

GROUP 52Bb

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) DIAGNOSIS

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SRS AIR BAG DIAGNOSIS

INTRODUCTION TO DIAGNOSIS

The SRS system is controlled by the SRS-ECU. The SRS-ECU judges how severe a collision is by detecting signals from the left and right side impact sensors, front impact sensors, front air bag analog G-sensor, front air bag safing G-sensor and side-airbag safing G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the safing G-sensor is on, the SRS air bag will inflate. The SRS warning light in the combination meter alerts a malfunction of the SRS system. If the following symptoms occur even when the vehicle has not been in a collision, there may be a malfunction in the SRS system.

- The SRS warning light does not go off within approximately seven seconds after the ignition switch has been turned to the "ON" position.
- The SRS warning light does not illuminate when the ignition switch is turned to the "ON" position.

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Refer to the After-collision Diagnosis (Refer to [P.52Ba-22.](#)) when inspecting and servicing the vehicle that has been in a collision.

TROUBLESHOOTING STRATEGY

Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure that you have exhausted all of the possible ways to find a SRS fault.

1. Gather information about the problem from the customer.
2. Verify that the condition described by the customer exists.
3. Check the vehicle for any SRS diagnostic trouble codes (SRS DTC).
4. If you cannot verify the condition but there are no SRS DTCs, the malfunction is intermittent. Refer to GROUP 00, How to use Troubleshooting – Inspection Service Points – How to Cope With Intermittent Malfunctions [P.00-13.](#)
5. If there is a SRS DTC, record the code number, then erase the code from vehicle memory using scan tool MB991502.
6. Recreate the SRS DTC set conditions to see if the same SRS DTC will set again.
 - If the same SRS DTC sets again, follow the Inspection Chart for DTC and find the fault.
 - If you cannot get the same SRS DTC to set again, the malfunction is intermittent. Refer to GROUP 00, How to use Troubleshooting – Inspection Service Points – How to Cope With Intermittent Malfunctions [P.00-13.](#)

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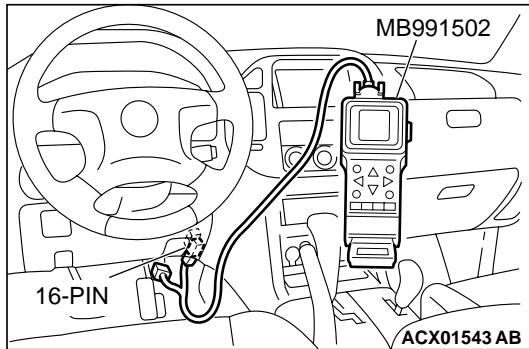
SRS DIAGNOSTIC TROUBLE CODE DIAGNOSIS

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Retrieving SRS Diagnostic Trouble Codes

Required Special Tool:

- MB991502: Scan Tool (MUT-II)



CAUTION

To prevent damage to scan tool MB991502, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991502.

1. Connect scan tool MB991502 to the data link connector.
2. Turn the ignition switch to the "ON" position.
3. Use scan tool MB991502 to check for SRS diagnostic trouble codes.
4. Turn the ignition switch to the "LOCK" (OFF) position.
5. Disconnect scan tool MB991502.

Erasing SRS Diagnostic Trouble Codes

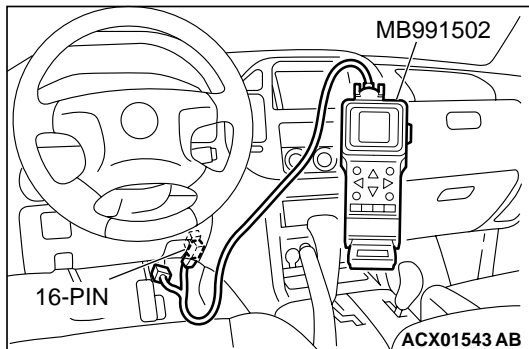
Required Special Tool:

- MB991502: Scan Tool (MUT-II)

CAUTION

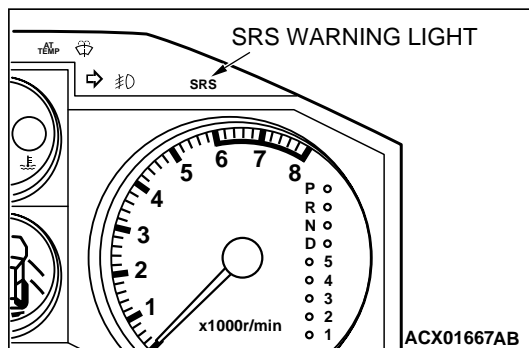
To prevent damage to scan tool MB991502, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting the scan tool.

1. Connect scan tool MB991502 to the data link connector.
2. Turn the ignition switch to the "ON" position.
3. Use scan tool MB991502 to erase SRS diagnostic trouble codes.
4. Turn the ignition switch to the "LOCK" (OFF) position.
5. Disconnect scan tool MB991502.



SRS WARNING LIGHT CHECK

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1. Check that the SRS warning light illuminates when the ignition switch is in the "ON" position.
2. Check that it illuminates for approximately seven seconds and then goes out.
3. If not, check for DTC.

DIAGNOSTIC TROUBLE CODE CHART

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Inspect according to the inspection chart that is appropriate for the DTC.

DIAGNOSTIC TROUBLE CODE NO.	INSPECTION ITEM	REFERENCE PAGE	
11	Front impact sensor system circuit short	P.52Bb-7	
12	Front impact sensor system either circuit open or no power supply	P.52Bb-7	
13	Front impact sensor system detects either both are open or no power supply	P.52Bb-7	
14	Analog G-sensor system in the SRS-ECU	P.52Bb-13	
15	Safing G-sensor short circuit	P.52Bb-13	
16	Safing G-sensor open circuit	P.52Bb-13	
17	Safing G-sensor for side-airbag faults	P.52Bb-13	
21*2	Driver's air bag module (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-15	
22*2	Driver's air bag module (squib) system fault 2 (Open in the squib circuit)	P.52Bb-21	
24*2	Passenger's (front) air bag module (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-25	
25*2	Passenger's (front) air bag module (squib) system fault 2 (Open in the squib circuit)	P.52Bb-31	
26*2	Driver's pre-tensioner (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-34	
27*2	Driver's pre-tensioner (squib) system fault 2 (Open in the squib circuit)	P.52Bb-39	
28*2	Passenger's (front) pre-tensioner (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-42	
29*2	Passenger's (front) pre-tensioner (squib) system fault 2 (Open in the squib circuit)	P.52Bb-47	
31	SRS-ECU capacitor circuit voltage too high	P.52Bb-13	
32	SRS-ECU capacitor circuit voltage too low	P.52Bb-13	
34*1	Connector lock system detects connector unlocked	P.52Bb-50	
35	SRS-ECU air bag condition monitor detects deployed air bag	P.52Bb-51	
41*1	IG1 power circuit system (fuse No.6 circuit)	P.52Bb-52	
42*1	IG1 power circuit system (fuse No.8 circuit)	P.52Bb-60	
43*1	SRS warning light drive circuit system fault 1	Light does not illuminate*1	P.52Bb-66
		Light does not switch off	P.52Bb-71
44*1	SRS warning light drive circuit system fault 2	P.52Bb-75	
45	SRS-ECU non-volatile memory (EEPROM) and A/D converter system	P.52Bb-13	

DIAGNOSTIC TROUBLE CODE NO.	INSPECTION ITEM	REFERENCE PAGE
51	Driver's air bag module (squib ignition drive circuit) system detected short circuit	P.52Bb-13
52	Driver's air bag module (squib ignition drive circuit) system detected open circuit	P.52Bb-13
54	Passenger's (front) air bag module (squib ignition drive circuit) system detected short circuit	P.52Bb-13
55	Passenger's (front) air bag module (squib ignition drive circuit) system detected open circuit	P.52Bb-13
56	Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected short	P.52Bb-13
57	Driver's seat belt pre-tensioner (squib ignition drive circuit) system detected open	P.52Bb-13
58	Passenger's (front) seat belt pre-tensioner (squib ignition drive circuit) system detected short	P.52Bb-13
59	Passenger's (front) seat belt pre-tensioner (squib ignition drive circuit) system detected open	P.52Bb-13
61	Driver's air bag module (squib) system fault for power supply circuit (Short-circuited to power supply)	P.52Bb-77
62	Driver's s air bag module (squib) system fault for ground circuit (Short-circuited to ground)	P.52Bb-82
64	Passenger's (front) air bag module (squib) system fault for power supply circuit (Short-circuited to power supply)	P.52Bb-87
65	Passenger's (front) air bag module (squib) system fault for ground circuit (Short-circuited to ground)	P.52Bb-91
66	Driver's seat belt pre-tensioner (squib) system fault for power supply circuit (Short-circuited to power supply)	P.52Bb-95
67	Driver's seat belt pre-tensioner (squib) system fault for ground circuit (Short-circuited to ground)	P.52Bb-99
68	Passenger's (front) pre-tensioner (squib) system fault for power supply circuit (Short-circuited to power supply)	P.52Bb-103
69	Passenger's (front) pre-tensioner (squib) system fault for ground circuit (Short-circuited to ground)	P.52Bb-107
71*2	Right hand side-airbag module (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-111
72*2	Right hand side-airbag module (squib) system fault 2 (Open in the squib circuit)	P.52Bb-117
73	Right hand side-airbag module (squib) system detected short circuit	P.52Bb-13
74	Right hand side-airbag module (squib) system detected open circuit	P.52Bb-13
75	Right hand side-airbag module (squib) system fault power supply circuit (Short-circuited to power supply)	P.52Bb-120
76	Right hand side-airbag module (squib) system fault ground circuit (Short-circuited to ground)	P.52Bb-124

DIAGNOSTIC TROUBLE CODE NO.	INSPECTION ITEM	REFERENCE PAGE
79	Left hand side-airbag module (squib) system fault 5 for power supply circuit	P.52Bb-128
81*2	Left hand side-airbag module (squib) system fault 1 (Short circuit between terminals of the squib circuit)	P.52Bb-131
82*2	Left hand side-airbag module (squib) system fault 2 (Open in the squib circuit)	P.52Bb-137
83	Left hand side-airbag module (squib) system fault 3 for ignition drive circuit	P.52Bb-13
84	Left hand side-airbag module (squib) system fault 4 for ignition drive circuit	P.52Bb-13
85	Left hand side-airbag module (squib) system fault power supply circuit (Short-circuited to power supply)	P.52Bb-140
86	Left hand side-airbag module (squib) system fault ground circuit (Short-circuited to ground)	P.52Bb-144
89	Right hand side-airbag module (squib) system fault 5 for power supply circuit	P.52Bb-128
91*1	Left hand side-impact sensor power supply circuit system	P.52Bb-151
92	Left hand side-impact sensor system for fault 1	P.52Bb-154
93	Left hand side-airbag module (squib) system fault 6 for communication system	P.52Bb-128
94*1	Right hand side-impact sensor power supply circuit system	P.52Bb-155
95	Right hand side-impact sensor system for fault 1	P.52Bb-154
96	Right hand side-airbag module (squib) system fault 6 for communication system	P.52Bb-128

NOTE:

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

TROUBLE SYMPTOM CHART

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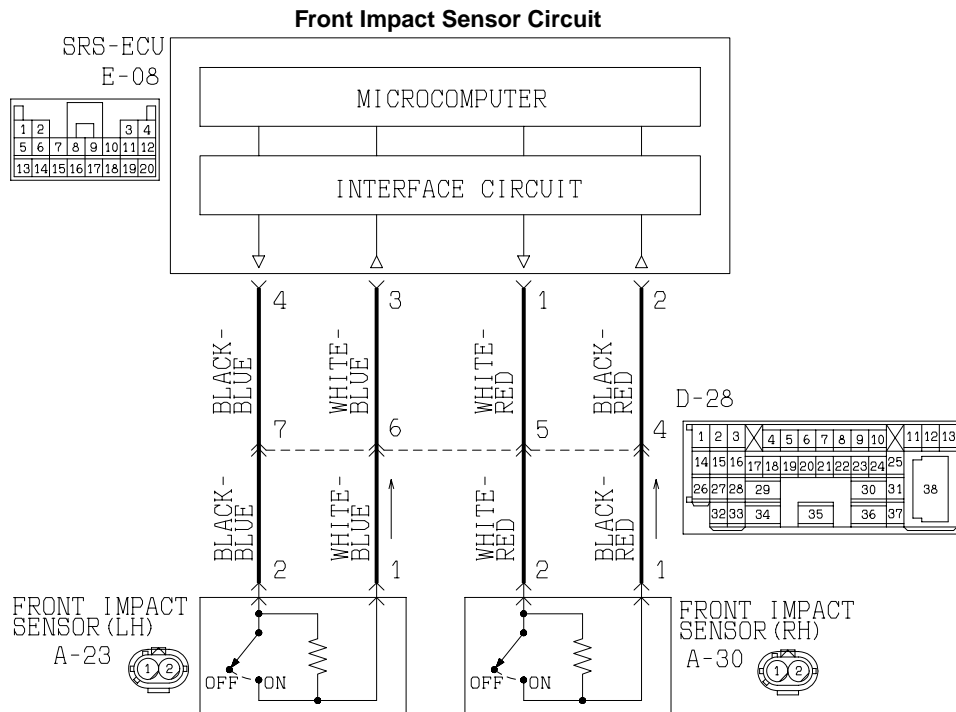
SYMPTOMS	INSPECTION PROCEDURE NO.	REFERENCE PAGE
Communication with scan tool MB991502 is not possible (Communication with all systems is not possible).	-	GROUP 13A, DIAGNOSIS P.13Ad-2 .
Communication with scan tool MB991502 is not possible (Communication is not possible with SRS).	1	P.52Bb-158
When the ignition switch is turned to the "ON" position (engine stopped), the SRS warning light does not illuminate.	Refer to DTC No.43.	P.52Bb-66
After the ignition switch is turned to the "ON" position the SRS warning light does not go off within approximately seven seconds.	Refer to DTC No.43.	P.52Bb-71

DIAGNOSTIC TROUBLE CODE PROCEDURES

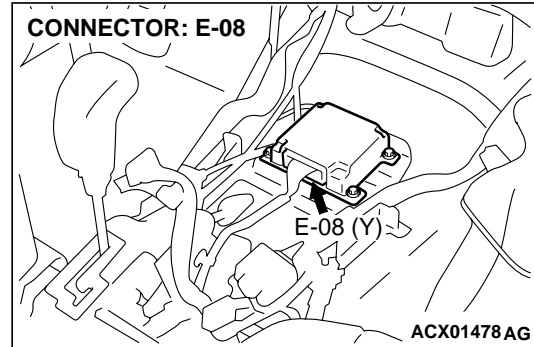
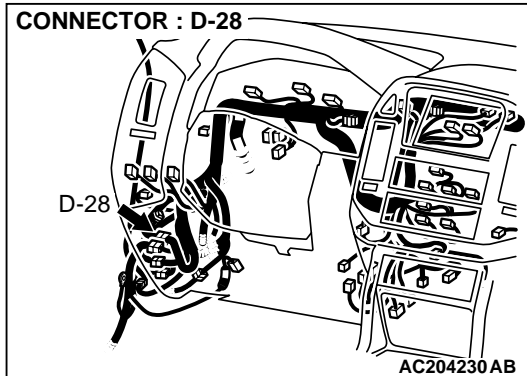
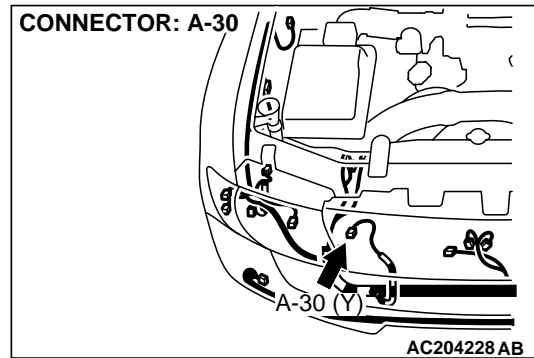
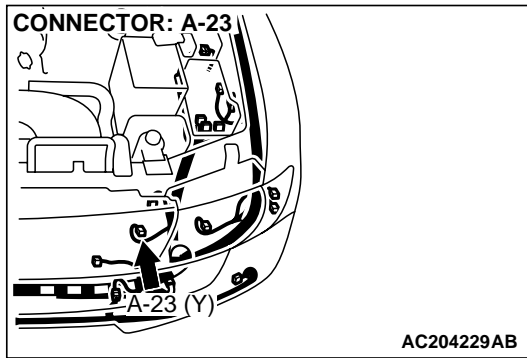
DTC 11: Front impact sensor system circuit short

DTC 12: Front impact sensor system either circuit open or on power supply

DTC 13: Front impact sensor system detects either both are open or no power supply



AC102902AB W1Q03M02AA



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 analog G-sensor. If the impact is over a predetermined level, the SRS-ECU outputs an ignition signal. At this time, if the safing G-sensor is on, the SRS air bag will inflate.

DTC SET CONDITIONS

These DTC 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:

DTC	SYMPTOMS
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 ground • 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

TROUBLESHOOTING HINTS

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

DIAGNOSIS

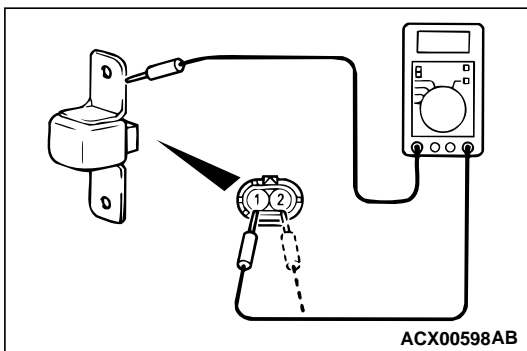
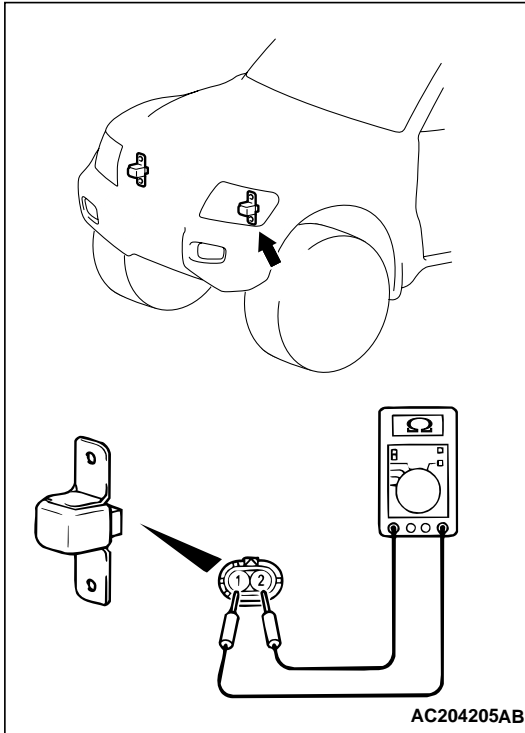
Required Special Tools:

MB991222: Probe

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.
There should be no continuity.

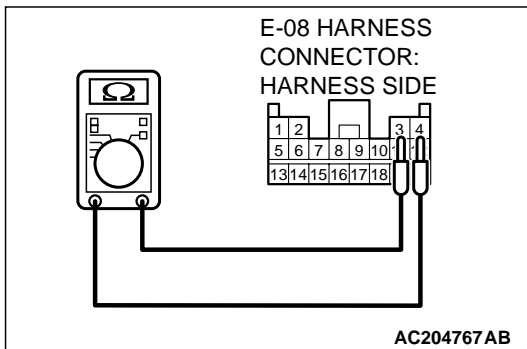
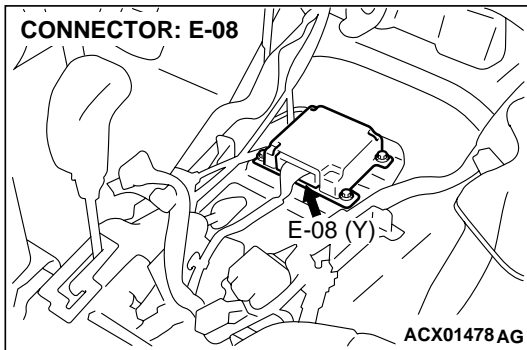
Q: Does the resistance meet the value above, and is there continuity?

YES : Go to Step 2.

NO : Replace front impact sensor. (Refer to [P.52Ba-27.](#))

STEP 2. Check the front impact sensor (LH) circuit at SRS-ECU connector E-08.

(1) Disconnect SRS-ECU connector E-08 and measure at the harness side (rear side).



