(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
 (4) Connect special tool (MB991884) to the D-29 harness side connector.
 (5) Connect the negative battery terminal.
 (6) Erase diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 66 set?

YES : Go to Step 2.

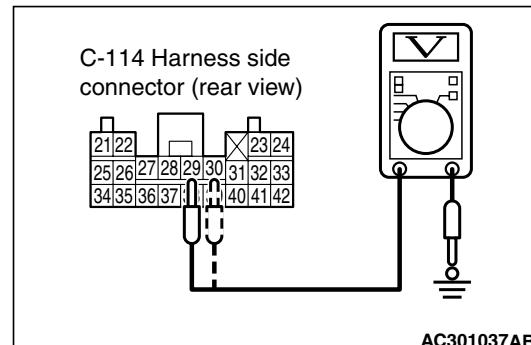
NO : Replace the driver's seat belt pre-tensioner (Refer to [P.52B-148](#)). Then go to Step 4.

STEP 2. Measure the voltage at the SRS-ECU connector C-114.



(1) Disconnect SRS-ECU connector C-114.
 (2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.
 (3) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-114 harness side connector terminals 29, 30 and body earth.

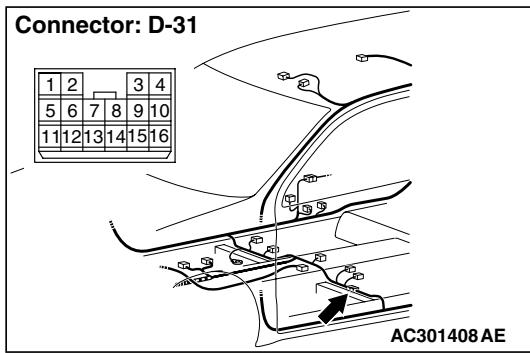
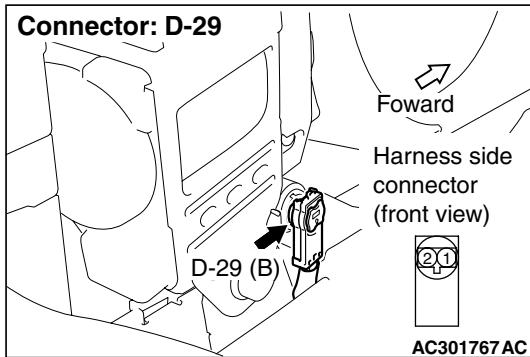
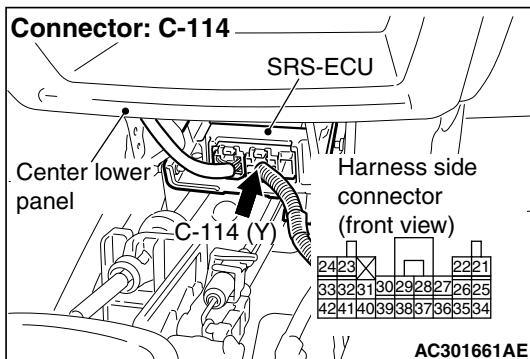
OK: 0 V

Q: Is the measured voltage within the specified range?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 65 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 4 .

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-114, driver's seat belt pre-tensioner connector D-29 and intermediate connector D-31.



Q: Is the check result normal?

YES : Check the harness wires for short circuit to power supply between SRS-ECU connector C-114 (terminal No.1 and 2) and driver's seat belt pre-tensioner connector D-29 (terminal No.29 and 30), and repair if necessary. Then go to Step 4.

NO : Repair or replace it. Then go to Step 4.

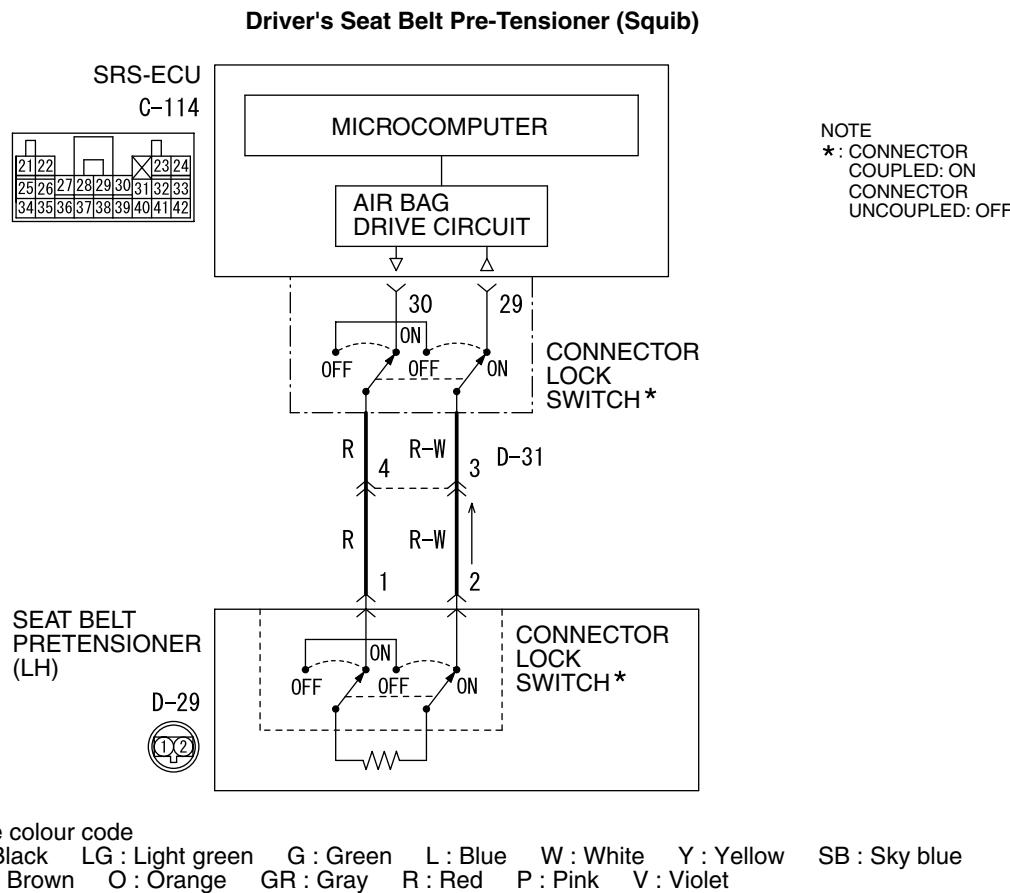
STEP 4. Recheck the diagnosis code.

Q: Is diagnosis code 66 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.67: Driver's seat belt pre-tensioner (squib) system (short-circuited to the earth)

**OPERATION**

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the driver's seat belt pre-tensioner wire(s) are short-circuited to the earth.

PROBABLE CAUSES

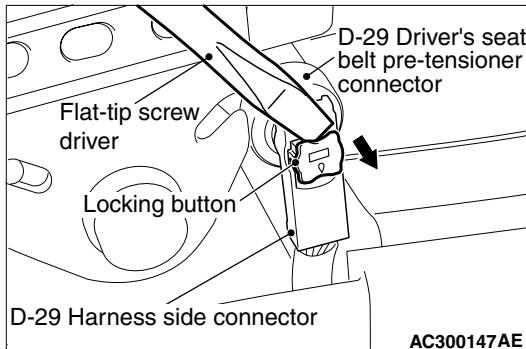
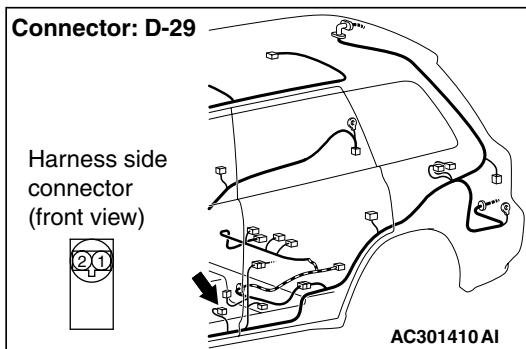
- Damaged wiring harnesses or connectors
- Short to the earth in the driver's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

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W3Z02E00AA

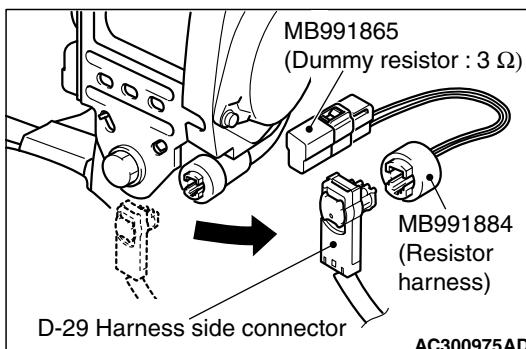
DIAGNOSIS PROCEDURE

STEP 1. Check the driver's seat belt pre-tensioner.

(1) Disconnect the negative battery terminal.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



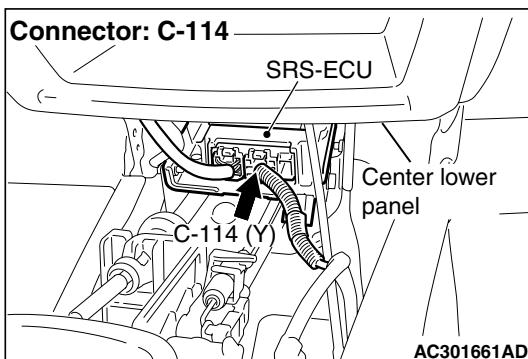
(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
(4) Connect special tool (MB991884) to the D-29 harness side connector.
(5) Connect the negative battery terminal.
(6) Erase diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 67 set?

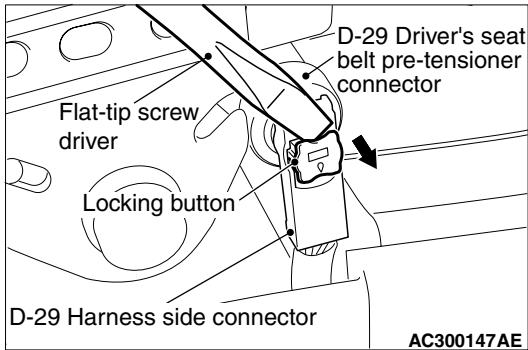
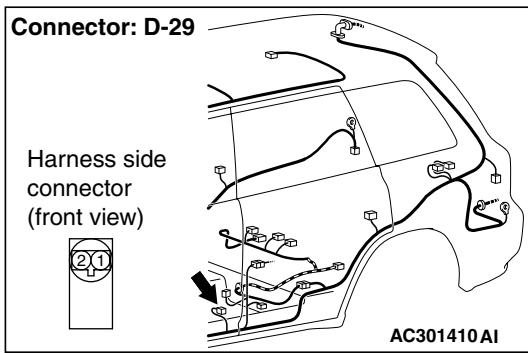
YES : Go to Step 2.

NO : Replace the driver's seat belt pre-tensioner (Refer to P.52B-148). Then go to Step 4.

STEP 2. Measure the resistance at the SRS-ECU connector C-114.

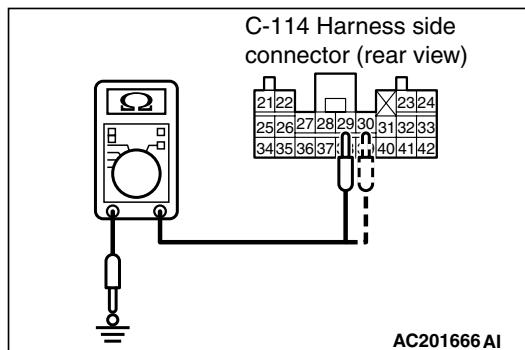


(1) Disconnect SRS-ECU connector C-114.



(2) Disconnect driver's seat belt pre-tensioner connector D-29. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between C-114 harness side connector terminals 29, 30 and body earth.

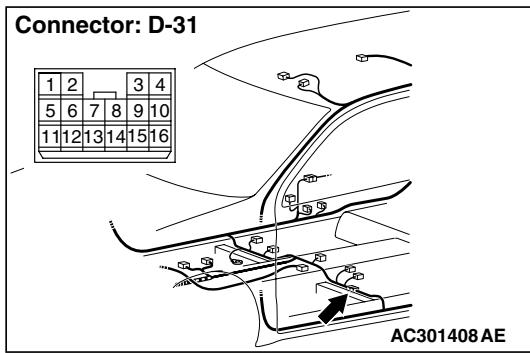
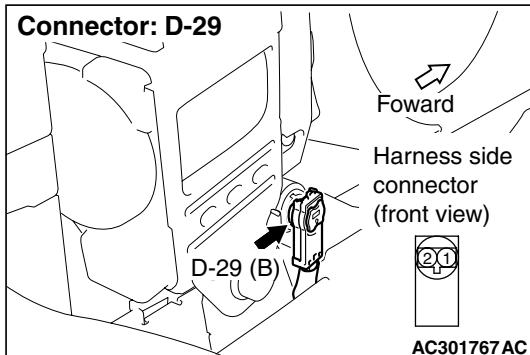
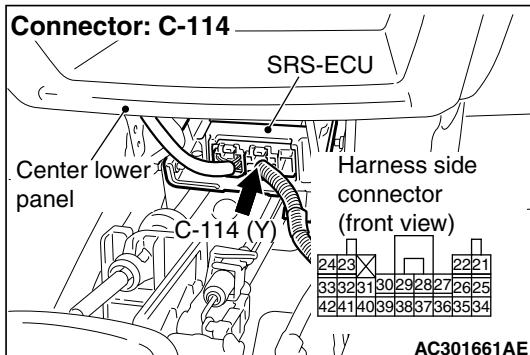
OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 67 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 4 .

NO : Go to Step 3.

STEP 3. Connector check: SRS-ECU connector C-114, driver's seat belt pre-tensioner connector D-29



Q: Is the check result normal?

YES : Check the harness wires for short circuit to the earth between SRS-ECU connector C-114 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector D-29 (terminal No.1 and 2), and repair if necessary. Then go to Step 4.

NO : Repair or replace it. Then go to Step 4 .

STEP 4. Recheck the diagnosis code.

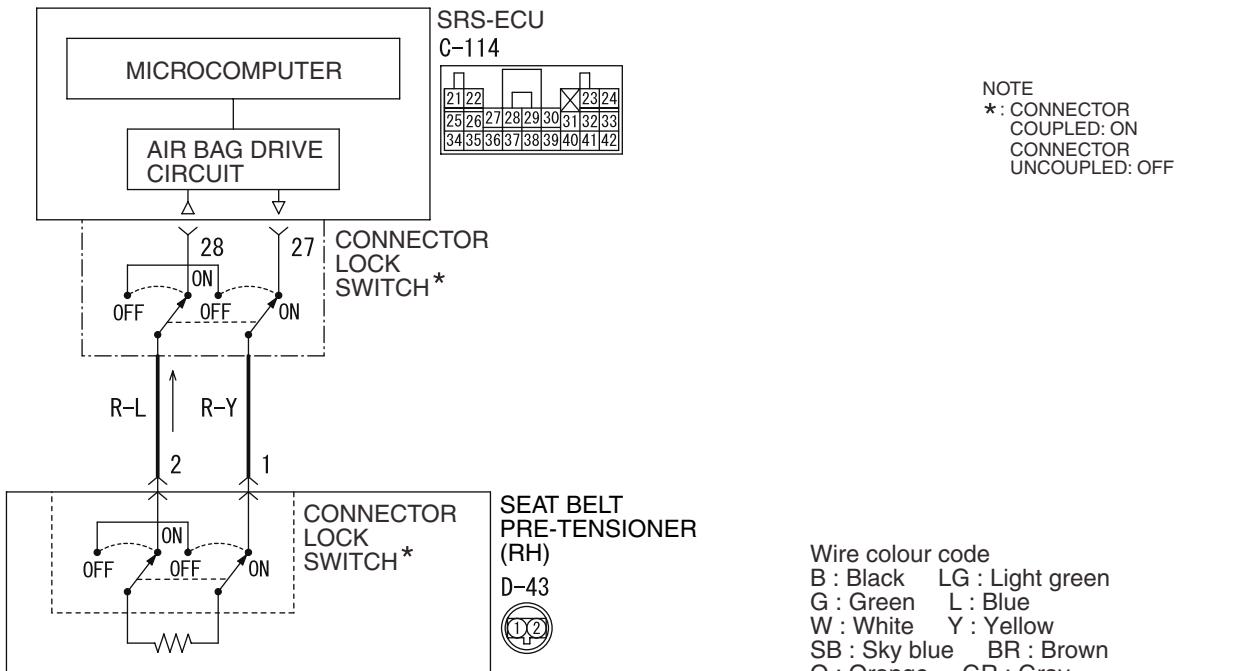
Q: Is diagnosis code 67 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.68: Passenger's (front) seat belt pre-tensioner (squib) system (short-circuited to the power supply)

Passenger's (Front) Seat Belt Pre-tensioner (Squib)



OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if passenger's (front) seat belt pre-tensioner wire(s) are short-circuited to the power supply.

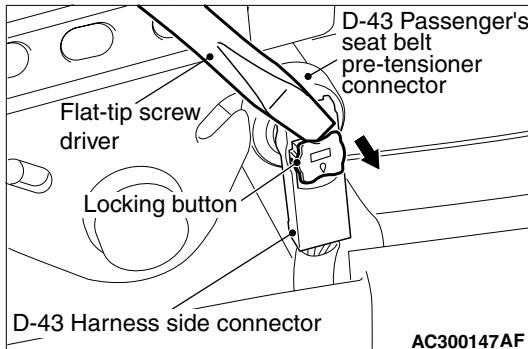
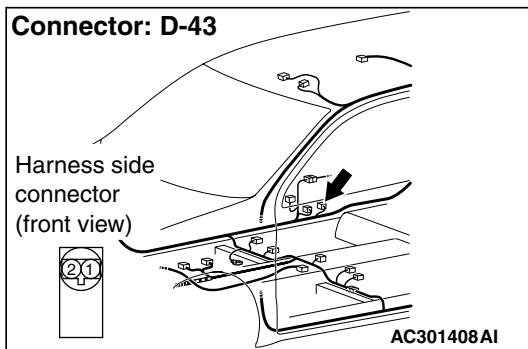
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Short to the power supply in the passenger's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

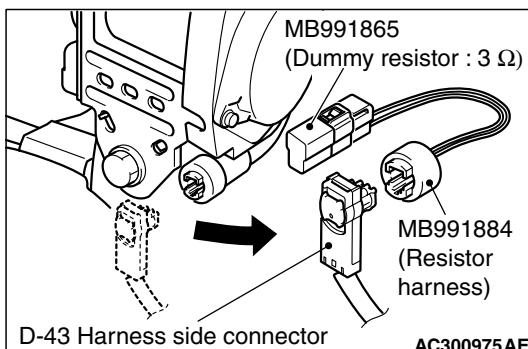
DIAGNOSIS PROCEDURE

STEP 1. Check the passenger's seat belt pre-tensioner.

- (1) Disconnect the negative battery terminal.



- (2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



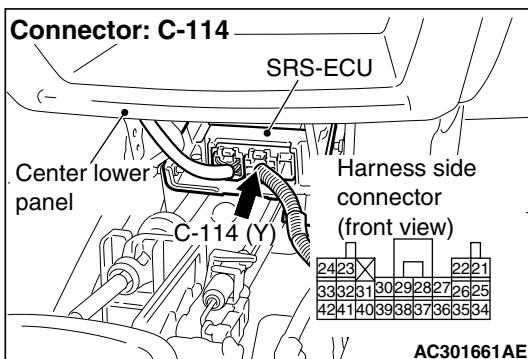
- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
- (4) Connect special tool (MB991884) to the D-43 harness side connector.
- (5) Connect the negative battery terminal.
- (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 68 set?

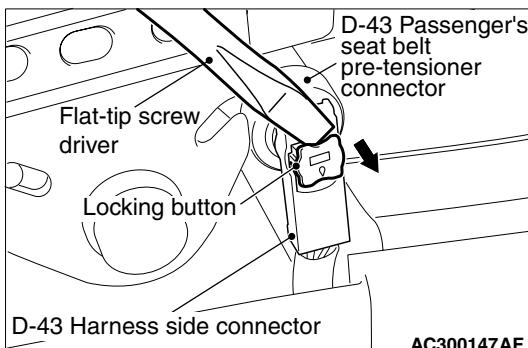
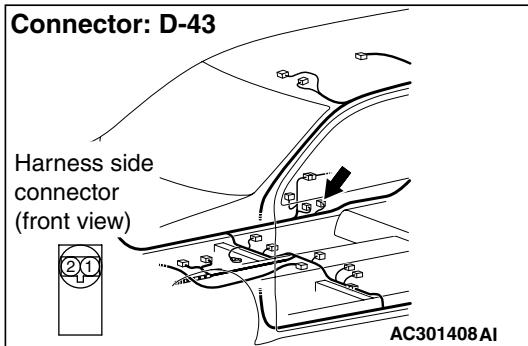
YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner (Refer to P.52B-148). Then go to Step 3.

STEP 2. Measure the voltage at the SRS-ECU connector C-114.



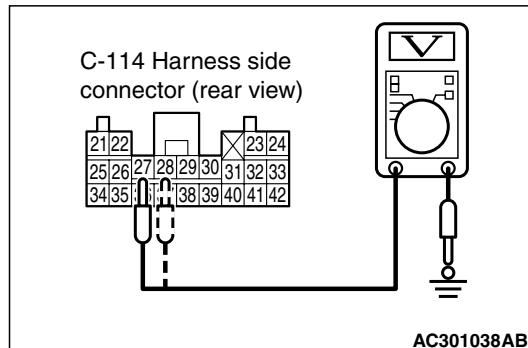
(1) Disconnect SRS-ECU connector C-114.



(2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

(3) Turn the ignition switch to the "ON" position,

⚠ CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-114 harness side connector terminals 27, 28 and body earth.

OK: 0 V

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 68 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-43 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

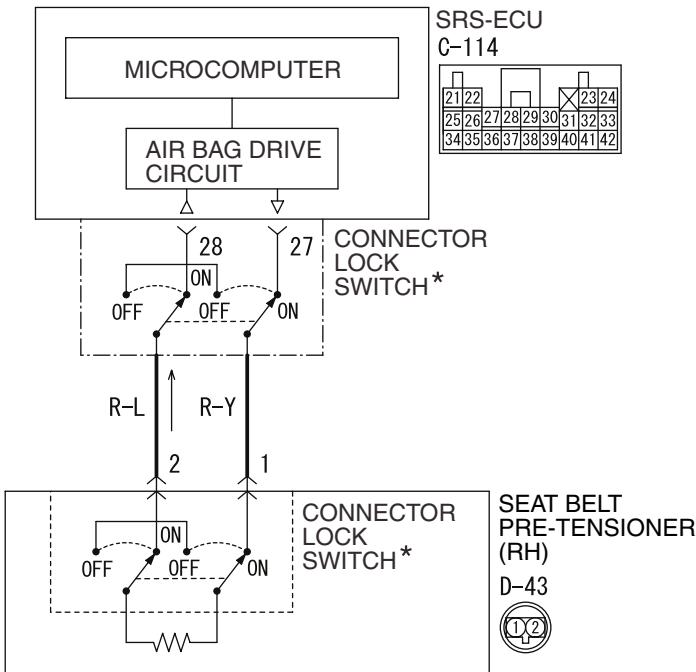
Q: Is diagnosis code 68 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.69: Passenger's (front) seat belt pre-tensioner (squib) system (short-circuited to the earth)

Passenger's (Front) Seat Belt Pre-tensioner (Squib)



NOTE
*: CONNECTOR
COUPLED: ON
CONNECTOR
UNCOPLED: OFF

Wire colour code
B : Black LG : Light green
G : Green L : Blue
W : White Y : Yellow
SB : Sky blue BR : Brown
O : Orange GR : Gray
R : Red P : Pink V : Violet

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OPERATION

The SRS-ECU judges how severe a collision is by detecting signals from the front impact sensors and the front air bag analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the front air bag safing G-sensor is on, the pre-tensioner will deploy.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if passenger's (front) seat belt pre-tensioner wire(s) are short-circuited to the earth.

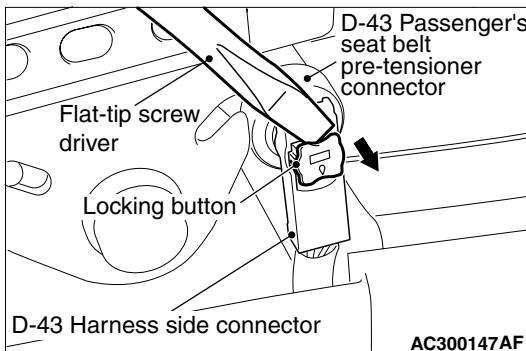
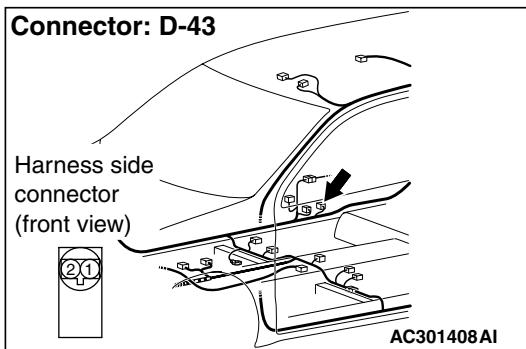
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Short to the earth in the passenger's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

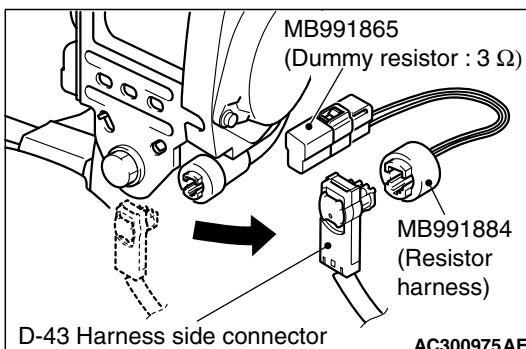
DIAGNOSIS PROCEDURE

STEP 1. Check the passenger's seat belt pre-tensioner.

- Disconnect the negative battery terminal.



- Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.



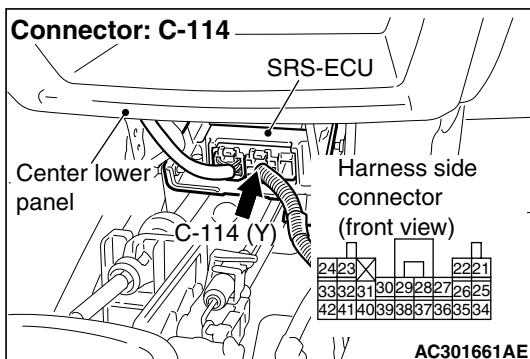
- Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991884).
- Connect special tool (MB991884) to the D-43 harness side connector.
- Connect the negative battery terminal.
- Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 69 set?

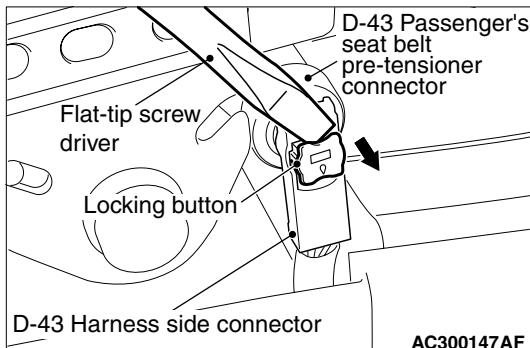
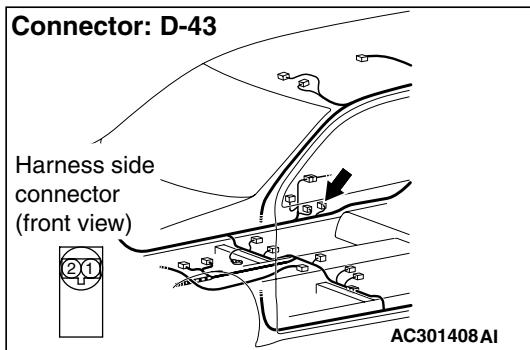
YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52B-148). Then go to Step 3.

STEP 2. Measure the resistance at the SRS-ECU connector C-114.

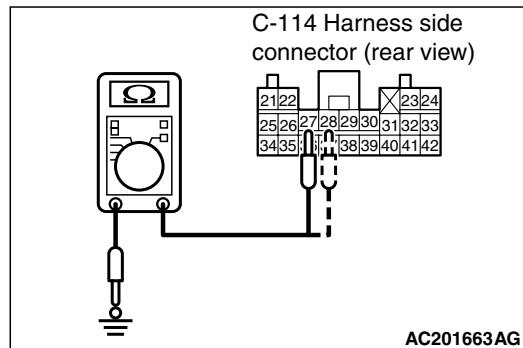


(1) Disconnect SRS-ECU connector C-114.