(2) Measure the resistance between terminal 3 and terminal 4. Resistance should be $820 \pm 82 \Omega$

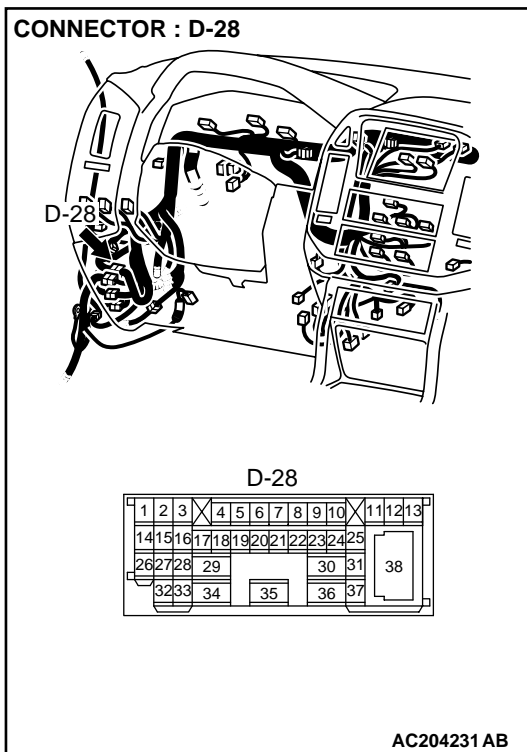
Q: Does the resistance meet the value above?

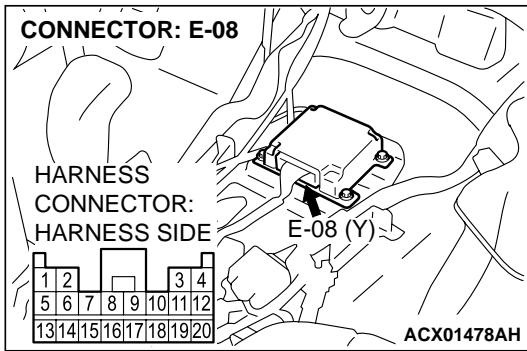
YES : Go to Step 4.

NO : Go to Step 3.

STEP 3. Check the harness wires between SRS-ECU connector E-08 (terminal No.3 and 4) and front impact sensor (LH) connector A-23 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector D-28, inspect the wiring harness. If the intermediate connector D-28 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2. Then go to Step 6.

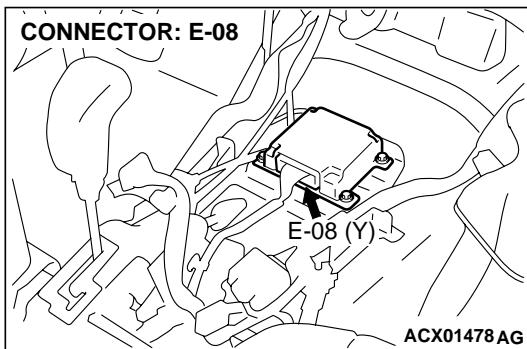
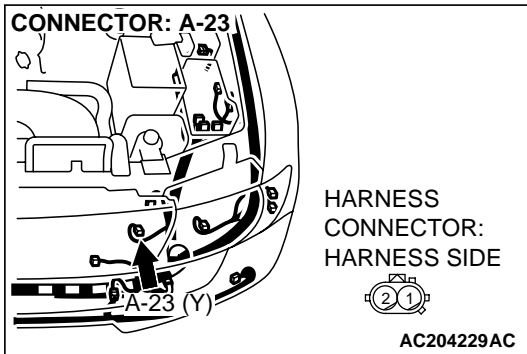




Q: Are harness wires between SRS-ECU connector E-08 (terminal No.3 and 4) and front impact sensor (LH) connector A-23 (terminal No.1 and 2) in good condition?

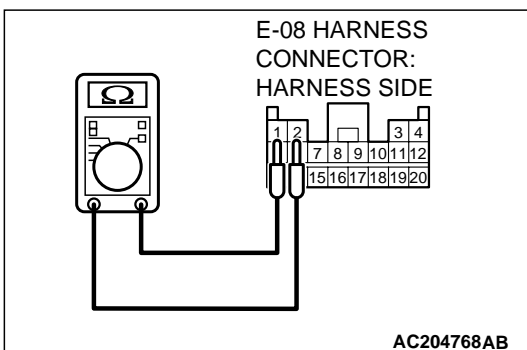
YES : Go to Step 6.

NO : Repair the harness wires between SRS-ECU connector E-08 and front impact sensor (LH) connector A-23. Then go to Step 6.



STEP 4. Check the front impact sensor (RH) circuit at SRS-ECU connector E-08.

(1) Disconnect SRS-ECU connector E-08 and measure at the harness side (rear side).



(2) Resistance between terminal 1 and terminal 2.
Resistance should be $820 \pm 82 \Omega$

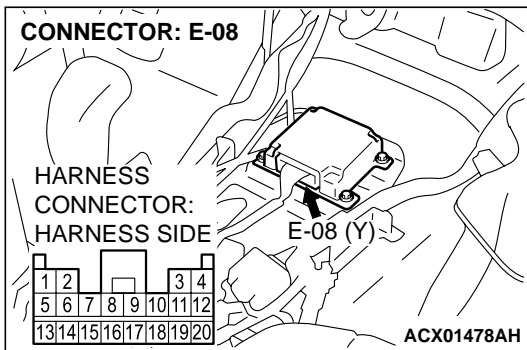
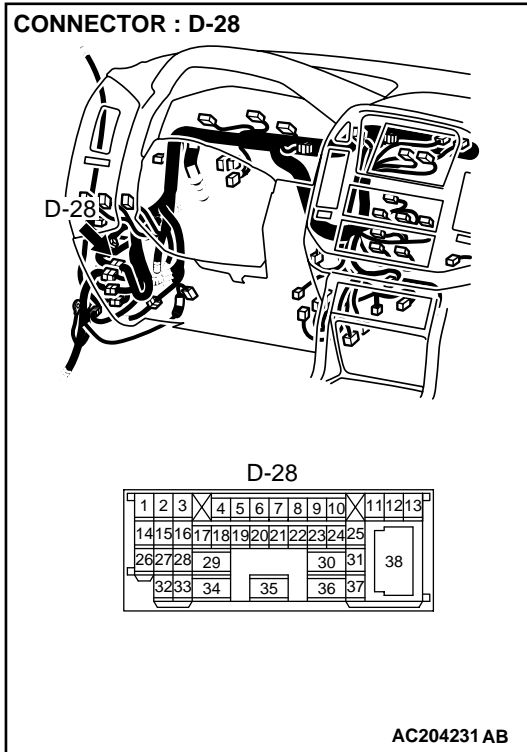
Q: Does the resistance meet the value above?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 11, 12 or 13 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 6.

NO : Go to Step 5.

STEP 5. Check the harness wires between SRS-ECU connector E-08 (terminal No.1 and 2) and front impact sensor (RH) connector A-30 (terminal No.1 and 2).

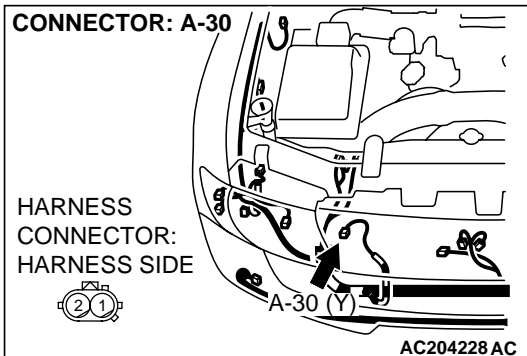
NOTE: After inspecting intermediate connector D-28, inspect the wiring harness. If intermediate connector D-28 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection [P.00E-2](#). Then go to Step 6.



Q: Are harness wires between SRS-ECU connector E-08 (terminal No.1 and 2) and front impact sensor (RH) connector A-27 (terminal No.1 and 2) in good condition?

YES : Go to Step 6.

NO : Repair the harness wires between SRS-ECU connector E-08 and front impact sensor (RH) connector A-30. Then go to Step 6.



STEP 6. Recheck the diagnostic trouble code.

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

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

- DTC 14: Analog G-Sensor System in the SRS-ECU**
- DTC 15: Safing G-Sensor Short Circuit**
- DTC 16: Safing G-Sensor Open Circuit**
- DTC 17: Safing G-Sensor for Side-AirBag Faults**
- DTC 31: SRS-ECU Capacitor Circuit Voltage too High**
- DTC 32: SRS-ECU Capacitor Circuit Voltage too Low**
- DTC 45: SRS-ECU Non-Volatile Memory (EEPROM) and A/D Converter System**
- DTC 51: Driver's Air Bag Module (Squib Ignition Drive Circuit) System Detected Short Circuit**
- DTC 52: Driver's Air Bag Module (Squib Ignition Drive Circuit) System Detected Open Circuit**
- DTC 54: Passenger's (Front) Air Bag Module (Squib Ignition Drive Circuit) System Detected Short Circuit**
- DTC 55: Passenger's (Front) Air Bag Module (Squib Ignition Drive Circuit) System Detected Open Circuit**
- DTC 56: Driver's Seat Belt Pre-tensioner (Squib Ignition Drive Circuit) System Detected Short Circuit**
- DTC 57: Driver's Seat Belt Pre-tensioner (Squib Ignition Drive Circuit) System Detected Open Circuit**
- DTC 58: Passenger's Seat Belt Pre-tensioner (Squib Ignition Drive Circuit) System Detected Short Circuit**
- DTC 59: Passenger's Seat Belt Pre-tensioner (Squib Ignition Drive Circuit) System Detected Open Circuit**
- DTC 73: Right Hand Side-Airbag Module (Squib) System Detected Short Circuit**
- DTC 74: Right Hand Side-Airbag Module (Squib) System Detected Open Circuit**
- DTC 83: Left Hand Side-Airbag Module (Squib) System Fault 3 for Ignition Drive Circuit**
- DTC 84: Left Hand Side-Air Bag Module (Squib) System Fault 4 for Ignition Drive Circuit**

DTC SET CONDITIONS

These DTC 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:

CODE NO.	DEFECTIVE PART	SYMPTOMS
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 (front air bag)	• Short circuit in the safing G-sensor
16		• Open circuit in the safing G-sensor
17	Safing G-sensor (side-airbag)	<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

CODE NO.	DEFECTIVE PART	SYMPTOMS
31	Capacitor	• Voltage at the capacitor terminal is higher than the specified value for five seconds or more
32		• Voltage at the capacitor terminal is lower than the specified value for five seconds or more (This is not detected if DTC No. 41 or 42 indicating battery positive voltage drop has been output.)
45	Non-volatile memory (EEPROM) and A/D converter	• When the non-volatile memory (EEPROM) and A/D converter system are abnormal
51	Driver's air bag module (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
52		• Open circuit in the squib ignition drive circuit
54	Front passenger's air bag module (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
55		• Open circuit in the squib ignition drive circuit
56	Driver's seat belt pre-tensioner (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
57		• Open circuit in the squib ignition drive circuit
58	Passenger's seat belt pre-tensioner (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
59		• Open circuit in the squib ignition drive circuit
73	Side-airbag module (RH) (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
74		• Open circuit in the squib ignition drive circuit
83	Side-airbag module (LH) (squib ignition drive circuit)	• Short circuit in the squib ignition drive circuit
84		• Open circuit in the squib ignition drive circuit

TROUBLESHOOTING HINTS

Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)

Replace the SRS-ECU. (Refer to [P.52Ba-31.](#))

Check the diagnosis trouble code.

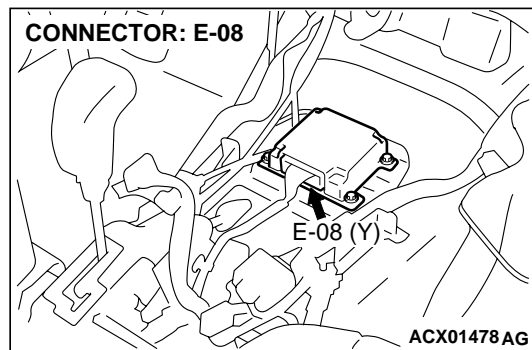
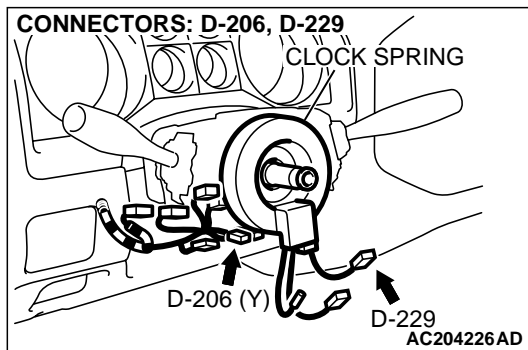
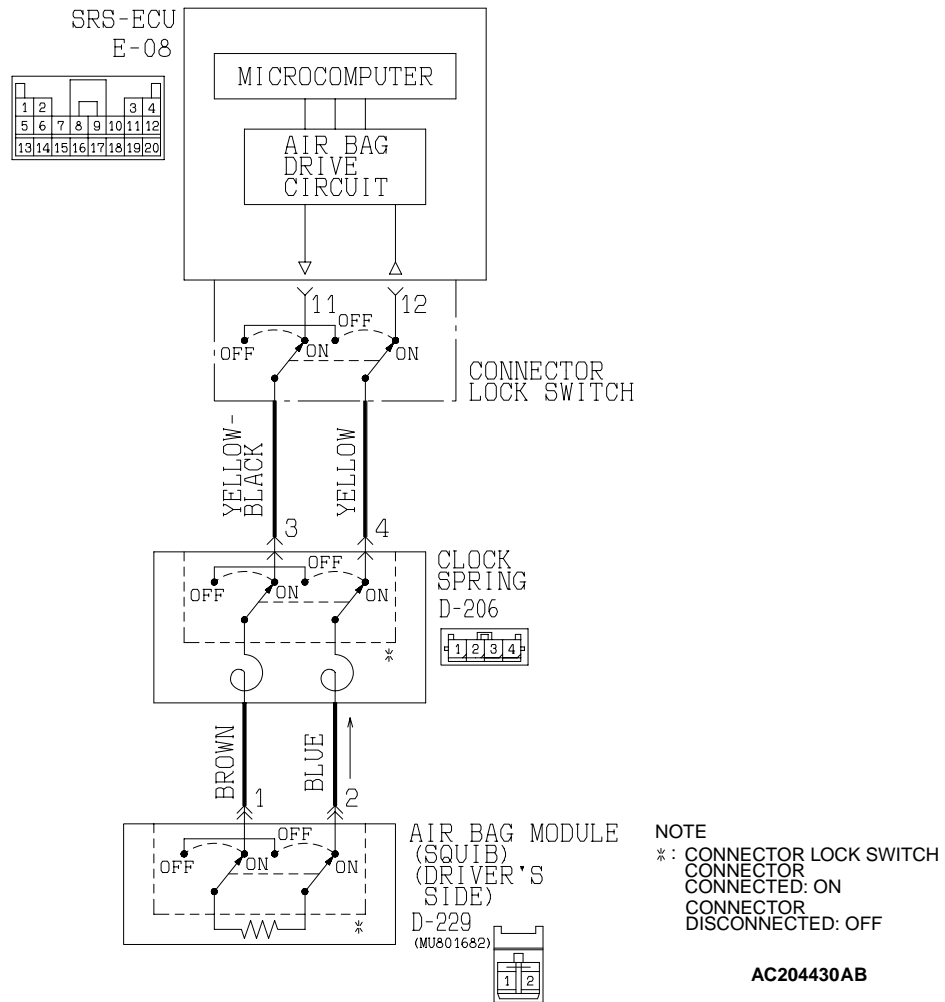
Q: Is any of DTC set?

YES : There is no action to be taken.

NO : The procedure is complete.

DTC 21: Driver's Air Bag Module (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

Driver's Air Bag Module (Squib) Circuit



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's side air bag module (squib). The most likely causes for this code to be set the followings:

- Short circuit in driver's air bag module (squib) or harness
- Short circuit in the clock spring

However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

- Improper engaged connector or defective short bar*
- 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" bar (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the ground wire in the squib circuit when the connectors are disconnected). (Refer to P.52Bb-2.) Therefore, if connector E-08, D-206 or D-229 is damaged or improperly engaged, the short bar may not be released when the connector is connected.*

DIAGNOSIS**Required Special Tools:**

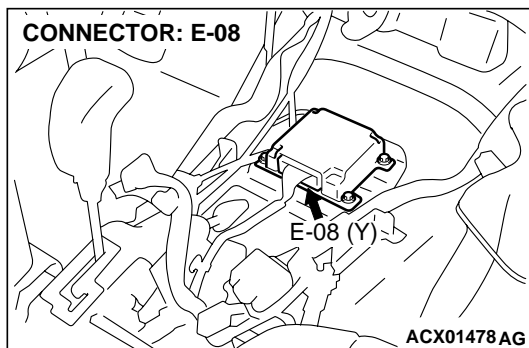
- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.**Q: Is DTC 34 set?**

- YES** : Go to Step 2.
NO : Go to Step 3.

STEP 2. Check SRS-ECU connector E-08.**Q: Is the connector correctly engaged?**

- YES** : Go to Step 3.
NO : Engage the connector correctly. Then go to Step 8.



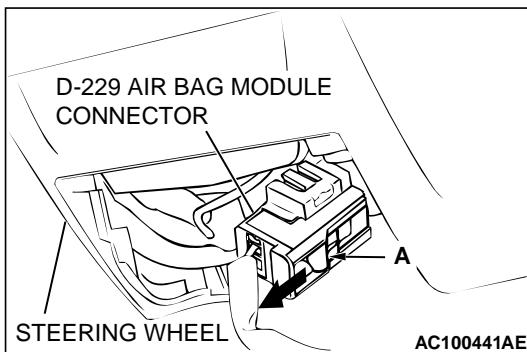
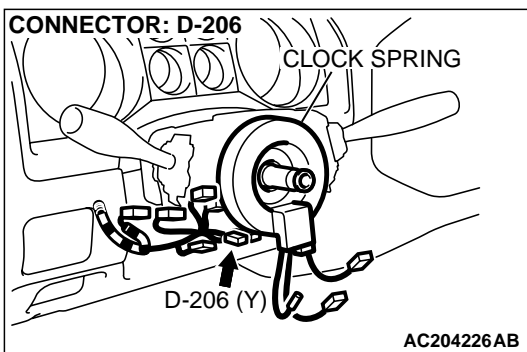
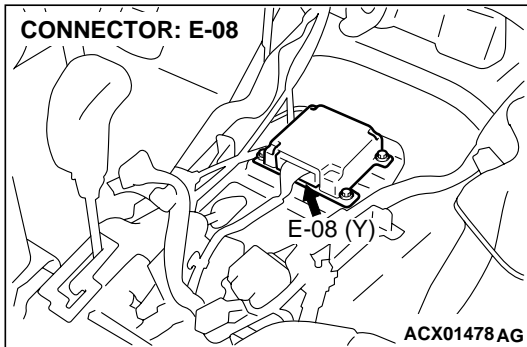
STEP 3. Check SRS-ECU connector E-08, clock spring connector D-206 and driver's airbag module connector D-229.

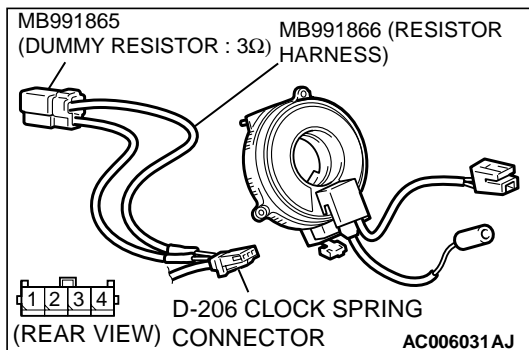
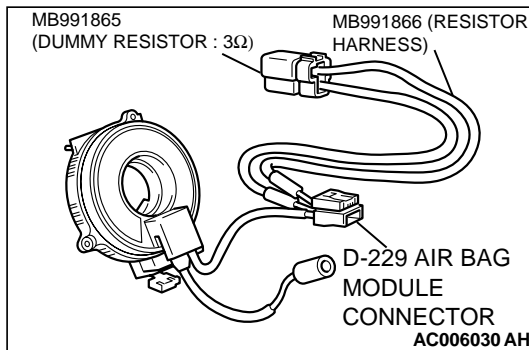
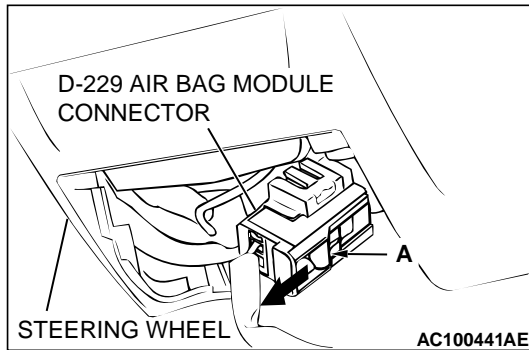
- (1) Disconnect the negative battery terminal.
- (2) Disconnection connectors E-08, D-206 and D-229, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 21 set?

YES : Go to Step 4.

NO : The procedure is complete. (It is assumed that DTC 21 set as connector E-08, D-206 or D-229 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 D-229 in the arrow direction, disconnect the connector.