(2) Disconnect passenger's seat belt pre-tensioner connector D-43. Use a flat-tipped screwdriver to pull out the locking button at the harness side connector, and then disconnect the connector.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between C-114 harness side connector terminals 27, 28 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 69 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector D-43 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

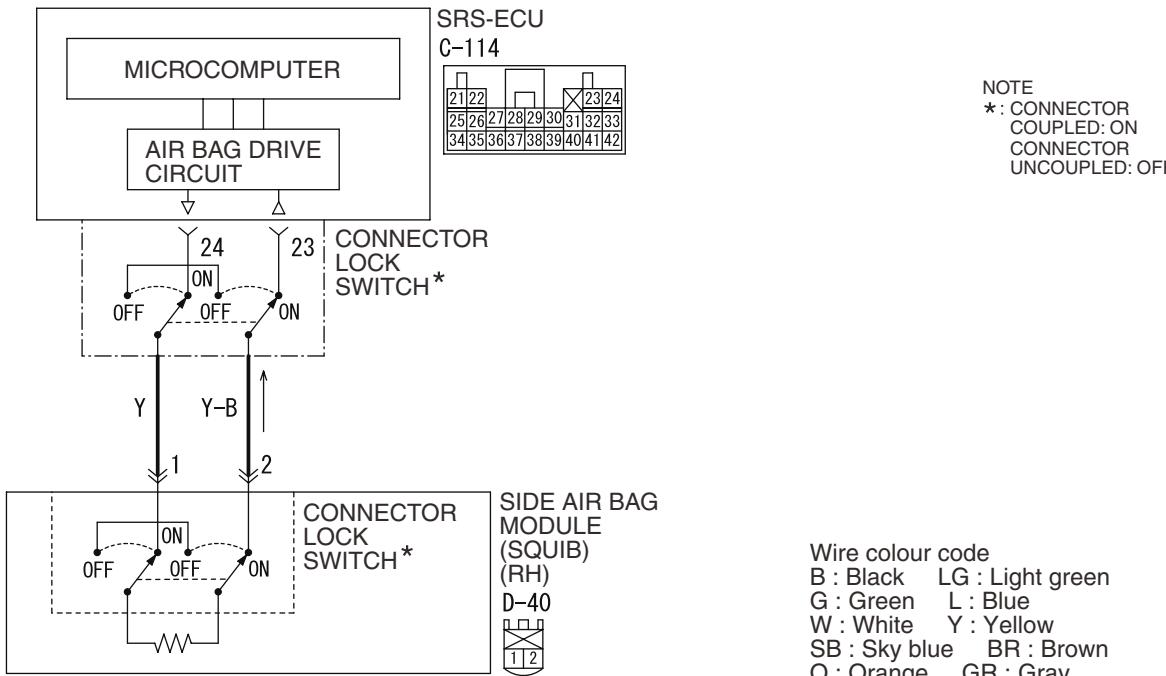
Q: Is diagnosis code 69 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.71: Side air bag module (squib) (RH) system (short-circuited between terminals of the squib circuit)

Side Air Bag Module (RH) (Squib) Circuit



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one side air bag squib (RH) wire shorted to the other.

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short between the side air bag module (RH) (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

*NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). Therefore, if connector C-114 or D-40 is damaged or improperly engaged, the short spring may not be released when the connector is connected.*

DIAGNOSIS PROCEDURE

STEP 1. Check the diagnosis code.

⚠ CAUTION

To prevent damage to MUT-II, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting MUT-II.

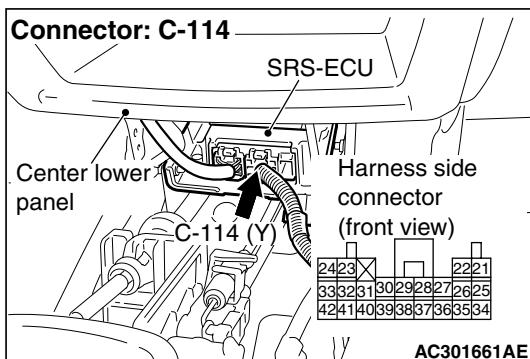
- Turn the ignition switch to the "ON" position.
- Check if the diagnosis code is set.
- Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-114



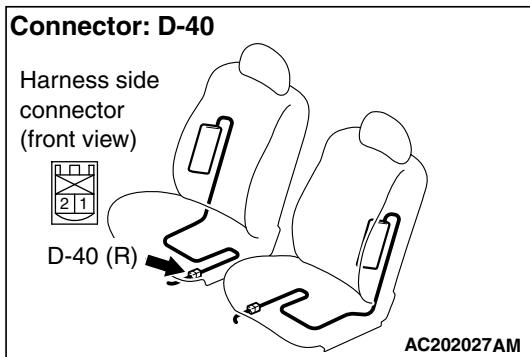
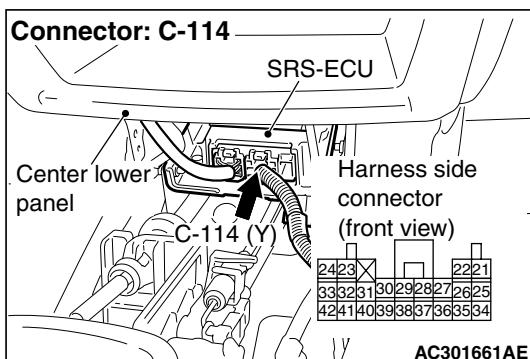
Q: Is the connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 6.

STEP 3. Connector check: SRS-ECU connector C-114 and side air bag module (RH) connector D-40

(1) Disconnect the negative battery terminal.



(2) Disconnect connectors C-114 and D-40, and then reconnect them.

(3) Connect the negative battery terminal.

(4) Erase the diagnosis code memory, and check the diagnosis code.

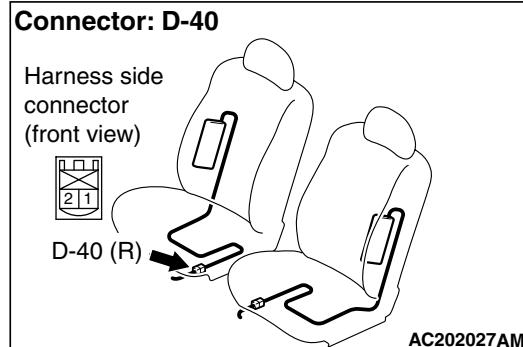
Q: Is diagnosis code 71 out put?

YES : Go to Step 4.

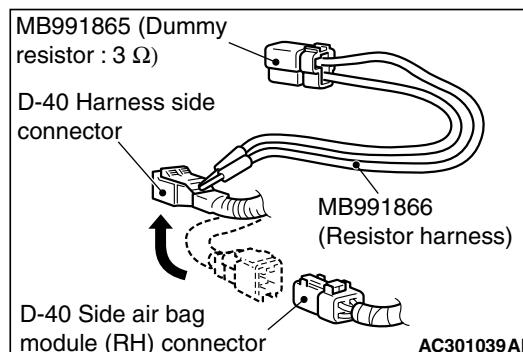
NO : The procedure is complete. It is assumed that diagnosis code 71 set as connector C-114 or D-40 was engaged improperly.

STEP 4. Check the side air bag module (RH).

(1) Disconnect the negative battery terminal.



(2) Disconnect the side air bag module (RH) connector D-40.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into the D-40 harness side connector by backprobing.

(5) Connect the negative battery terminal.

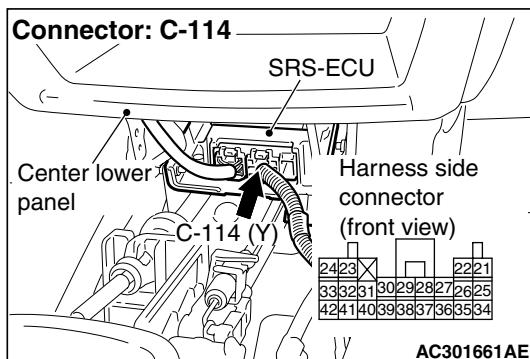
(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 71 set?

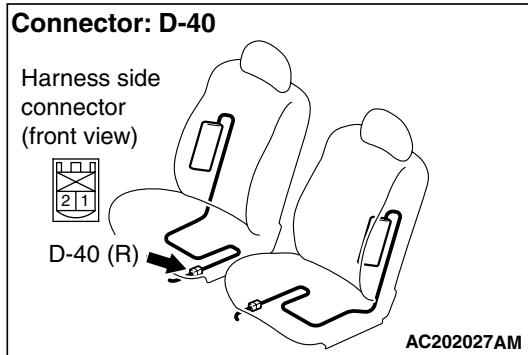
YES : Go to Step 5.

NO : Replace the seat back assembly of the front seat (RH) (Refer to GROUP 52A – Front Seat P.52A-24). Then go to Step 6.

STEP 5. Measure the resistance at the SRS-ECU connector C-114.

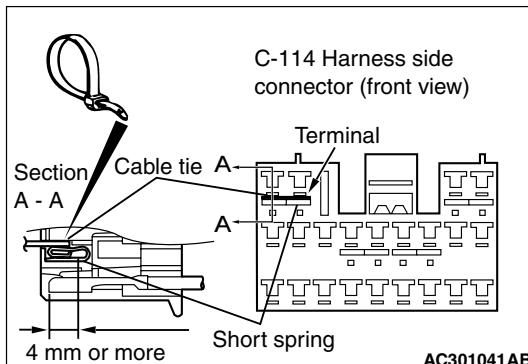


(1) Disconnect SRS-ECU connector C-114.

⚠ DANGER


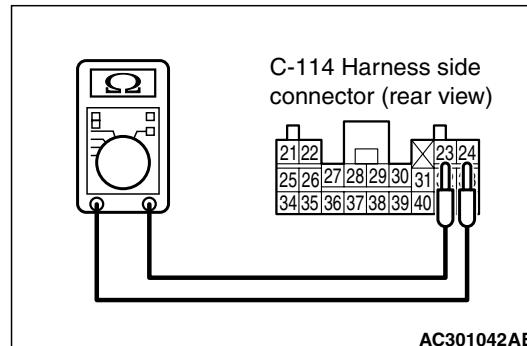
To prevents the air bag from deploying unintentionally, disconnect the side air bag module (RH) connector D-40 to short the squib circuit.

(2) Disconnect side air bag module connector D-40.

⚠ CAUTION


Insert an insulator such as a cable tie to a depth of 4mm or more, otherwise the short spring will not be released.

- (3) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 23, 24 and the short spring to release the short spring.
- (4) Measure at the wiring harness side.

⚠ CAUTION


Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Measure the resistance between C-114 harness side connector terminals 23 and 24.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 71 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 6.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.23 and 24) and side air bag module (RH) connector D-40 (terminal No.1 and 2). Then go to Step 6.

STEP 6. Recheck the diagnosis code.

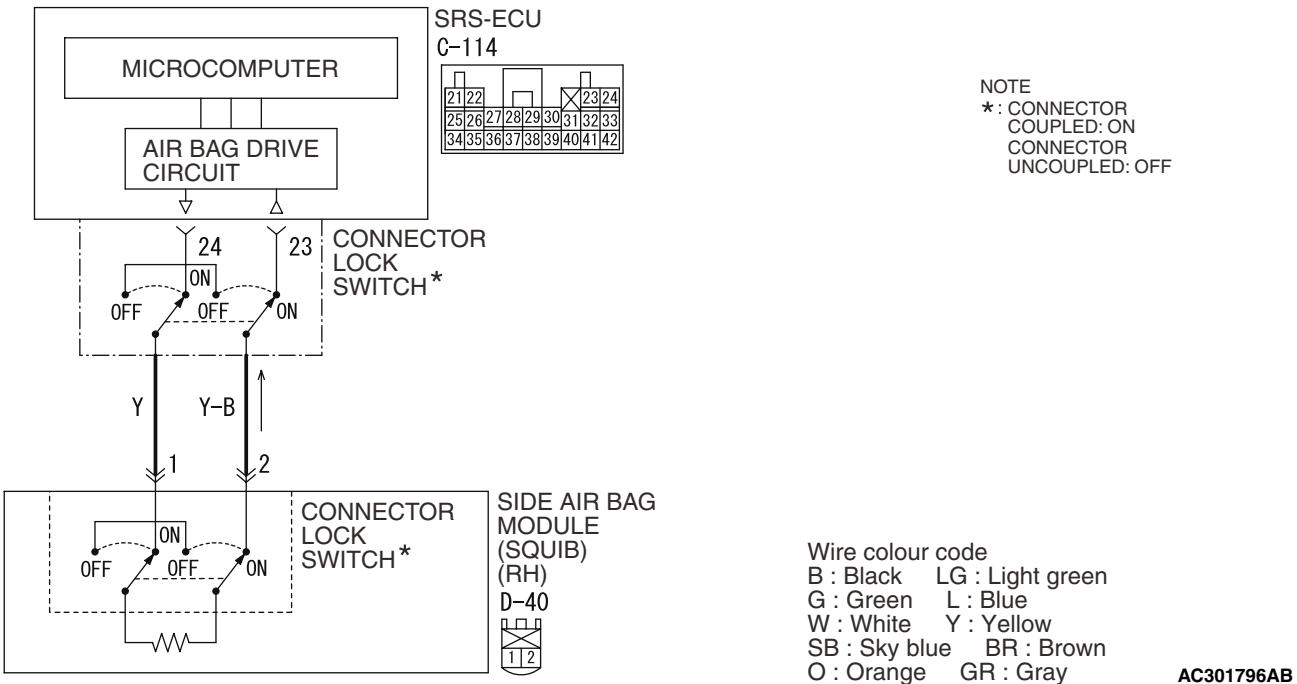
Q: Is diagnosis code 71 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.72: Side air bag module (squib) (RH) system (open-circuited in the squib circuit)

Side Air Bag Module (RH) (Squib) Circuit



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (RH) wire(s) are open-circuited.

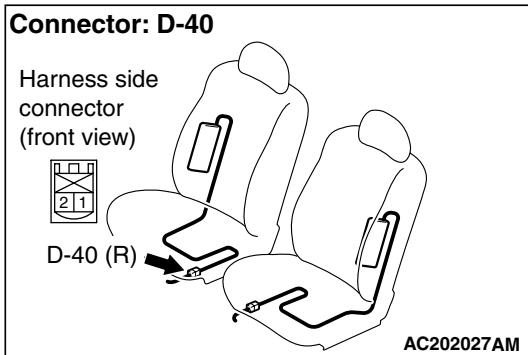
PROBABLE CAUSES

- Open circuit in the side air bag module (RH) (squib) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

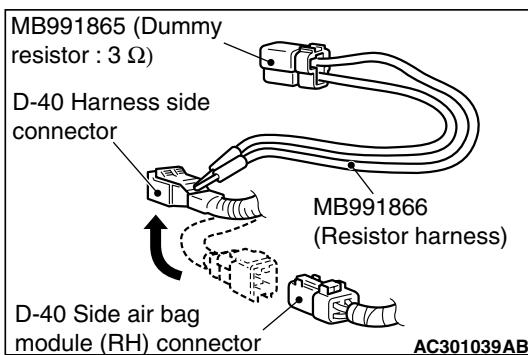
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (RH).

- (1) Disconnect the negative battery terminal.



- (2) Disconnect the side air bag module (RH) connector D-40.



- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

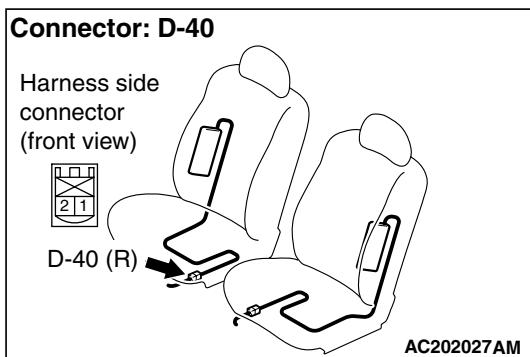
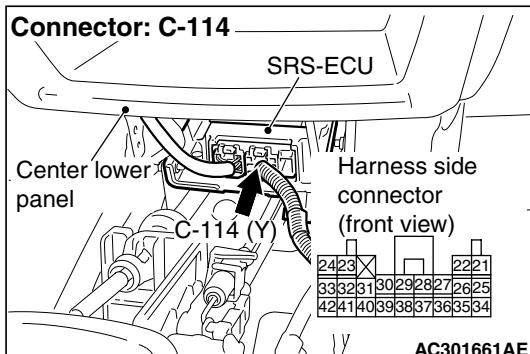
- (4) Insert special tool (MB991866) into the D-40 harness side connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 72 set?

YES : Go to Step 2.

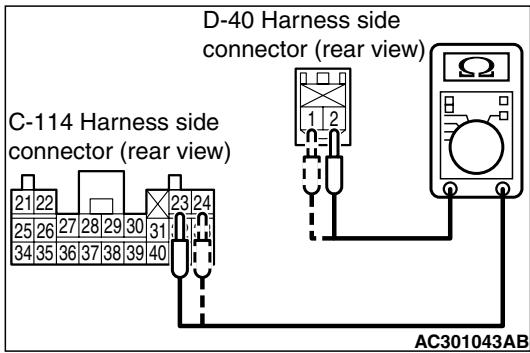
NO : Replace the seat back assembly of the front seat (RH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the resistance between SRS-ECU connector C-114 (terminal No.23 and 24) and the side air bag module (RH) connector D-40 (terminal No.1 and 2).



(1) Disconnect SRS-ECU connector C-114 and side air bag module (RH) connector D-40.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Measure the resistance between the following terminals.

- SRS-ECU connector C-114 terminal No.23 and the side air bag module (RH) connector D-40 terminal No.2
- SRS-ECU connector C-114 terminal No.24 and the side air bag module (RH) connector D-40 terminal No.1

OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 72 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.23 and 24) and side air bag module (RH) connector D-40 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

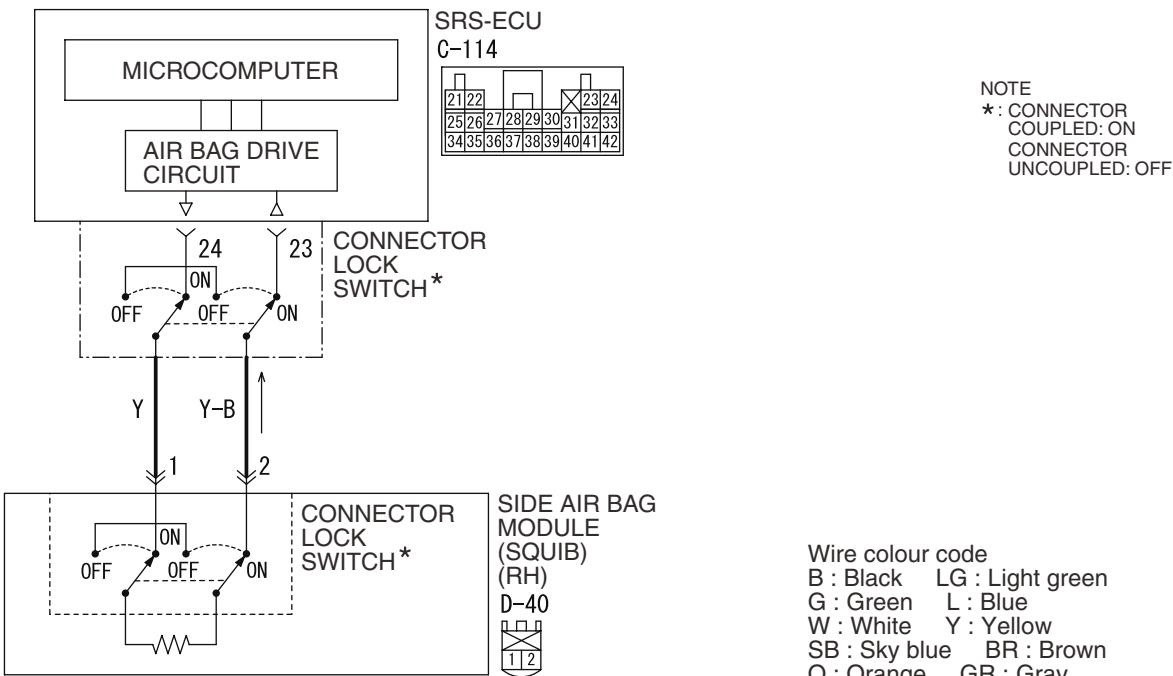
Q: Is diagnosis code 72 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.75: Side air bag module (squib) (RH) system (short-circuited to the power supply)

Side Air Bag Module (RH) (Squib) Circuit



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (RH) wire(s) are short-circuited to the power supply.

PROBABLE CAUSES

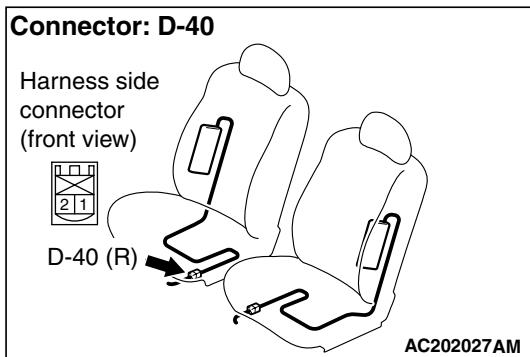
- Damaged wiring harnesses or connectors
- Short to the power supply in the side air bag module (RH) (squib) harness
- Malfunction of the SRS-ECU

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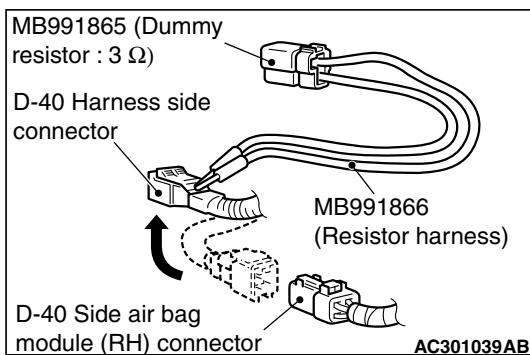
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (RH).

(1) Disconnect the negative battery terminal.



(2) Disconnect the side air bag module (RH) connector D-40.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

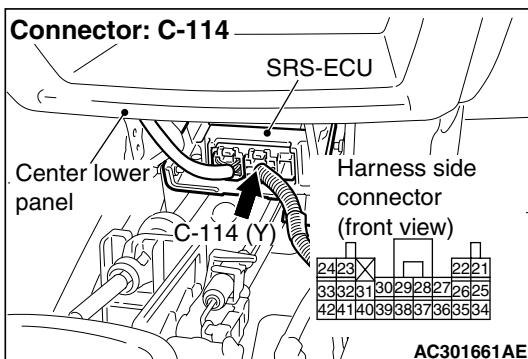
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into the D-40 harness side connector by backprobing.
(5) Connect the negative battery terminal.
(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 75 set?

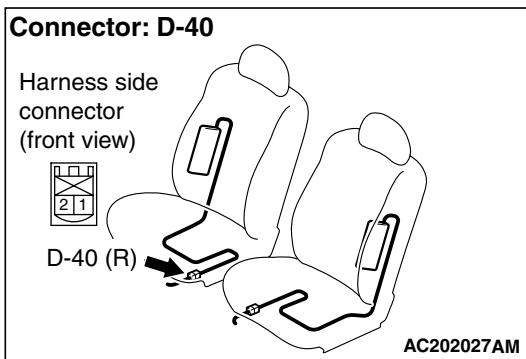
YES : Go to Step 2.

NO : Replace the seat back assembly of the front seat (RH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the voltage at the SRS-ECU connector C-114.

(1) Disconnect SRS-ECU connector C-114.

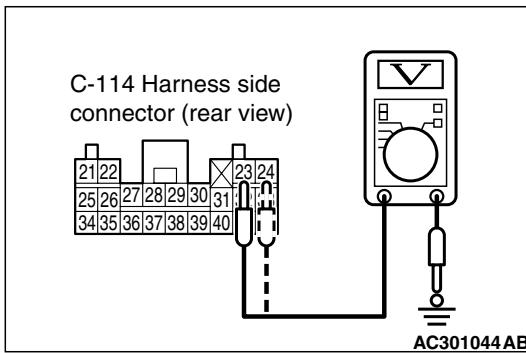
DANGER



To prevents the air bag from deploying unintentionally, disconnect the side air bag module (RH) connector D-40 to short the squib circuit.

(2) Disconnect side air bag module (RH) connector D-40.
 (3) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-114 harness side connector terminals 23 and 24 and body earth.

OK: 0 V

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 75 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.23 and 24) and side air bag module (RH) connector D-40 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

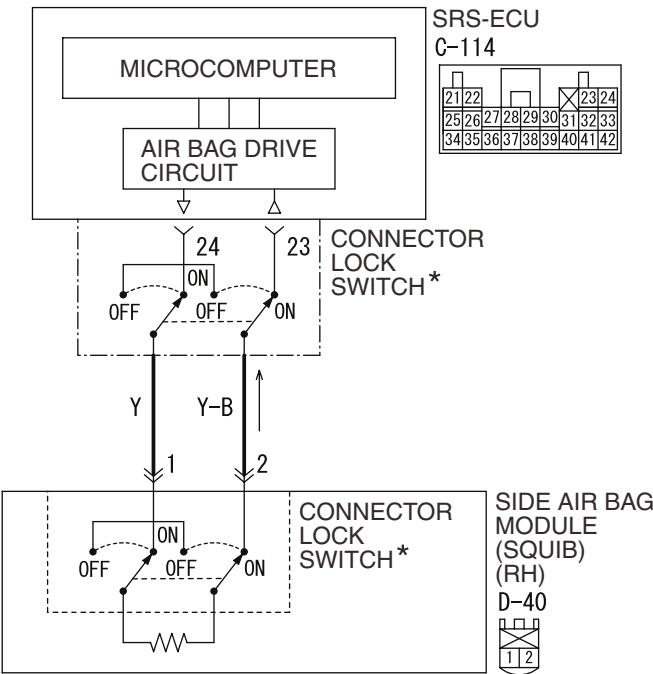
Q: Is diagnosis code 75 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.76: Side air bag module (squib) (RH) system (short-circuited to the earth)

Side Air Bag Module (RH) (Squib) Circuit



NOTE
*: CONNECTOR
COUPLED: ON
CONNECTOR
UNCOPLED: OFF

Wire colour code
B : Black LG : Light green
G : Green L : Blue
W : White Y : Yellow
SB : Sky blue BR : Brown
O : Orange GR : Gray
R : Red P : Pink V : Violet

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OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (RH) wire(s) are short-circuited to the earth.

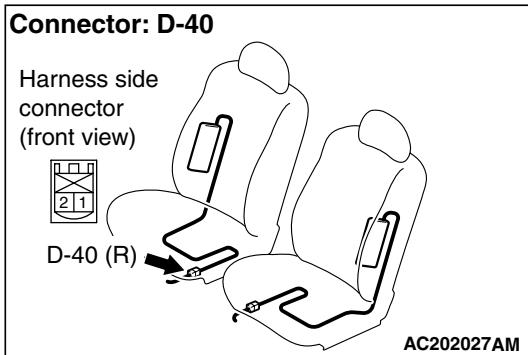
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Short to earth in the side air bag module (RH) (squib) harness
- Malfunction of the SRS-ECU

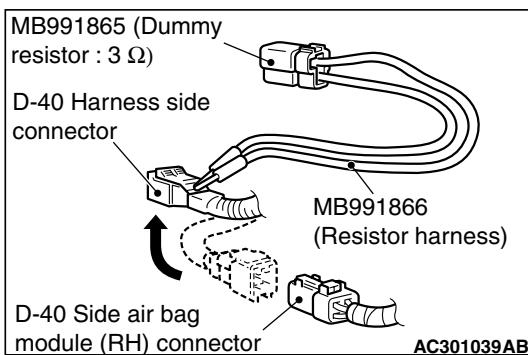
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (RH).

(1) Disconnect the negative battery terminal.



(2) Disconnect the side air bag module (RH) connector D-40.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

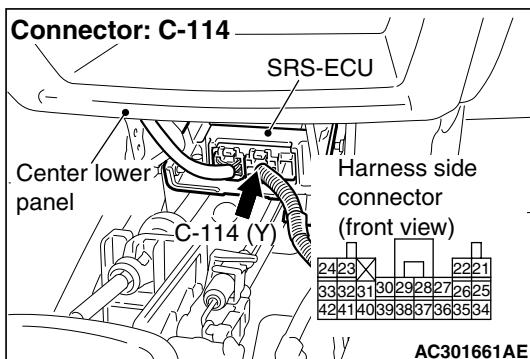
(4) Insert special tool (MB991866) into the D-40 harness side connector by backprobing.
(5) Connect the negative battery terminal.
(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 76 set?

YES : Go to Step 2.

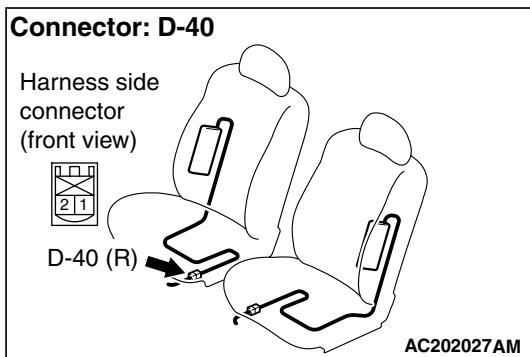
NO : Replace the seat back assembly of the front seat (RH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the resistance at the SRS-ECU connector C-114.



(1) Disconnect SRS-ECU connector C-114.

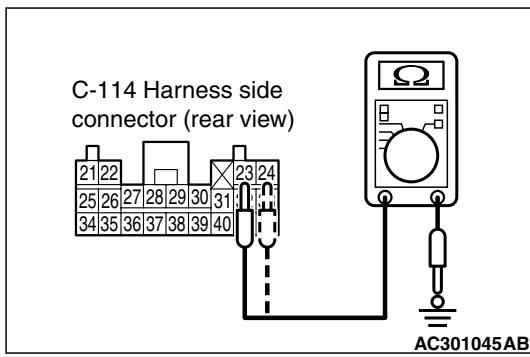
DANGER



To prevents the air bag from deploying unintentionally, disconnect the side air bag module (RH) connector D-40 to short the squib circuit.

(2) Disconnect side air bag module (RH) connector D-40.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between C-114 harness side connector terminals 23, 24 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 76 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.23 and 24) and side air bag module (RH) connector D-40 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 76 set?