- (3) Connect special tool MB991865 to special tool 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 D-229 by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 21 set?

YES : Go to Step 5.

NO : Replace the driver's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 8.

STEP 5. Check the clock spring.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the clock spring connector D-206.
- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

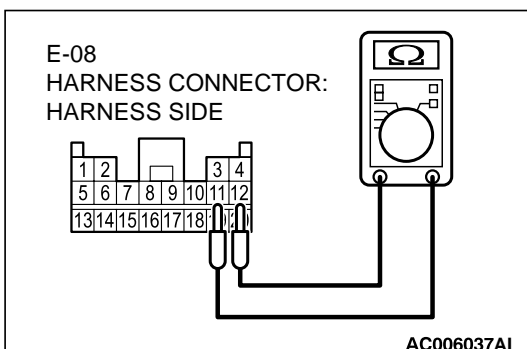
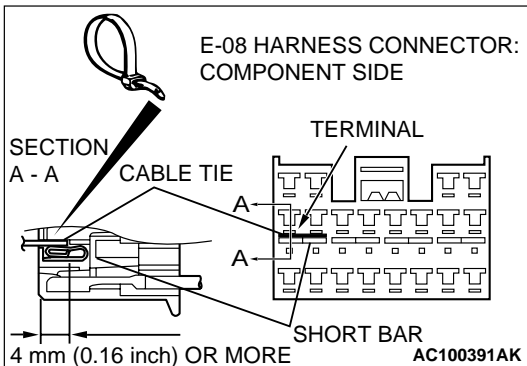
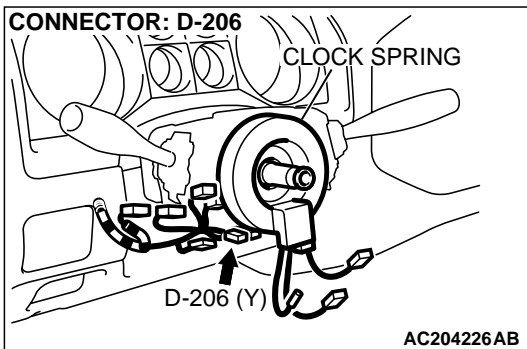
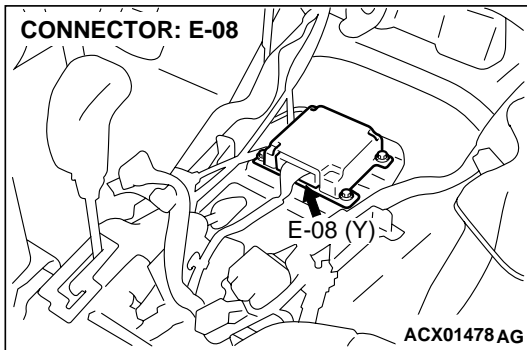
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring harness connector D-206 (terminal No.3 and 4) by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 21 set?

YES : Go to Step 6.

NO : Replace the clock spring. (Refer to [P.52Ba-33.](#)) Then go to Step 8.



STEP 6. Check harness between the SRS-ECU and the clock spring for short circuit.

- (1) Disconnect SRS-ECU connector E-08.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the clock spring connector D-206 to short the squib circuit.

- (2) Disconnect the clock spring connector D-206.

⚠ CAUTION

Insert an insulator such as a cable tie to a depth of 4mm (0.16 inch) or more, otherwise the short bar will not cable tie release.

- (3) Insert a cable tie [3 mm (0.12 inch) wide, 0.5 mm (0.02 inch) thick] between terminals 11, 12 and the short bar to release the short bar.

⚠ CAUTION

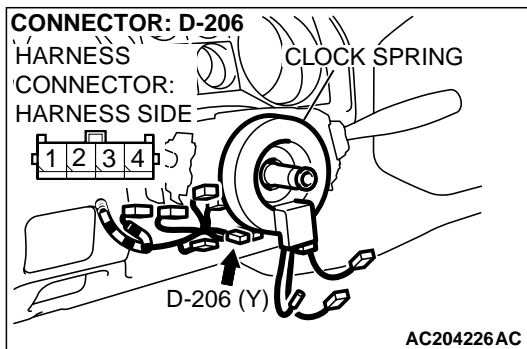
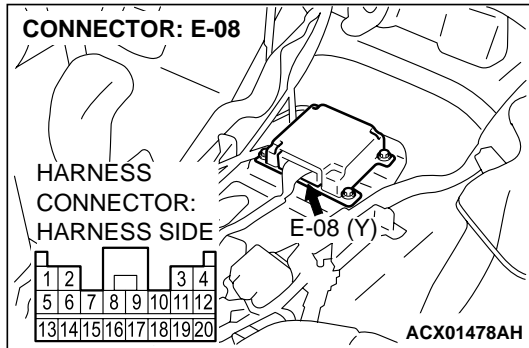
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Check for continuity between E-08 harness connector terminals 11 and 12. It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 21 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 8.

NO : Go to Step 7.



STEP 7. Check the harness for short circuit between SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal No.3 and 4).

Q: Are harness wires between SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal No.3 and 4) in good condition?

YES : Go to Step 8.

NO : Repair the harness wires between SRS-ECU connector E-08 and clock spring connector D-206. Then go to Step 8.

STEP 8. Recheck for diagnostic trouble code.

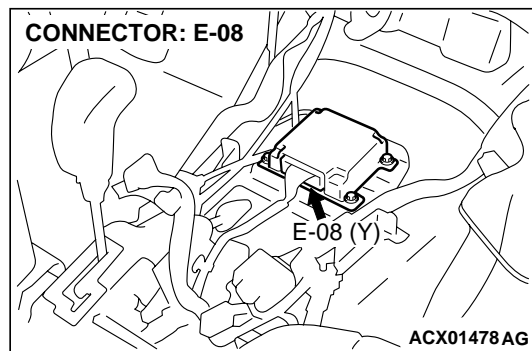
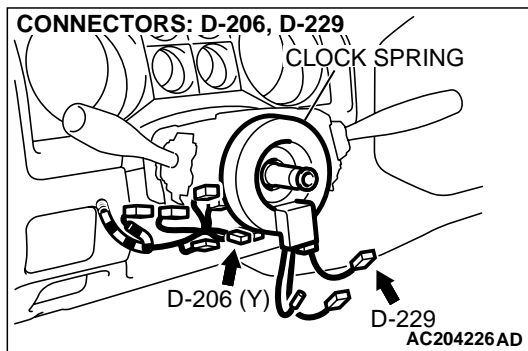
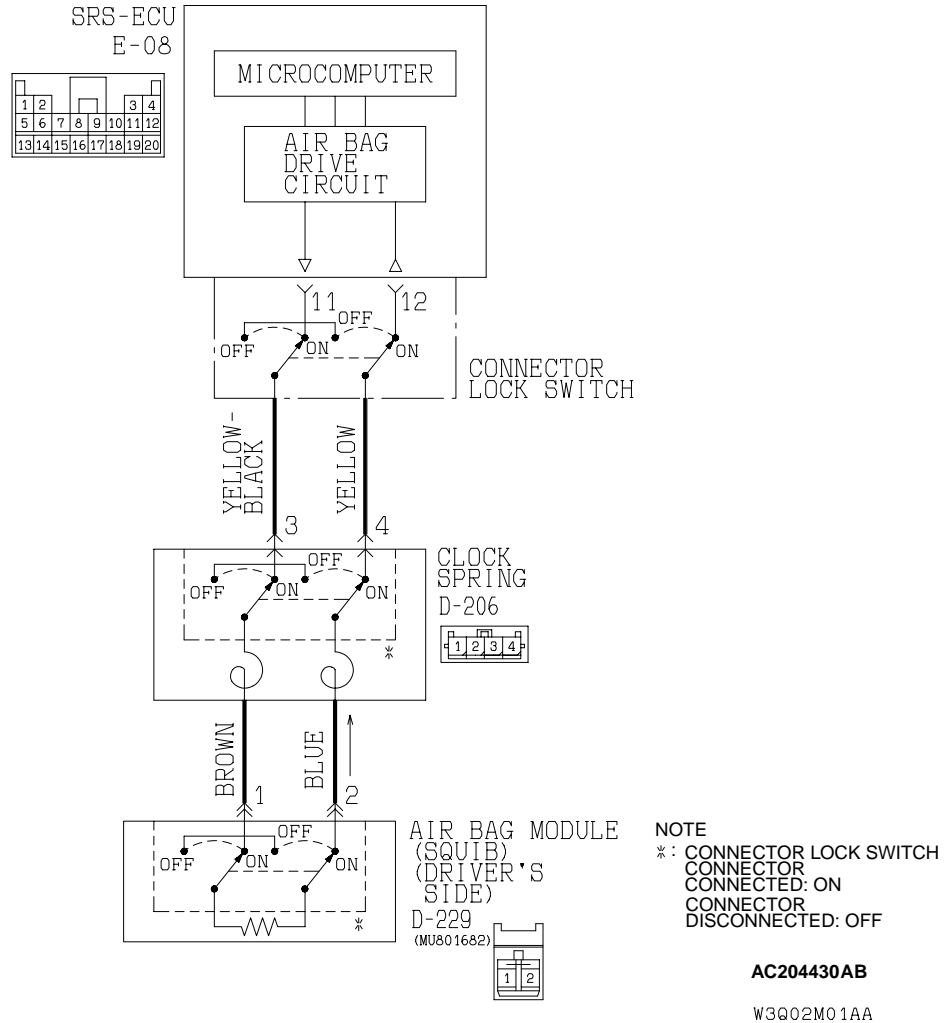
Q: Is DTC 21 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 22: Driver's Air Bag Module (Squib) System Fault 2 (Open in the Squib Circuit)

Driver's Air Bag Module (Squib) Circuit



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's side air bag module (squib). The most likely causes for this code to be set are the followings:

- Open circuit in the driver's air bag module (squib) or harness
 - Open circuit in the clock spring
 - Malfunction of connector contact
- However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

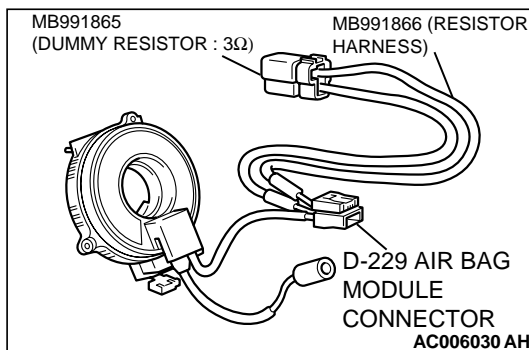
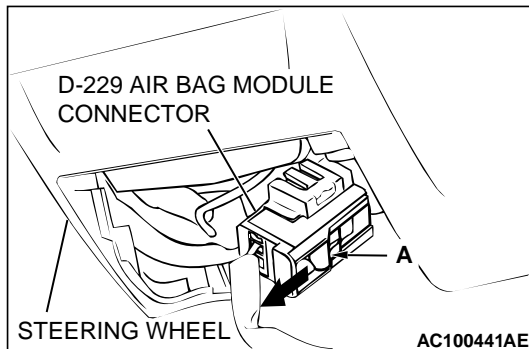
- Open circuit in the clock spring
- Open circuit due to improper neutral position of the clock spring
- Open circuit in the driver's air bag module (squib) circuit
- Disengaged driver's air bag module (squib) connector
- Improper connector contact
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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 D-229 in the arrow direction, disconnect the connector.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

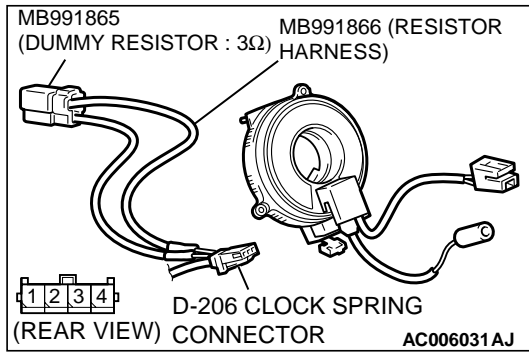
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring side air bag module connector D-229 by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 22 set?

YES : Go to Step 2.

NO : Replace the driver's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 4.



STEP 2. Check the clock spring.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect clock spring connector D-206.
- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

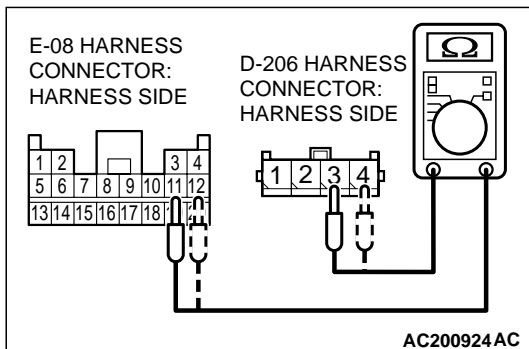
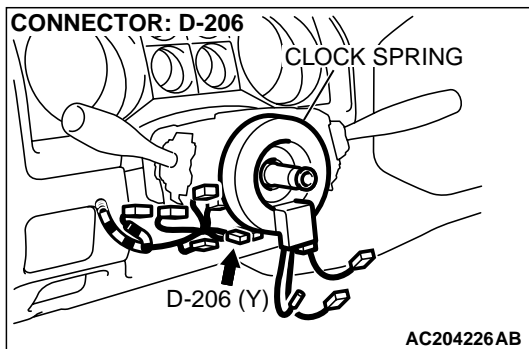
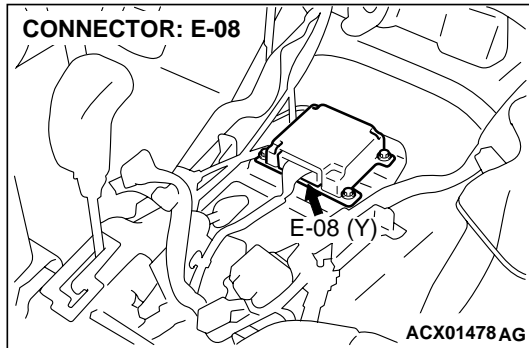
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring harness connector D-206 (terminal No.3 and 4) by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check diagnostic trouble code.

Q: Is DTC 22 set?

YES : Go to Step 3.

NO : Replace the clock spring. (Refer to [P.52Ba-33.](#)) Then go to Step 4.



STEP 3. Check the harness between the SRS-ECU connector E-08 (terminal No.11 and 12) and the clock spring connector (terminal No.3 and 4) for open circuit.

- (1) Disconnect SRS-ECU connector E-08 and clock spring connector D-206, 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 the following terminals.
- Between connector E-08 terminal 11 and connector D-206 terminal 3
 - Between connector E-08 terminal 12 and connector D-206 terminal 4
- It should be less than 2 ohms.

Q: Does continuity exist?

- YES :** Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 22 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 4.
- NO :** Repair the harness wires between SRS-ECU connector E-08 and clock spring connector D-206. Then go to Step 4.

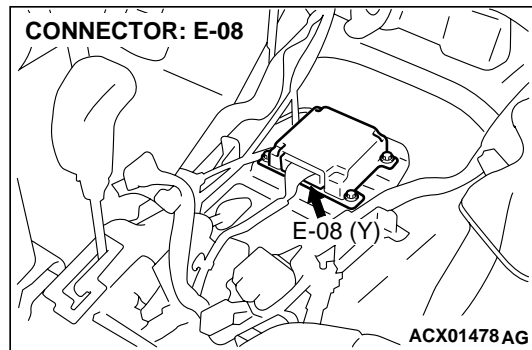
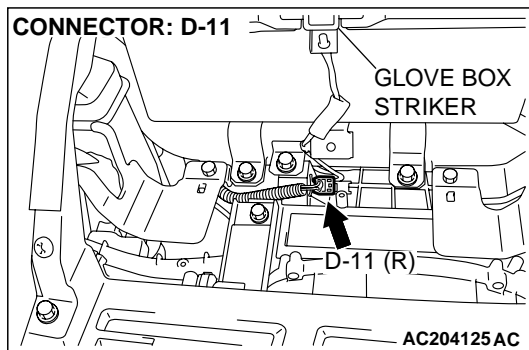
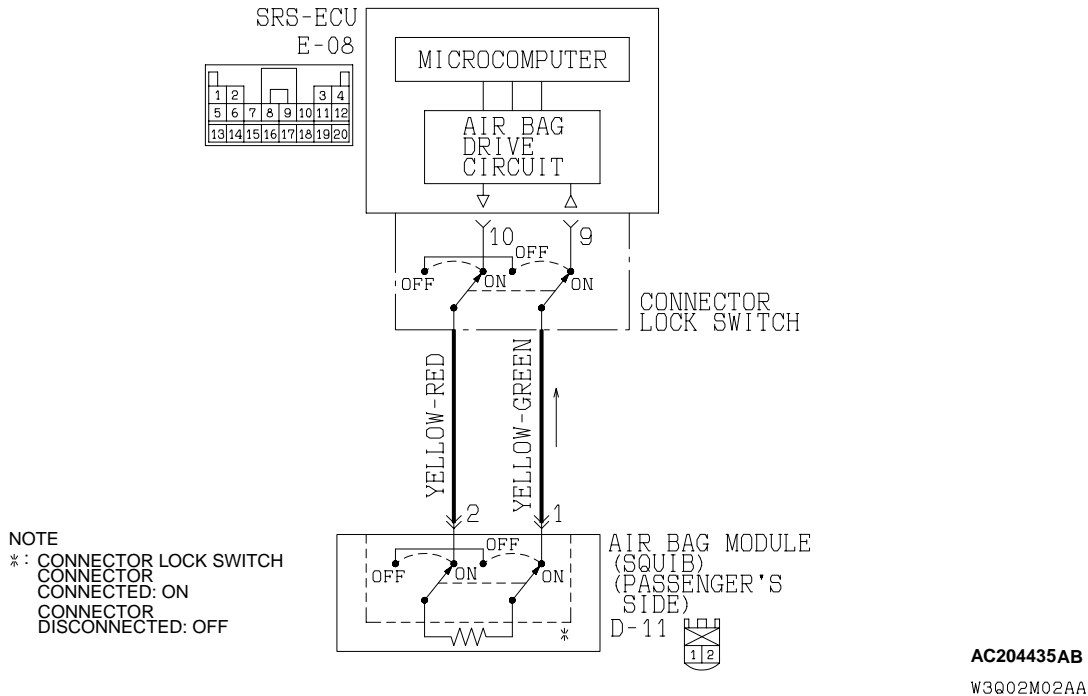
STEP 4. Recheck for diagnostic trouble code.

Q: Is DTC 22 set?

- YES :** Return to Step 1.
- NO :** The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 24: Passenger's (Front) Air Bag Module (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

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



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's air bag module (squib). However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

- Improper engaged connector or defective short bar*
- 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" bar (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the ground wire in the squib circuit when the connectors are disconnected). (Refer to P.52Ba-2.) Therefore, if connector E-08 or D-11 is damaged or improperly engaged, the short bar may not be released when the connector is connected.*

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.

Q: Is DTC 34 set?

YES : Go to Step 2.

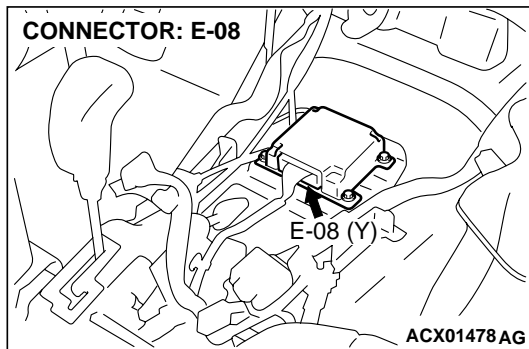
NO : Go to Step 3.

STEP 2. Check SRS-ECU connector E-08.

Q: Is the connector correctly engaged?

YES : Go to Step 3.

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



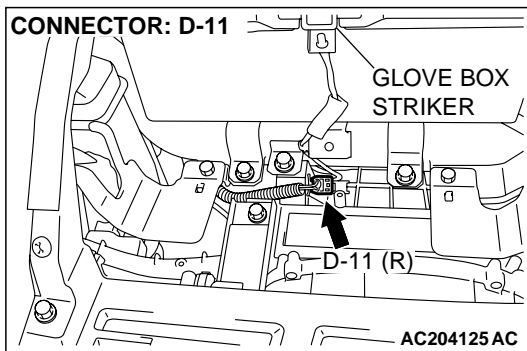
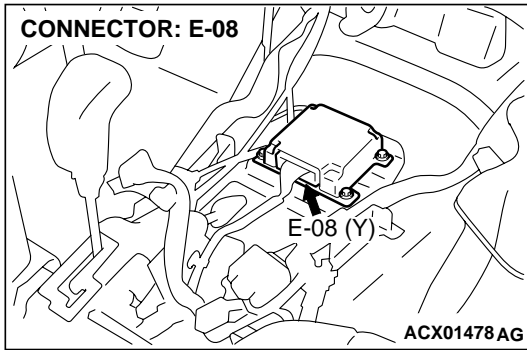
STEP 3. Check SRS-ECU connector C-12 and passenger's connector C-106.