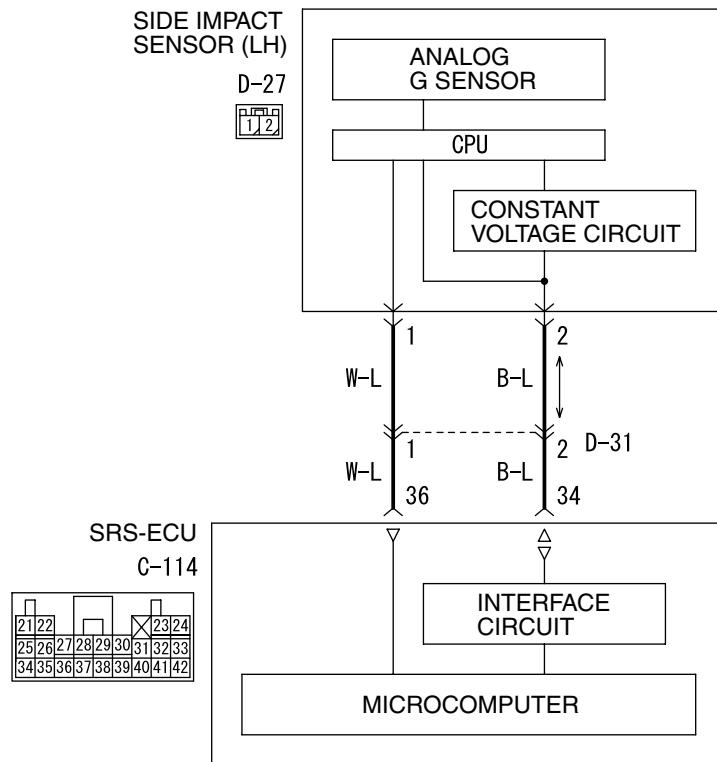
YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.79: Side impact sensor (LH) communication error

Code No.93: Side impact sensor (LH) communication impossible

Side Impact Sensor (LH) Power Supply Circuit



Wire colour code

B : Black	LG : Light green	G : Green	L : Blue	W : White	Y : Yellow	SB : Sky blue
BR : Brown	O : Orange	GR : Gray	R : Red	P : Pink	V : Violet	

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OPERATION

The side impact sensor includes an analog G sensor and CPU, etc. The CPU monitors the analog G sensor output signal. If the CPU judges that the side air bags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side air bags. Besides that, the CPU diagnoses the internal components of the side impact sensor. If a malfunction occurs, it requests the SRS-ECU to set a diagnosis code.

DIAGNOSIS CODE SET CONDITIONS

These diagnosis codes are set if communication between the side impact sensor (LH) and the SRS-ECU is not possible or communication is faulty.

PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the side impact sensor (LH)
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

STEP 1. Check the side impact sensor (LH).

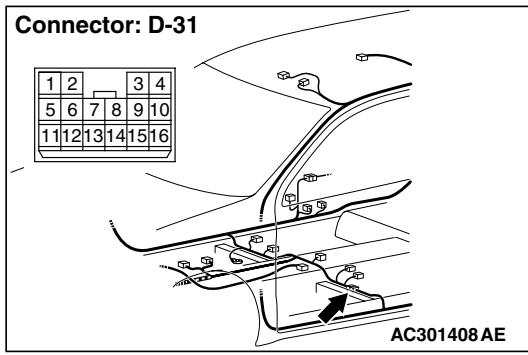
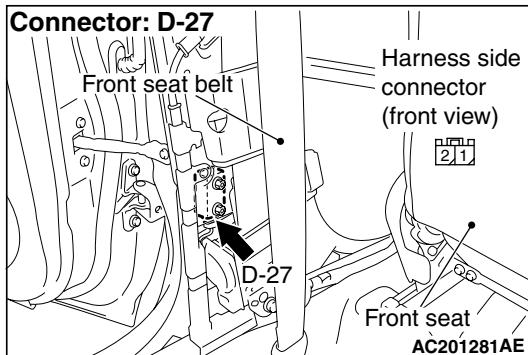
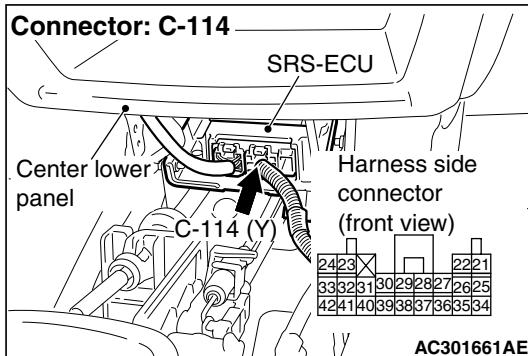
- (1) Disconnect the negative battery terminal.
- (2) Replace the side impact sensor (LH) with the side impact sensor (RH).
- (3) Connect the negative battery terminal.
- (4) Erase diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 89 or 96 set?

YES : Replace the side impact sensor (LH) with a new one (Refer to P.52B-147). Then go to Step 3.

NO : Go to Step 2.

STEP 2. Check the harness wires for open circuit or short circuit between SRS-ECU connector C-114 (terminal No.34 and 36) and side impact sensor (LH) connector D-27 (terminal No.1 and 2).



NOTE: After inspecting intermediate connector D-31 inspect the wiring harness. If the intermediate connector D-31 is damaged, repair or replace it. Then go to Step 3. If any harness wires between SRS-ECU connector C-114 and side impact sensor (LH) connector D-27 are damaged, repair or replace it.

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 79 or 93 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.34 and 36) and side impact sensor (LH) connector D-27 (terminal No.1 and 2). Then go to Step 3.

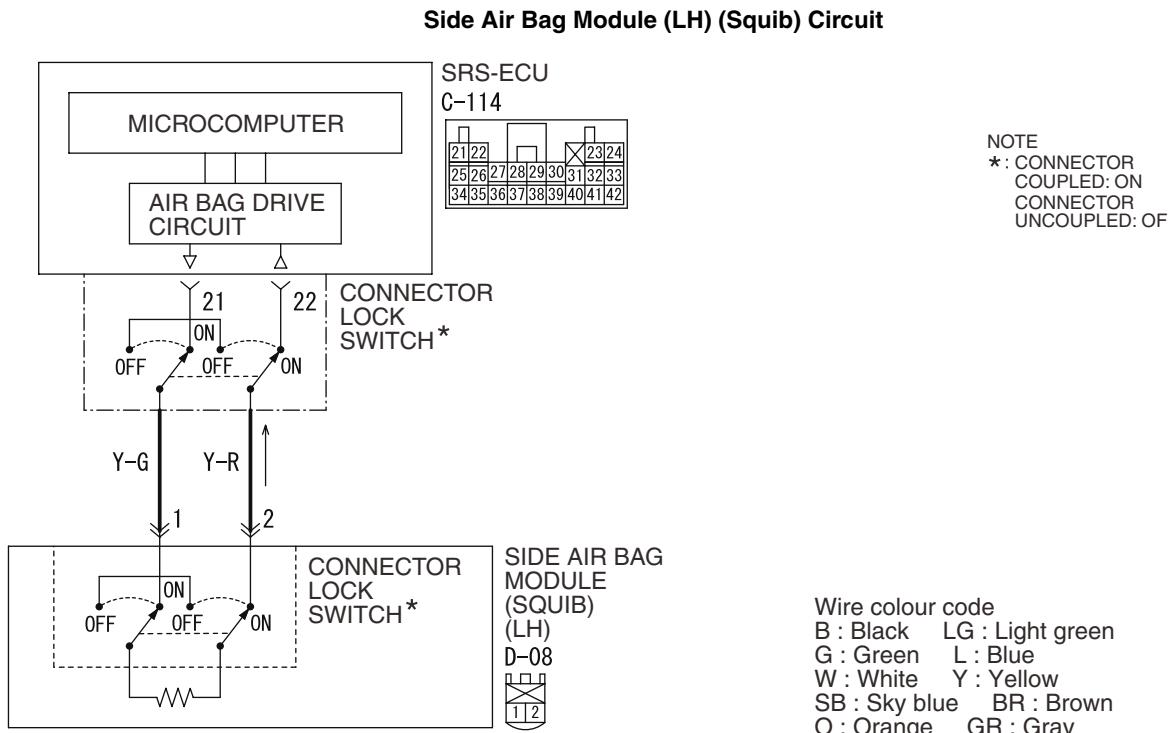
STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 79 or 93 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.81: Side air bag module (squib) (LH) system (short-circuited between terminals of the squib circuit)



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if one side air bag squib (LH) wire shorted to the other.

PROBABLE CAUSES

- Improper engaged connector or defective short spring*
- Short circuit between the side air bag module (LH) (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

*NOTE: *: The squib circuit connectors integrate a "short" spring (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the earth wire in the squib circuit when the connectors are disconnected). (Refer to P.52B-2). Therefore, if connector C-114 or D-08 is damaged or improperly engaged, the short spring may not be released when the connector is connected.*

DIAGNOSIS PROCEDURE

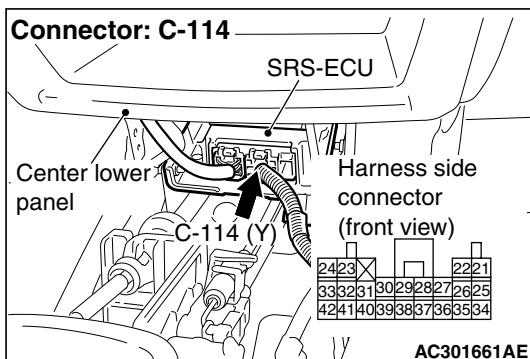
STEP 1. Check the diagnosis code.

Q: Is diagnosis code 34 set?

YES : Go to Step 2.

NO : Go to Step 3.

STEP 2. Connector check: SRS-ECU connector C-114



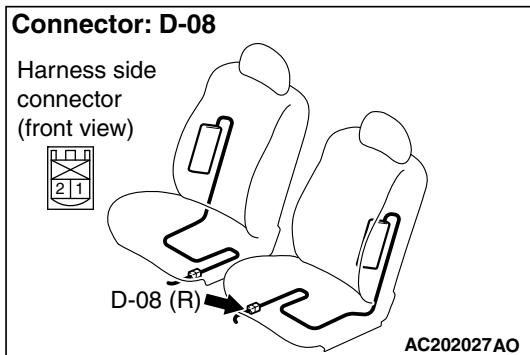
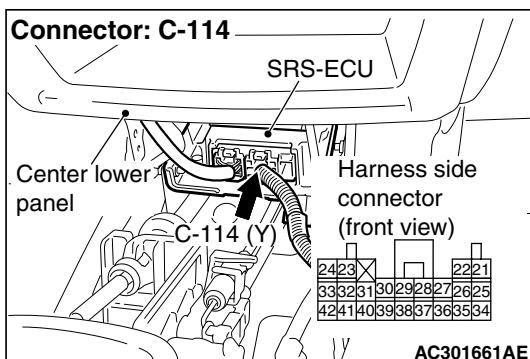
Q: Is the connector correctly engaged?

YES : Go to Step 3.

NO : Engage the connector correctly. Then go to Step 6.

STEP 3. Connector check: SRS-ECU connector C-114 and side air bag module (LH) connector D-08

(1) Disconnect the negative battery terminal.



(2) Disconnect connectors C-114 and D-08, and then reconnect them.

(3) Connect the negative battery terminal.

(4) Erase the diagnosis code memory, and check the diagnosis code.

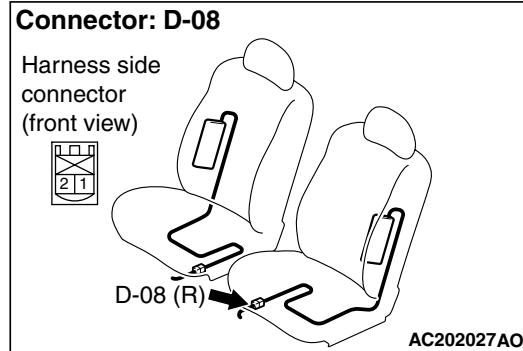
Q: Is diagnosis code 81 out put?

YES : Go to Step 4.

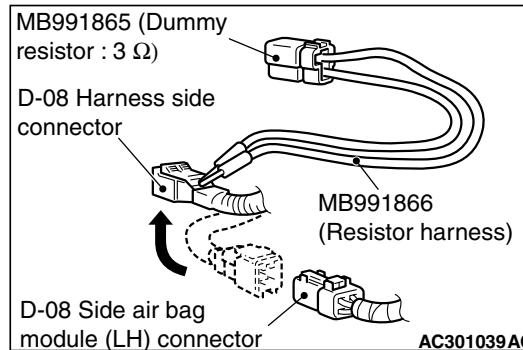
NO : The procedure is complete. It is assumed that diagnosis code 81 set as connector C-114 or D-08 was engaged improperly.

STEP 4. Check the side air bag module (LH).

(1) Disconnect the negative battery terminal.



(2) Disconnect the side air bag module (LH) connector D-08.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

⚠ CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into the D-08 harness side connector by backprobing.

(5) Connect the negative battery terminal.

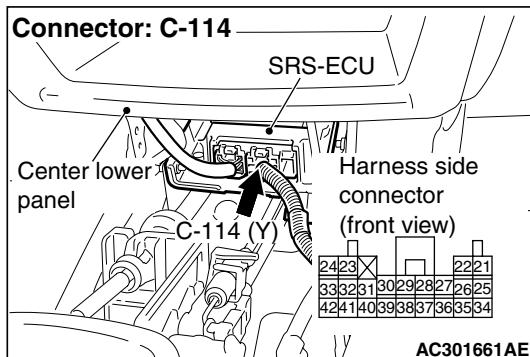
(6) Erase diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 81 set?

YES : Go to Step 5.

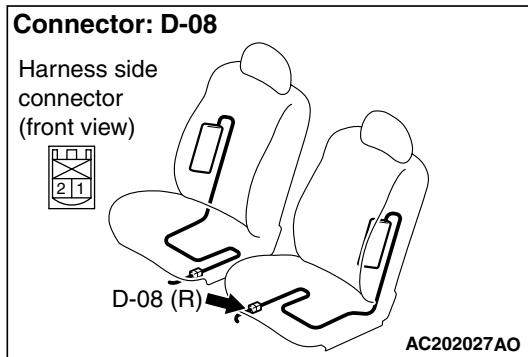
NO : Replace the seat back assembly of the front seat (LH) (Refer to GROUP 52A – Front Seat P.52A-24). Then go to Step 6.

STEP 5. Measure the resistance at the SRS-ECU connector C-114.



(1) Disconnect SRS-ECU connector C-114.

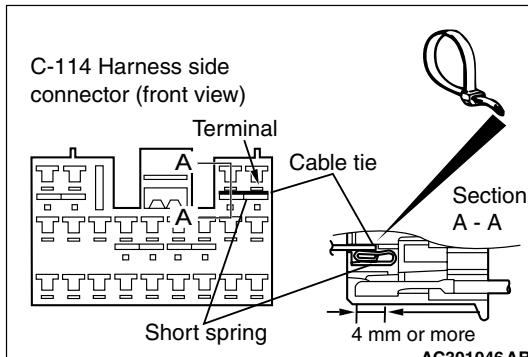
DANGER



To prevents the air bag from deploying unintentionally, disconnect the side air bag module (LH) connector D-08 to short the squib circuit.

(2) Disconnect left hand side air bag module (LH) connector D-08.

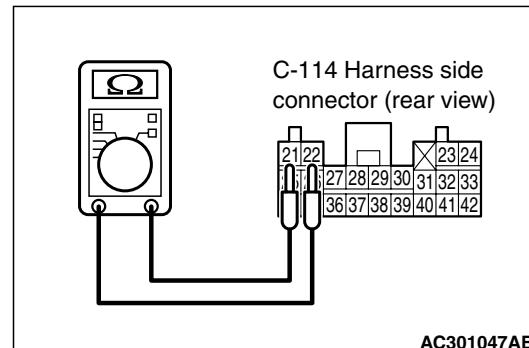
CAUTION



Insert an insulator such as a cable tie to a depth of 4mm or more, otherwise the short spring will not be released.

(3) Insert a cable tie [3 mm wide, 0.5 mm thick] between terminals 21, 22 and the short spring to release the short spring.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Check for continuity between C-114 harness side connector terminals 21 and 22.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 81 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 6 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.21 and 22) and side air bag module (LH) connector D-08 (terminal No.1 and 2). Then go to Step 6.

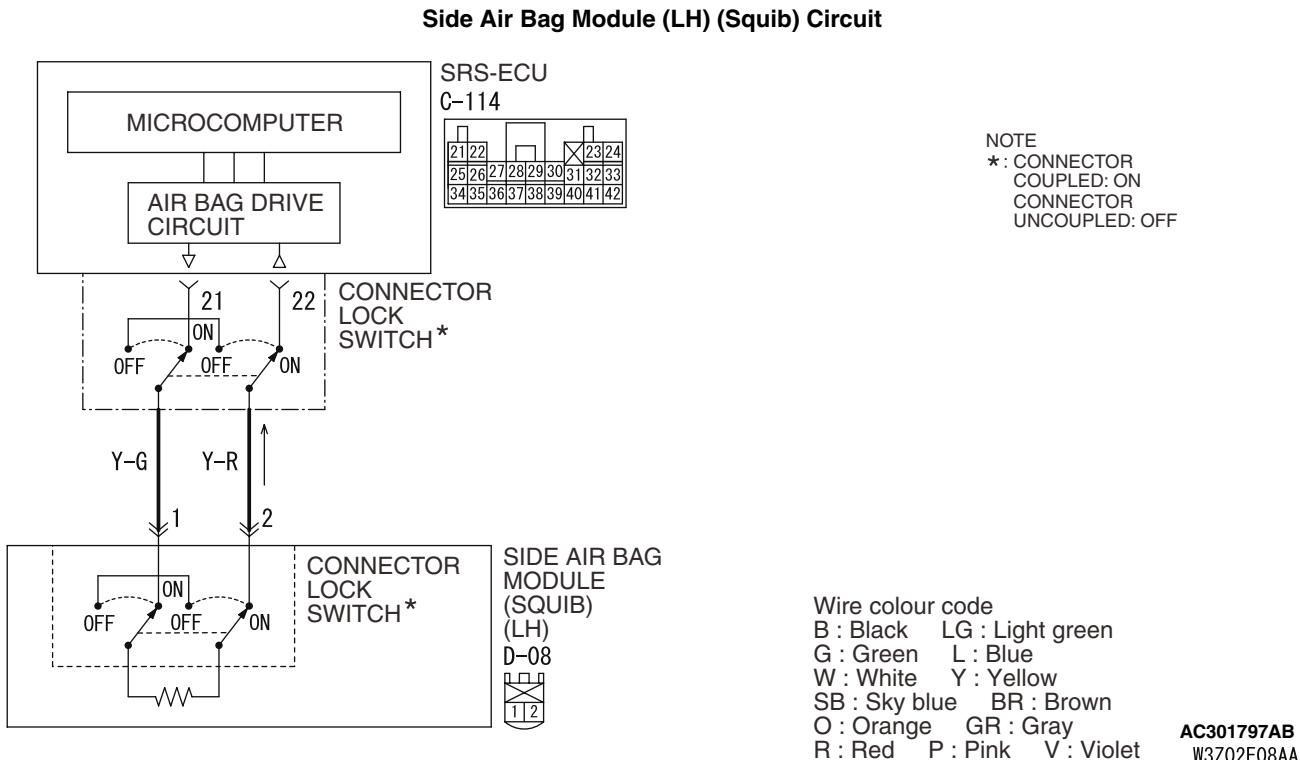
STEP 6. Recheck the diagnosis code.

Q: Is diagnosis code 81 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.82: Side air bag module (squib) (LH) system (open-circuited in the squib circuit)



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (LH) wire(s) are open-circuited.

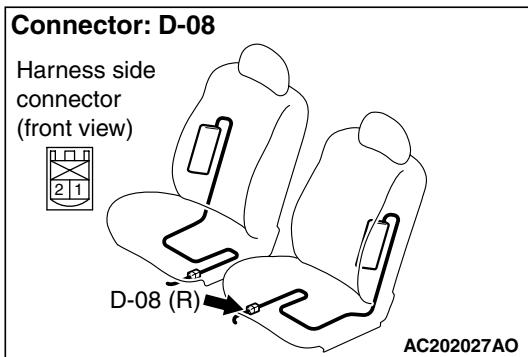
PROBABLE CAUSES

- Open circuit in the side air bag module (squib) (LH) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

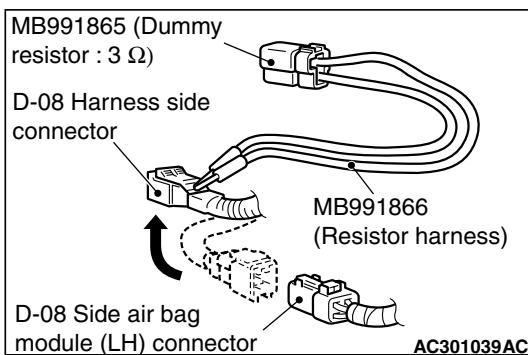
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (LH).

- (1) Disconnect the negative battery terminal.



- (2) Disconnect the side air bag module (LH) connector D-08.



- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

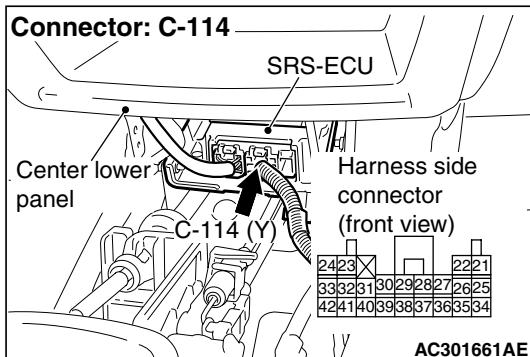
- (4) Insert special tool (MB991866) into the D-08 harness side connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnosis code memory, and then check the diagnosis code.

Q: Is diagnosis code 82 set?

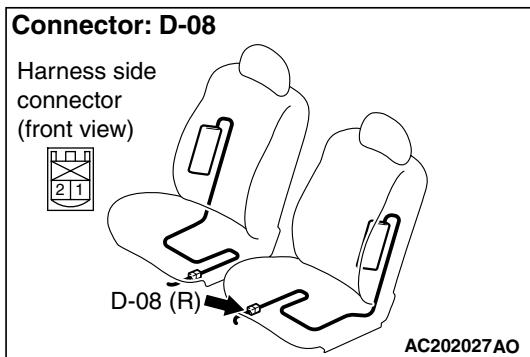
YES : Go to Step 2.

NO : Replace the seat back assembly of the front seat (LH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the resistance between the SRS-ECU connector C-114 (terminal No.21 and 22) and the side air bag module (LH) connector D-08 (terminal No.1 and 2).

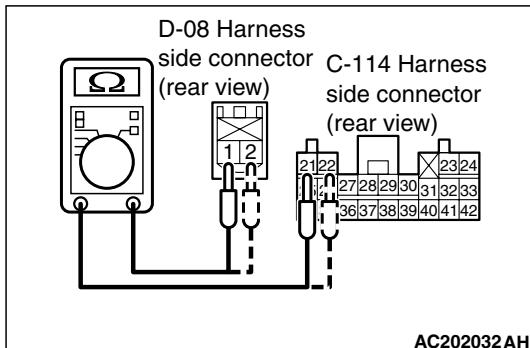


(1) Disconnect SRS-ECU connector C-114.



(2) Disconnect side air bag module (LH) connector D-08.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Measure the resistance between the following terminals.

- SRS-ECU connector C-114 (terminal No.21) and the side air bag module (LH) connector D-08 (terminal No.1)
- SRS-ECU connector C-114 (terminal No.22) and the side air bag module (LH) connector D-08 (terminal No.2)

OK: Less than 2 Ω

Q: Are the check results normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 82 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.21 and 22) and side air bag module (LH) connector D-08 (terminal No.1 and 2). Then go to Step 3.

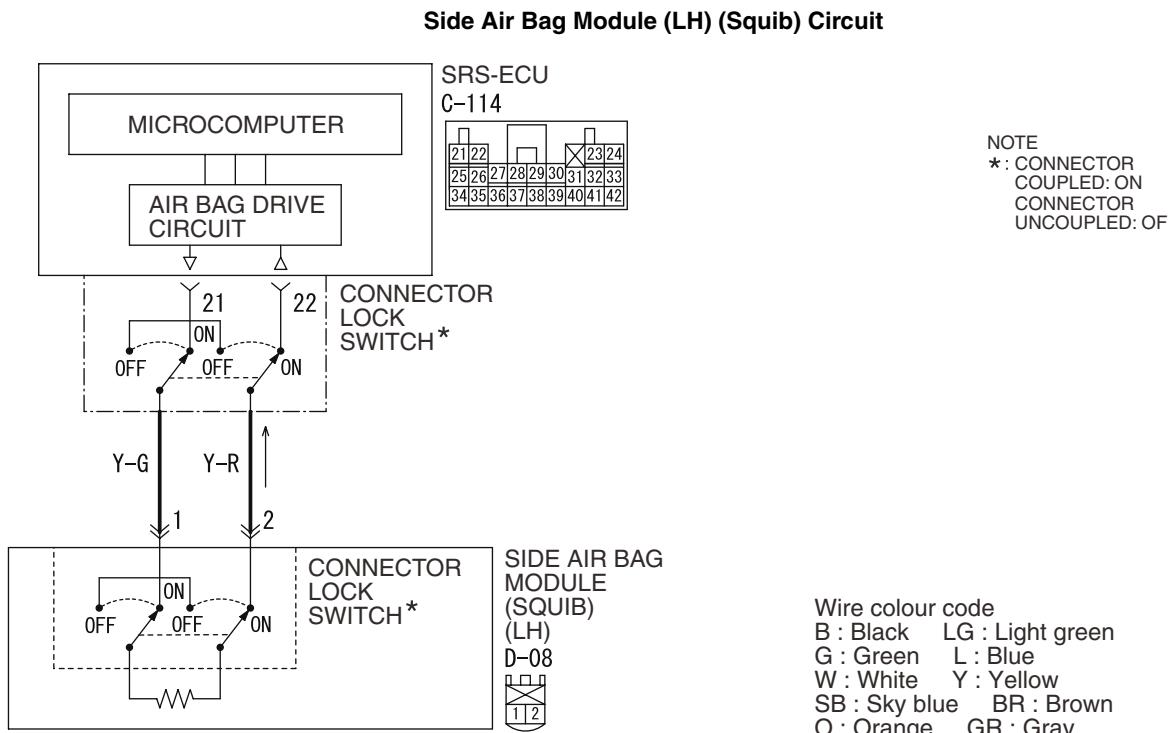
STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 82 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.85: Side air bag module (squib) (LH) system (short-circuited to the power supply)

**OPERATION**

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (LH) wire(s) are short-circuited to the power supply.

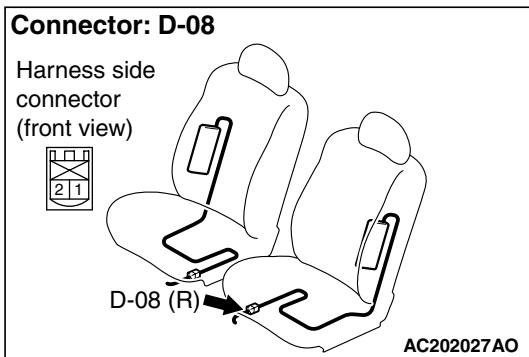
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Short to the power supply in the side air bag module (LH) (squib) harness
- Malfunction of the SRS-ECU

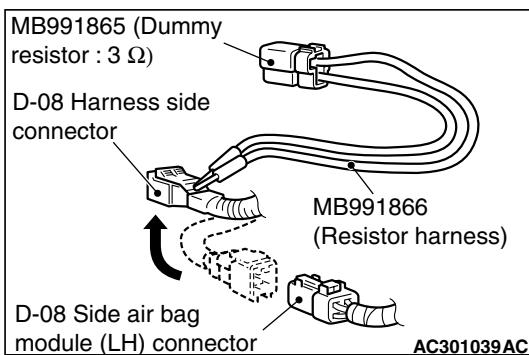
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (LH).

(1) Disconnect the negative battery terminal.



(2) Disconnect the side air bag module (LH) connector D-08.



(3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Insert special tool (MB991866) into the D-08 harness side connector by backprobing.

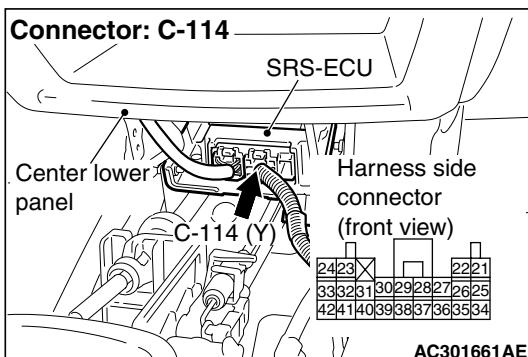
(5) Connect the negative battery terminal.

(6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 85 set?

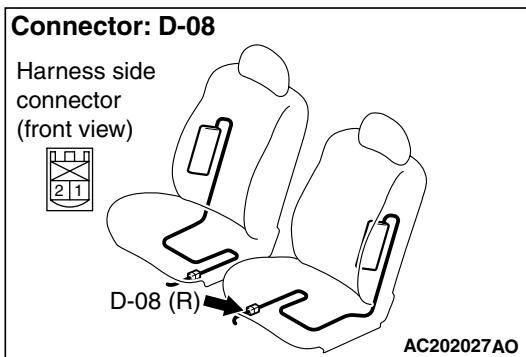
YES : Go to Step 2.

NO : Replace the seat back assembly of the front seat (LH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the voltage at the SRS-ECU connector C-114.

(1) Disconnect SRS-ECU connector C-114.

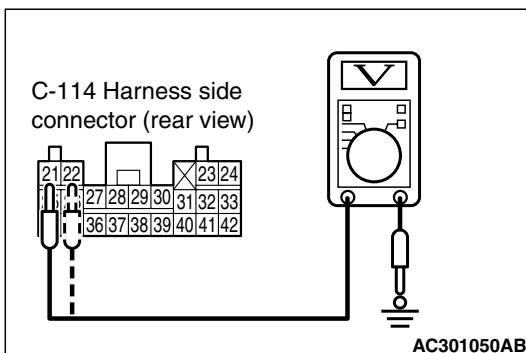
DANGER



To prevents the air bag from deploying unintentionally, disconnect the side air bag module (LH) connector D-08 to short the squib circuit.

(2) Disconnect left hand side air bag module (LH) connector D-08.
 (3) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between C-114 harness side connector terminals 21, 22 and body earth.
 OK: 0 V

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 85 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.21 and 22) and side air bag module (LH) connector D-08 (terminal No.1 and 2). Then go to Step 3.