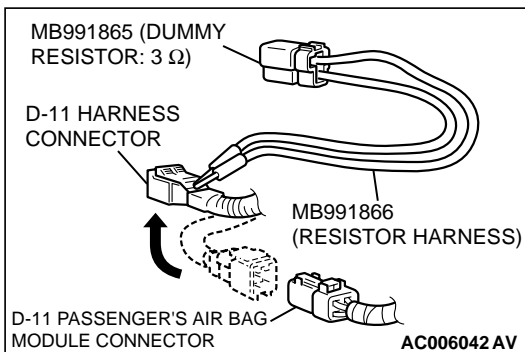
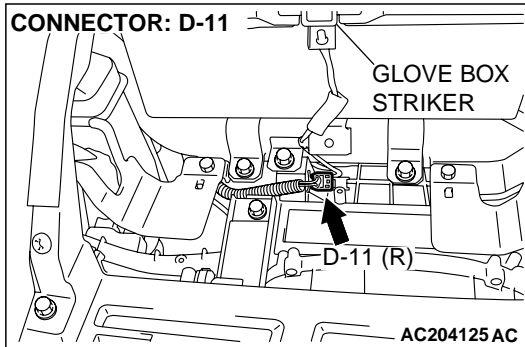
- (1) Disconnect the negative battery terminal.
- (2) Disconnect connectors E-08 and D-11, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 24 set?

YES : Go to Step 4.

NO : The procedure is complete. (It is assumed that DTC 24 set as connector E-08 or D-11 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 D-11.

- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

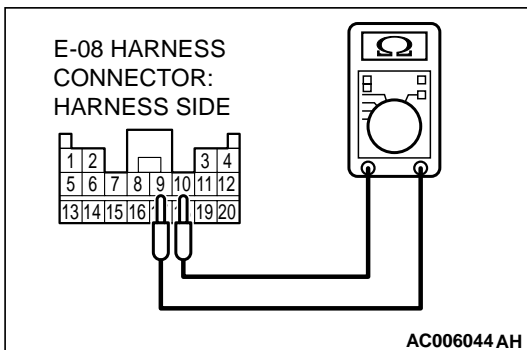
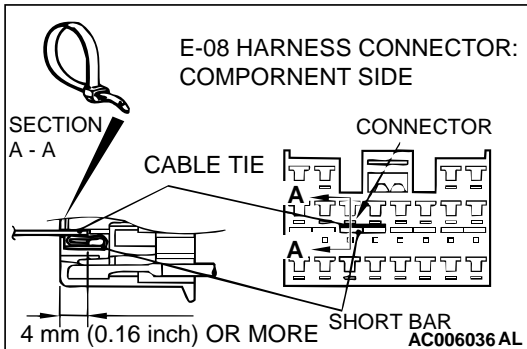
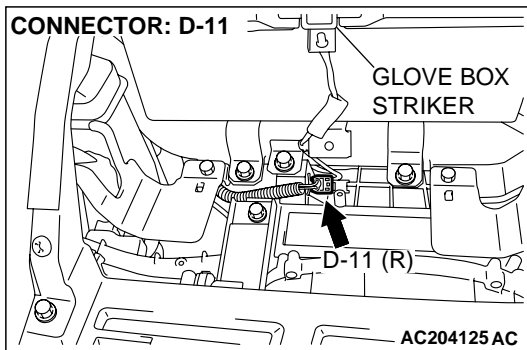
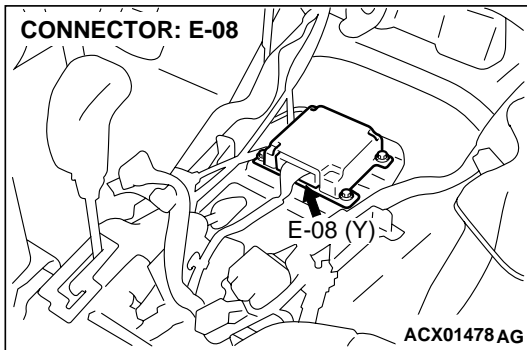
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Disconnect the passenger's air bag module connector D-11, and insert special tool MB991866 into the harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 24 set?

YES : Go to Step 5.

NO : Replace the passenger's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 7.



STEP 5. Check the harness for short circuit between SRS-ECU and the passenger's air bag module.

(1) Disconnect SRS-ECU connector E-08.

(2) Unclip passenger's air bag module connector D-11.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the passenger's air bag module connector D-11 to short the squib circuit.

(3) Disconnect the passenger's air bag module connector D-11.

⚠ CAUTION

Insert an insulator such as a cable tie to a depth of 4mm (0.16 inch) or more, otherwise the short bar will not cable tie release.

(4) Insert a cable tie [3 mm (0.12 inch) wide, 0.5 mm (0.02 inch) thick] between terminals 9, 10 and the short bar to release the short bar.

⚠ CAUTION

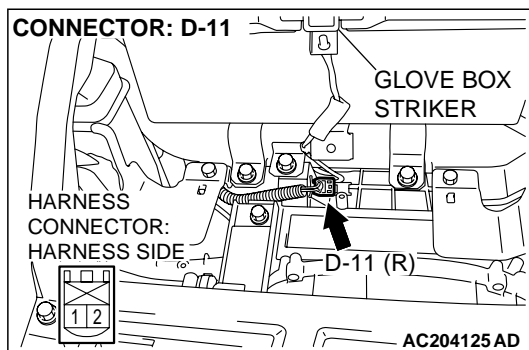
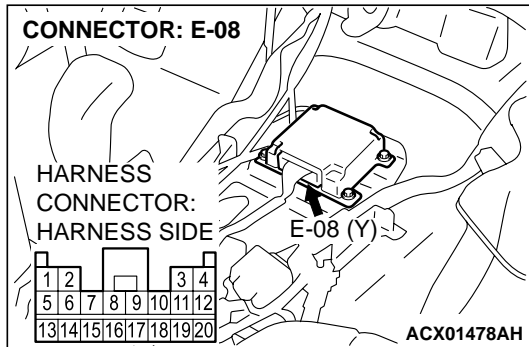
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(5) Check for continuity between E-08 harness connector terminals 9 and 10.
It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 24 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 7.

NO : Go to Step 6.



STEP 6. Check the harness for short circuit between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's side air bag module connector D-11 (terminal No.1 and 2).

Q: Are harness wires between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's side air bag module connector D-11 (terminal No.1 and 2) in good condition?

YES : Go to Step 7.

NO : Repair the harness wires between SRS-ECU connector E-08 and passenger's side air bag module connector D-11. Then go to Step 7.

STEP 7. Recheck for diagnostic trouble code.

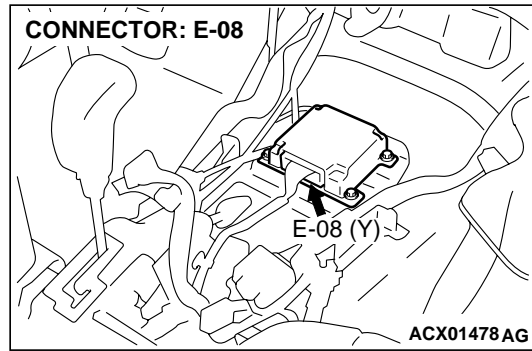
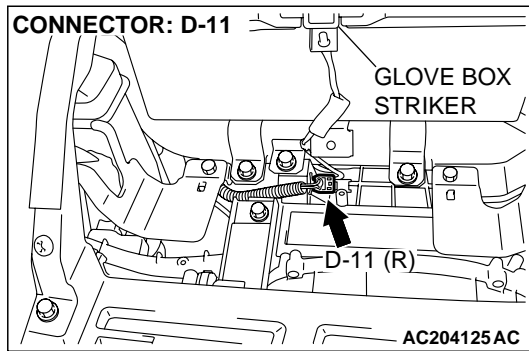
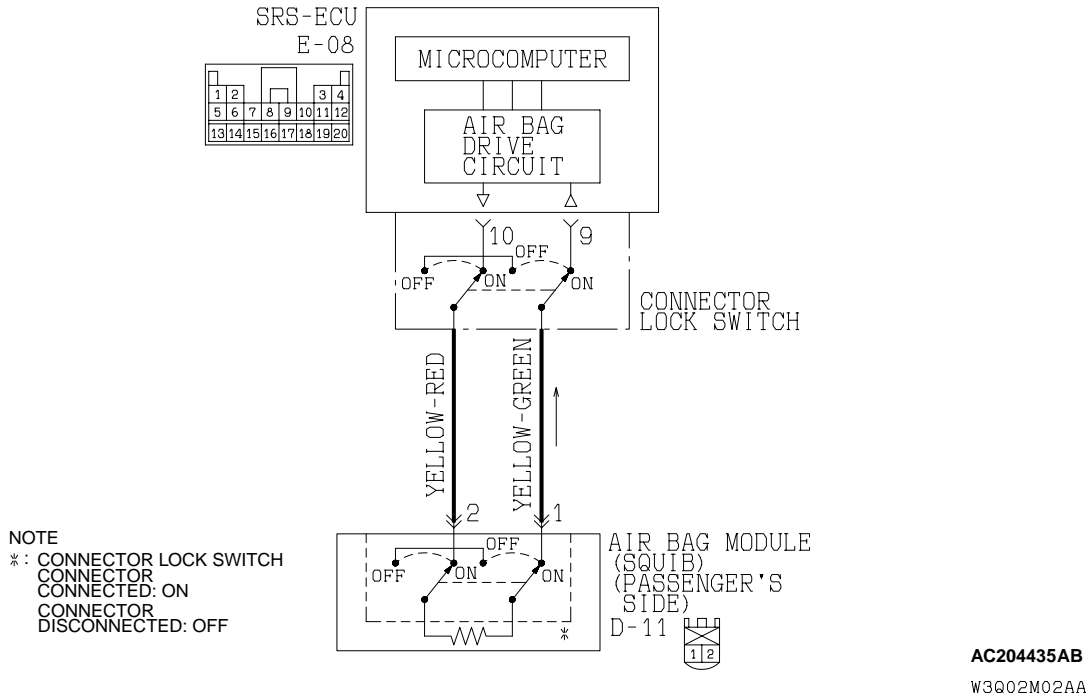
Q: Is DTC 24 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 25: Passenger's (Front) Air Bag Module (Squib) System Fault 2 (Open in the Squib Circuit)

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



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's air bag module (squib). The most likely causes for this code to be set are shown in the table below: However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

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

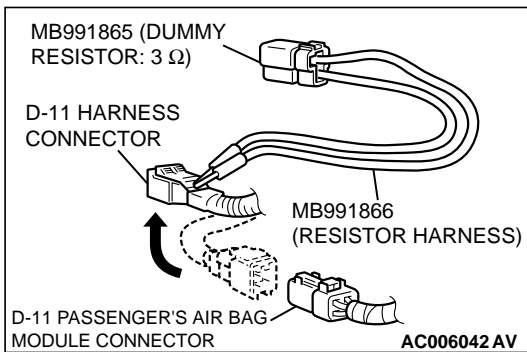
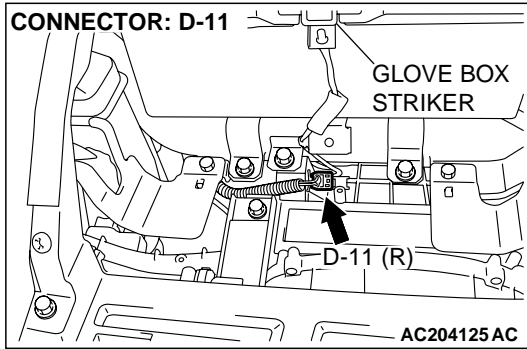
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Unclip passenger's air bag module connector D-11.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

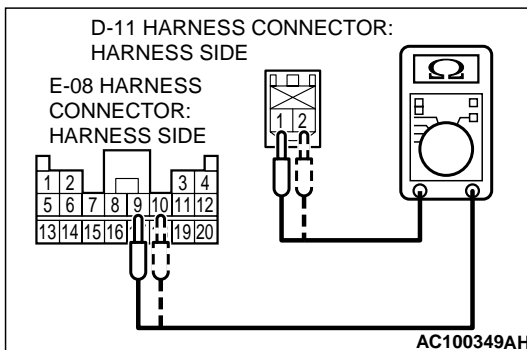
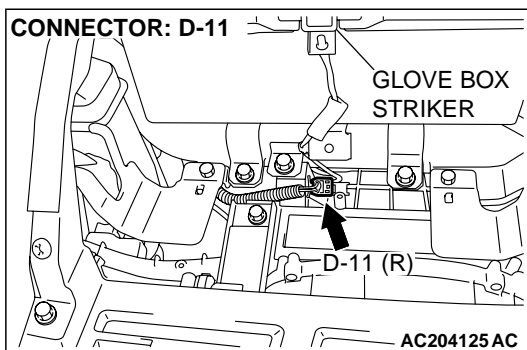
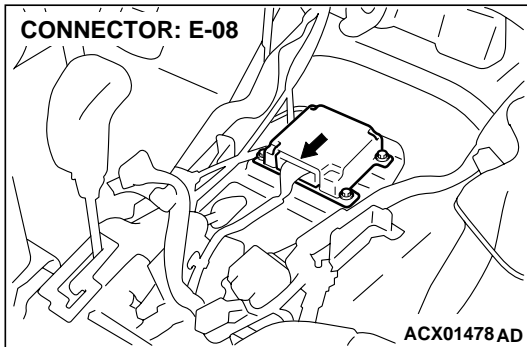
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 25 ?

YES : Go to Step 2.

NO : Replace the passenger's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 3.



STEP 2. Check the harness for open circuit between SRS-ECU connector E-08 (terminal No.9 and 10) and the passenger's side air bag module connector D-11 (terminal No.1 and 2).

- (1) Unclip passenger's air bag module connector D-11.
- (2) Disconnect SRS-ECU connector E-08 and passenger's air bag module connector D-11.

⚠ 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 the following terminals.
 - Between connector E-08 terminal 9 and connector D-11 terminal 1
 - Between connector E-08 terminal 10 and connector D-11 terminal 2
 It should be less than 2 ohms.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 25 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-08 and passenger's side air bag module connector D-11. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

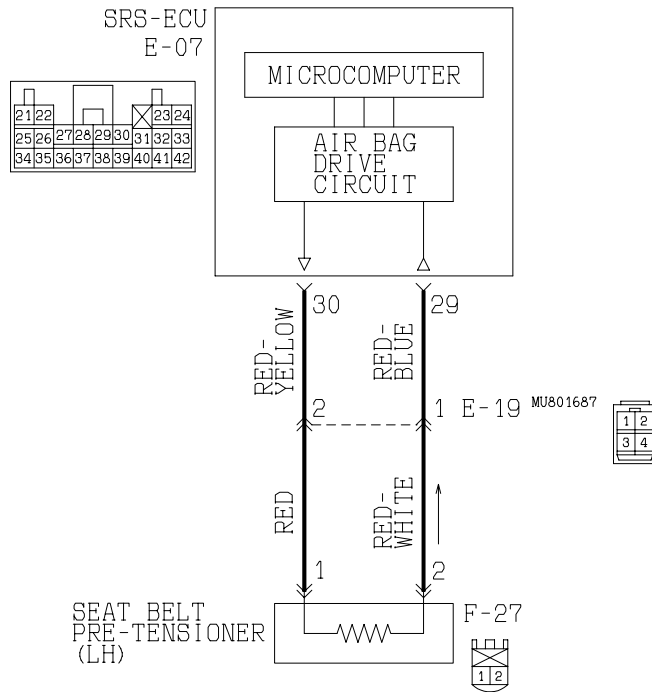
Q: Is DTC 25 set?

YES : Return to Step 1.

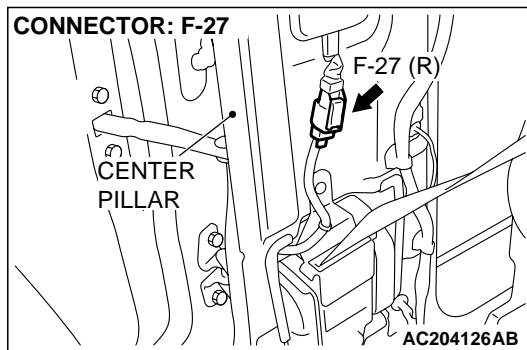
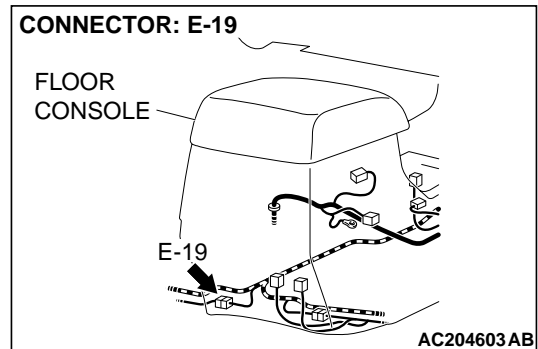
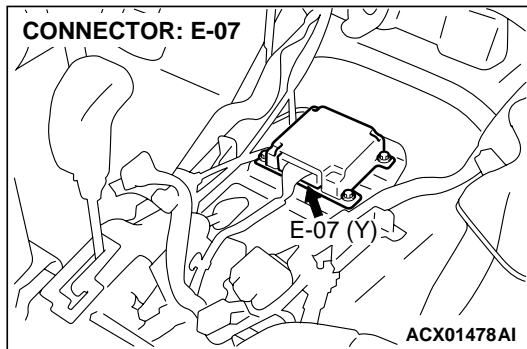
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 26: Driver's Seat Belt Pre-Tensioner (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

Driver's Seat Belt Pre-Tensioner (Squib)



W2006M03AA
AC102677AB



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

- Short circuit between the driver's seat belt pre-tensioner (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.

Q: Is DTC 34 set?

YES : Go to Step 2.

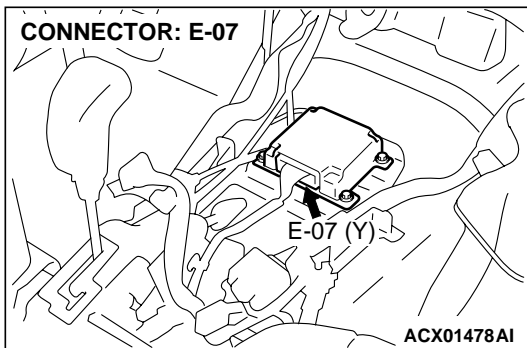
NO : Go to Step 4.

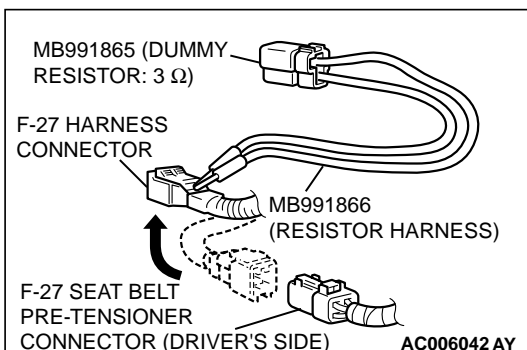
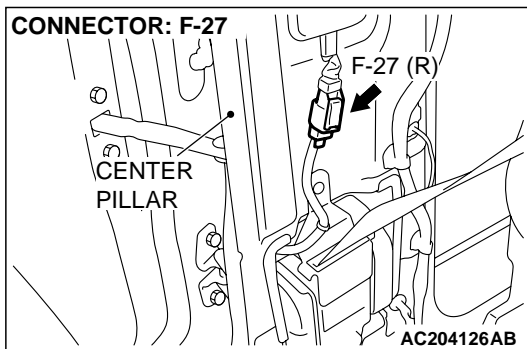
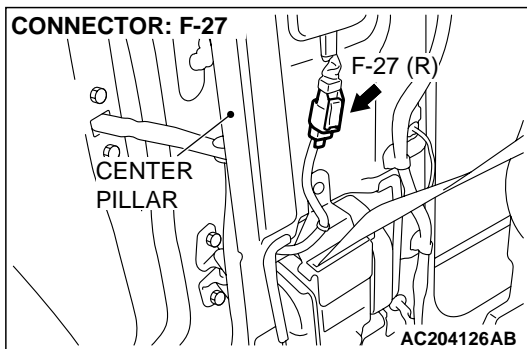
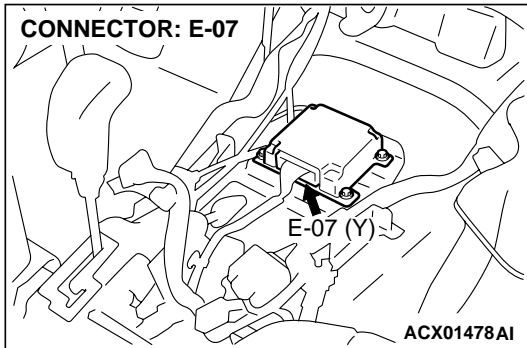
STEP 2. Check the SRS-ECU connector E-07.

Q: Is the connector correctly engaged?

YES : Go to Step 3.

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





STEP 3. Check SRS-ECU connector E-07 and driver's seat belt pre-tensioner connector F-27.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect connectors E-07 and F-27, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 26 set?

YES : Go to Step 4.

NO : The procedure is complete. (It is assumed that DTC 26 set as connector E-07 or F-27 was engaged improperly.)

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the driver's seat belt pretensioner connector F-27.

- (3) Connect special tool MB991865 to special tool MB991866.

⚠ CAUTION

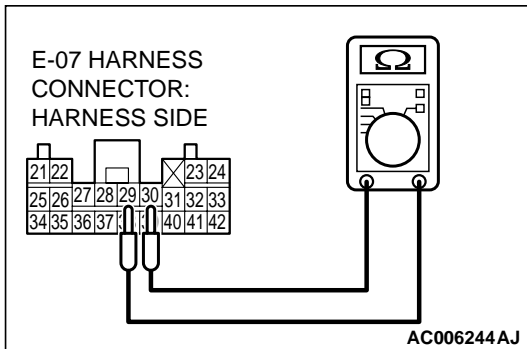
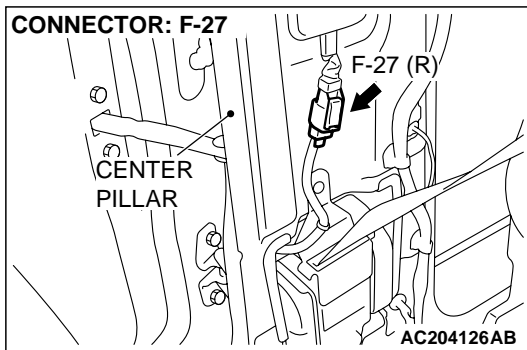
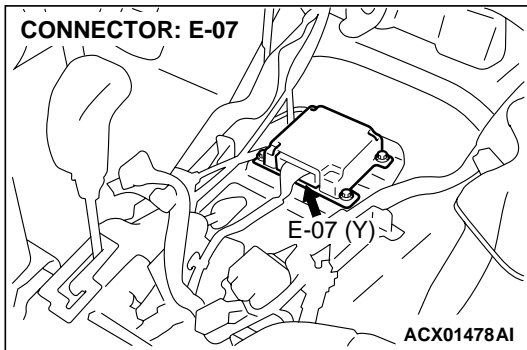
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 26 set?

YES : Go to Step 5.

NO : Replace the driver's seat belt pre-tensioner. (Refer to P.52Ba-44). Then go to Step 7.



STEP 5. Check the driver's side seat belt pretensioner circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect driver's seat belt pretensioner connector F-27.

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 E-07 harness connector terminals 29 and 30. It should be open circuit.

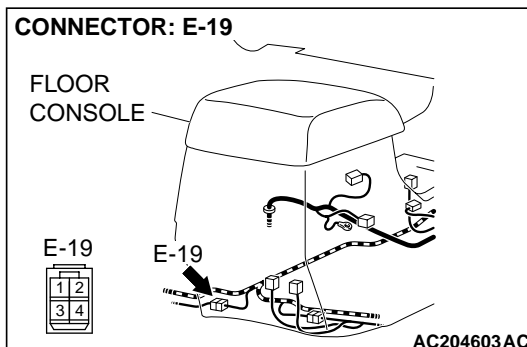
Q: Does continuity exist?

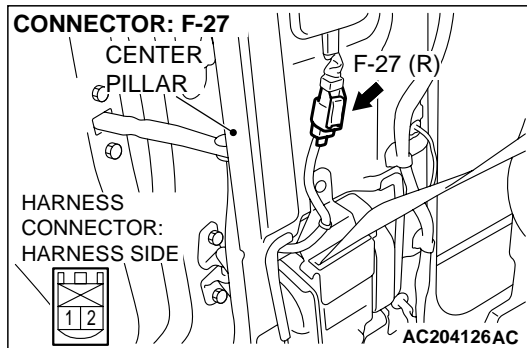
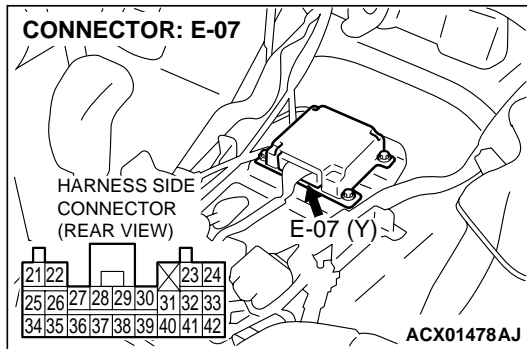
NO : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 26 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#))

YES : Go to Step 6.

STEP 6. Check the harness for short circuit between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-19, inspect the wiring harness. If the intermediate connector E-19 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection [P.00E-2.](#)) Then go to Step 7.





Q: Are harness wires between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2) in good condition?

YES : Go to Step 7.

NO : Repair the harness wires between SRS-ECU connector E-07 and driver's side seat belt pre-tensioner connector F-27. Then go to Step 7.

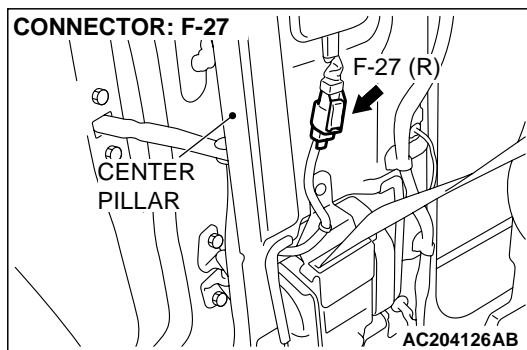
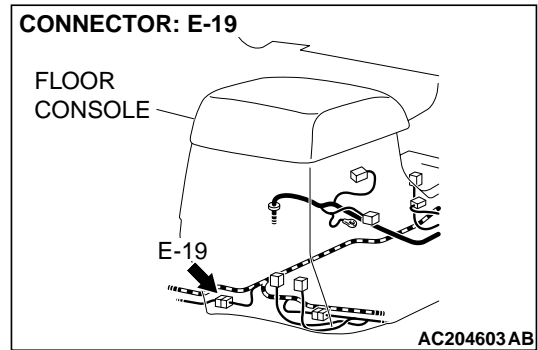
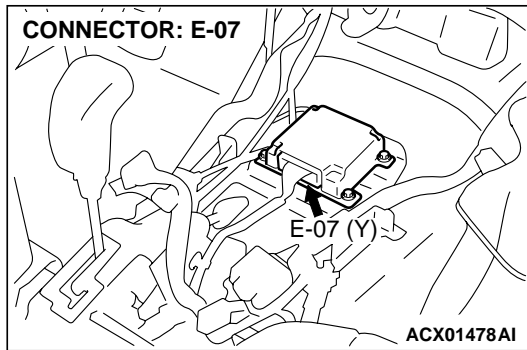
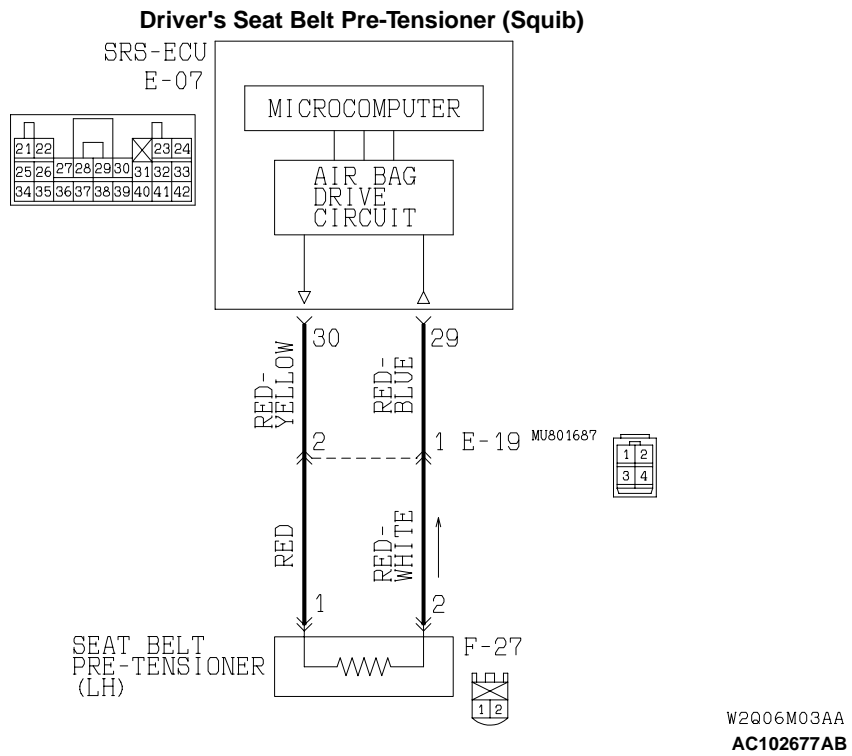
STEP 7. Recheck for diagnostic trouble code.

Q: Is DTC 26 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 27: Driver' Seat Belt Pre-Tensioner (Squib) System Fault 2 (Open in the Squib Circuit)



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

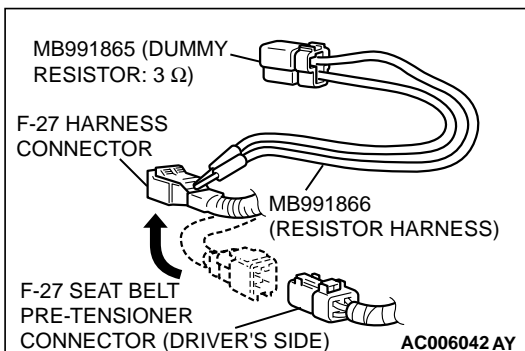
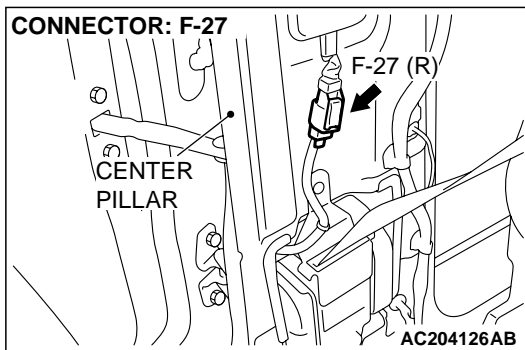
- Improper connector contact
- Open circuit in the driver's seat belt pretensioner (squib) circuit
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the driver's seat belt pretensioner connector F-27.



- (3) Connect special tool MB991865 to special tool 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 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnostic trouble code memory, and then check the diagnostic trouble code.

Q: Is DTC 27 set?

YES : Go to Step 2.

NO : Replace the driver's seat belt pre-tensioner. (Refer to [P.52Ba-44.](#)) Then go to Step 3.

STEP 2. Check the harness for open circuit between SRS-ECU connector E-07 (terminal No.29 and 30) and the driver's seat belt pretensioner F-27 (terminal No.1 and 2).

⚠ CAUTION

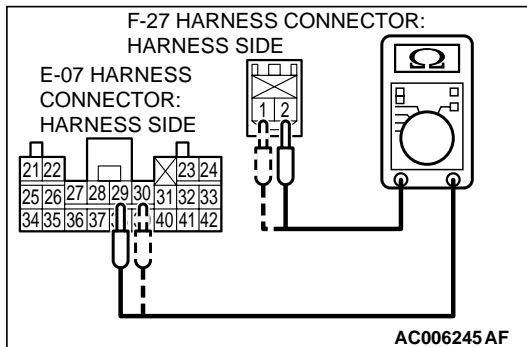
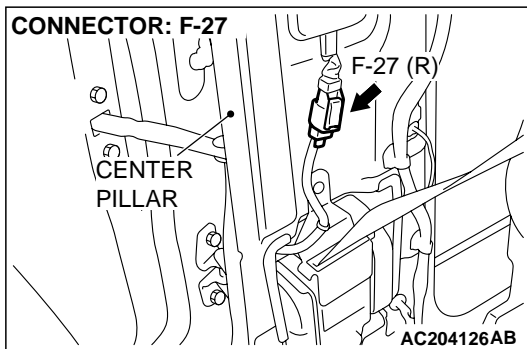
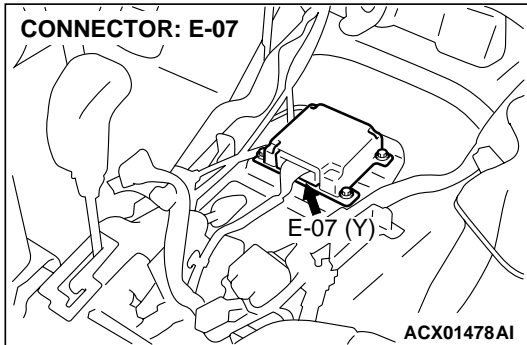
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (1) Disconnect SRS-ECU connector E-07 and driver's seat belt pretensioner connector F-27, and measure at the wiring harness.
- (2) Check for continuity between the following terminals.
Between connector E-07 terminal 30 and connector F-27 terminal 1
Between connector E-07 terminal 29 and connector F-27 terminal 2
It should be less than 2 ohms.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code sets. If DTC 27 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 3.

NO : Repair harness wires between SRS-ECU connector E-07 and driver's seat belt pre-tensioner connector F-27. Then go to Step 3.



STEP 3. Recheck for diagnostic trouble code.

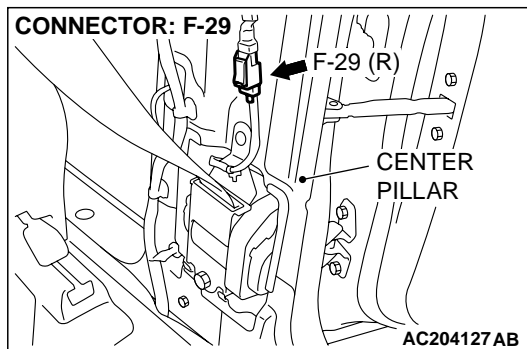
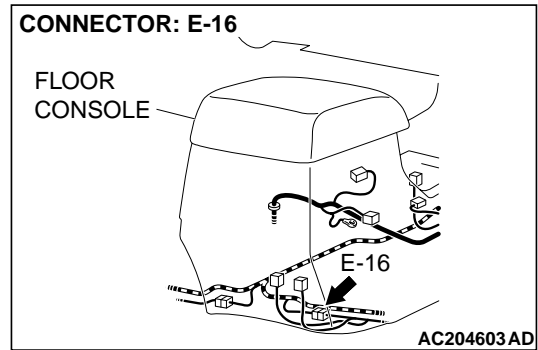
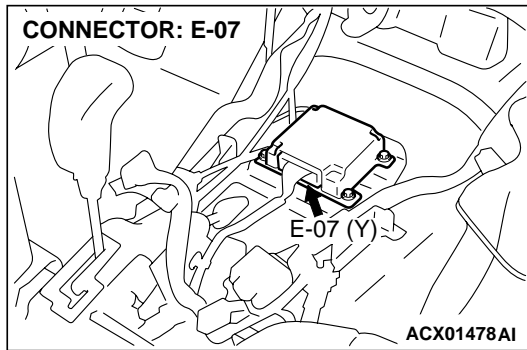
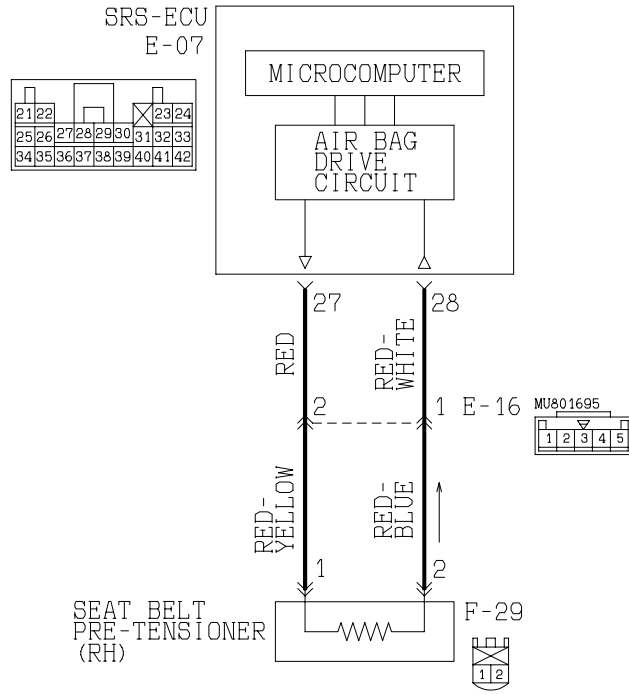
Q: Is DTC 27 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 28: Passenger's (Front) Seat Belt Pre-Tensioner (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

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



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

- Short circuit between the passenger's seat belt pretensioner (squib) circuit terminals
- Damaged connector(s)
- Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resister
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.

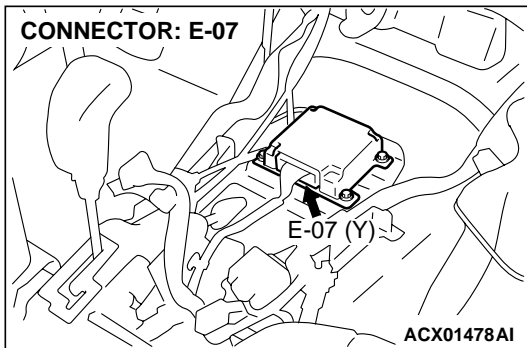
Q: Is DTC 34 set?

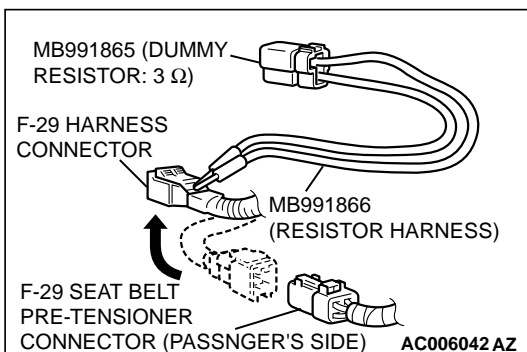
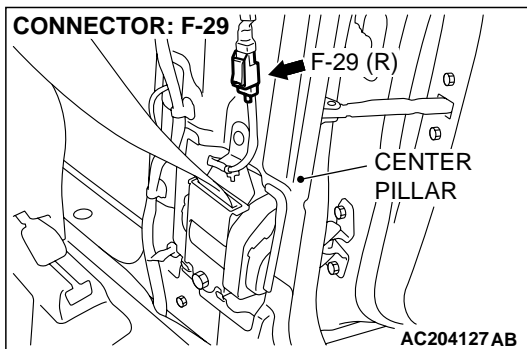
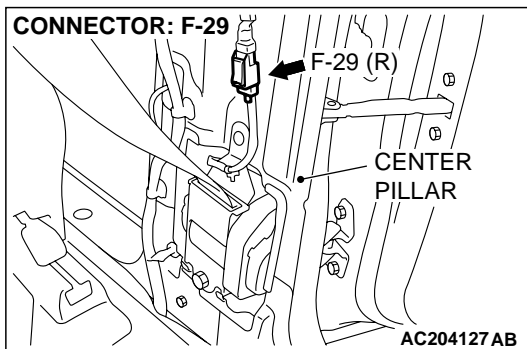
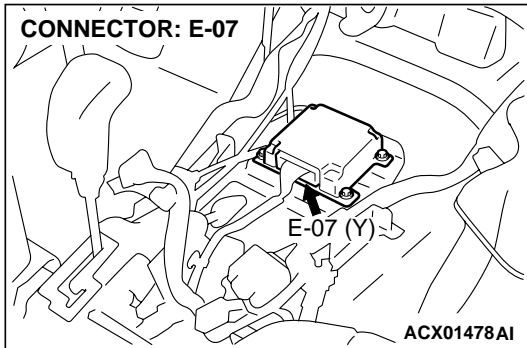
- YES** : Go to Step 2.
NO : Go to Step 3.

STEP 2. Check the SRS-ECU connector E-07.

Q: Is connector correctly engaged?

- YES** : Go to Step 3.
NO : Engage the connector to the place. Then go to Step 7.





STEP 3. Check SRS-ECU connector E-07 and passenger's seat belt pre-tensioner connector F-29.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect connectors E-07 and F-29, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnostic trouble code memory, and the diagnostic trouble code.

Q: Is DTC 28 set?

YES : Go to Step 4.

NO : The procedure is complete. It is assumed that DTC 28 set as connector E-07 or F-29 was engaged improperly.

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the passenger's seat belt pretensioner connector F-29.

- (3) Connect special tool MB991865 to special tool MB991866.