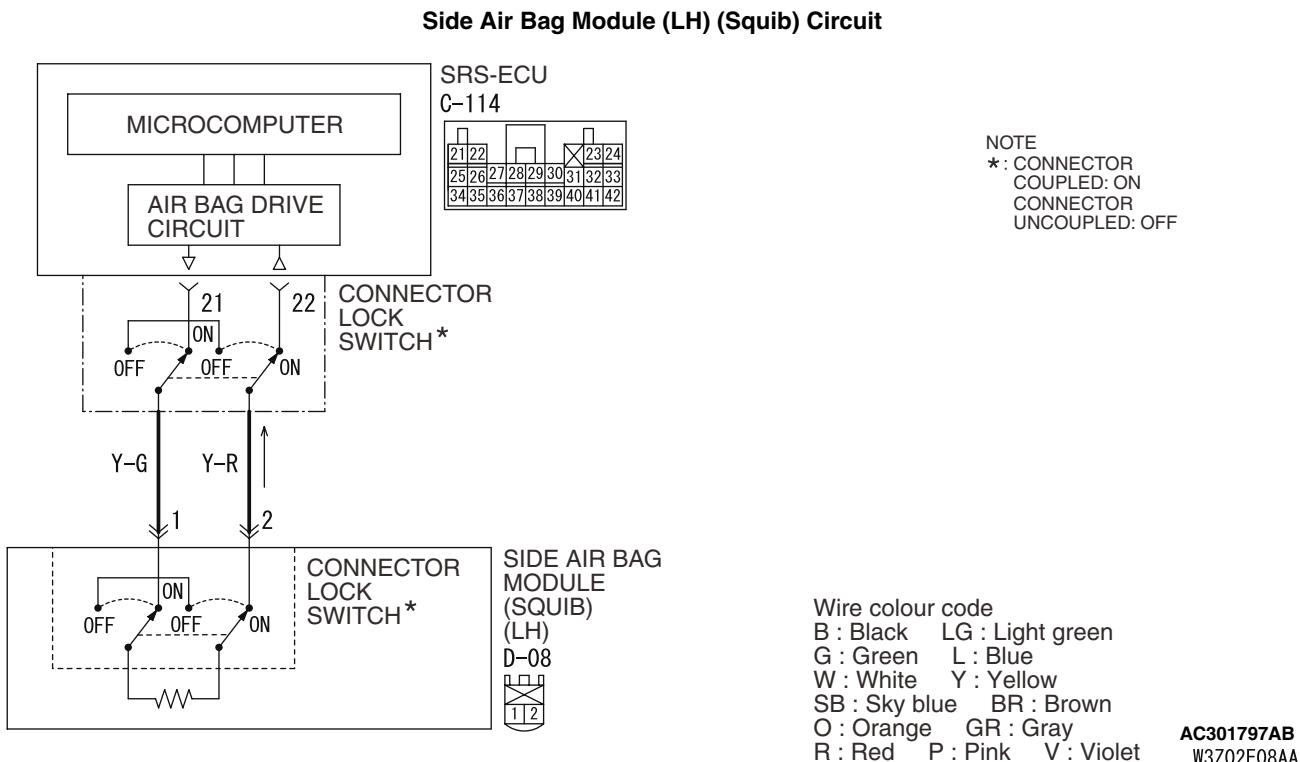
STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 85 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.86: Side air bag module (squib) (LH) system (short-circuited to the earth)



OPERATION

- The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the side air bag safing G-sensor is on, the SRS side air bag will inflate.
- The ignition signal is input to the side air bag module to inflate the side air bag.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the side air bag squib (LH) wire(s) are short-circuited to the earth.

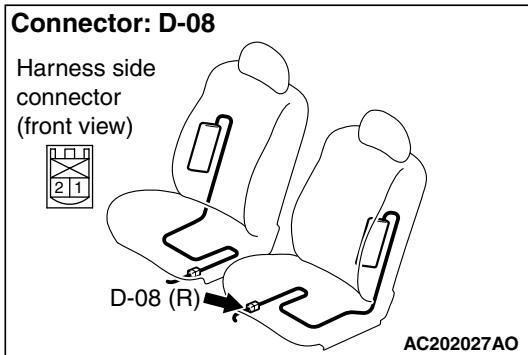
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Short to earth in the left hand side air bag module (squib) harness
- Malfunction of the SRS-ECU

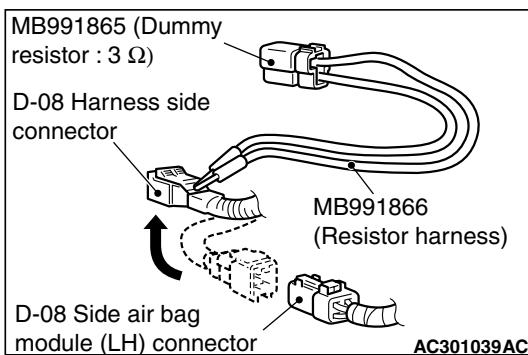
DIAGNOSIS PROCEDURE

STEP 1. Check the side air bag module (LH).

- (1) Disconnect the negative battery terminal.



- (2) Disconnect the side air bag module (LH) connector D-08.



- (3) Connect special tool dummy resistor (MB991865) to special tool resistor harness (MB991866).

CAUTION

Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

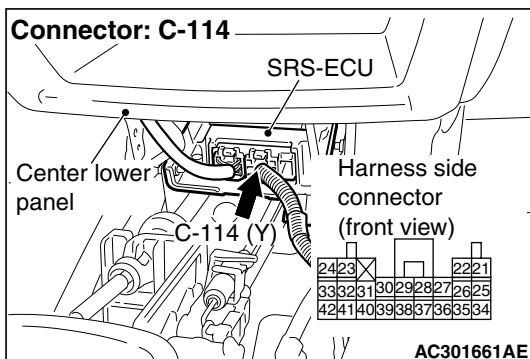
- (4) Insert special tool (MB991866) into the D-08 harness side connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 86 set?

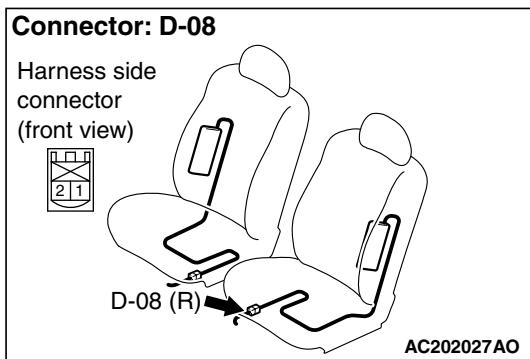
YES : Go to Step 2.

NO : Replace the seat back assembly of the front seat (LH) (Refer to GROUP 52A – Front Seat [P.52A-24](#)). Then go to Step 3.

STEP 2. Measure the resistance at the SRS-ECU connector C-114.

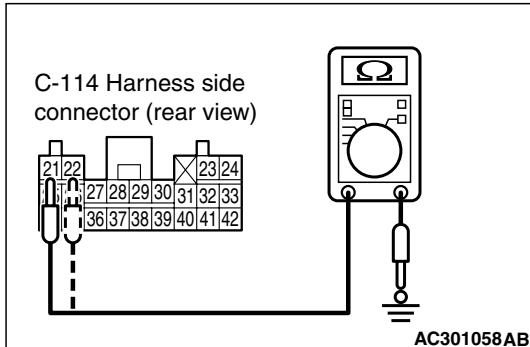


(1) Disconnect SRS-ECU connector C-114.



(2) Disconnect side air bag module (LH) connector D-08.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Check for continuity between C-114 harness side connector terminals 21, 22 and body earth.

OK: Open circuit

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 86 sets, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 3 .

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.21 and 22) and side air bag module (LH) connector D-08 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

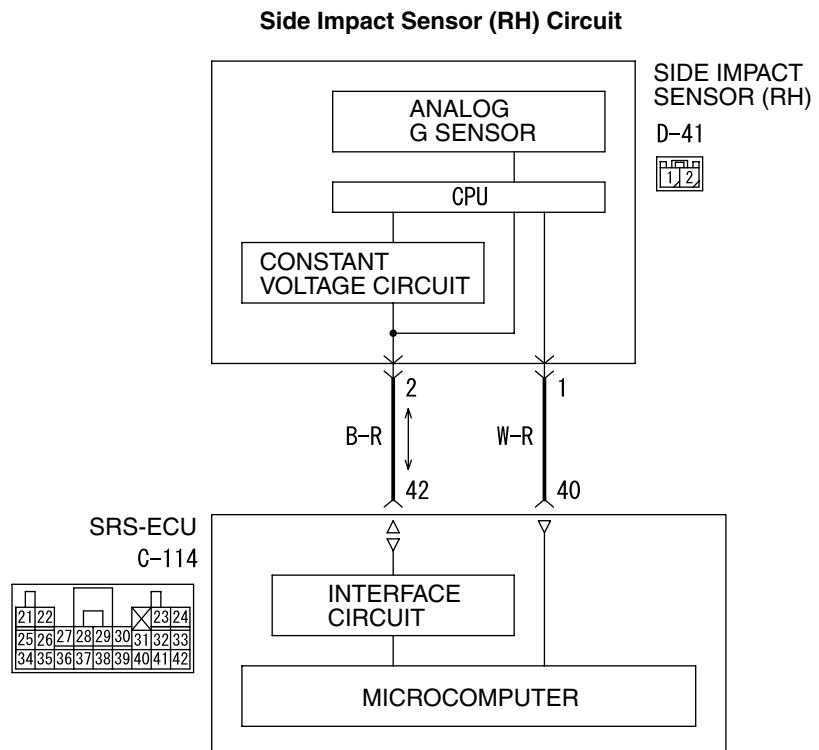
Q: Is diagnosis code 86 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points P.00-6).

Code No.89: Side impact sensor (RH) communication error

Code No.96: Side impact sensor (RH) communication impossible



Wire colour code

Wing colors: B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301791AB
W3Z02E02AA

OPERATION

The side impact sensor includes an analog G sensor and CPU, etc. The CPU monitors the analog G sensor output signal. If the CPU judges that the side air bags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side air bags. Besides that, the CPU diagnoses the internal components of the side impact sensor. If a malfunction occurs, it requests the SRS-ECU to set a diagnosis code.

DIAGNOSIS CODE SET CONDITIONS

These diagnosis codes are set if communication between the side impact sensor (RH) and the SRS-ECU is not possible or faulty.

PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the side impact sensor (RH)
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

STEP 1. Check the side impact sensor (RH).

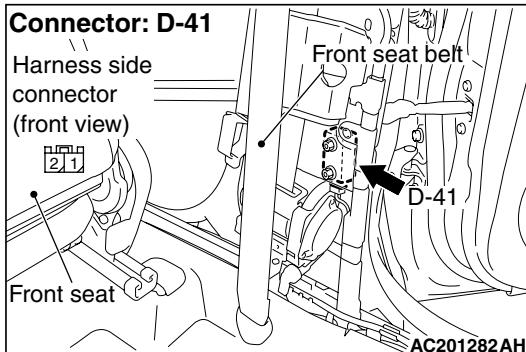
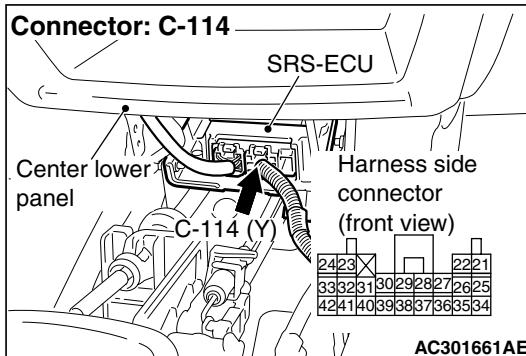
- (1) Disconnect the negative battery terminal.
- (2) Replace the side impact sensor (RH) with the side impact sensor (LH).
- (3) Connect the negative battery terminal.
- (4) Erase diagnosis code memory, and check the diagnosis code.

Q: Is diagnosis code 79 or 93 out put?

YES : Replace the side impact sensor (RH) with a new one (Refer to [P.52B-147](#)). Go to Step 3.

NO : Go to Step 2.

STEP 2. Check the harness wires for open circuit or short circuit between SRS-ECU connector C-114 (terminal No.40 and 42) and side impact sensor (RH) connector D-41 (terminal No.1 and 2).



NOTE: If any harness wires between SRS-ECU connector C-114 and side impact sensor (RH) connector D-41 are damaged, repair or replace it. Then go to Step 3.

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 89 or 96 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.40 and 42) and side impact sensor (RH) connector D-41 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

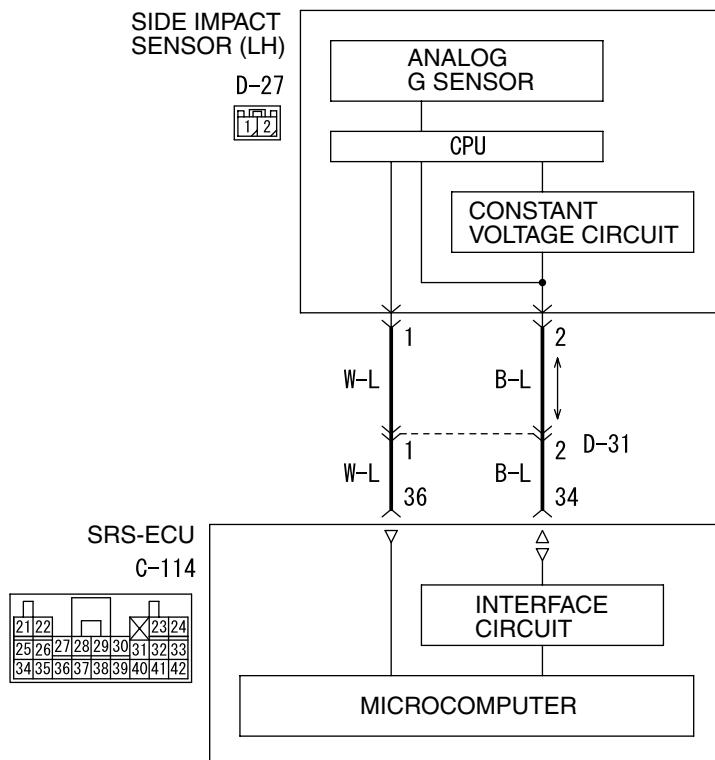
Q: Is diagnosis code 89 or 96 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

Code No.91: Side impact sensor (LH) voltage error

Side Impact Sensor (LH) Power Supply Circuit



Wire colour code

B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

AC301792AB
W3Z02E03AA

OPERATION

The side impact sensor includes an analog G sensor and CPU, etc. The CPU monitors the analog G sensor output signal. If the CPU judges that the side air bags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side air bags. Besides that, the CPU diagnoses the internal components of the side impact sensor. If a malfunction occurs, it requests the SRS-ECU to set a diagnosis code.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code will set when the power supply voltage to the side impact sensor (LH) remains less than a predetermined value for 5 seconds. However, if the system returns to normal condition, code number 91 will be erased automatically and the SRS warning lamp will go out.

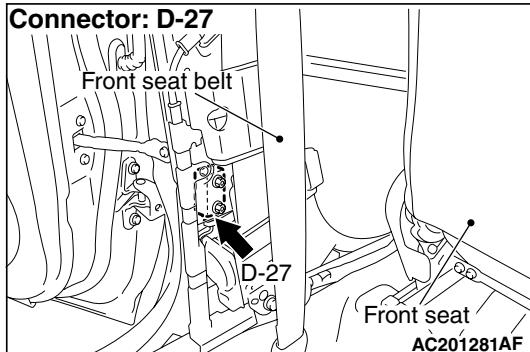
PROBABLE CAUSES

- Damaged wiring harness or connectors
- Malfunction of the side air bag module (LH) (squib)
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

STEP 1. Measure the voltage at the side impact sensor (LH) connector D-27.

(1) Disconnect the negative battery terminal.

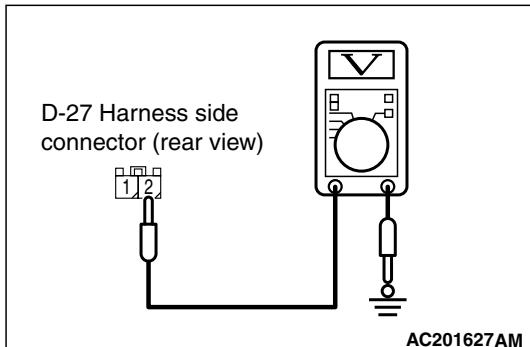


(2) Disconnect side impact sensor (LH) connector D-27, and measure at the wiring harness side.

(3) Connect the negative battery terminal.

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

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Measure the voltage between D-27 harness side connector terminal 2 and the earth.

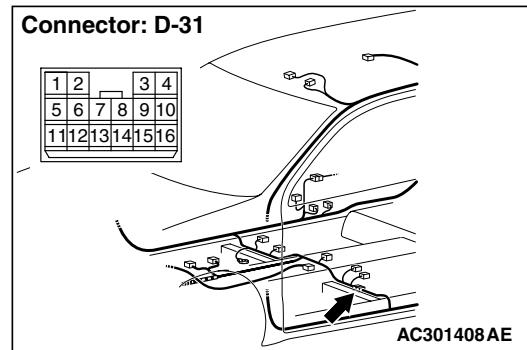
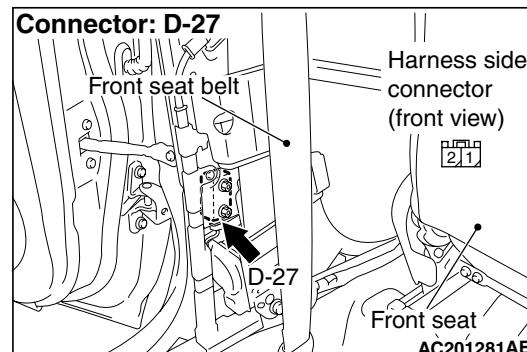
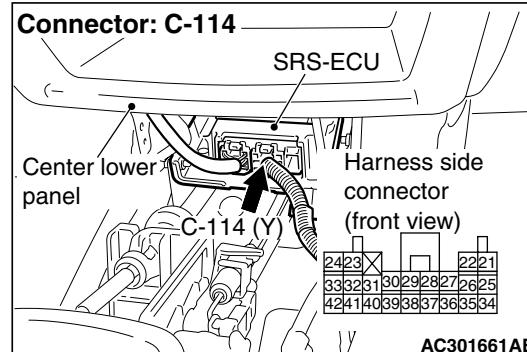
OK: 9 V or more

Q: Is the check result normal?

YES : Replace the side impact sensor (LH) (Refer to [P.52B-147](#)). Then go to Step 3.

NO : Go to Step 2.

STEP 2. Check the harness wires for open circuit or short circuit between SRS-ECU connector C-114 (terminal No.34 and 36) and side impact sensor (LH) connector D-27 (terminal No.1 and 2).



NOTE: After inspecting intermediate connector D-31 inspect the wiring harness. If the intermediate connector D-31 is damaged, repair or replace it. Then go to Step 3.

Q: Is the check result normal?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 91 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.34 and 36) and side impact sensor (LH) connector D-27 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.**Q: Is diagnosis code 91 set?****YES** : Return to Step 1.**NO** : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).**Code No.92: G-sensor of side impact sensor (LH) failure****Code No.95: G-sensor of side impact sensor (RH) failure****DIAGNOSIS CODE SET CONDITIONS**

These diagnosis codes are set if the followings are detected from the analog G-sensor inside the side impact sensor output.

- Analog G-sensor is not operating.
- Analog G-sensor characteristics are abnormal.
- Analog G-sensor inside the side impact sensor output is abnormal.

PROBABLE CAUSE

Malfunction of side impact sensor (LH) (for diagnosis code 92) and side impact sensor (RH) (for diagnosis code 95)

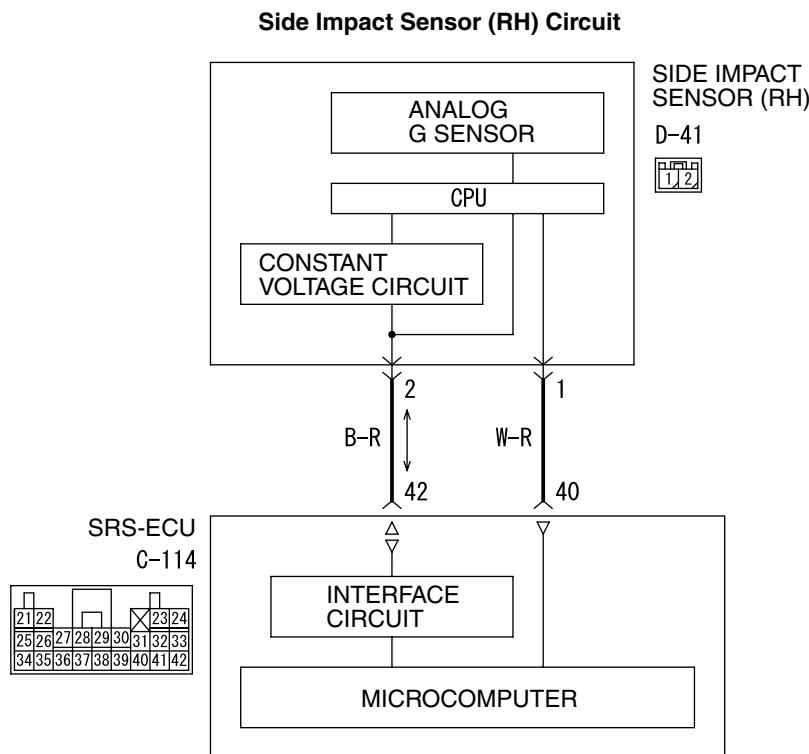
DIAGNOSIS PROCEDURE

Replace side impact sensor (LH) (for diagnosis code 92) and side impact sensor (RH) (for diagnosis code 95). (Refer to [P.52B-147](#)).

Check the diagnosis code.

Q: Is any of diagnosis code 92 or 95 set?**YES** : Replace the SRS-ECU (Refer to [P.52B-140](#)).**NO** : The procedure is complete.

Code No.94: Side Impact Sensor (RH) voltage error



AC301791AB
W3Z02E02AA

OPERATION

The side impact sensor includes an analog G sensor and CPU, etc. The CPU monitors the analog G sensor output signal. If the CPU judges that the side air bags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side air bags. Besides that, the CPU diagnoses the internal components of the side impact sensor. If a malfunction occurs, it requests the SRS-ECU to set a diagnosis code.

DIAGNOSIS CODE SET CONDITIONS

This diagnosis code is set if the power supply voltage of the side impact sensor (RH) drops below the rated value for a continuous period of 5 seconds or more. However, diagnosis code number 94 will be automatically cleared and the SRS warning lamp will switch off if the condition returns to normal.

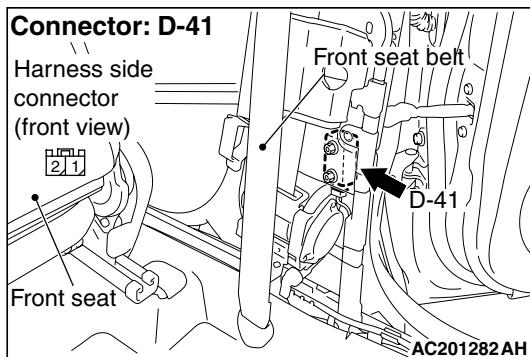
PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the side air bag module (RH) (squib)
- Malfunction of the SRS-ECU

DIAGNOSIS PROCEDURE

STEP 1. Measure the voltage at the side impact sensor (RH) connector D-41.

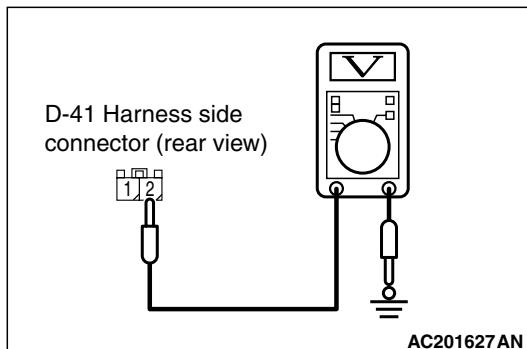
(1) Disconnect the negative battery terminal.



(2) Disconnect side impact sensor (RH) connector D-41, and measure at the wiring harness side.

(3) Connect the negative battery terminal.

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

CAUTION


Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Measure the voltage between the D-41 harness side connector terminal 2 and body earth.

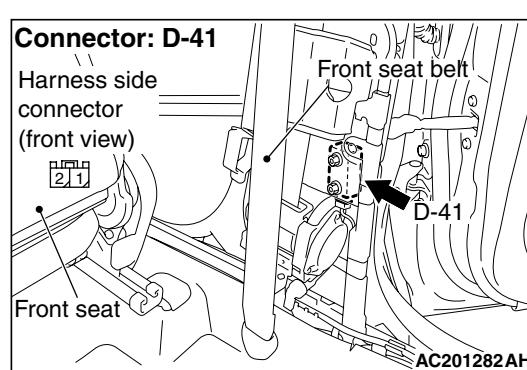
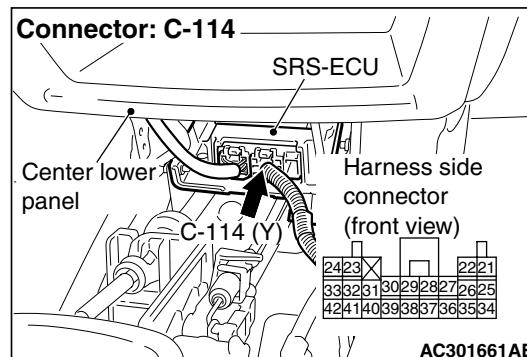
OK: 9 V or more

Q: Is the check result normal?

YES : Replace the side impact sensor (RH) (Refer to [P.52B-147](#)). Then go to Step 3.

NO : Go to Step 2.

STEP 2. Check the harness wires for open circuit or short circuit between SRS-ECU connector C-114 (terminal No.40 and 42) and side impact sensor (RH) connector D-41 (terminal No.1 and 2).



Q: Are the harness wires between SRS-ECU connector C-114 (terminal No.40 and 42) and side impact sensor (RH) connector D-41 (terminal No.1 and 2) in good condition?

YES : Erase the diagnosis code memory, and check the diagnosis code. If diagnosis code 94 sets, replace the SRS-ECU (Refer to [P.52B-140](#)). Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector C-114 (terminal No.40 and 42) and side impact sensor (RH) connector D-41 (terminal No.1 and 2). Then go to Step 3.

STEP 3. Recheck the diagnosis code.

Q: Is diagnosis code 94 set?

YES : Return to Step 1.

NO : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

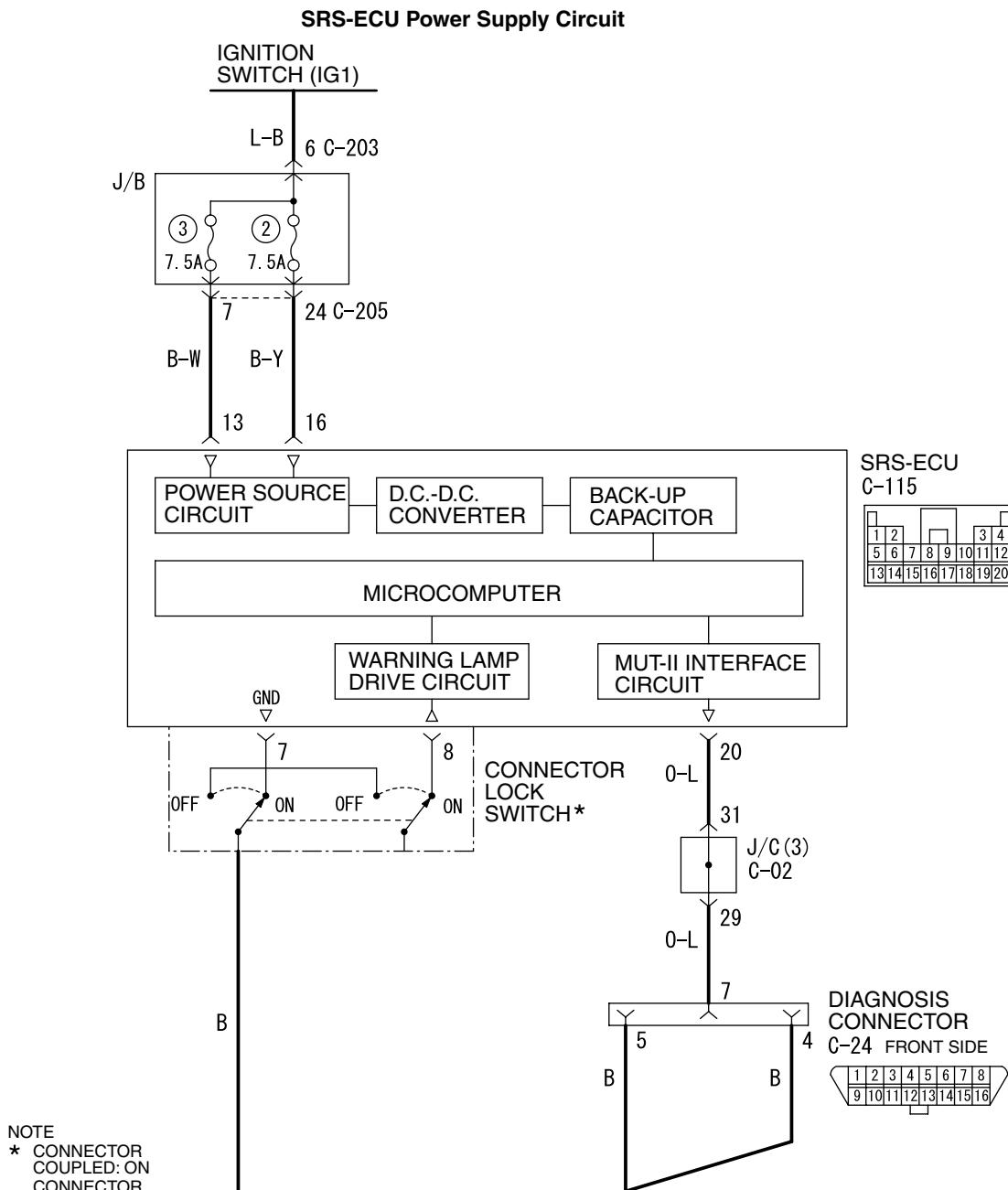
**CHECK CHART FOR TROUBLE
SYMPTOMS**

M1524003400417

Trouble	Inspection procedure No.	Reference page
Communication with MUT-II MB991502 is not possible (Communication with all systems is not possible).	–	GROUP 13A – Troubleshooting P.13A-179
Communication with MUT-II MB991502 is not possible (Communication is not possible with SRS).	1	P.52B-124
When the ignition switch is turned to the "ON" position (engine stopped), the SRS warning lamp does not illuminate.	Refer to diagnosis code No.43.	P.52B-58
After the ignition switch is turned to the "ON" position, the SRS warning lamp does not go off within approximately 7 seconds.	Refer to diagnosis code No.43.	P.52B-62

SYMPTOM PROCEDURES

INSPECTION PROCEDURE 1: Communication with MUT-II MB991502 is not possible. (Communication is not possible with SRS).



Wire colour code
 B : Black LG : Light green G : Green L : Blue W : White Y : Yellow SB : Sky blue
 BR : Brown O : Orange GR : Gray R : Red P : Pink V : Violet

OPERATION

- The SRS-ECU is powered from the ignition switch (IG1).
- The SRS-ECU power is supplied from two circuits. Even if one circuit is shut off, the air bag can inflate.
- The SRS system diagnosis can be done by connecting MUT-II MB991502 to the diagnosis connector.

COMMENTS ON TROUBLE SYMPTOM

If communication is not possible with the SRS only, the cause is probably an open circuit in the on-board diagnostic output circuit of the SRS or in the power circuit (including earth circuit).

PROBABLE CAUSES

- Damaged wiring harnesses or connectors
- Malfunction of the SRS-ECU
- Incorrect MUT-II (MUT-II) ROM pack

DIAGNOSIS PROCEDURE

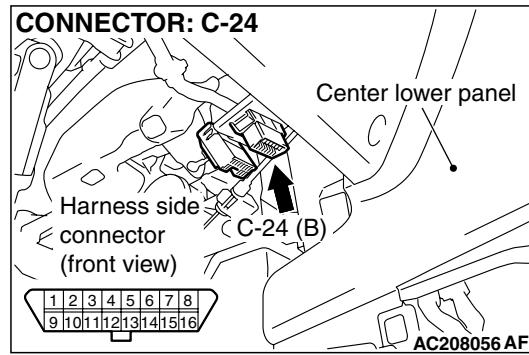
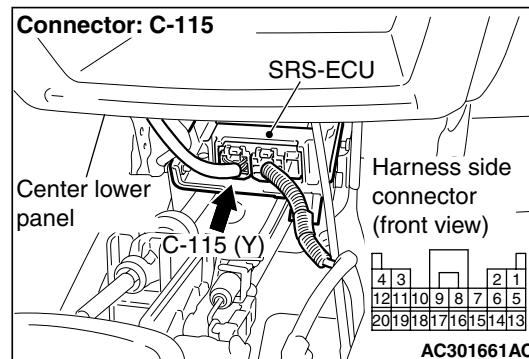
STEP 1. Check that the MUT-II can communicate with the other systems.

Q: Can the MUT-II communicate with the other systems?

YES : Go to Step 2.

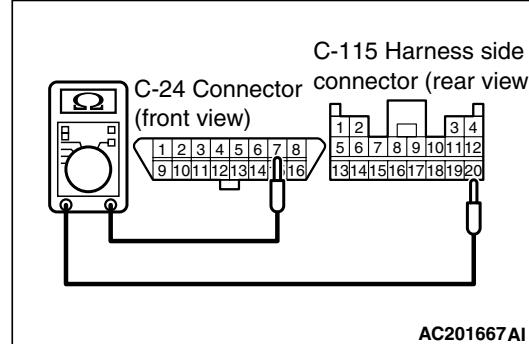
NO : Refer to GROUP 13A – Troubleshooting P.13A-179.

STEP 2. Measure the resistance between SRS-ECU connector C-115 (terminal No.20) and diagnosis connector C-24 (terminal No.7)



- (1) Disconnect SRS-ECU connector C-115 and diagnosis connector C-24, and measure at the wiring harness side.

⚠ CAUTION



Do not insert a test probe into the terminal from of the SRS-ECU connector C-115 its front side directly as the connector contact pressure may be weakened.

- (2) Measure the resistance between the following terminals.

- SRS-ECU connector C-115 (terminal No.20) and diagnosis connector C-24 (terminal No.7)

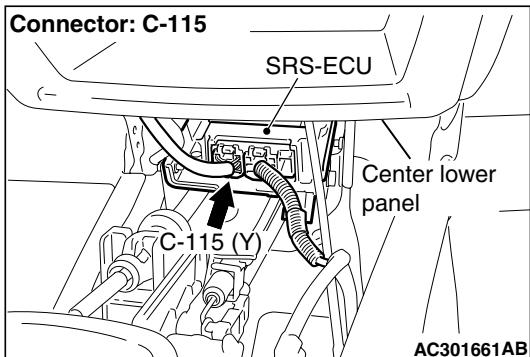
OK: Less than 2 Ω

Q: Is the check results normal?

YES : Go to Step 3.

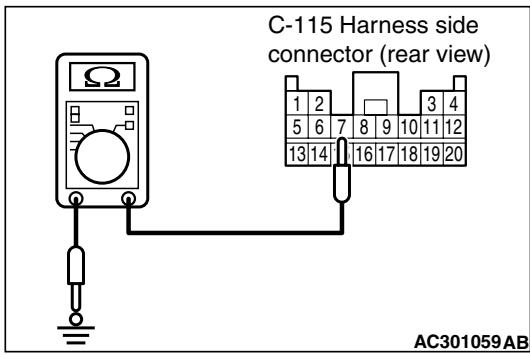
NO : Go to Step 5.

STEP 3. Check the earth circuit to the SRS-ECU.



(1) Disconnect SRS-ECU connector C-115, and measure at the wiring harness side.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(2) Check for continuity between terminal 7 and body earth.

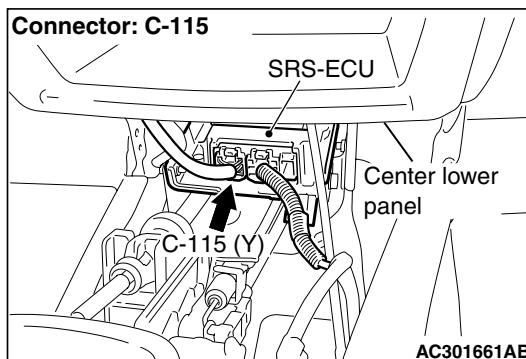
OK: Less than 2 Ω

Q: Is the check result normal?

YES : Go to Step 4.

NO : Go to Step 6.

STEP 4. Check the power supply circuit to the SRS-ECU.

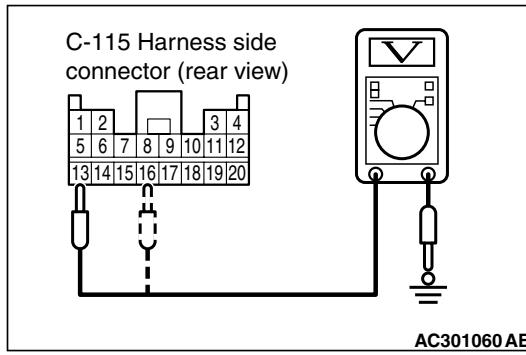


(1) Disconnect SRS-ECU connector C-115, and measure at the wiring harness side.

(2) Connect the negative battery terminal.

(3) Turn the ignition switch to the "ON" position.

CAUTION



Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Measure the voltage between terminals 13, 16 and body earth.

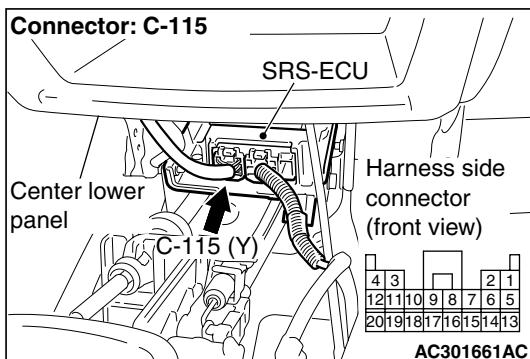
OK: 9 V or more

Q: Is the check result normal?

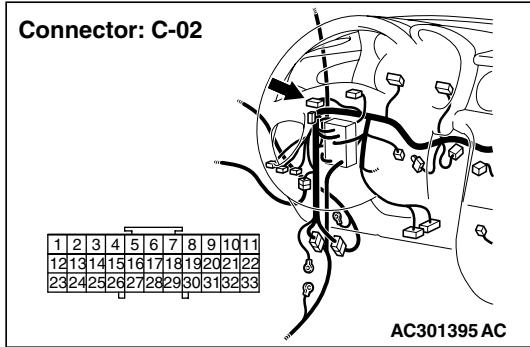
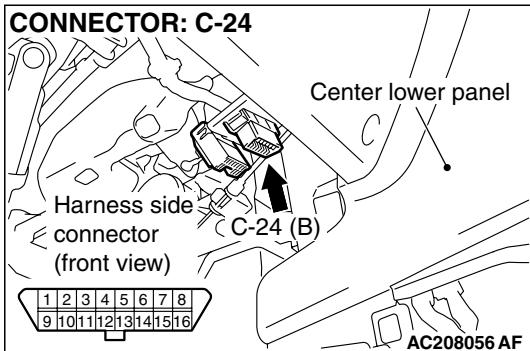
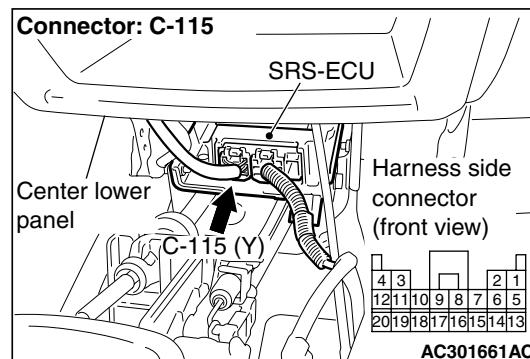
YES : Recheck the trouble symptom. If it is not solved, replace the SRS-ECU (Refer to P.52B-140). Then go to Step 8.

NO : Go to Step 7.

STEP 5. Connector check: SRS-ECU connector C-115 and diagnosis connector C-24



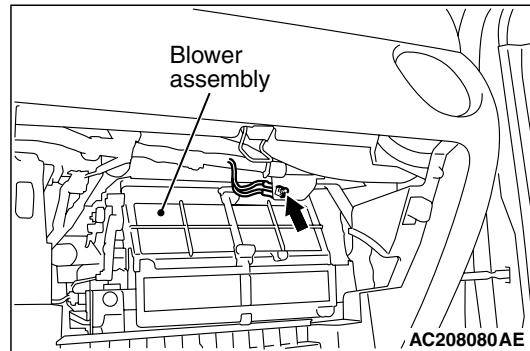
STEP 6. Connector check: SRS-ECU connector C-115 and earth



Q: Is the check result normal?

YES : Check the harness wires for open or short circuit between SRS-ECU connector C-115 (terminal No.20) and diagnosis connector C-24 (terminal No.7), and repair if necessary. Then go to Step 8.

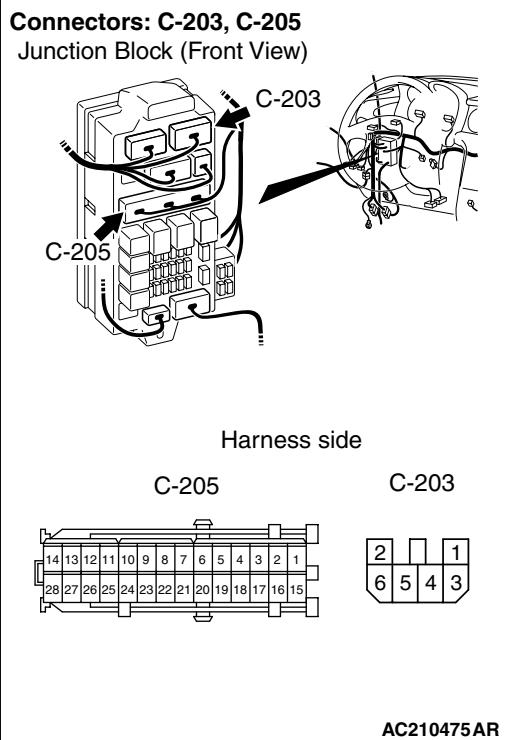
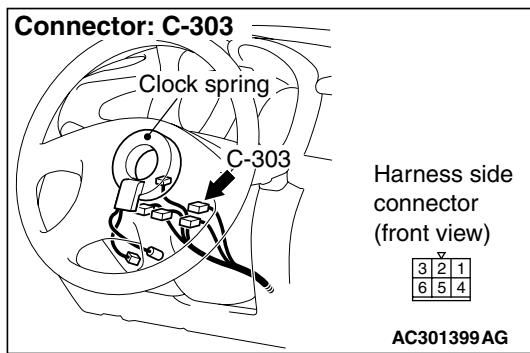
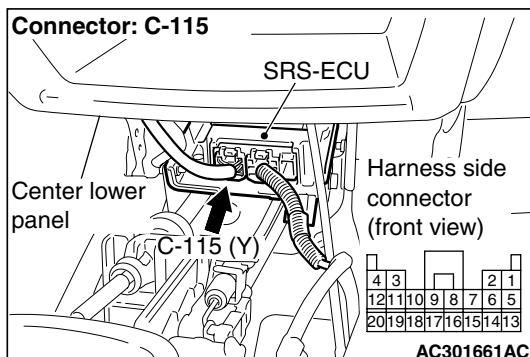
NO : Repair or replace it. Then go to Step 8.



Q: Is the check result normal?

YES : Check the harness wire for open circuit between SRS-ECU connector C-115 (terminal No.7) and earth, and repair if necessary. Then go to Step 8.

NO : Repair or replace it. Then go to Step 8.

STEP 7. Connector check: SRS-ECU connector C-115 and ignition switch connector C-303**STEP 8. Retest the system.**

Q: Does the MUT-II communicate normally with the SRS system?

YES : The procedure is complete (If no malfunctions are found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

NO : There is no action to be taken.

Q: Is the check result normal?

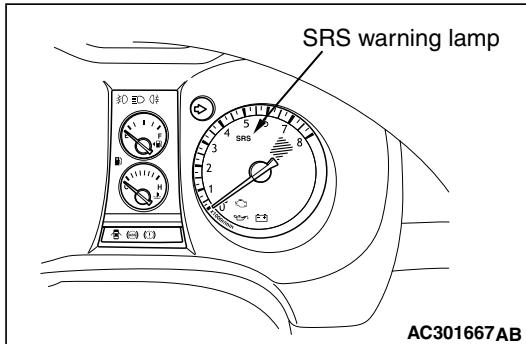
YES : Check the harness wires for open or short circuit between SRS-ECU connector C-115 (terminal No.13 and 16) and ignition switch connector C-303 (terminal No.2), and repair if necessary. Then go to Step 8.

NO : Repair or replace it. Then go to Step 8.

SRS MAINTENANCE

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

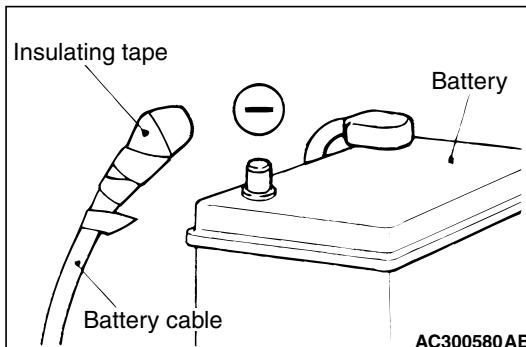
SRS WARNING LAMP CHECK



Turn the ignition key to the "ON" position. Does the SRS warning lamp illuminate for about 7 seconds, turn off and then remain extinguished for at least 5 seconds? If yes, SRS system is functioning properly. If no, consult page [P.52B-8](#).

SRS COMPONENT VISUAL CHECK

 **DANGER**

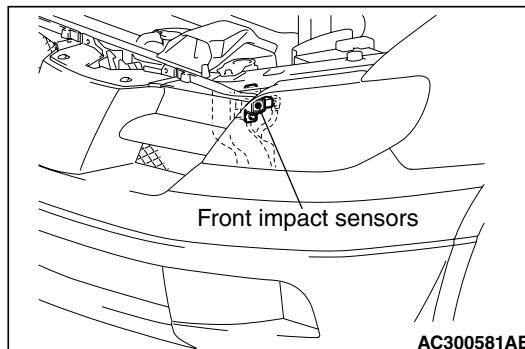


Wait at least 60 seconds after disconnecting the battery cable before doing any further work (Refer to [P.52B-2](#)).

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

FRONT IMPACT SENSORS

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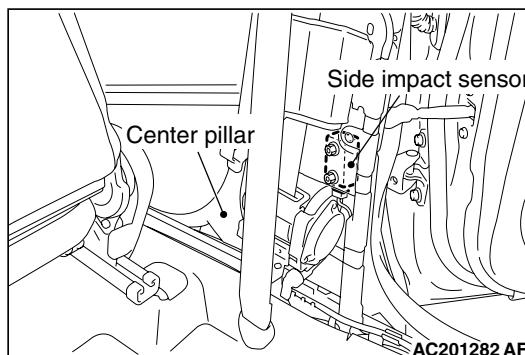
1. Check the front side member and front impact sensor for deformation or rust.
2. Check the front impact sensor for dents, cracks, deformation or rust.
3. Check the sensor harnesses for binding, the connectors for damage, and the terminals for deformation.

NOTE: The figures show front impact sensors (LH). The side impact sensors (RH) is symmetrical with the side impact sensors (LH).

SIDE IMPACT SENSOR

 **WARNING**

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



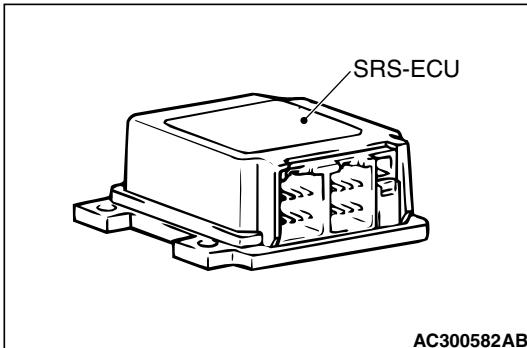
1. Check the centre pillar for deformation or rust.
2. Check the side impact sensors for dents, cracks, deformation and rust.
3. Check the connector for damage and the terminals for deformation.

NOTE: The figures show side impact sensors (RH). The side impact sensors (LH) is symmetrical with the side impact sensors (RH).

SRS CONTROL UNIT (SRS-ECU)

WARNING

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.



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

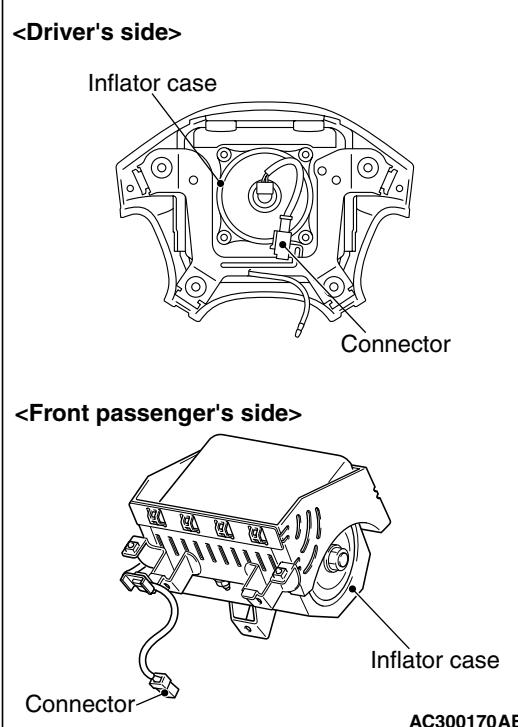
Replace the SRS-ECU if it fails the visual checks above (Refer to [P.52B-140](#)).

AIR BAG MODULES, STEERING WHEEL AND CLOCK SPRING

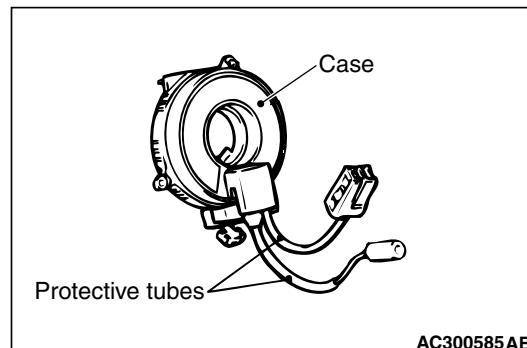
WARNING

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

1. Remove the air bag module, steering wheel and clock spring (Refer to [P.52B-141](#)).
2. Check the pad cover for dents, cracks or deformation.



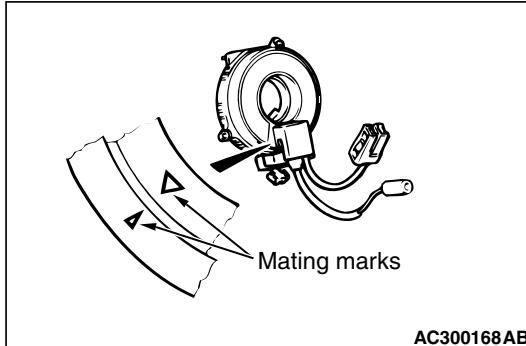
3. Check the connector for damage and deformed terminals, and check the harness for binding.
4. Check the air bag inflator case for dents, cracks or deformation.
5. Check the harness (built into the steering wheel) and connectors for damage, and check the terminals for deformation.



6. Check the clock spring connectors and protective tube for damage, and terminals for deformities.
7. Visually check the case for damage.

WARNING

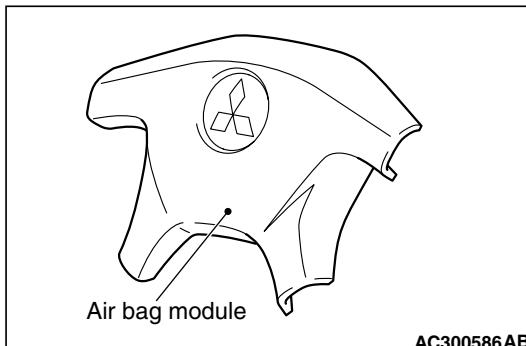
If the clock spring's mating mark is not properly aligned, the steering wheel may not be completely rotational during a turn, or the flat cable within the clock spring may be severed, obstructing normal operation of the SRS and possibly leading to serious injury to the vehicle's driver or front passenger.



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 Marks Alignment;

Turn the clock spring clockwise fully. Then turn it back approximately 3 3/4 turns counterclockwise to align the mating marks.

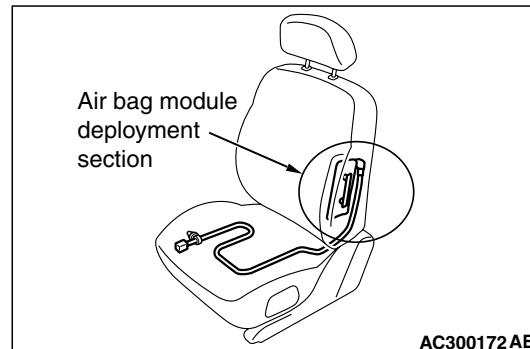


9. Install the steering column covers, steering wheel and air bag module (Refer to P.52B-141).
10. Check the steering wheel for noise, binding or difficult operation.

DANGER

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.

11. Check the steering wheel for excessive free play.
12. REPLACE ANY VISUALLY INSPECTED PART IF IT FAILS THAT INSPECTION (Refer to P.52B-145).

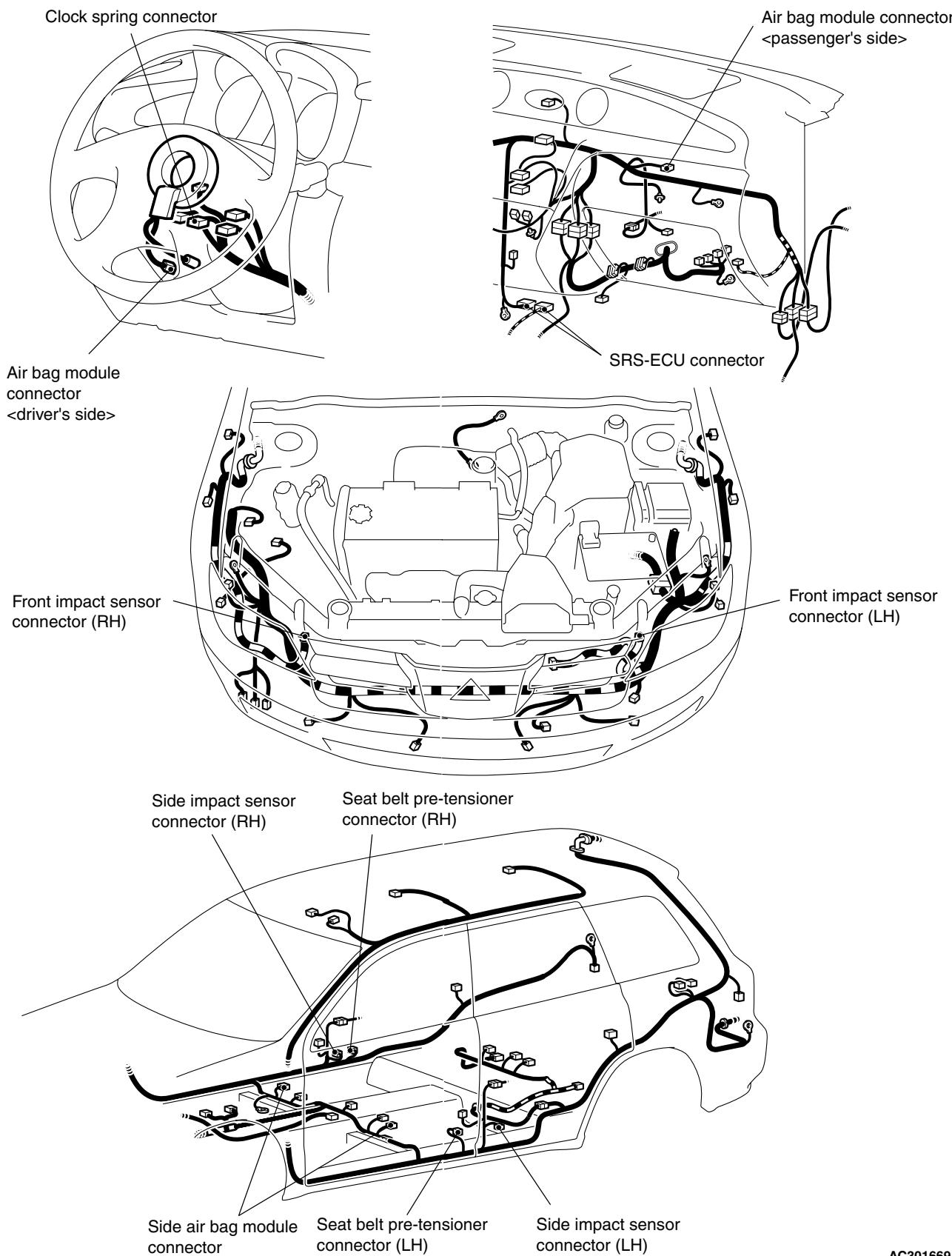
FRONT SEATBACK ASSEMBLY WITH SIDE AIR BAG MODULE

1. Check the side air bag module deployment section in the seat for dents and deformation.
2. Check the harness for binds, the connector for damage and the terminals for deformation.

SEAT BELT WITH PRE-TENSIONER

1. Check the seat belt pre-tensioner for dents or deformation.
2. Check that the seat belt pre-tensioner is installed correctly to the vehicle body.

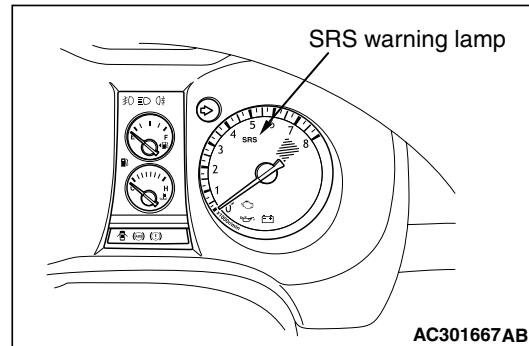
INSTRUMENT PANEL WIRING HARNESS/FRONT WIRING HARNESS/FLOOR WIRING HARNESS



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-2](#)).

POST-INSTALLATION INSPECTION



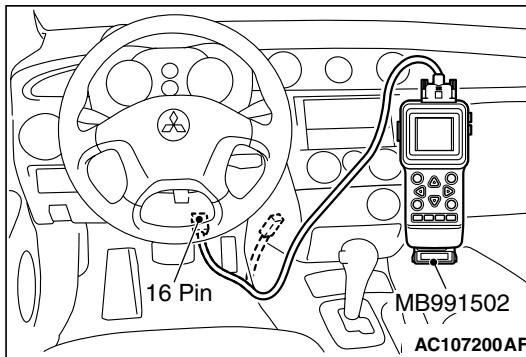
Reconnect the negative battery terminal. Turn the ignition key to the "ON" position. Does the SRS warning lamp illuminate for about 7 seconds, turn off and then remain extinguished for at least 5 seconds? If yes, SRS system is functioning properly. If no, consult page [P.52B-8](#).

POST-COLLISION DIAGNOSIS

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

SRS-ECU MEMORY CHECK

⚠ CAUTION



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

1. Connect the MUT-II to the diagnosis connector (Refer to GROUP 00 – How to Use Troubleshooting/Inspection Service Points [P.00-6](#)).

2. Read (and write down) all displayed diagnosis codes (Refer to [P.52B-8](#)).

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.