⚠ CAUTION

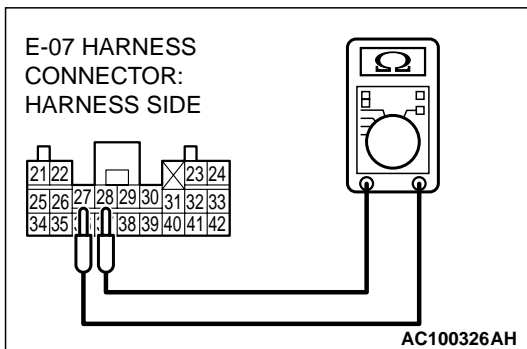
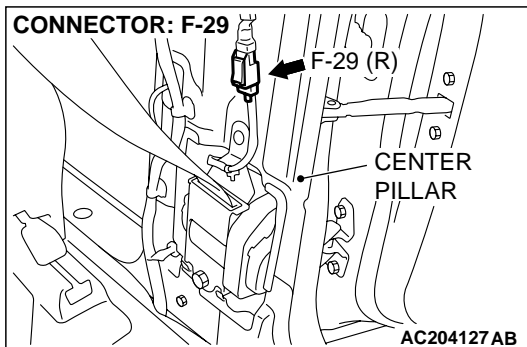
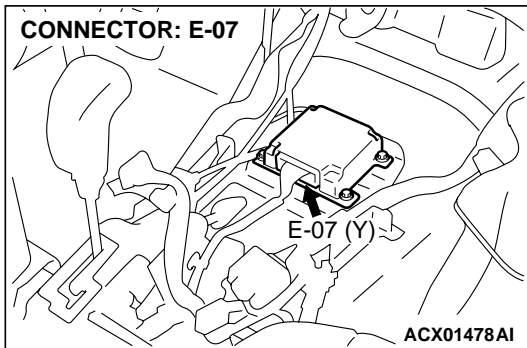
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 28 set?

YES : Go to Step 5.

NO : Replace the passenger's seat belt pre-tensioner. (Refer to [P.52Ba-44.](#)) Then go to Step 7.



STEP 5. Check the passenger's seat belt pretensioner circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect passenger's seat belt pretensioner connector F-29.

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 E-07 harness connector terminals 27 and 28. It should be open circuit.

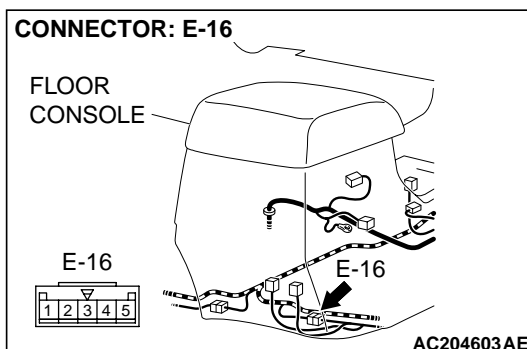
Q: Does continuity exist?

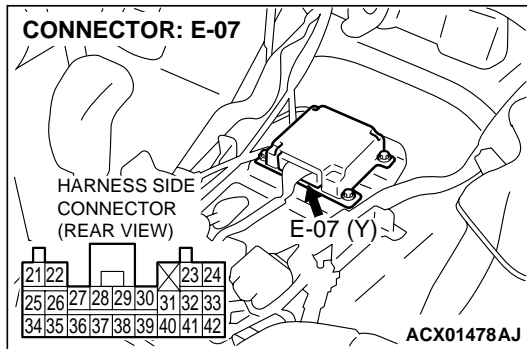
NO : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 28 sets, replace the SRS-ECU. (Refer to P.52Ba-31.)

YES : Go to Step 6.

STEP 6. Check the harness for short circuit between SRS-ECU connector E-07 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector F-29 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-16, inspect the wiring harness. If the intermediate connector E-16 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 7.

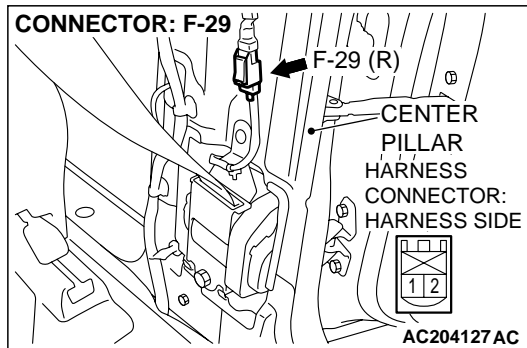




Q: Are harness wires between SRS-ECU connector E-07 (terminal No.27 and 28) connector and passenger's seat belt pre-tensioner connector F-29 (terminal No.1 and 2) in good condition?

YES : Go to Step 7.

NO : Repair the harness wires between SRS-ECU connector E-07 and passenger's seat belt pre-tensioner connector F-29. Then go to Step 7.



STEP 7. Recheck for diagnostic trouble code.

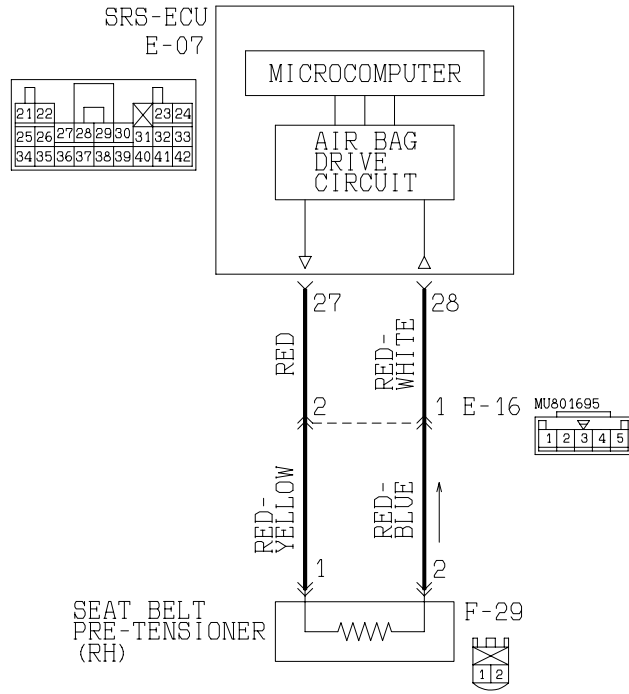
Q: Is DTC 28 set?

YES : Return to Step 1.

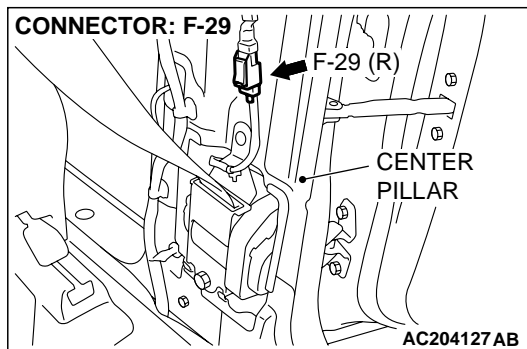
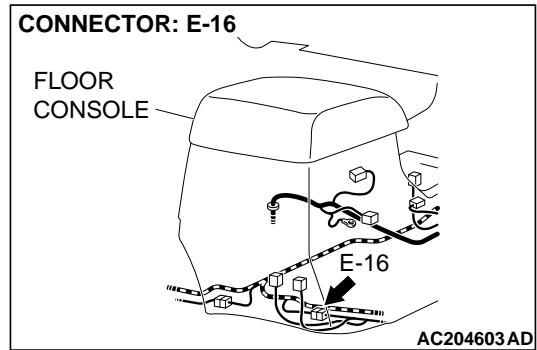
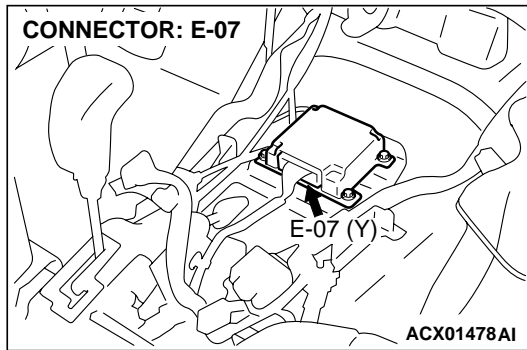
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 29: Passenger's (Front) Seat Belt Pre-Tensioner (Squib) System Fault 2 (Open in the Squib Circuit)

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



W2Q06M02AA
AC102676 AB



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

These DTC are set if there is abnormal resistance between the input terminals of the passenger's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

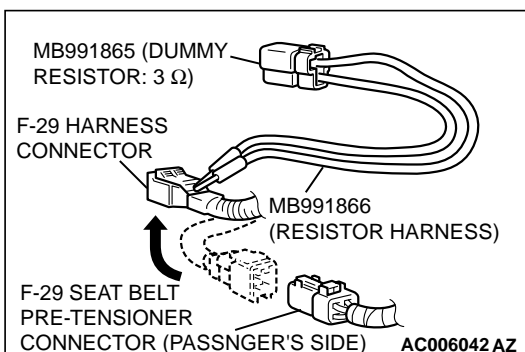
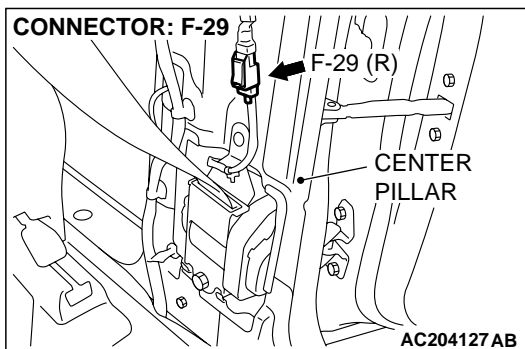
- Open circuit in the passenger's seat belt pretensioner (squib) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the passenger's seat belt pretensioner connector F-29.



- (3) Connect special tool MB991865 to special tool 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 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnostic trouble code memory, and then check the diagnostic trouble code.

Q: Is DTC 29 set?

YES : Go to Step 2.

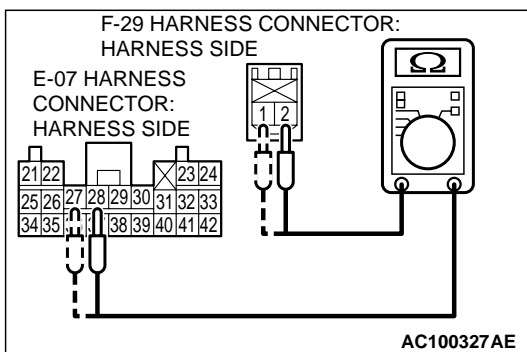
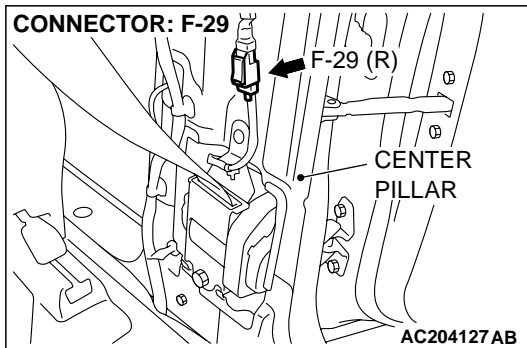
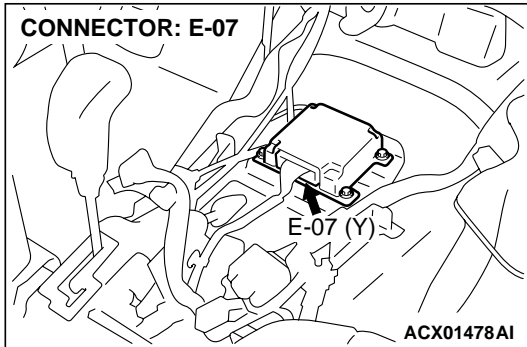
NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52Ba-44.) Then go to Step 3.

STEP 2. Check the harness for open circuit between SRS-ECU connector E-07 (terminal No.27 and 28) and the passenger's seat belt pretensioner F-29 (terminal No.1 and 2).

⚠ CAUTION

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

(1) Disconnect SRS-ECU connector E-07 and passenger's seat belt pretensioner connector F-29, and measure at the wiring harness.



(2) Check for continuity between the following terminals.

Between connector E-07 terminal 28 and connector F-29 terminal 2

Between connector E-07 terminal 27 and connector F-29 terminal 1

It should be less than 2 ohms.

Q: Does continuity exist?

YES : Erase the diagnosis trouble code memory, and check the diagnostic trouble code. If DTC 29 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 passenger's seat belt pre-tensioner connector F-29. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

Q: Is DTC 29 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 34: Connector Lock System Detects Connector Unlocked**DTC SET CONDITIONS**

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

TROUBLESHOOTING HINTS

- Damaged connectors
- Malfunction of the SRS-ECU

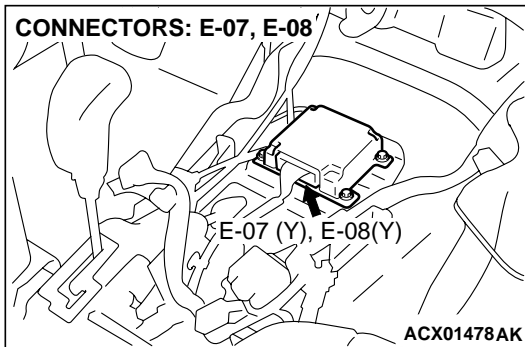
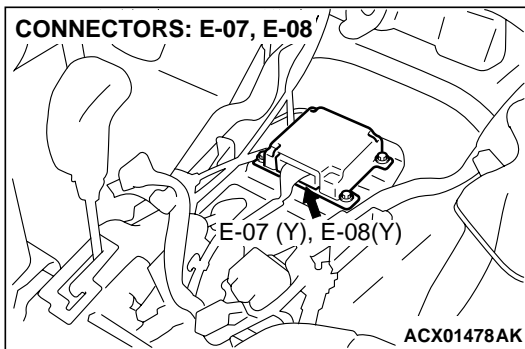
DIAGNOSIS**Required Special Tool:**

- MB991502: Scan Tool (MUT-II)

STEP 1. Check the SRS-ECU connector E-07, E-08.**Q: Are connectors correctly engaged?**

YES : Go to Step 2.

NO : Engage the connectors correctly. Then go to Step 3.

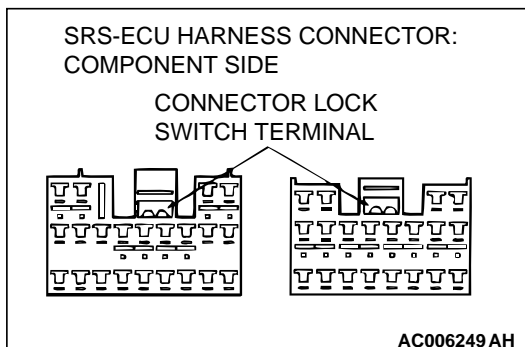
**STEP 2. Check SRS-ECU connector E-07, E-08 for damage.**

- (1) Disconnect SRS-ECU connectors E-07 and E-08.
- (2) Check the connector lock switch terminal inside the harness side connector for improper contact or deformation.

Q: Are the SRS-ECU connector E-07, E-08 in good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 34 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 3.

NO : Repair or replace the SRS-ECU connector E-07, E-08. (Refer to GROUP 00E, Harness Connector Inspection [P.00E-2.](#)) Then go to Step 3.



STEP 3. Recheck for diagnostic trouble code.

Q: Is DTC 34 set?

YES : There is no action to be taken.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 35: SRS-ECU Air Bag Condition Monitor Detects Deployed Air Bag

DTC SET CONDITIONS

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

TROUBLESHOOTING HINTS

Malfunction of the SRS-ECU

DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)

Replace the SRS-ECU. (Refer to [P.52Ba-31.](#))

Check the diagnostic trouble code

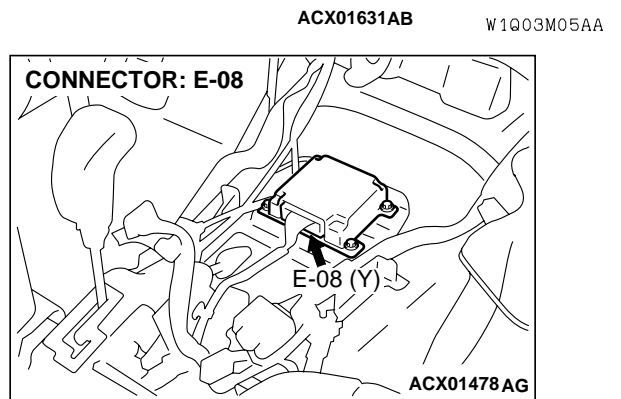
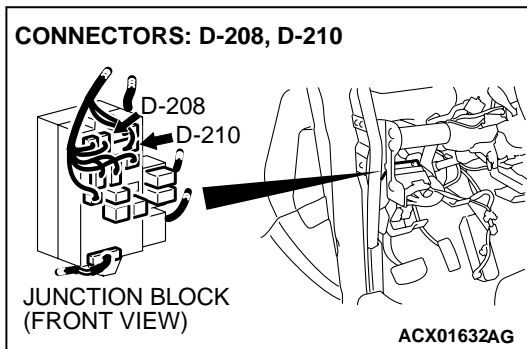
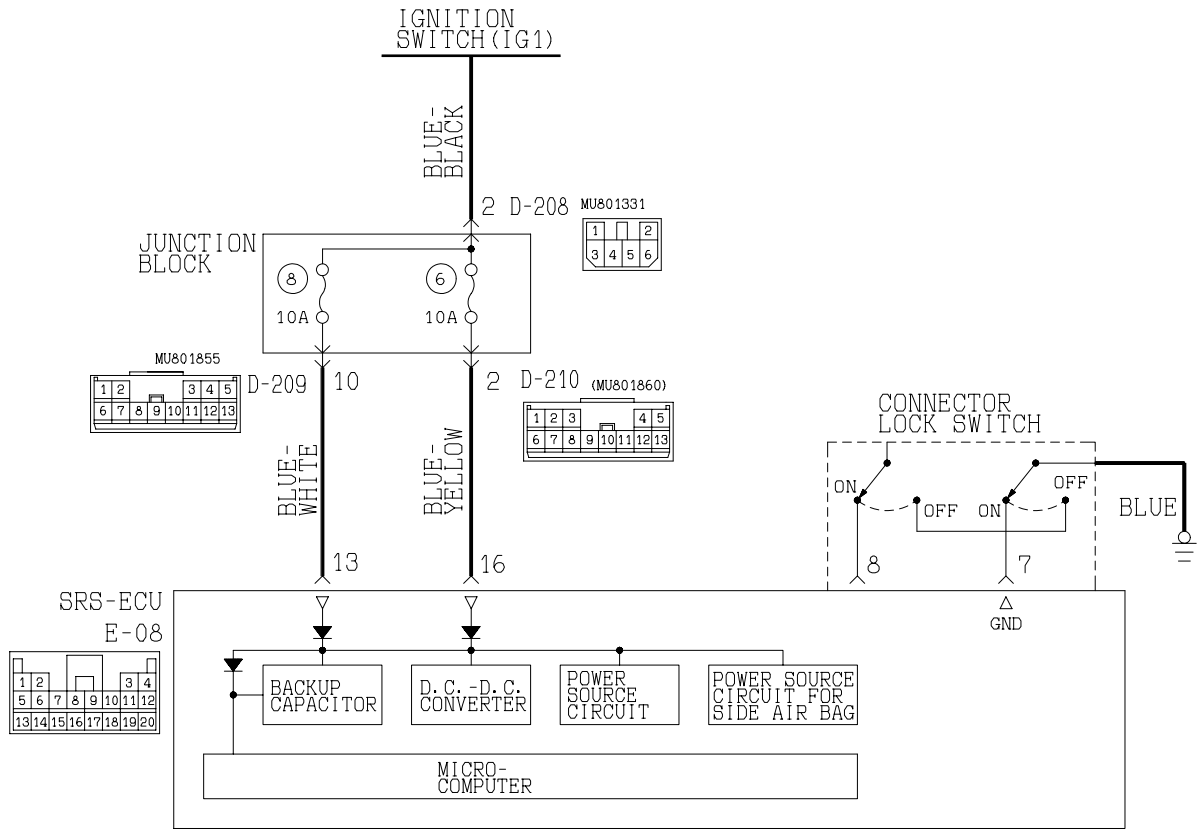
Q: Is DTC 35 set?

YES : There is no action to be taken.

NO : The procedure is complete.

DTC 41: IG1 Power Circuit System (Fuse No.6 Circuit)

IG1 Power Circuit System (Fuse No.6 Circuit)



CIRCUIT 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.

DTC SET CONDITIONS

This DTC is set if the voltage between the IG1 terminals (fuse No.6 circuit) and ground is lower than a predetermined value for a continuous period of five second or more. However, if the vehicle condition returns to normal, DTC number 41 will be automatically erased, and the SRS warning light will switch off.

TROUBLESHOOTING HINTS

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

DIAGNOSIS

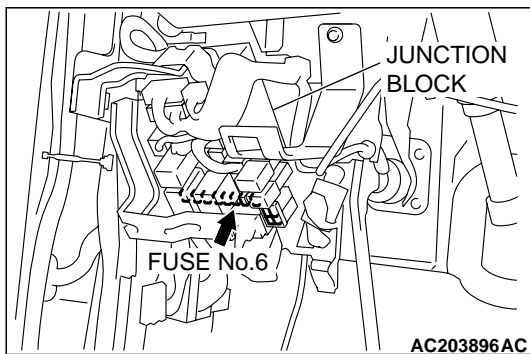
Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991223 (MB991222): Harness set (Probe)

STEP 1. Check junction block fuse number 6.