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3. Use 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 indicating how often the memory is cleared	Maximum time to be stored: 250
93	How long a problem has lasted (How long it takes from the occurrence of the problem till the first air bag squib igniting signal)	Maximum time to be stored: 9,999 minutes (approximately 7 days)
94	How long a problem has 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.

REPAIR PROCEDURE

WHEN FRONT AIR BAGS DEPLOY IN A COLLISION.

1. Replace the following parts with new ones.
 - SRS-ECU (Refer to [P.52B-140](#)).
 - Air bag modules (Refer to [P.52B-141](#)).
 - Seat belt with pre-tensioner (Refer to [P.52B-148](#)).
 - Front impact sensors (Refer to [P.52B-138](#)).
 - Instrument panel (Refer to GROUP 52A – Instrument Panel Assembly <LH drive vehicles [P.52A-2](#), <RH drive vehicles [P.52A-2](#)>).
2. Check the following parts and replace if there are any malfunctions.
 - Clock spring (Refer to [P.52B-141](#)).
 - Steering wheel, steering column and shaft assembly
 - (1) Check the wiring harness (built into the steering wheel) and connectors for damage, and terminals for deformation.
 - (2) Install the air bag module to check fit or alignment with the steering wheel.
 - (3) Check the steering wheel for noise, binds or difficult operation and excessive free play.
 - (4) Check the steering column shaft shock absorbing mechanism (Refer to GROUP 37A – On-Vehicle Service [P.37-12](#)).
3. Check the harness for binding, connectors for damage, poor connections, and terminals for deformation (Refer to [P.52B-2](#)).

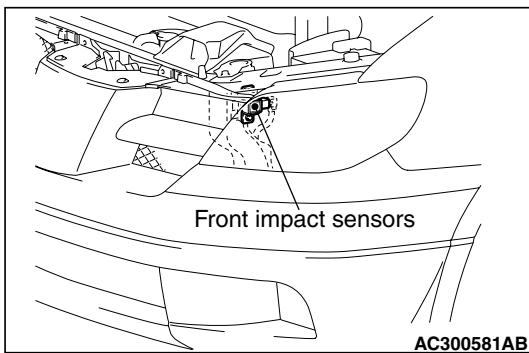
WHEN SIDE AIR BAGS DEPLOY IN A COLLISION.

1. Replace the following parts with new ones.
 - SRS-ECU (Refer to [P.52B-140](#)).
 - Side impact sensors (Refer to [P.52B-147](#)).
 - Front seatback assembly (Refer to GROUP 52A – Front Seat Assembly [P.52A-24](#)).
2. Check the harness for binding, connectors for damage, poor connections, and terminals for deformation (Refer to [P.52B-2](#)).

WHEN AIR BAGS DO NOT DEPLOY IN LOW-SPEED COLLISION.

Check the SRS components. If visible damage such as dents, cracks, or deformation are found on the SRS components, 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-136](#)

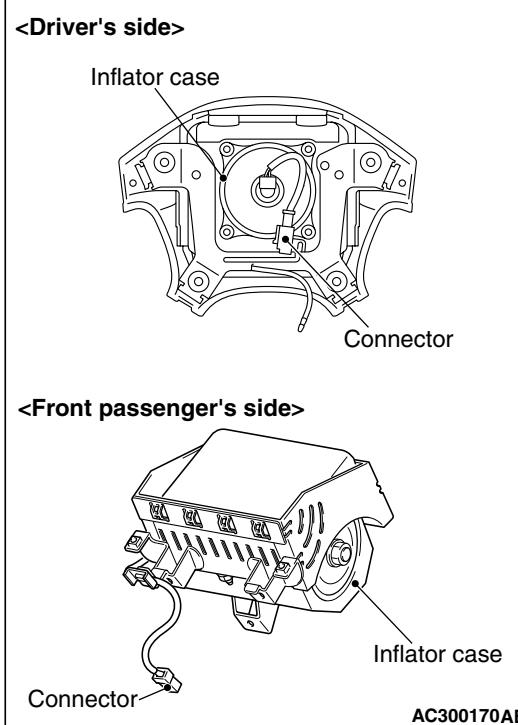
Front impact sensor



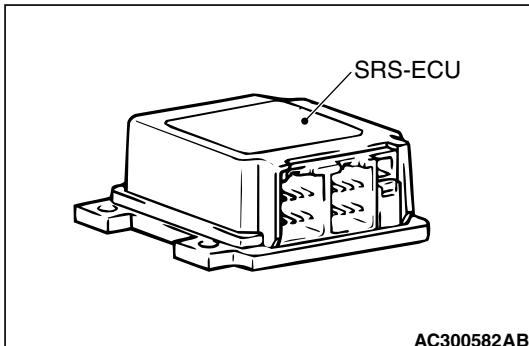
1. Check the front side member and front impact sensor for deformation or rust.
2. Check the front impact sensor for dents, cracks, deformation or rust.
3. Check the sensor harnesses for binding, the connectors for damage, and the terminals for deformation.

NOTE: The figures show front impact sensors (LH). The side impact sensors (RH) is symmetrical with the side impact sensors (LH).

Air bag modules



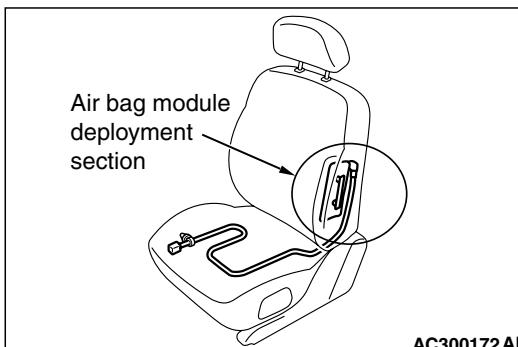
SRS-ECU



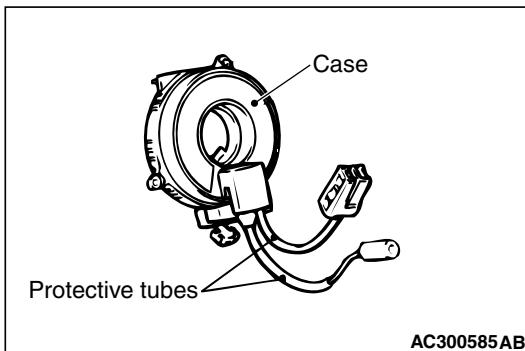
1. Check the SRS-ECU case and brackets for dents, cracks or deformation.
2. Check the connector for damage, and the terminals for deformation.
3. Check the SRS-ECU and bracket for installation condition.

1. Check the pad cover for dents, cracks or deformation.
2. Check the connector for damage, terminals deformities, and the harness for binding.
3. Check the air bag inflator case for dents, cracks or deformities.
4. Check the air bag modules for proper installation.

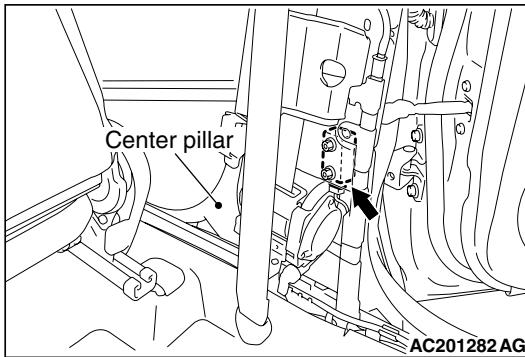
Front seatback assembly (Side air bag module)



1. Check the side air bag module deployment section in the seat for dents and deformation.
2. Check the connectors for damage, the terminals for deformation, and the harness for binds.

Clock spring

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

Side impact sensor

1. Check the centre pillar for deformation or rust.
2. Check the side impact sensors for dents, cracks, deformation and rust.

3. Check the connector for damage and the terminals for deformation.

NOTE: The figures show side impact sensors (RH). The side impact sensors (LH) is symmetrical with the side impact sensors (RH).

Steering wheel, steering column and shaft assembly

1. Check the wiring harness (built into the steering wheel) and the connectors for damage, and the terminals for deformation.
2. Install the air bag module to check fit or alignment with the steering wheel.
3. Check the steering wheel for noise, binding or difficult operation and excessive free play.
4. Check the steering column shaft shock absorbing mechanism (Refer to GROUP 37A – On-Vehicle Service [P.37-12](#)).

Seat belt with pre-tensioner

1. Check the seat belt for damage or deformation.
2. Check the seat belt with pre-tensioner for cracks or deformation.
3. Check that the unit is installed correctly to the vehicle body.

Harness connector (Front wiring harness, instrument panel wiring harness and floor wiring harness)

Check harnesses for binding, connectors for damage and terminals for deformation (Refer to [P.52B-2](#)).

INDIVIDUAL COMPONENT SERVICE

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⚠ WARNING

- **If heat damage may occur during paint work, remove the SRS-ECU, the air bag modules, the clock spring, front seats, and the seat belt with pre-tensioner. Recheck the SRS system operability after reinstalling them (Refer to GROUP 00 – Maintenance Service).**
 - **SRS-ECU, air bag module, clock spring and impact sensor: 93° C or more**
 - **Seat belt with pre-tensioner: 90° C or more**
- **If the SRS components are removed for the purpose of check, sheet metal repair, painting, etc., they should be stored in a clean, dry place until they are reinstalled.**

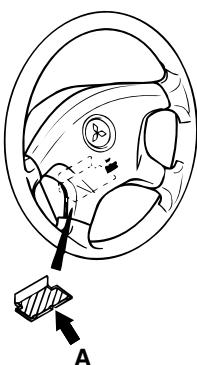
If the SRS components are to be removed or replaced as a result of maintenance, troubleshooting etc., follow the service procedures that follow. (Front impact sensor; refer to [P.52B-138](#), SRS-ECU; refer to [P.52B-140](#), Air bag modules and clock spring; refer to [P.52B-141](#), Side impact sensor; refer to [P.52B-147](#), Seat belt with pre-tensioner; refer to [P.52B-148](#)).

WARNING/CAUTION LABELS

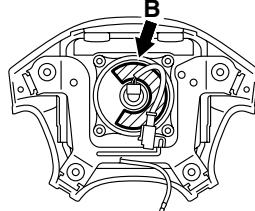
Caution labels on the SRS are attached in the vehicle as shown. Follow label instructions when servicing the SRS. If the label(s) are dirty or damaged, replace with new one(s).

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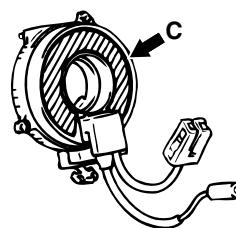
Steering wheel



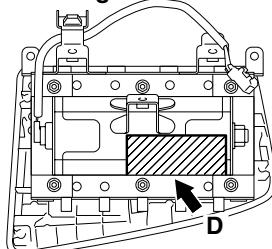
Driver's air bag module



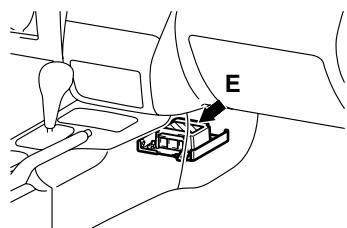
Clock spring



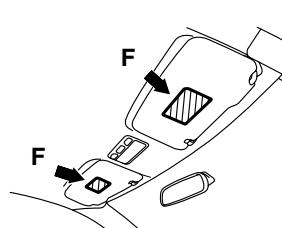
Passenger's (front)
air bag module



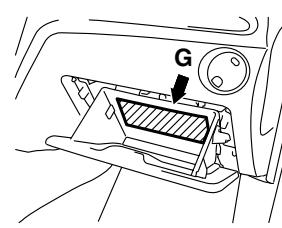
SRS-ECU



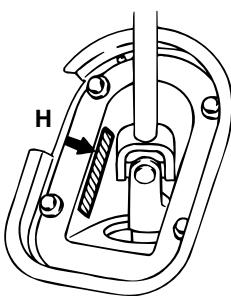
Sun visor



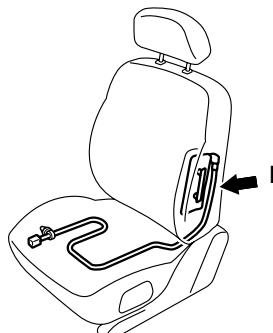
Glove box



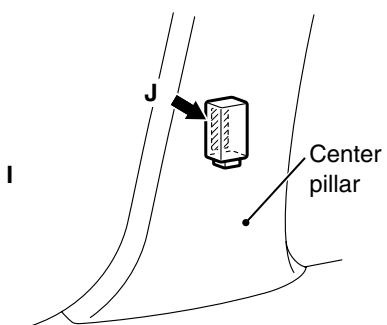
Steering joint cover



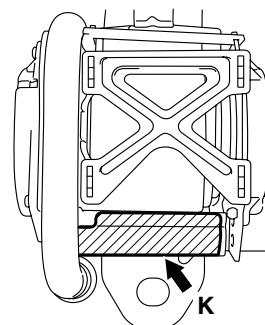
Side air bag module
(driver's and
front passenger's seat)



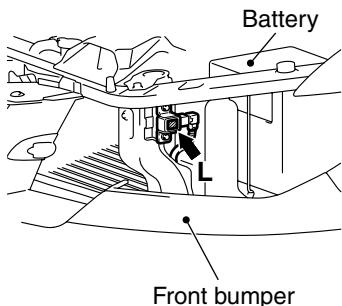
Side impact sensors
(left and right)



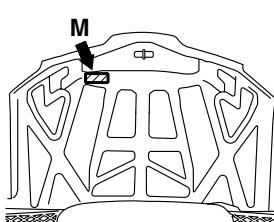
Seat belt with pre-tensioner
(driver's and passenger's seat)



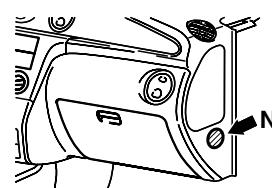
Front impact sensors (left and right)



Hood



Instrument panel



FRONT IMPACT SENSORS

REMOVAL AND INSTALLATION

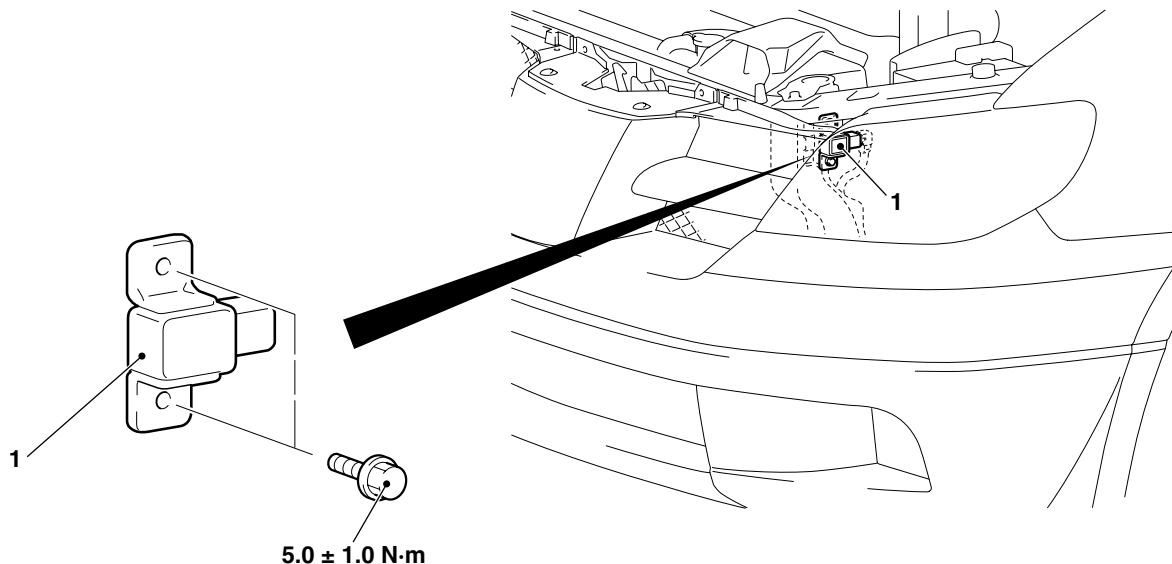
M1524001500258

WARNING

- *Disconnect the negative battery terminal and wait for 60 seconds or more before starting work. Furthermore, the disconnected battery terminal should be covered with tape to insulate it.*
- *Never attempt to disassemble or repair the front impact sensor. If faulty, replace it.*
- *Do not drop or subject the front impact sensor to impact or vibration. If denting, cracking, deformation, or rust are discovered in the front impact sensor, replace it with a new front impact sensor. Discard the old one.*
- *After deployment of an air bag, replace the front impact sensor with a new one.*

Pre-removal Operation

- Turn the ignition key to the "LOCK" (OFF) position.
- Disconnect the Negative Battery Terminal.



AC300078AB

Removal step
 1. Front impact sensor

Installation steps

>>A<< • Pre-installation inspection

>>B<< 1. Front impact sensor

- Negative battery cable connection

>>C<< • Post-installation inspection

NOTE: The figure on the left indicates the left front impact sensor.

INSTALLATION SERVICE POINTS

>>A<<PRE-INSTALLATION INSPECTION

When the new front impact sensor refer to the previous item "INSPECTION."

>>B<<FRONT IMPACT SENSOR INSTALLATION

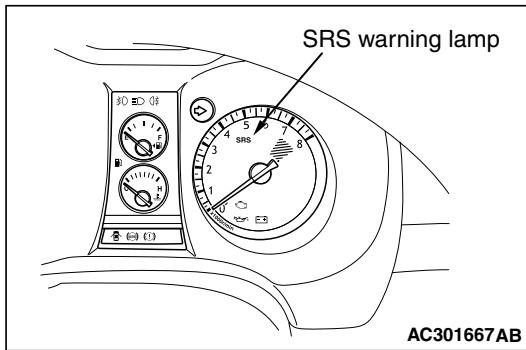
⚠ WARNING

The SRS may not activate properly if a front impact sensor is not installed properly.

1. Securely connect the connector.
2. Position the front impact sensor facing toward the front of the vehicle as shown by the arrow on the label, and install it securely.

>>C<<POST-INSTALLATION INSPECTION

1. Connect the negative battery cable.
2. Turn the ignition key to "ON" position.



3. Does the SRS warning lamp illuminate for about 7 seconds, and then remain extinguished for at least 5 seconds after turning OFF?
4. If no, refer to troubleshooting (Refer to [P.52B-8](#)).

INSPECTION

M1524001600222

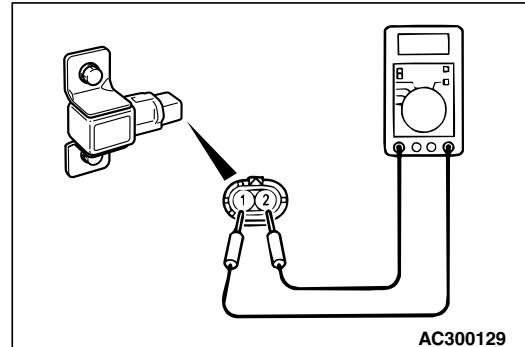
⚠ WARNING

If a dent, crack, deformation or rust is detected, replace with a new sensor.

1. Check the front impact sensor for dents, cracks, deformation or rust.

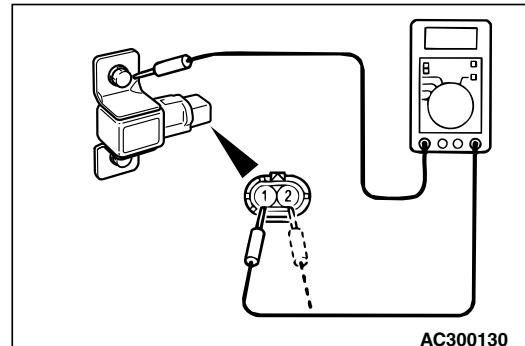
⚠ WARNING

Always replace the sensor with a new one if the resistance shows a short or open circuit.



2. Measure the resistance between terminals and check whether it is within the standard value.

Standard value: $820 \pm 82 \Omega$



3. Check the continuity between the terminal and bracket. If there is a continuity, the insulation is malfunctioned, and replace the sensor with a new one.
4. Check the head lamp support pane for deformation and rust.

SRS CONTROL UNIT (SRS-ECU)

REMOVAL AND INSTALLATION

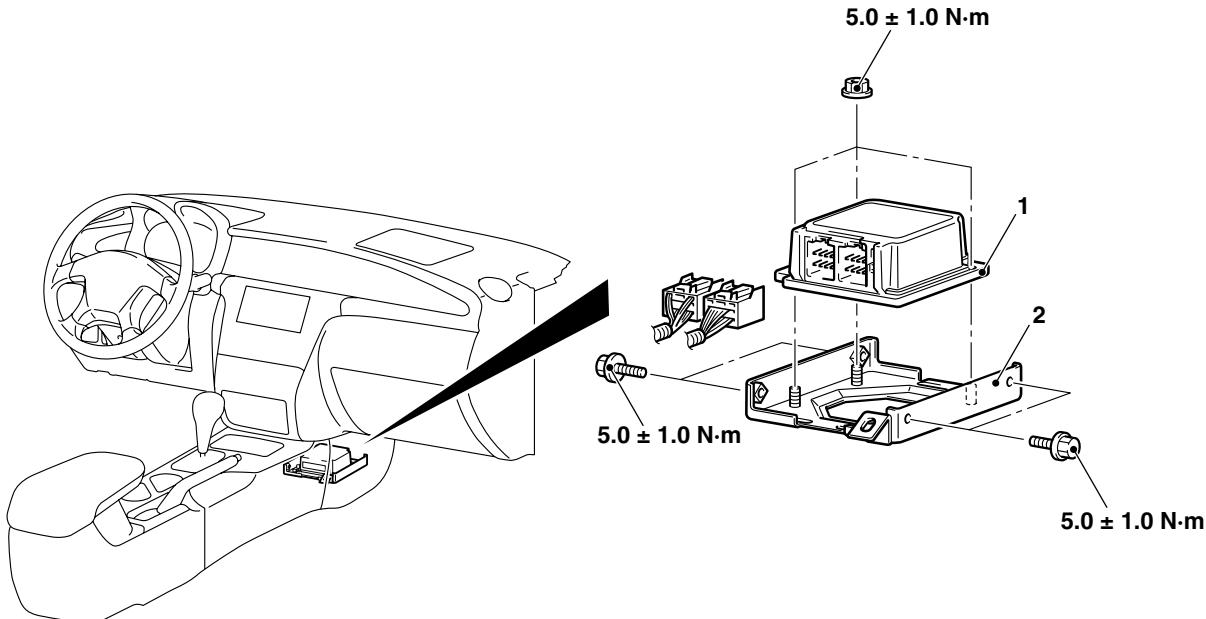
M1524002100350

⚠️ WARNING

- *Disconnect the negative battery terminal and wait for 60 seconds or more before starting work. Furthermore, the disconnected battery terminal should be covered with tape to insulate it.*
- *Never attempt to disassemble or repair the SRS-ECU. If faulty, replace it.*
- *Do not drop or subject the SRS-ECU to impact or vibration. If denting, cracking, deformation, or rust are discovered in the SRS-ECU, replace it with a new front impact sensor. Discard the old one.*
- *After deployment of an air bag, replace the SRS-ECU with a new one.*
- *Never use an ohmmeter on or near the SRS-ECU, and use only the special test equipment described on P.52B-7.*

Pre-removal Operation

- Turn the ignition switch to the "LOCK" (OFF) position.
- Disconnect the Negative Battery Terminal.



AC300137AB

Removal steps

- Front floor console (Refer to GROUP 52A – Floor console assembly P.52A-8).

1. SRS-ECU
2. SRS-ECU bracket

Installation steps

2. SRS-ECU bracket
1. SRS-ECU

- Front floor console (Refer to GROUP 52A – Floor console assembly P.52A-8).
- Negative battery cable connection
- Post-installation inspection

>>A<<

>>B<<

INSTALLATION SERVICE POINTS

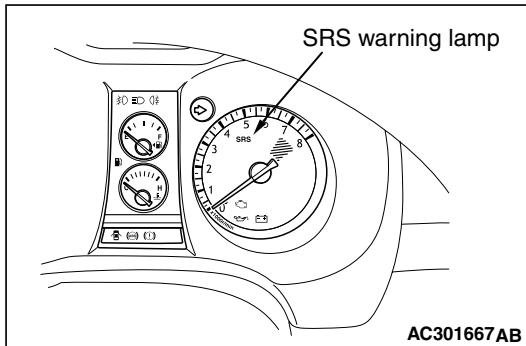
>>A<< SRS-ECU INSTALLATION

⚠ WARNING

The SRS may not activate if SRS-ECU is not installed properly.

>>B<< POST-INSTALLATION INSPECTION

1. Connect the negative battery cable.
2. Turn the ignition key to "ON" position.



3. Does the SRS warning lamp illuminate for about 7 seconds, and then remain extinguished for at least 5 seconds after turning OFF?
4. If no, refer to troubleshooting (Refer to [P.52B-8](#)).

INSPECTION

M1524002200302

⚠ WARNING

If any problems are found, replace the SRS-ECU.

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

NOTE: For the checks other than the items above, refer to "Troubleshooting" (Refer to [P.52B-8](#)).

AIR BAG MODULE(S) AND CLOCK SPRING

REMOVAL AND INSTALLATION

M1524002400403

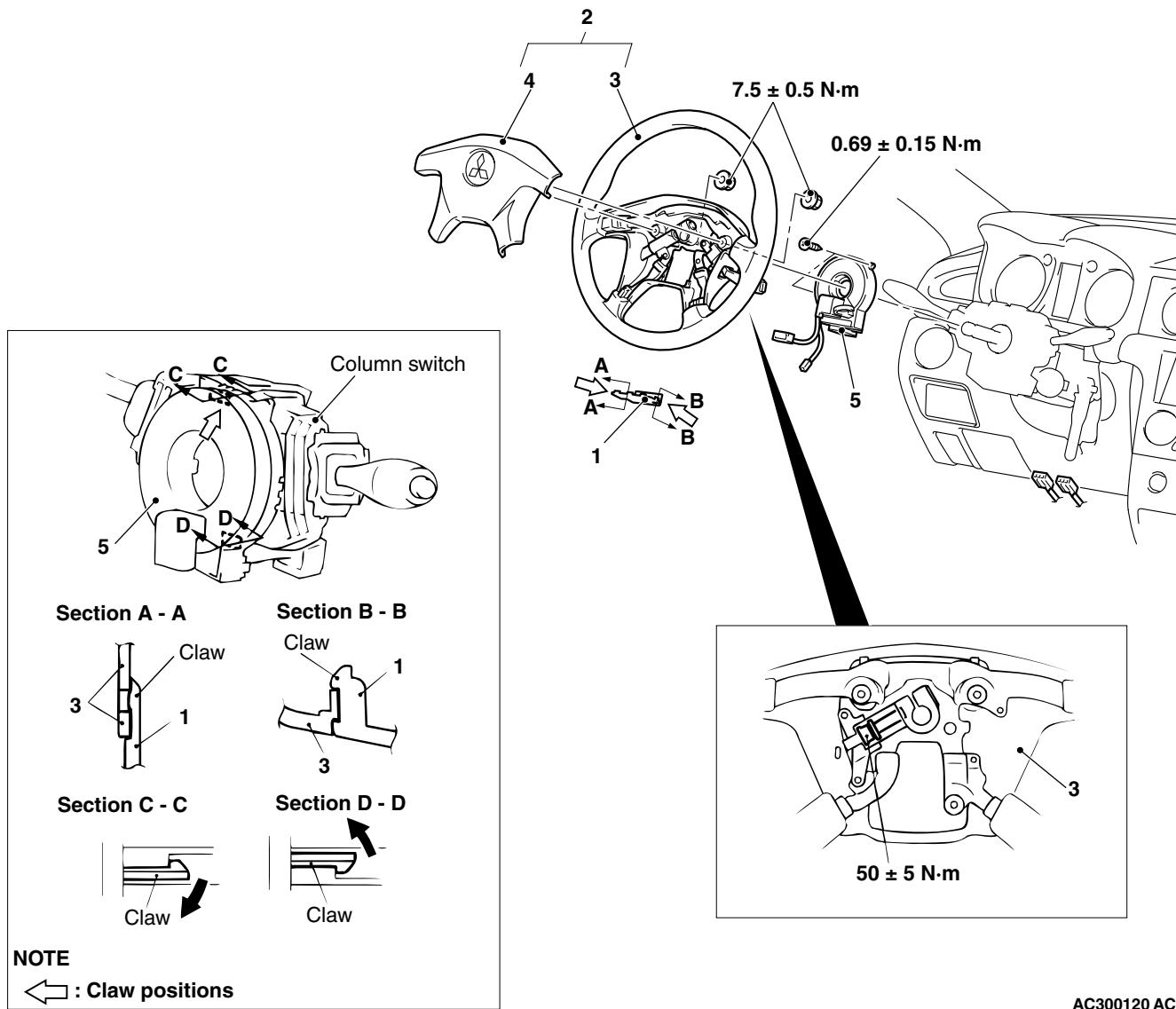
⚠ WARNING

- **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-2](#)).**
- **Never attempt to disassemble or repair the air bag modules and clock spring. If faulty, just replace with new one(s).**
- **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.**
- **Store the air bag modules on a flat surface with the deployment surface facing up. Do not place anything on top of them.**
- **Do not store the air bag modules in a place more than 93°C.**
- **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.**
- **Put on gloves and safety glasses when handling deployed air bags.**
- **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 [P.52B-151](#)).**

<Side air bag module>

For removal and installation of the front seatback assembly with side air bag module, refer to GROUP 52A – Front Seat [P.52A-24](#).