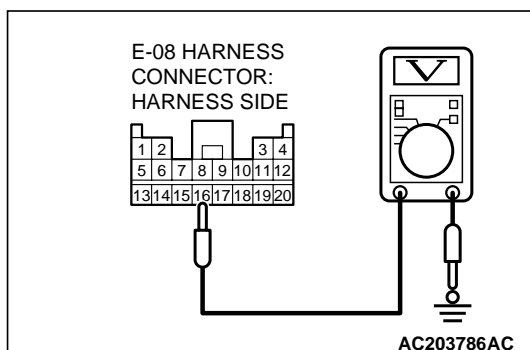
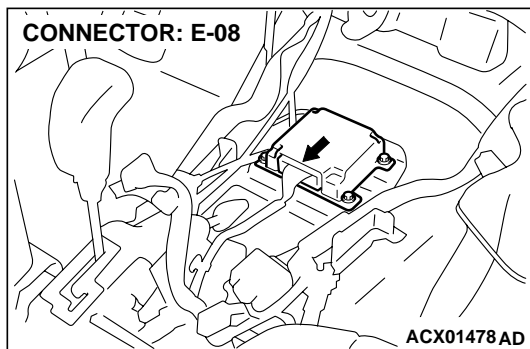
Q: Is the fuse burned out?

- NO :** Go to Step 2.
YES : Go to Step 4.



STEP 2. Check the circuit between the SRS-ECU and the ignition switch (IG1).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect SRS-ECU connector E-08.
- (3) Connect the negative battery terminal.
- (4) Turn the ignition switch to the "ON" position.



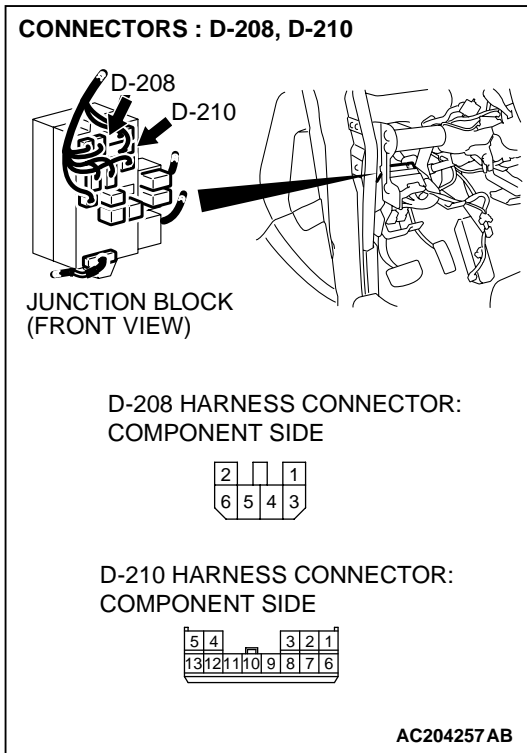
⚠ CAUTION

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 E-08 harness connector terminal 16 and body ground.
 Voltage should measure 9 volts or more.

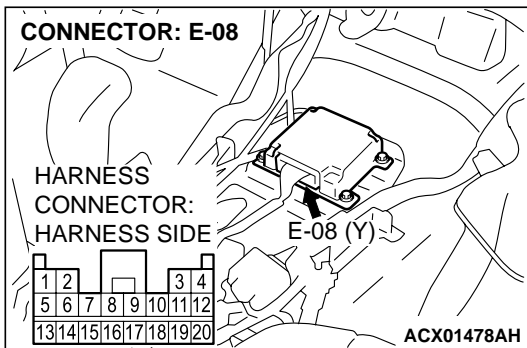
Q: Is the measured voltage within the specified range?

- YES :** Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 41 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 10.
- NO :** Go to Step 3.



STEP 3. Check the harness for open circuit between SRS-ECU connector E-08 (terminal No.16) and the ignition switch connector D-204 (terminal No.2).

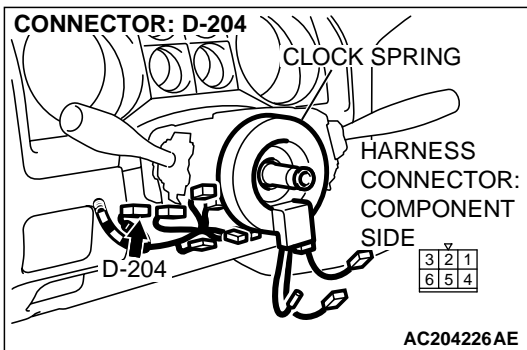
NOTE: After inspecting junction block connectors D-210 and D-208, inspect the wiring harness. If junction block connectors are damaged, repair or replace them. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 10.



Q: Are harness between SRS-ECU connector E-08 (terminal No.16) and the ignition switch connector D-204 (terminal No.2) in good condition?

YES : Go to Step 10.

NO : Repair the harness wire between SRS-ECU connector E-08 and the ignition switch connector D-204. 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.

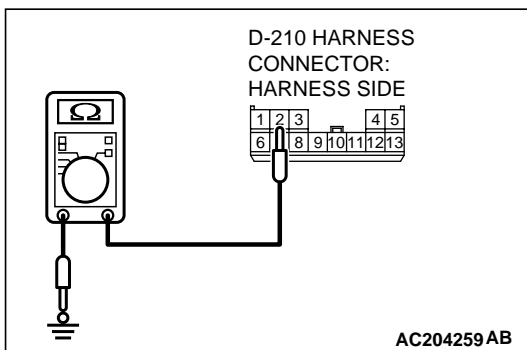
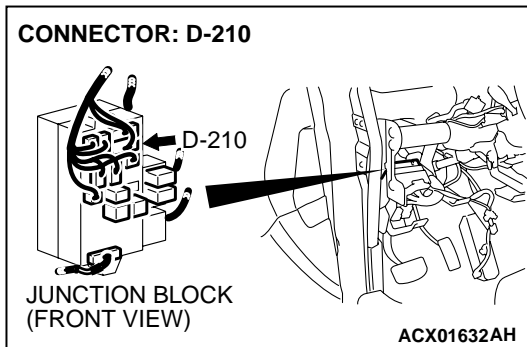
Q: Is the fuse in good condition?

YES : Then go to Step 10.

NO : Go to Step 5.

STEP 5. Check the harness for short circuit to ground between the SRS-ECU and the junction block.

- (1) Disconnect junction block connector D-210, and measure at the wiring harness.



CAUTION

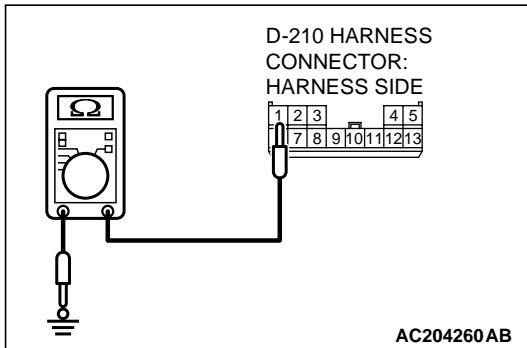
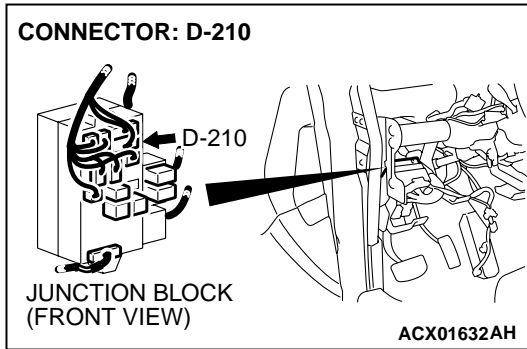
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between D-210 harness connector terminal 2 and body ground. It should be open circuit.

Q: Does continuity exist?

YES : Go to Step 6.

NO : Go to Step 8.



STEP 6. Check the fuse number 6-related circuit at junction block connector C-205.

- (1) Disconnect junction block connector D-210, and measure at the wiring harness.

⚠ 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 D-210 harness connector terminal 1 and body ground.
It should be open circuit.

Q: Does continuity exist?

YES : Check the other circuit, which flows through multi-purpose fuse number 6.

NO : Go to Step 7.

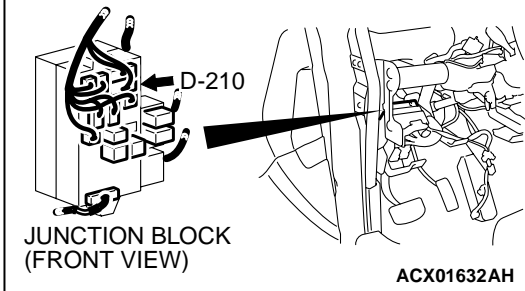
STEP 7. Check the harness for short circuit to ground between junction block connector D-210 (terminal No.1) and combination meter connector D-03 (terminal No.62).

Q: Are harness wires between junction block connector D-210 (terminal No.1) and combination meter connector D-03 (terminal No.62) in good condition?

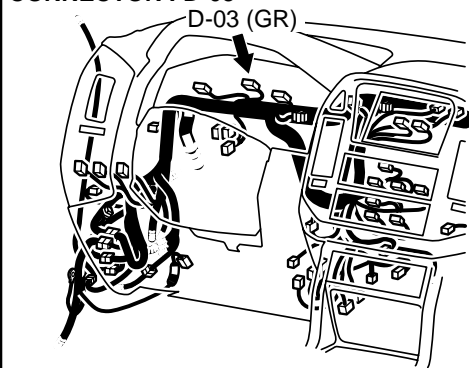
YES : Go to Step 10.

NO : Repair the harness wires between junction block connector D-210 and combination meter connector D-03. Then go to Step 10.

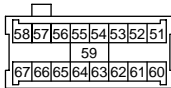
CONNECTOR: D-210



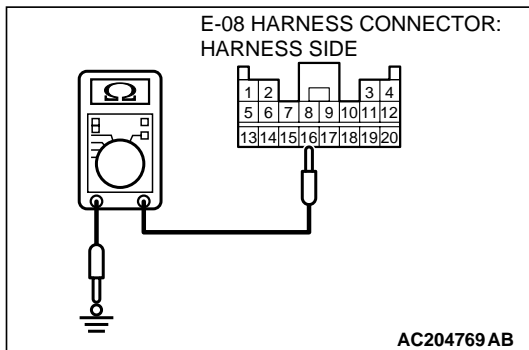
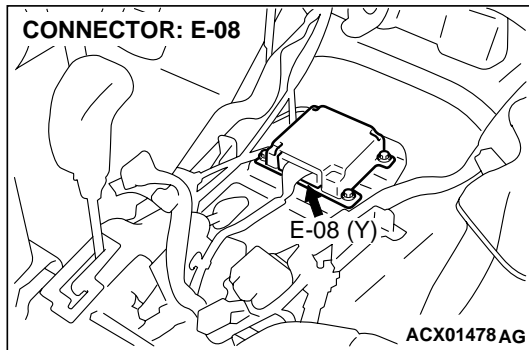
CONNECTOR : D-03



**D-03 HARNESS CONNECOR:
COMPONENTT SIDE**



AC204231 AC



STEP 8. Check the harness for short circuit to ground between the SRS-ECU and the junction block.

- (1) Disconnect SRS-ECU connector E-08, and measure at the wiring harness.

CAUTION

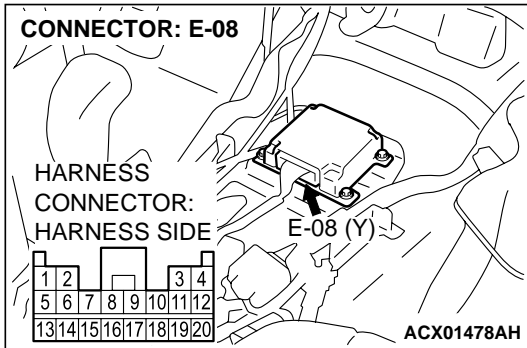
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between E-08 harness connector terminal 16 and body ground. It should be open circuit.

Q: Is the circuit normal?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 41 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 10.

NO : Go to Step 9.

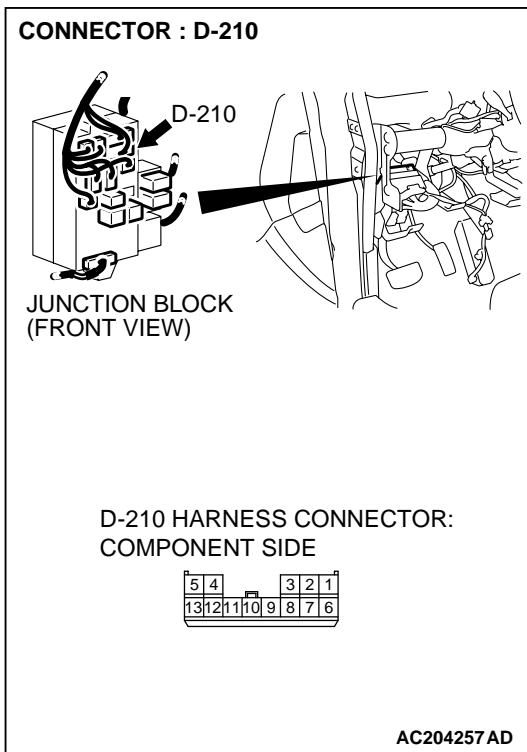


STEP 9. Check the harness for short circuit ground between SRS-ECU connector E-08 (terminal No.16) and junction block connector D-210 (terminal No.2).

Q: Are harness wires between SRS-ECU connector E-08 (terminal No.16) and junction block connector D-210 (terminal No.2) in good condition?

YES : Go to Step 10.

NO : Repair the harness wire between SRS-ECU connector E-08 and junction block connector D-210. Then go to Step 10.



STEP 10. Recheck for diagnostic trouble code.

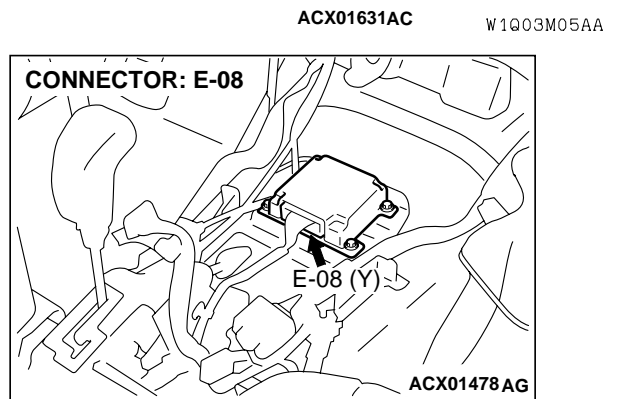
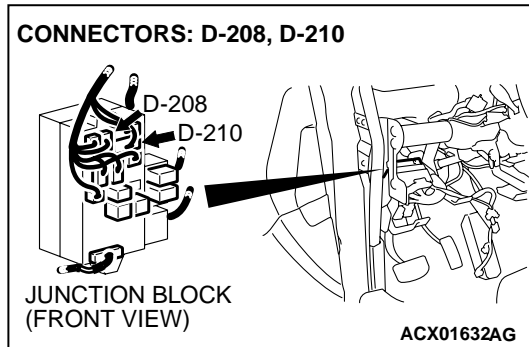
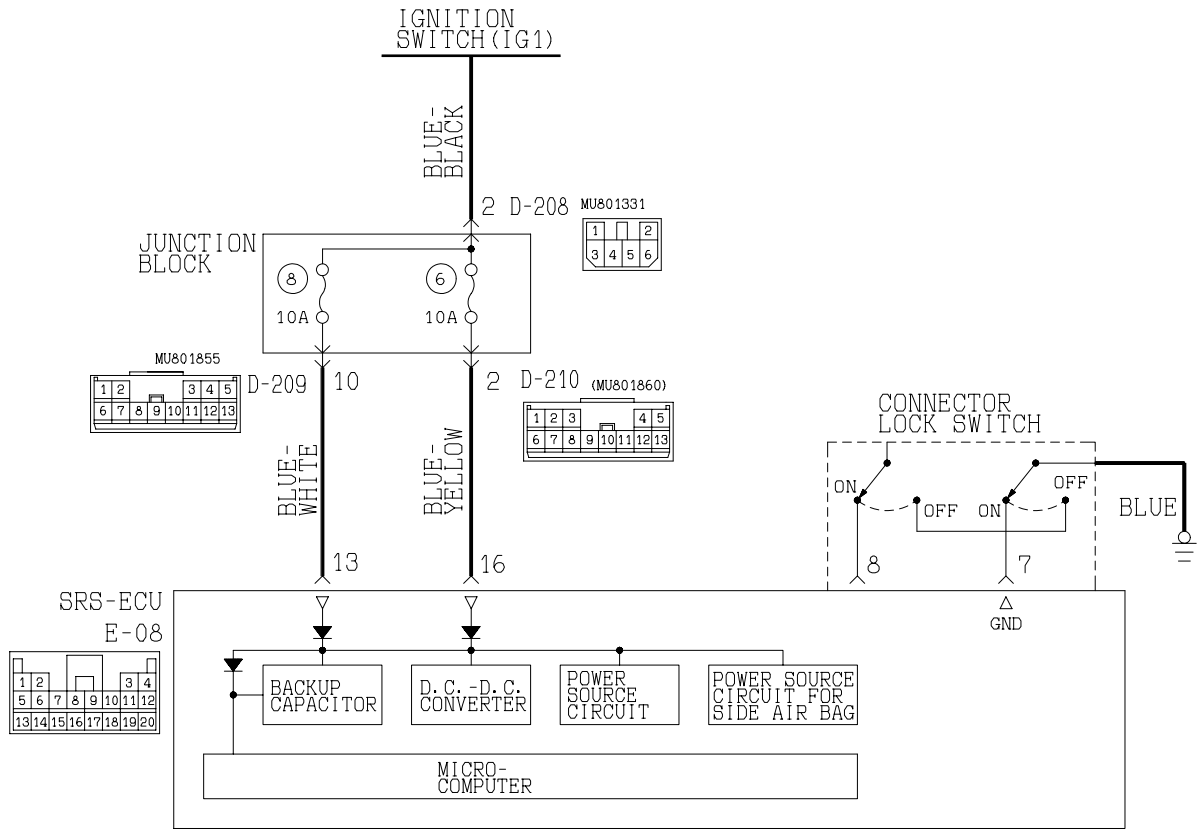
Q: Is DTC 41 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 42: IG1 Power Circuit System (Fuse No.8 Circuit)

IG1 Power Circuit System (Fuse No.8 Circuit)



CIRCUIT 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.

DTC SET CONDITIONS

This DTC is set if the voltage between the IG1 terminals (fuse No.8 circuit) and ground is lower than a predetermined value for a continuous period of five second or more. However, if the vehicle condition returns to normal, DTC number 42 will be automatically erased, and the SRS warning light will switch off.

TROUBLESHOOTING HINTS

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

DIAGNOSIS

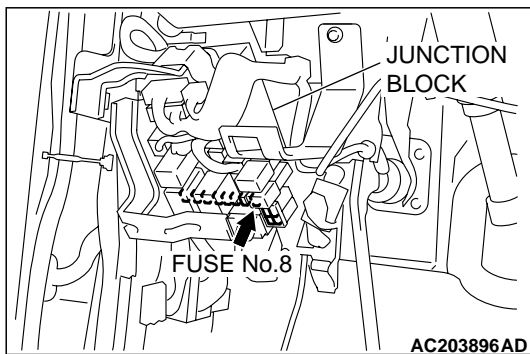
Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991223 (MB991222): Harness set (Probe)

STEP 1. Check junction block fuse number 8.

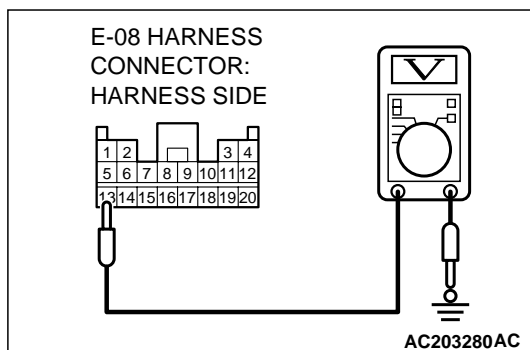
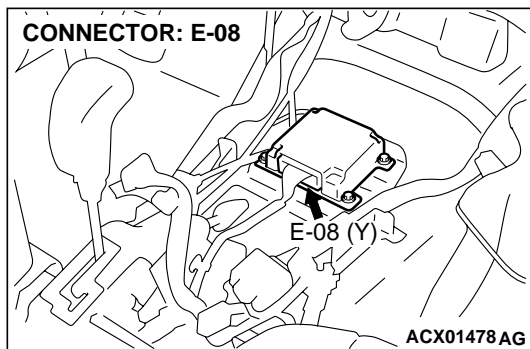
Q: Is the fuse burned out?