<Air bag module (driver's side) and clock spring>



NOTE

◀ : Claw positions

AC300120 AC

Air bag module removal steps

<<A>> 1. Cover
<> 2. Steering wheel and air bag module assembly
<<C>> 3. Steering wheel
<<D>> 4. Air bag module

Clock spring removal steps

<<A>> 1. Cover
<> 2. Steering wheel and air bag module assembly
• Column cover lower (Refer to GROUP 37A – Steering shaft P.37-15).
<<D>> 5. Clock spring

Air bag module installation steps

>>A<< • Pre-installation inspection
4. Air bag module

Air bag module installation steps

3. Steering wheel
>>C<< 2. Steering wheel and air bag module assembly

1. Cover

- Negative battery cable connection

Clock spring installation steps

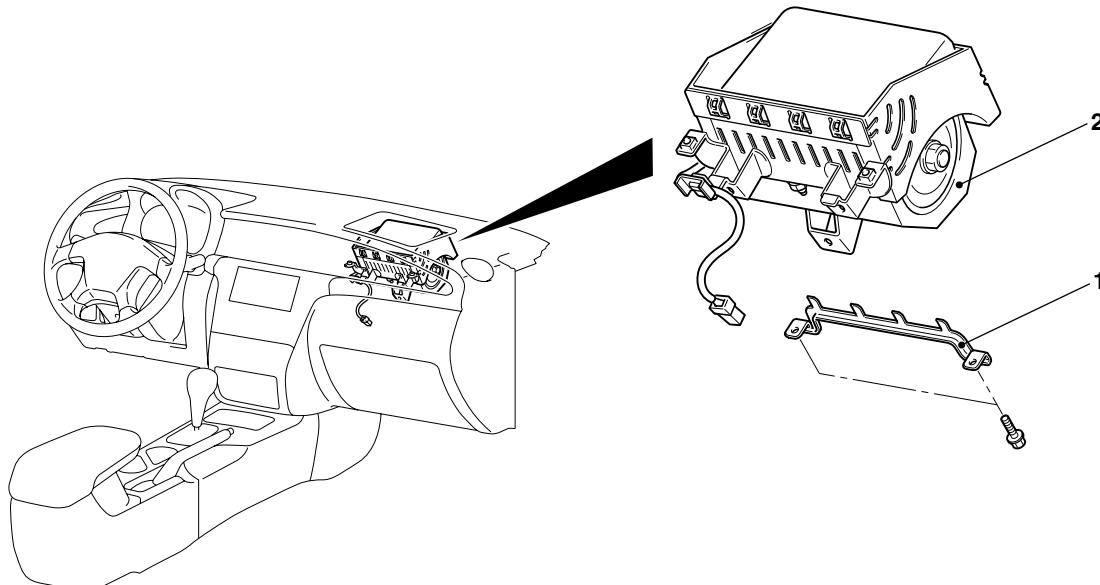
>>A<< • Pre-installation inspection
>>B<< 5. Clock spring
• Column cover lower (Refer to GROUP 37A – Steering shaft P.37-15).

>>C<< 2. Steering wheel and air bag module assembly
1. Cover

Clock spring installation steps

- Negative battery cable connection
- Post-installation inspection

<Air bag module (front passenger's side)>



AC300153AB

Air bag module removal steps

- Instrument panel assembly (Refer to GROUP 52A – Instrument panel [P.52A-2](#)).
- Distribution duct (Refer to GROUP 52A – Instrument panel [P.52A-7](#)).
- 1. Air bag module bracket
- 2. Air bag module

<<E>>

Air bag module installation steps

- Pre-installation inspection
- 2. Air bag module

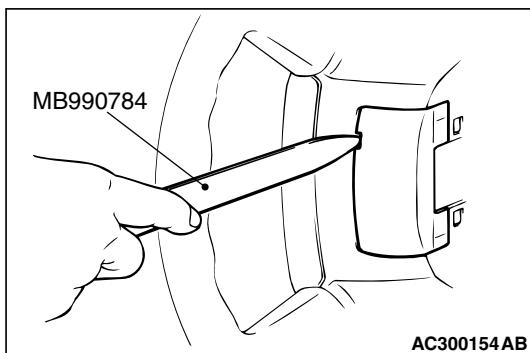
Air bag module installation steps

- 1. Air bag module bracket
- Distribution duct (Refer to GROUP 52A – Instrument panel [P.52A-7](#)).
- Instrument panel assembly (Refer to GROUP 52A – Instrument panel [P.52A-2](#)).
- Negative battery cable connection
- Post-installation inspection

>>D<<

REMOVAL SERVICE POINTS

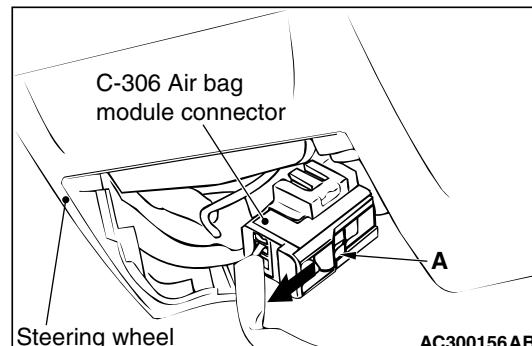
<<A>> COVER REMOVAL



AC300154AB

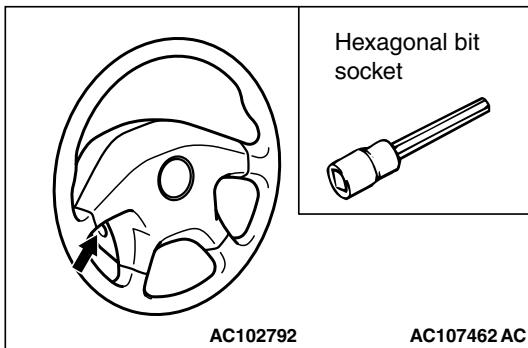
Insert the special tool ornament remover (MB990784) as shown in the illustration to remove the cover.

<> STEERING WHEEL AND AIR BAG MODULE ASSEMBLY REMOVAL



AC300156AB

1. By sliding the A section (in the figure) of the air bag module 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 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.

<<C>> DRIVER'S AIR BAG MODULE REMOVAL



- The air bag module must not be measured with such equipment as an ohmmeter, nor disassembled.**
- The removed air bag module should be stored in a clean, dry place with the deployment surface facing up.**

<<D>> CLOCK SPRING REMOVAL



The removed clock spring should be stored in a clean, dry place.

<<E>> AIR BAG MODULE REMOVAL (FRONT PASSENGER'S SIDE)



- When the passenger's air bag module is removed, do not damage the engagement of the pawls.**
- 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



WARNING
When discarding the air bag module or seat back assembly, deploy the air bag as specified in the service procedure (Refer to P.52B-151).

- Even new air bag modules, clock spring and front seat back assembly require inspection before installation.
- Connect the negative battery cable.



WARNING
Turn the ignition switch to the "LOCK" (OFF) position when connecting and disconnecting the MUT-II.

- Connect the MUT-II to the diagnosis connector (16- pin).
- Turn the ignition switch to the "ON" position.
- Read a diagnosis code to refer to that the SRS is operating properly except an open in the air bag module circuit.
- Turn the ignition switch to "LOCK" (OFF) position.



WARNING
Wait at least 60 seconds after the disconnection of the battery cable before any further job (Refer to P.52B-2).

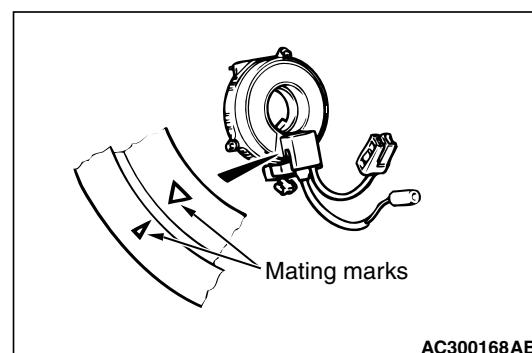
- Disconnect the negative battery cable and insulate with tape.

>>B<< CLOCK SPRING INSTALLATION

- Confirm that the steering wheel is at the straight-ahead position.



WARNING
Unless the mating marks are properly aligned, the steering wheel gets stuck amid a turn or the flat cable in the clock spring is cut. These hinder the SRS air bag from proper operation, resulting in serious injury to the vehicle's driver.



- Align the mating marks of the clock spring.

- (1) Turn the clock spring clockwise fully. Then turn it back approximately 3 3/4 turns counterclockwise to align the mating marks.
- (2) Then install the clock spring to the column switch.

>>C<< STEERING WHEEL AND AIR BAG MODULE ASSEMBLY INSTALLATION

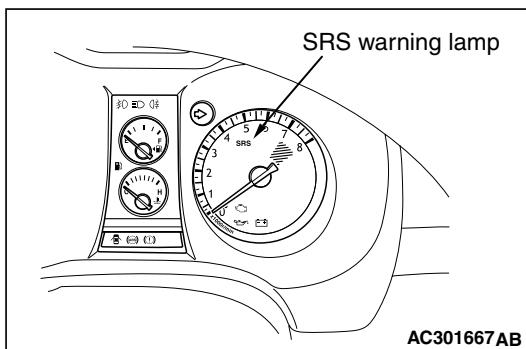
⚠ CAUTION

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

1. Refer to first that the clock spring has been centered properly. Then, install the steering wheel.
2. After clamping, turn the steering wheel all the way in both directions to confirm that steering is normal.

>>D<< POST-INSTALLATION INSPECTION

1. Connect the negative battery cable.
2. Turn the ignition key to "ON" position.



3. Does the SRS warning lamp illuminate for about 7 seconds, and then remain extinguished for at least 5 seconds after turning OFF?
4. If no, refer to troubleshooting (Refer to P.52B-8).

INSPECTION

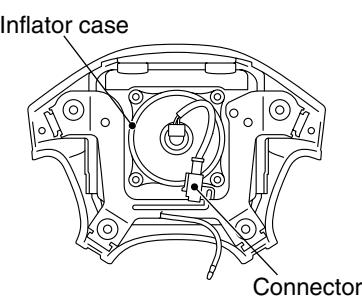
M1524002500381

AIR BAG MODULE CHECK

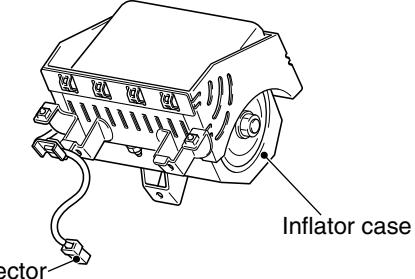
⚠ WARNING

- If any component damage is found during the following inspection, replace the air bag module(s) with a new one. Dispose of the old one according to the specified procedure (Refer to P.52B-151).
- Never attempt to measure the circuit resistance of the air bag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental air bag module(s) deployment will result in serious personal injury.
- 1. Check the pad cover for dents, cracks or deformation.

<Driver's side>



<Front passenger's side>

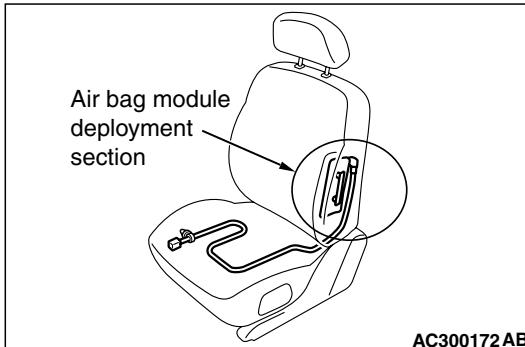


2. Check the connectors for damage, the terminals for deformation, and the harness for binds.
3. Check the air bag inflator case for dents, cracks or deformation.
4. Install the air bag module (driver's side) to the steering wheel and check fit and alignment with the wheel.
5. Install the air bag module (front passenger's side) to the instrument panel and front deck crossmember and check fit and alignment.

FRONT SEATBACK ASSEMBLY WITH SIDE AIR BAG MODULE CHECK

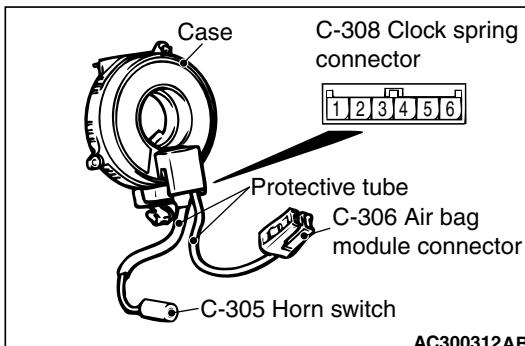
WARNING

- **If any improper part is found during the following inspection, replace the front seatback assembly with a new one. Dispose of the old one according to the specified procedure (Refer to P.52B-151).**
- **Never attempt to measure the circuit resistance of the air bag module (squib) even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental air bag deployment will result in serious personal injury.**



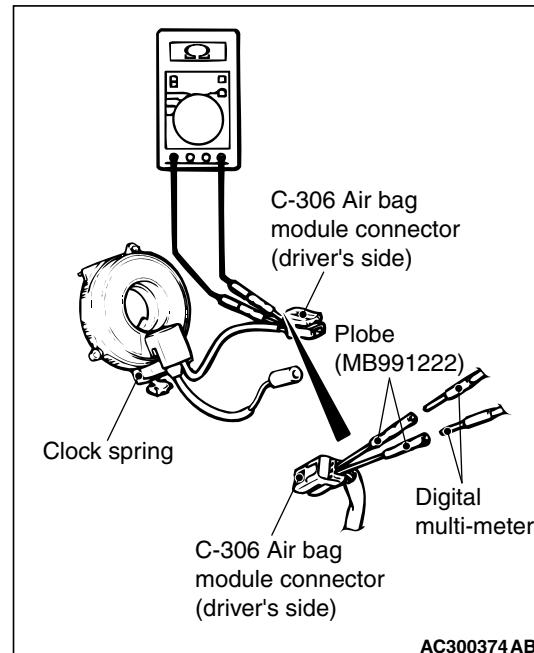
1. Check the air bag module deployment section for dents or deformation.
2. Check the connector for damage, the terminals for deformation, and the harness for binds.

CLOCK SPRING CHECK



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

1. Check the connectors and protective tube for damage, and the terminals for deformation.
2. Visually check the case for damage.
3. Check to see that there is a charge (continuity) between the C-308 clock spring connector terminal 1 and C-305 horn switch.

CAUTION

Do not directly insert a probe, etc. into the terminal from the front of the connector.

4. Insert the special tool probe in the harness set (MB991222) from behind the C-306 air bag module connector (driver's side).
5. As shown in the Figure, connect the circuit tester to the special tool probe in the harness set (MB991222) and check to see that there is a charge between the terminals.

SIDE IMPACT SENSOR

REMOVAL AND INSTALLATION

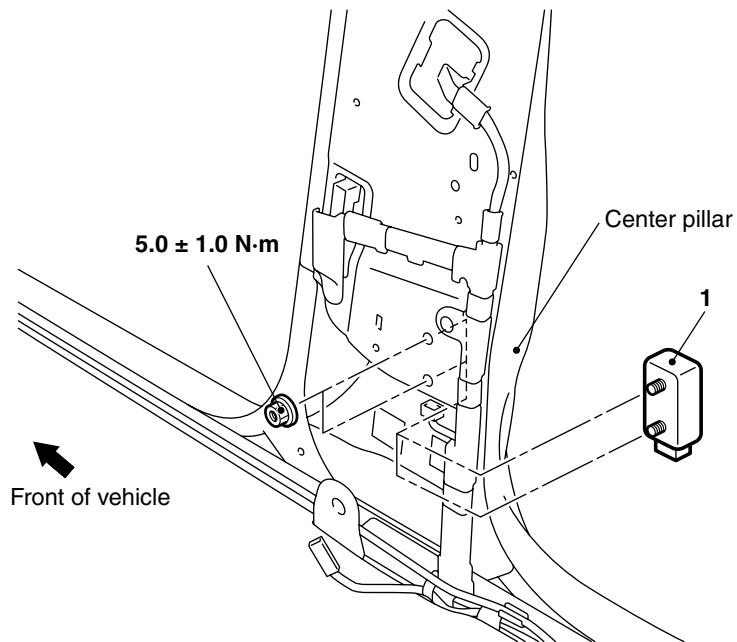
M1524004600243

WARNING

- *Disconnect the negative battery terminal and wait for 60 seconds or more before starting work. Furthermore, the disconnected battery terminal should be covered with tape to insulate it.*
- *Never attempt to disassemble or repair the side impact sensors. If faulty, replace it.*
- *Do not drop or subject the side impact sensors to impact or vibration. If denting, cracking, deformation, or rust are discovered in the side impact sensors, replace it with a new front impact sensor. Discard the old one.*
- *After deployment of an air bag, replace the side impact sensors with a new one.*
- *Never use an ohmmeter on or near the side impact sensors, and use only the special test equipment described on P.52B-7.*

Pre-removal Operation

- Turn the ignition key to the "LOCK" (OFF) position.
- Disconnect the Negative Battery Terminal.



AC300142AB

Removal steps

- Centre pillar trim lower (Refer to GROUP 52A – Trims P.52A-10).
- Seat belt pre-tensioner (Refer to GROUP 52A – Front seat belt P.52A-29).

1. Side impact sensor

Installation steps

>>A<< • Pre-installation inspection

>>B<< 1. Side impact sensor

Installation steps (Continued)

- Seat belt pre-tensioner (Refer to GROUP 52A – Front seat belt P.52A-29).
- Centre pillar trim lower (Refer to GROUP 52A – Trims P.52A-10).
- Negative battery cable connector

>>C<<

Post-installation inspection

NOTE: The figure shows the side impact sensor (RH).

INSTALLATION SERVICE POINTS

>>A<< PRE-INSTALLATION INSPECTION

Even new side impact sensor requires inspection before installation. (Refer to the previous item "INSPECTION")

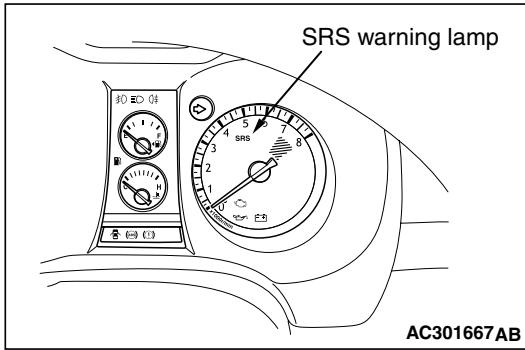
>>B<< SIDE IMPACT SENSOR INSTALLATION

⚠ WARNING

The side impact sensor, unless properly installed, does not operate properly, thereby resulting in serious injury or death of the vehicle's occupants.

>>C<< POST-INSTALLATION INSPECTION

1. Connect the negative battery cable.
2. Turn the ignition key to "ON" position.



3. Does the SRS warning lamp illuminate for about 7 seconds, and then remain extinguished for at least 5 seconds after turning OFF?
4. If no, refer to troubleshooting (Refer to [P.52B-8](#)).

INSPECTION

M1524004700206

⚠ WARNING

If any problems, replace the sensor.

1. Check the side impact sensor and bracket for dents, cracks or deformation.
2. Check the connector for damage, and terminal for deformation.
3. Check that there is no bending or corrosion in the centre pillar.

NOTE: For the checks other than the items above, refer to Troubleshooting (Refer to [P.52B-8](#)).

SEAT BELTS WITH PRE-TENSIONER

REMOVAL AND INSTALLATION

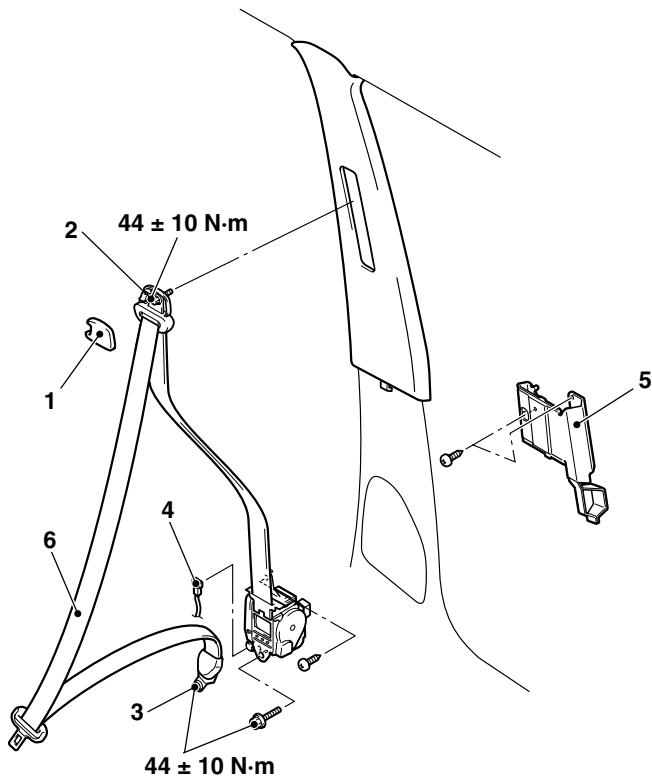
M1524004100237

⚠ WARNING

- ***Never attempt to disassemble or repair the seat belt pre-tensioner. If faulty, replace it.***
- ***Be extremely careful when handling the seat with pre-tensioner. Do not subject it to shocks, drop it, bring it close to strong magnets or allow contact with water, grease or oil. Always replace it with a new part if any dents, cracks or deformation is found.***
- ***Do not place anything on top of the seat belt pre-tensioner.***
- ***Do not expose the seat belt pre-tensioner to temperatures over 90°C.***
- ***After operating the seat belt pre-tensioner, replace the seat belt pre-tensioner with a new part.***
- ***Gloves and protective goggles should be worn when handling a seat belt pre-tensioner once it has been used.***
- ***If disposing of a seat belt with pre-tensioner which has not yet been operated, its seat belt pre-tensioner should be operated first before disposal (Refer to [P.52B-151](#)).***

Pre-removal Operation

- Turn the ignition key to the "LOCK" (OFF) position.
- Disconnect the Negative Battery Terminal.



AC300144AB

Removal steps

1. Sash guide cover
2. Seat belt shoulder anchor bolt
3. Seat belt lower anchor bolt
 - Centre pillar trim, lower (Refer to GROUP 52A – Trims P.52A-10).
4. Pre-tensioner connector connection
5. Bracket
6. Seat belt with pre-tensioner

Installation steps

- >>A<< • Pre-installation inspection
6. Seat belt with pre-tensioner

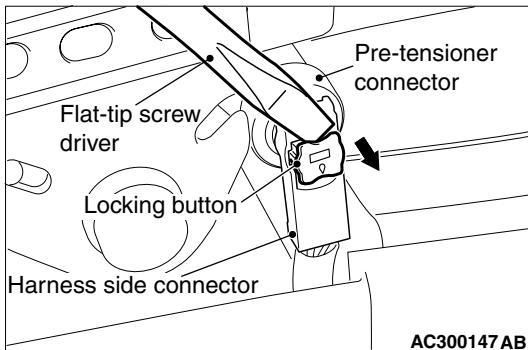
<<A>>

Installation steps (Continued)

5. Bracket
4. Pre-tensioner connector connection
 - Centre pillar trim, lower (Refer to GROUP 52A – Trims P.52A-10).
3. Seat belt lower anchor bolt
2. Seat belt shoulder anchor bolt
1. Sash guide cover
 - Negative battery cable connection

>>C<<

NOTE: The figure shows the seat belt with pre-tensioner (RH).

REMOVAL SERVICE POINTS**<<A>>PRE-TENSIONER CONNECTOR
DISCONNECTION**

1. Use a flat-tipped screwdriver to pull out forward and unlock the locking button of the harness-side connector.
2. Disconnect the pretensioner connector.

INSTALLATION SERVICE POINTS**>>A<< PRE-INSTALLATION INSPECTION****⚠ WARNING**

When discarding the seat belt with pre-tensioner, operate the pre-tensioner as specified in the service procedure (Refer to P.52B-151).

1. Even new seat belt with pre-tensioner require inspection before installation.
2. Connect the negative battery cable.

⚠ CAUTION

Turn the ignition switch to the "LOCK" (OFF) position when connecting and disconnecting the MUT-II.

3. Connect the MUT-II to the diagnosis connector (16-pin).
4. Turn the ignition switch to the ON position.
5. Read a diagnosis code to refer to that the SRS is operating properly except an open in the seat belt with pre-tensioner circuit.
6. Turn the ignition switch to "LOCK" (OFF) position.

⚠ DANGER

Wait at least 60 seconds after the disconnection of the battery cable before any further job (Refer to P.52B-2).

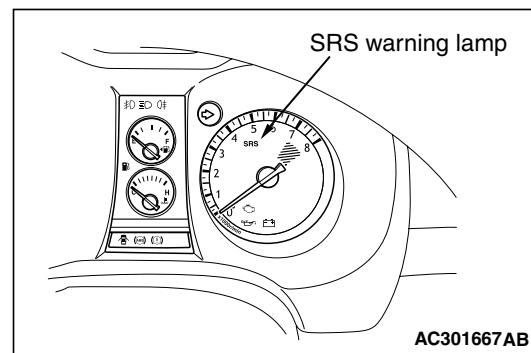
7. Disconnect the negative battery cable and insulate with tape.

**>>B<< PRE-TENSIONER CONNECTOR
CONNECTION**

Connect the pretensioner connector then securely lock the locking button of the harness-side connector.

>> C<< POST-INSTALLATION INSPECTION

1. Connect the negative battery cable.
2. Turn the ignition key to "ON" position.



3. Does the SRS warning lamp illuminate for about 7 seconds, and then remain extinguished for at least 5 seconds after turning OFF?
4. If no, refer to troubleshooting (Refer to P.52B-8).

INSPECTION

M1524004200223

⚠ WARNING

• If any component damage is found during the following inspection, replace the seat belt with pre-tensioner with a new one. Dispose of the old one according to the specified procedure (Refer to P.52B-151).

• Never attempt to measure the circuit resistance of the seat belt pre-tensioner even if you are using the specified tester. If the circuit resistance is measured with a tester, accidental seat belt pre-tensioner operation will result in serious personal injury.

1. Check the pre-tensioner deployment section for dents and deformation.
2. Check the harness and connector for damage and the terminals for deformation.

AIR BAG MODULE AND SEAT BELT PRE-TENSIONER DISPOSAL PROCEDURES

Before disposing of an air bag or a vehicle equipped with an air bag, follow the procedures below to deploy the air bag.

UNDEPLOYED AIR BAG MODULE DISPOSAL

⚠ WARNING

- If the vehicle is to be scrapped or otherwise disposed of, deploy the air bags and operate the seat belt pre-tensioner inside the vehicle. If the vehicle will continue to be used and only the air bag modules and seat belt pre-tensioner are to be disposed of, deploy the air bags and operate the seat belt pre-tensioner outside the vehicle.**
- Since a large amount of smoke is produced when the air bag is deployed and the seat belt pre-tensioner is operated, avoid residential areas whenever possible.**
- Since there is loud noise when the air bags are deployed and when the seat belt pre-tensioner are operated, avoid residential areas whenever possible. If anyone is nearby, give warning of the impending noise.**
- Suitable ear protection should be worn by personnel performing these procedures or by people in the immediate area.**

DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Air bag module (driver's side)>

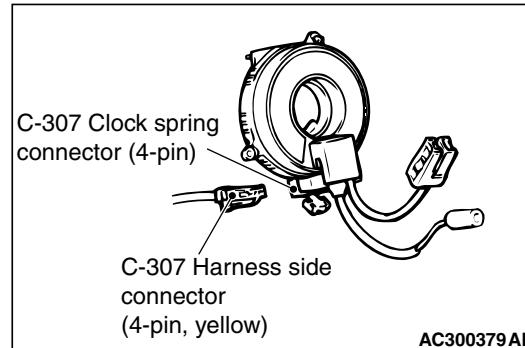
1. Move the vehicle to an isolated spot.

⚠ DANGER

Wait at least 60 seconds after the disconnection of the battery cable before any further job (Refer to P.52B-2).

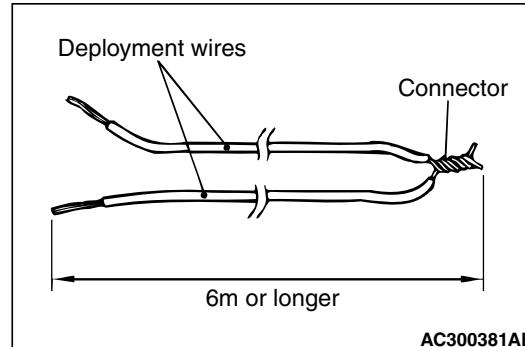
2. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

3. Remove the column cover lower (Refer to GROUP 37A – Steering shaft P.37-15).

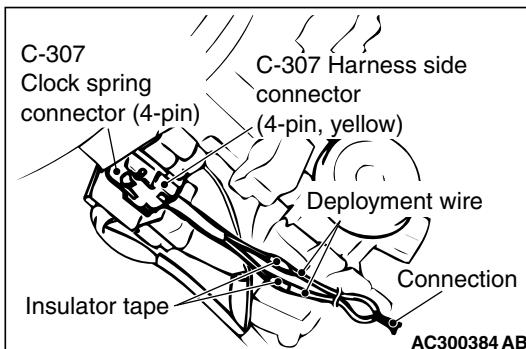


4. Remove the connection between the C-307 clock spring connector (4-pin) and the harness side connector (4-pin, yellow).

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.



5. Obtain two suitable wires, which are 6 meters or longer, as deployment wires. Then connect the wires at one end to short.
6. Touch the vehicle's body with bare hands to discharge static in you.

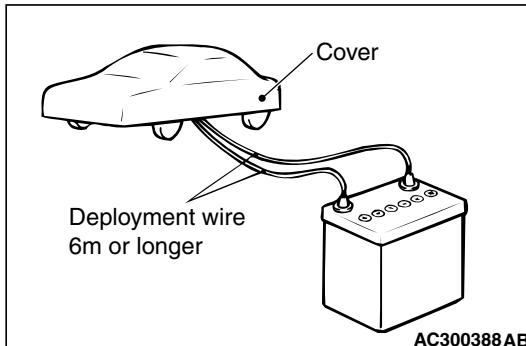


7. Cut with a pliers, etc. the instrument panel wiring harness shown in the figure of the instructions, while the C-307 clock spring connector is disconnected.

NOTE: The disconnection location should be sufficiently away from the C-307 harness side connector with consideration to the expansion harness connection location upon disconnections.

8. Connect the deployment wires on the two instrument panel wiring harnesses disconnected, cover the connection areas with insulation tape and then pull out the deployment wires outside the vehicle.
 9. Connect the C-307 harness side connector connected with an expansion harness to the C-307 clock spring connector.

⚠ WARNING



If the glass is scratched, air bag deployment could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

10. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

⚠ WARNING

• ***Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.***

• ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161) for post-deployment handling instructions.***

• ***If the air bag module fails to deploy, do not go near the module. Contact your distributor.***

11. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
 12. After deployment, dispose of the air bag module according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161).

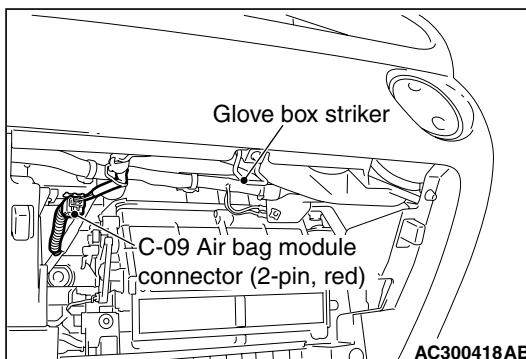
DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Air bag module (front passenger's side)>

1. Move the vehicle to an isolated spot.

⚠ DANGER

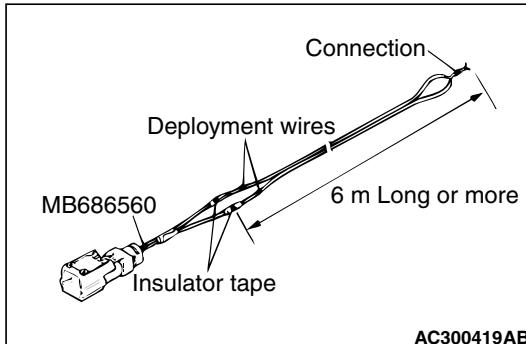
Wait at least 60 seconds after the disconnection of the battery cable before any further job (Refer to P.37-2).

2. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.
 3. Remove the glove box (Refer to GROUP 52A – Instrument Panel P.52A-2).

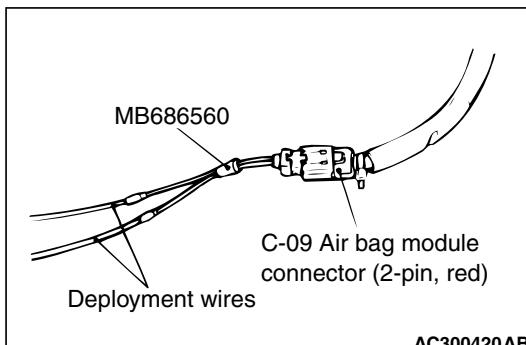


4. Remove the connection between the C-09 air bag module (front passenger's side) connector (2-pin, red) and the harness side connector (2-pin, red).

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

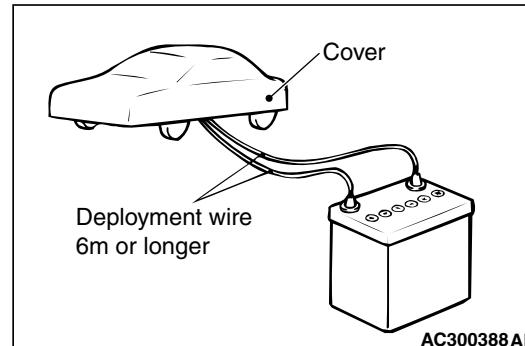


5. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB686560) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.



6. Connect the C-09 air bag module (front passenger's side) connector (2-pin, red) to special tool SRS air bag adapter harness (MB686560) and move the deployment wires out of the vehicle.

WARNING



If the glass is scratched, air bag deployment could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

7. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

WARNING

- ***Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.***
- ***The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161") for post-deployment handling instructions.***
- ***If the air bag module fails to deploy, do not go near the module. Contact your distributor.***
- 8. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
- 9. After deployment, dispose of the air bag module according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161).

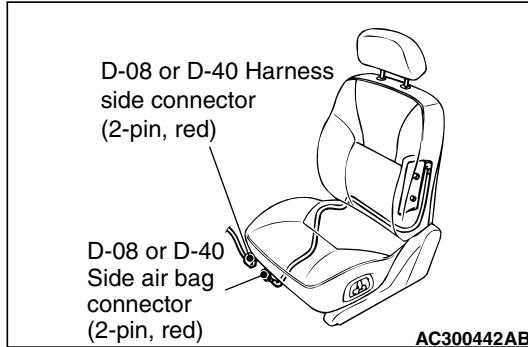
DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Side air bag module>

1. Move the vehicle to an isolated spot.

WARNING

Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to P.37-2).

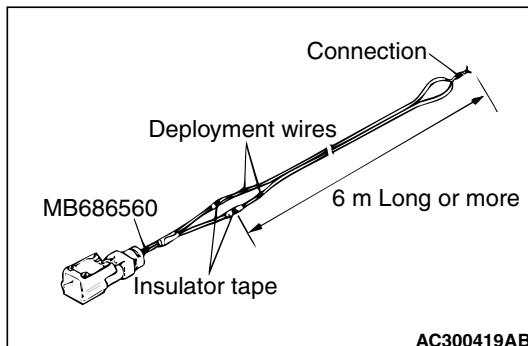
2. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

WARNING

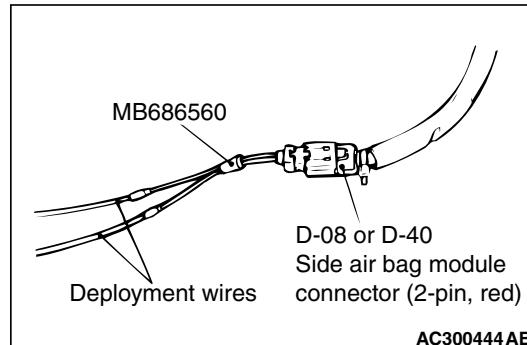
The side air bag modules for both the driver's side and passenger's side should be deployed.

3. Remove the connection between the D-08 or D-40 side air bag module connector (2-pin, red) and the harness side connector (2-pin, red).

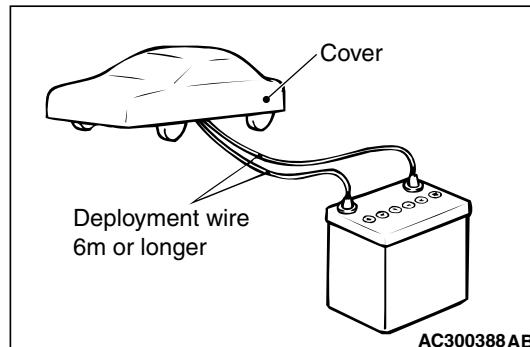
NOTE: Once disconnected from the side air bag wiring harness, both electrode of the side air bag module connector short automatically. This prevents the side air bag from accidental deployment caused by static etc.



4. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB686560) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.



5. Connect the D-08 or D-40 side air bag module connector (2-pin, red) to special tool SRS air bag adapter harness (MB686560) and move the deployment wire out of the vehicle.

WARNING

If the glass is scratched, air bag deployment could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

6. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the vehicle.

⚠️ WARNING

- **Before deploying the air bag in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.**
- **The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from the air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161") for post-deployment handling instructions.**
- **If the air bag module fails to deploy, do not go near the module. Contact your distributor.**
- 7. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
- 8. After deployment, dispose of the front seatback assembly (air bag module) according to the Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161).

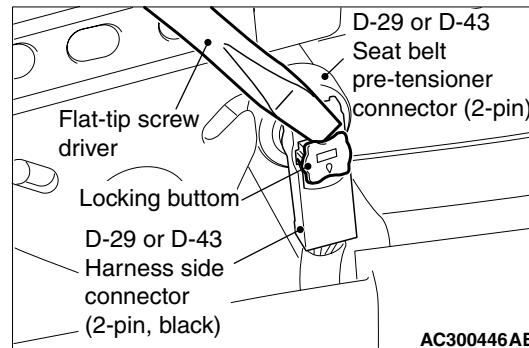
DEPLOYMENT INSIDE THE VEHICLE (when disposing of a vehicle) <Seat belt pre-tensioner>

1. Move the vehicle to an isolated spot.

⚠️ DANGER

Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to P.37-2).

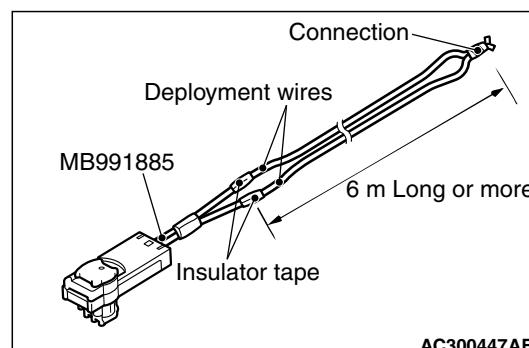
2. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.
3. Remove the centre pillar lower trim (Refer to GROUP 52A – TRIMS P.52A-10).



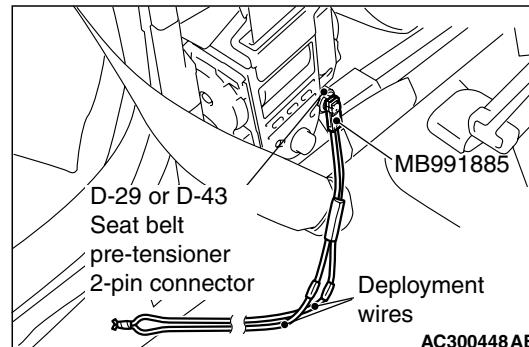
4. Execute the following steps to disconnect the connection between D-29 or D-43 seat belt pre-tensioner connector (2-pin) and harness side connector (2-pin, black).

NOTE: Once disconnected from the seat belt pre-tensioner wiring harness, both electrode of the side air bag module connector short automatically. This prevents the seat belt pre-tensioner from accidental deployment caused by static etc.

- (1) Use a flat-tipped screwdriver to pull out forward and unlock the locking button of the harness-side connector (2-pin, black).
- (2) Disconnect the D-29 or D-43 harness side connector.

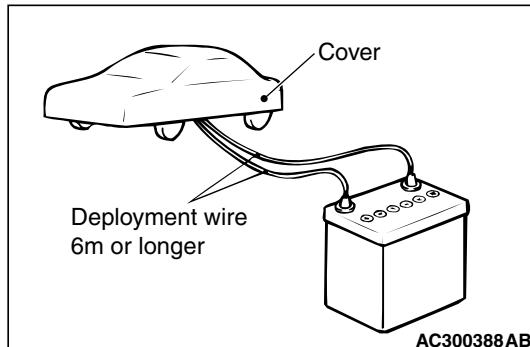


5. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB991885) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.



6. Connect the D-29 or D-43 seat belt pre-tensioner 2-pin connector (red) to special tool SRS air bag adapter harness (MB991885) and move the deployment harness out of the vehicle.

⚠ WARNING



If the glass is scratched, seat belt pre-tensioner operation could cause it to crack and fly out of the vehicle, so always put a cover over the vehicle.

7. To suppress the operation sound as much as possible completely close all door windows, close the doors and put the cover on the vehicle.

⚠ WARNING

- **Before operating the seat belt pre-tensioner in this manner, first check to be sure that there is no one in or near the vehicle. Wear safety glasses.**
- **The inflator will be quite hot immediately following the operation, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although no poisonous, do not inhale gas from the seat belt pre-tensioner operation. See Deployed Air Bag and Operated Seat Belt pre-tensioner Disposal (Refer to P.52B-161) for post-operation handling instructions.**
- **If the seat belt pre-tensioner fails to operate, do not go near the seat belt pre-tensioner. Contact your distributor.**

8. At a location as far away from the vehicle as possible, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to operating the seat belt pre-tensioner.

9. After operation, dispose of the seat belt pre-tensioner according to the Deployed Air Bag Module operated seat belt pre-tensioner Disposal (Refer to P.52B-161).

DEPLOYMENT OUTSIDE THE VEHICLE <Air bag module (driver's side)>

⚠ WARNING

- **This should be carried out in a wide, flat area at least 6 m away from obstacles and other people.**
- **Do not deploy outside if wind is high. Even in a soft wind, ignite to windward of the air bag modules.**

⚠ DANGER

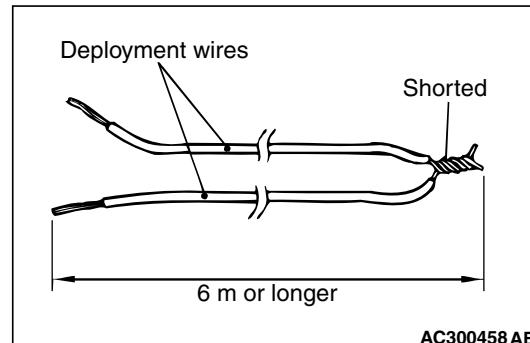
Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to P.37-2).

1. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

⚠ WARNING

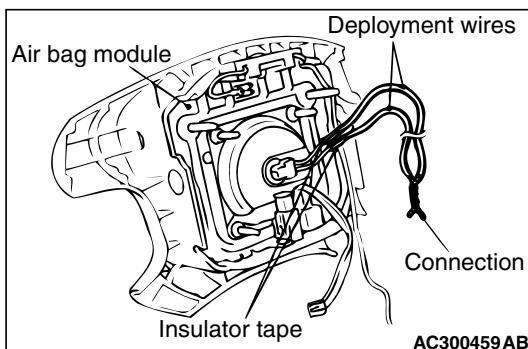
Once disconnected, both electrodes of the driver's air bag module connector short automatically to prevent accidental deployment caused by static etc. Still, in consideration of the accidental deployment, store the air bag module on flat place with deployment surface facing up. Also, do not put anything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

2. Remove the air bag module from the vehicle (Refer to P.52B-141).

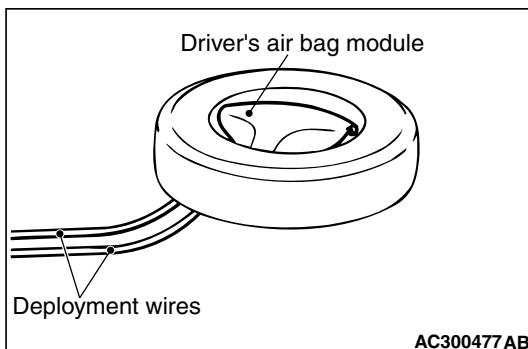


3. Obtain two suitable wires, which are 6 meters or longer, as deployment wires. Then connect the wires at one end to short.

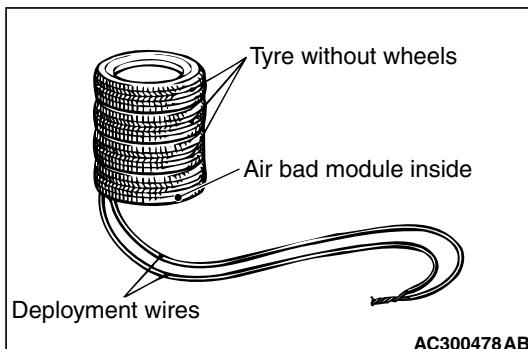
4. Touch the vehicle's body with bare hands to discharge static in you.



5. Using pliers, cut the driver's air bag module connector from the harnesses. Connect the deployment wires to each harness that has been cut and insulate the connections with plastic tape.



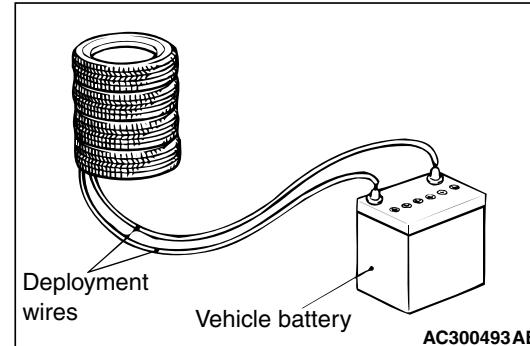
6. Install a nut to the bolt behind the driver's air bag module and tie thick wire there for securing.
 7. Route the deployment wires connected to the driver's air bag module beneath an old tyre and wheel assembly. Then, using the wire tied to the bolt, secure the driver's air bag module to the tyre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



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

⚠️ WARNING

- *Before deployment, check carefully to be sure that no one is nearby.*
- *The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161") for post-deployment handling instructions.*
- *If the air bag fails to deploy, do not go near the module. Contact your distributor.*

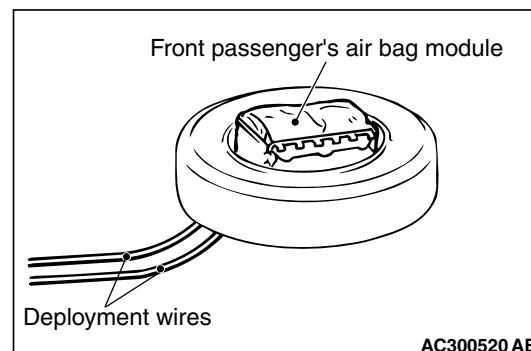


9. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them, to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
 10. Discard the deployed air bag module as specified in Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161).

DEPLOYMENT OUTSIDE THE VEHICLE <Air bag module (front passenger's side)>

⚠ WARNING

- **This should be carried out in a wide, flat area at least 6 m away from obstacles and other people.**
- **Do not deploy outside if wind is high. Even in a soft wind, ignite to windward of the air bag modules.**

**⚠ DANGER**

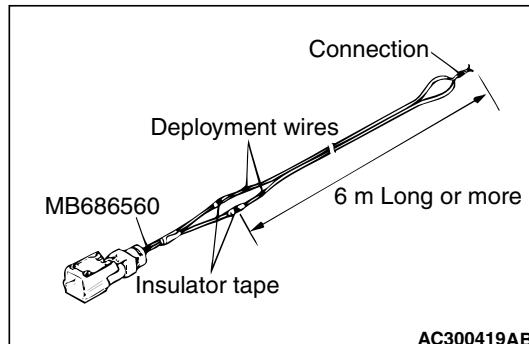
Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to P.37-2).

1. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

⚠ WARNING

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. Remove the air bag module from the vehicle (Refer to P.52B-141).



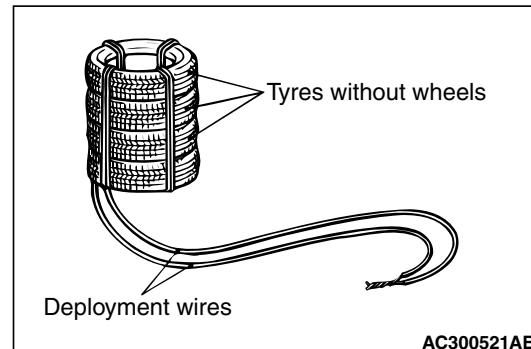
3. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB686560) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.

4. Connect the deployment wires to special tool SRS air bag adapter harness (MB686560), pass it beneath the tyre and wheel assembly, and connect it to the air bag module.

⚠ CAUTION

- **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.**
- **During deployment, the connector of special tool SRS air bag adapter harness (MB686560) must not be between the tyres.**

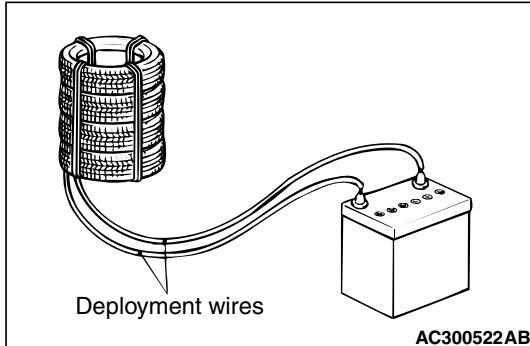
5. Pass the thick wire through the air bag module mounting hole, and then secure the air bag module to an old tyre with a wheel in it so that the pad on the module is facing upwards.



6. Place three old tyres without wheels on top of the tyre secured to the air bag module, and secure all tyres together with ropes (four locations).

⚠️ WARNING

- **Before deployment, check carefully to be sure that no one is nearby.**
- **The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to [P.52B-161](#)) for post-deployment handling instructions.**
- **If the air bag fails to deploy, do not go near the module. Contact your distributor.**



7. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to deploy the air bag.
8. Discard the deployed air bag module as specified in Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to [P.52B-161](#)).

DEPLOYMENT OUTSIDE VEHICLE <Side air bag module>

⚠️ WARNING

- **This should be carried out in a wide, flat area at least 6 m away from obstacles and other people.**
- **Do not deploy outside if wind is high. Even in a soft wind, ignite to windward of the air bag modules.**

⚠️ DANGER

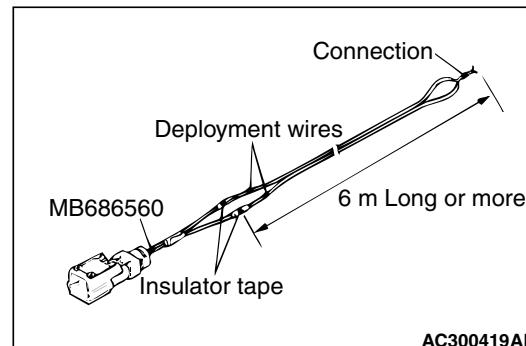
Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to [P.37-2](#)).

1. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

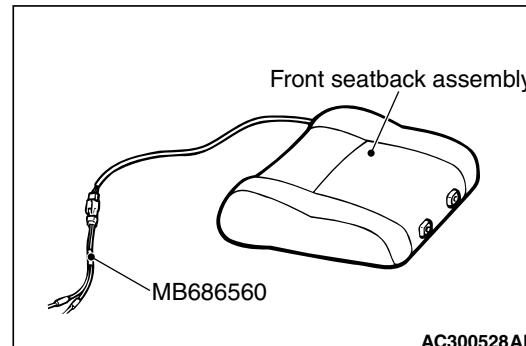
⚠️ WARNING

Once disconnected, both electrodes of the side 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. Remove the front seatback assembly with side air bag module from the vehicle (Refer to [P.52B-141](#)).



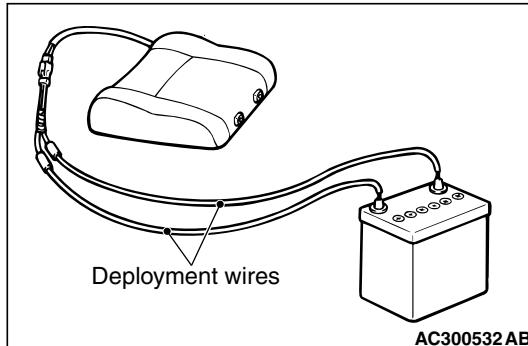
3. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB686560) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.



4. Place the front seatback assembly with its back contact with the earth.
5. Connect the special tool SRS air bag adapter harness (MB686560) with the deployment wires to the side air bag module connector.

⚠️ WARNING

- **Before deployment, check carefully to be sure that no one is nearby.**
- **The inflator will be quite hot immediately following the deployment, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from air bag deployment. See Deployed Air Bag Module and Operated Seat Belt Pre-tensioner Disposal (Refer to P.52B-161) for post-deployment handling instructions.**
- **If the air bag fails to deploy, do not go near the module. Contact your distributor.**



6. Disconnect the deployment wires as far from the front seatback assembly possible and connect the harnesses to the battery removed from the vehicle. Then, deploy.
7. Remove the deployed air bag module from the seatback assembly and discard as specified in the Deployed air bag module and Operated Seat Back Pre-tensioner (Refer to P.52B-161).

DEPLOYMENT OUTSIDE THE VEHICLE <Seat belt pre-tensioner>**⚠️ WARNING**

- **This should be carried out in a wide, flat area at least 6 m away from obstacles and other people.**
- **Do not deploy outside if wind is high. Even in a soft wind, ignite to windward of the air bag modules.**

⚠️ DANGER

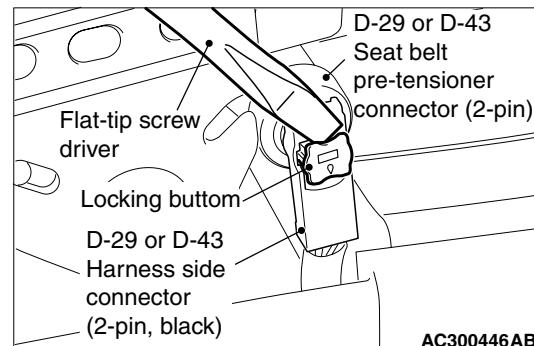
Wait at least 60 seconds after disconnecting the battery cables before doing any further work (Refer to P.37-2).

1. Disconnect the negative and positive battery cables from the battery terminals, and then remove the battery from the vehicle.

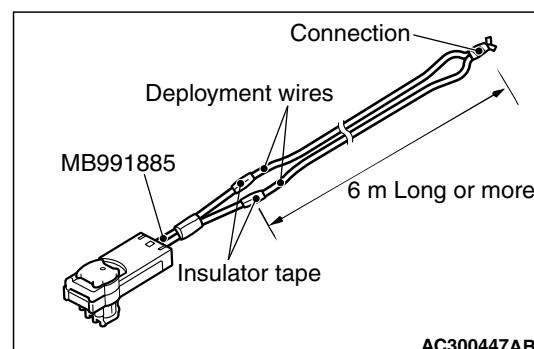
⚠️ WARNING

Store the operated seat belt pre-tensioner the correct way up with its operation surface upper most on a flat surface. Do not place anything on top of them.

2. Remove the seat belt pre-tensioner from the vehicle (Refer to P.52B-148).



3. Use a flat-tipped screwdriver to unlock the locking button of the harness-side connector (2-pin, black) by drawing it toward you in two stages.
4. Disconnect the D-29 or D-43 harness side connector.

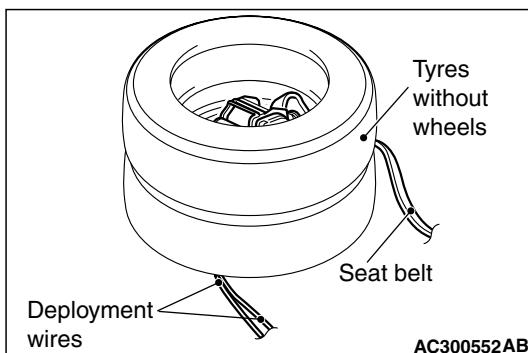


5. Connect deployment wires longer than 6 m to each special tool SRS air bag adapter harness (MB991885) and insulate the connections with plastic tape. Also, connect the deployment wires in the other ends to short, thereby preventing the passenger's air bag from accidental deployment caused by static etc.
6. Connect the special tool SRS air bag adapter harness (MB991885), which the deployment wires are attached to, to the seat belt pre-tensioner connector.

⚠️ CAUTION

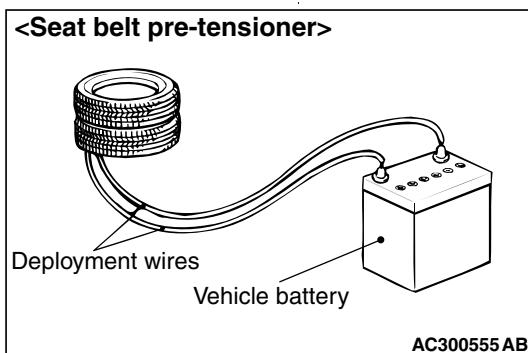
The adapter harness below the wheel should be loose. If it is too tight, the reaction when the seat belt pre-tensioner operates could damage the adapter harness.

7. Pass the thick wires through the hole on the seat belt pre-tensioner bracket and secure them to the front (raised part) of the wheel on two places.



8. Pull the seat belt out the outside of the tyre, and then place one tyre without a wheel inside on top of the existing tyre.

⚠️ WARNING



Before operation, check carefully to be sure that no one is nearby.

- **The inflator will be quite hot immediately following the operation, so wait at least 30 minutes to allow it to cool before attempting to handle it. Although not poisonous, do not inhale gas from seat belt pre-tensioner operation. See Deployed Air Bag Module and Operated Seat Belt pre-tensioner Disposal (Refer to P.52B-161) for post-operation handling instructions.**
- **If the seat belt pre-tensioner fails to operate, do not go near the seat belt pre-tensioner. Contact your distributor.**

9. At a location as far away from the air bag module as possible, and from a shielded position, disconnect the two connected wires from each other, and connect them to the two terminals of the battery (which has been removed from the vehicle) to operated seat belt pre-tensioner.

10. Discard the operated seat belt pre-tensioner as specified in Deployed Air Bag Module and Seat Belt pre-tensioner Disposal (Refer to [P.52B-161](#)).

DEPLOYED AIR BAG MODULE AND OPERATED SEAT BELT PRE-TENSIONER DISPOSAL

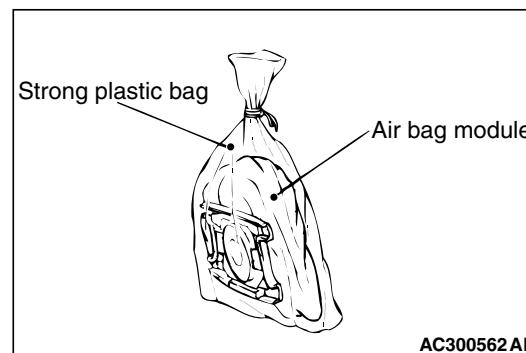
After deployment and operation, the air bag module and seat belt pre-tensioner should be disposed of in the same manner as any other scrap parts, adhering to local laws and/or legislation. Observe the following precautions during air bag or seat belt pre-tensioner disposal:

1. The inflator will be quite hot immediately following deployment, so wait at least 30 minutes to allow it cool before attempting to handle it.
2. Do not put water or oil on the air bag after deployment or on the seat belt pre-tensioner after operation.

⚠️ WARNING

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.

3. There may be material on the deployed air bag module or the operated seat belt pre-tensioner, that could irritate the eye and/or skin. Wear gloves and safety glasses when handling a deployed air bag module or the operated seat belt pre-tensioner.



4. Tightly seal the air bag module and seat belt pre-tensioner in a strong plastic bag for disposal.
5. Be sure to always wash your hands after completing this operation.

NOTES