- NO** : Go to Step 2.
YES : Go to Step 4.



STEP 2. Check the harness for open circuit between the SRS-ECU and the ignition switch (IG1).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect SRS-ECU connector E-08.
- (3) Connect the negative battery terminal.
- (4) Turn the ignition switch to the "ON" position.



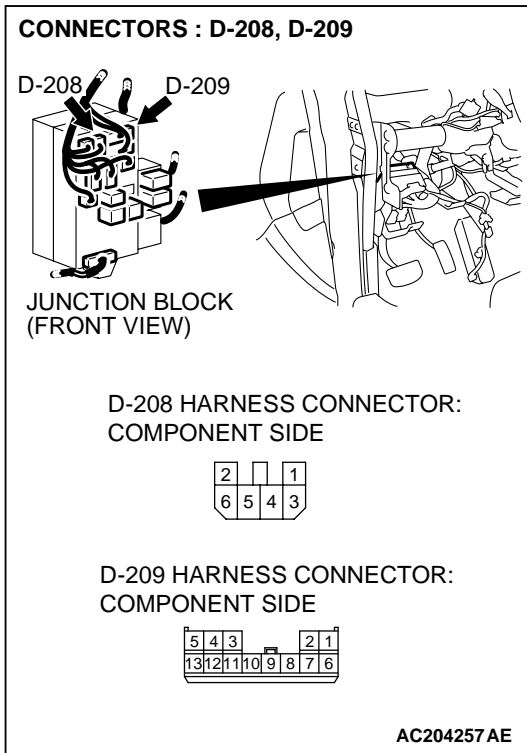
⚠ CAUTION

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 E-08 harness connector terminal 13 and body ground.
 Voltage should measure 9 volts or more.

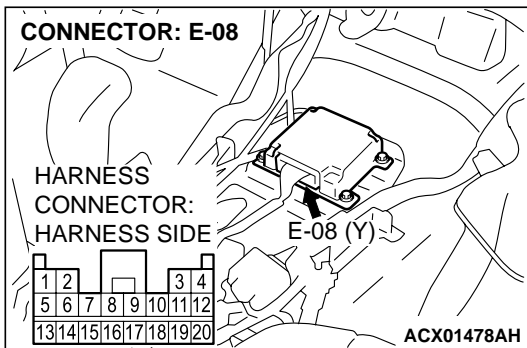
Q: Is the measured voltage within the specified range?

- YES** : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 42 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 8.
- NO** : Go to Step 3.



STEP 3. Check the harness for open circuit between SRS-ECU connector E-08 (terminal No.13) and the ignition switch connector D-204 (terminal No.2).

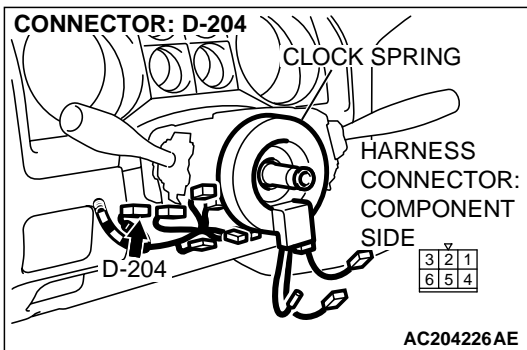
NOTE: After inspecting junction block connectors D-209 and D-208, inspect the wiring harness. If junction block connectors are damaged, repair or replace them. Refer to GROUP 00E, Harness Connector Inspection P.00E-2. Then go to Step 8.



Q: Is the harness wire between SRS-ECU connector E-08 (terminal No.13) and the ignition switch connector D-204 (terminal No.2) in good condition?

YES : Go to Step 8.

NO : Repair the harness wire between SRS-ECU connector E-08 and the ignition switch connector D-204. 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.

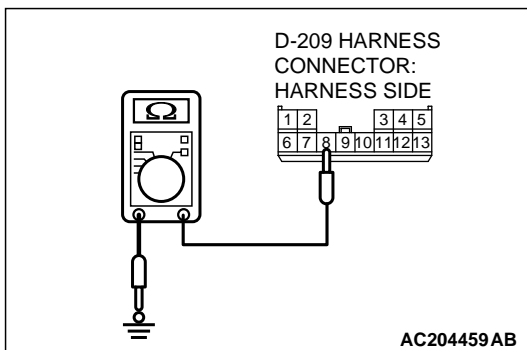
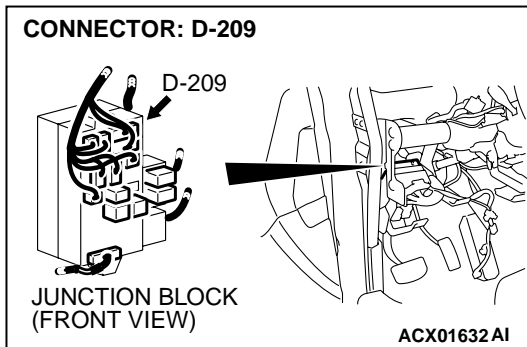
Q: Is the fuse in good condition?

YES : Go to Step 8.

NO : Go to Step 5.

STEP 5. Check the circuit between the SRS-ECU and the junction block connector D-209.

- (1) Disconnect junction block connector D-209, and measure at the wiring harness.



⚠ CAUTION

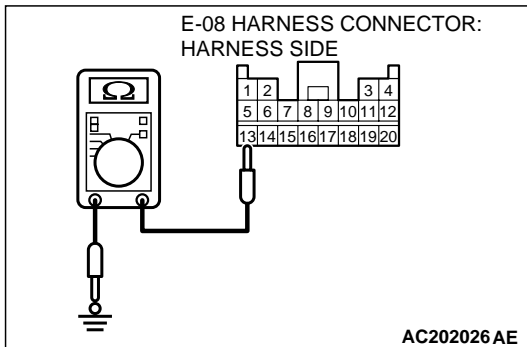
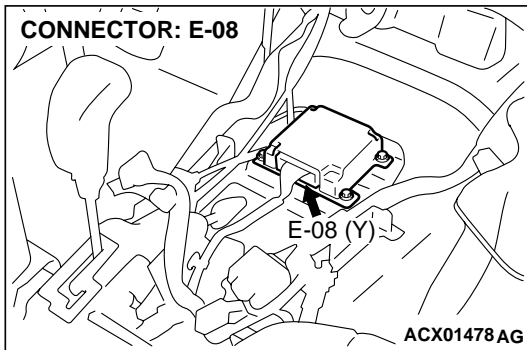
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between D-209 harness connector terminal 10 and body ground. It should be open circuit.

Q: Is the circuit normal?

YES : Check the other circuit, which flows through fuse number 8.

NO : Go to Step 6.



STEP 6. Check the power supply circuit for short circuit to ground at the SRS-ECU connector E-08.

- (1) Disconnect SRS-ECU connector E-08, and measure at the wiring harness.

⚠ CAUTION

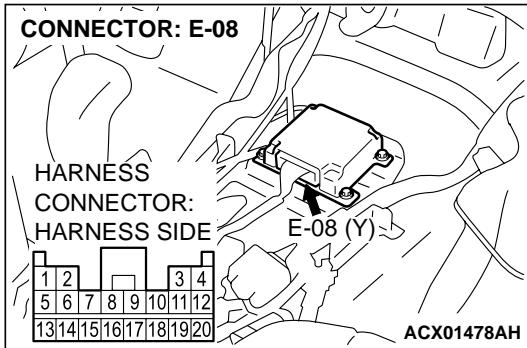
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between terminal 13 and body ground. It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 42 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 8.

NO : Go to Step 7.

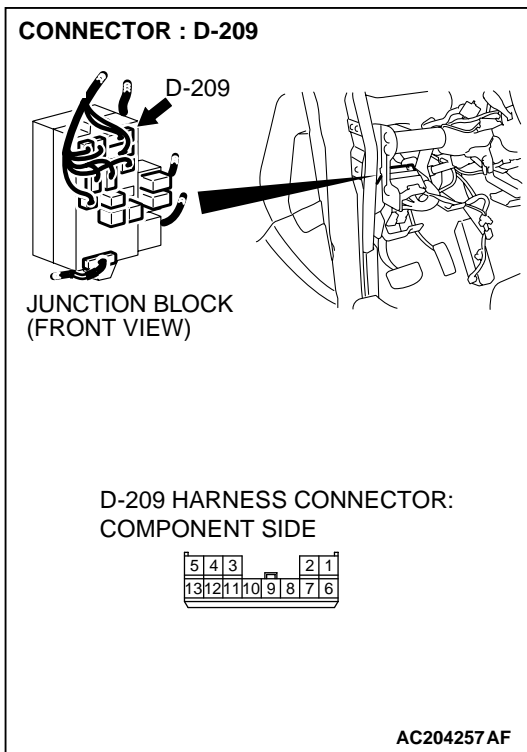


STEP 7. Check the harness wires between SRS-ECU connector E-08 (terminal No.13) and junction block connector D-209 (terminal No.10).

Q: Are harness wires between SRS-ECU connector E-08 (terminal No.13) and junction block connector D-209 (terminal No.10) in good condition?

YES : Go to Step 8.

NO : Repair the harness wires between SRS-ECU connector E-08 and junction block connector D-209. Then go to Step 8.



STEP 8. Rereck for diagnostic trouble code.

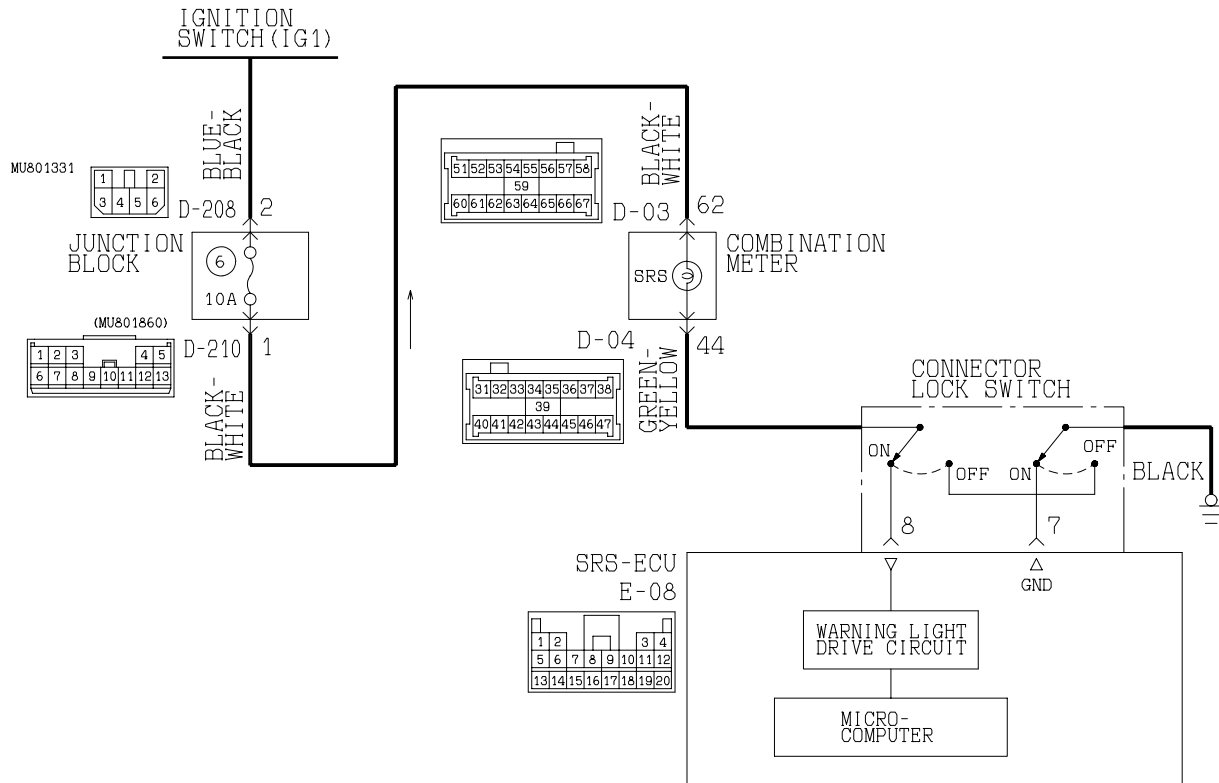
Q: Is DTC 42 set?

YES : Replace the SRS-ECU. Refer to [P.52Ba-31](#).

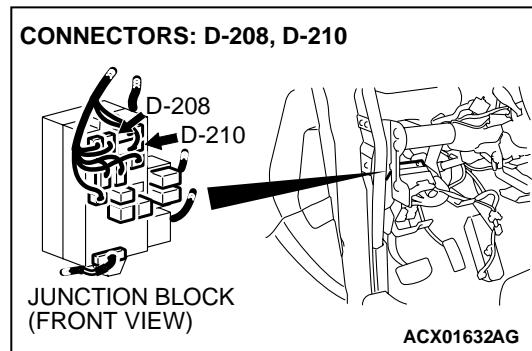
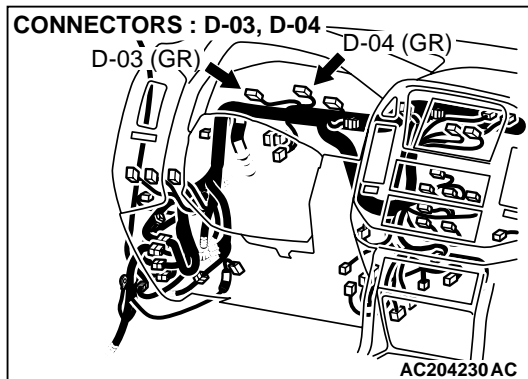
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6](#).)

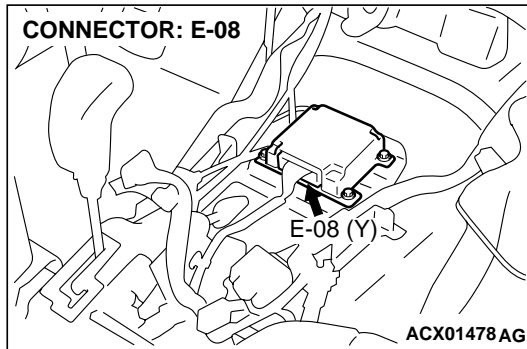
DTC 43: SRS Warning Light Drive Circuit System Fault 1 (Light does not illuminate.)

SRS Warning Light Drive Circuit



W3007M01AA
AC204592AB





CIRCUIT OPERATION

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

DTC SET CONDITIONS

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

TROUBLESHOOTING HINTS

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

DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)

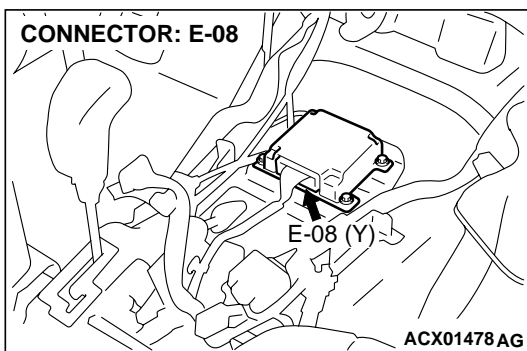
STEP 1. Check the SRS warning light.

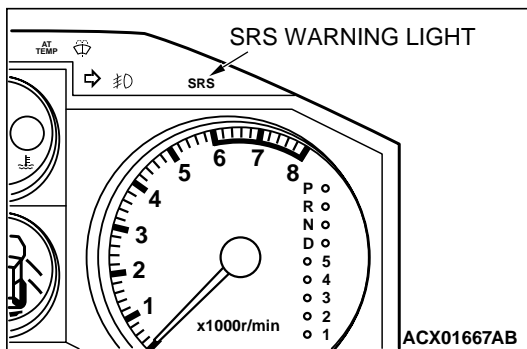
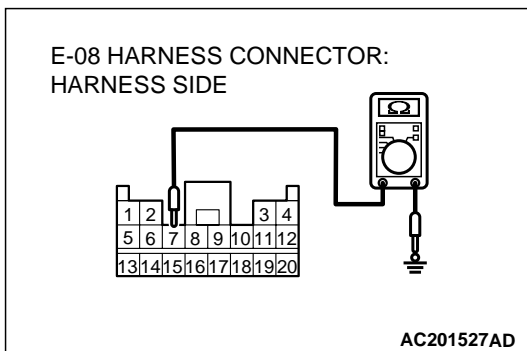
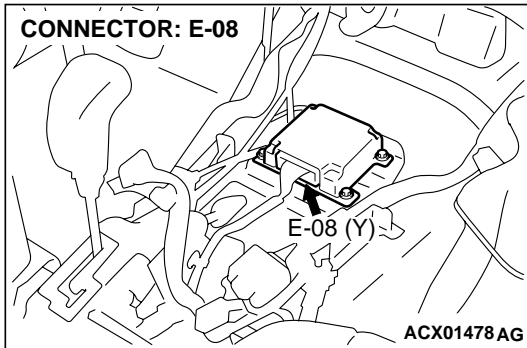
- (1) Disconnect the negative battery terminal.
- (2) Connect the negative battery terminal.
- (3) Disconnect the SRS-ECU connector E-08.
- (4) Turn the ignition switch to the "ON" position.

Q: Does the warning light illuminate?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 43 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 6.

NO : Go to Step 2.





STEP 2. Check the ground line at the SRS-ECU connector E-08.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect SRS-ECU connector E-08.
- (3) Connect the negative battery terminal.

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 continuity between terminal 7 and ground. It should be less than 2 ohms.

Q: Does continuity exist?

YES : Go to Step 3.

NO : Then go to Step 5.

STEP 3. Check the SRS warning light bulb.

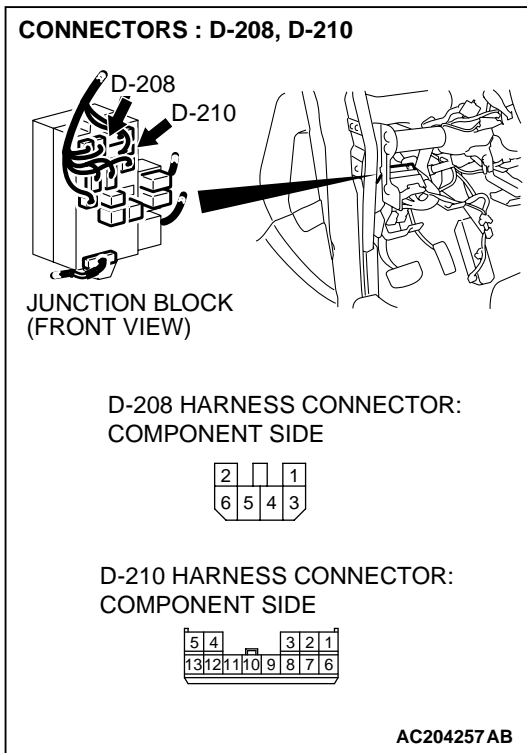
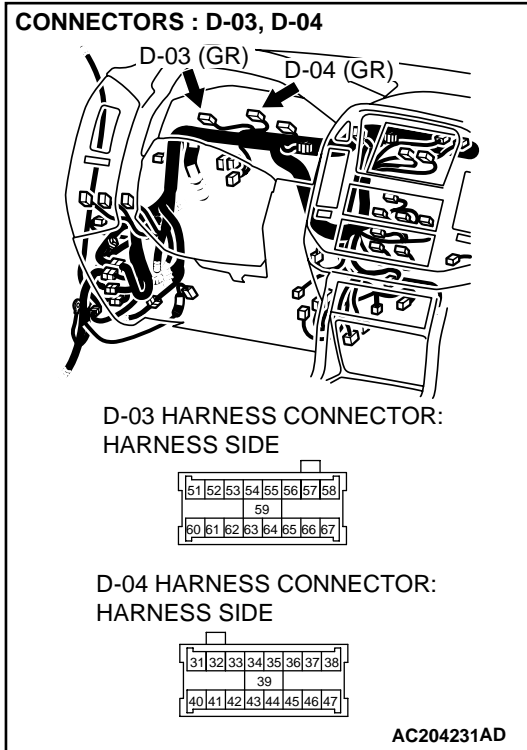
Q: Has the SRS warning light bulb blown?

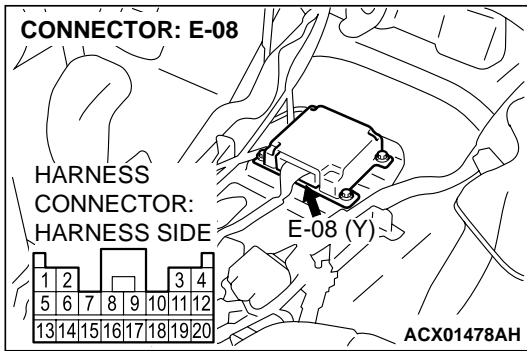
YES : Replace the SRS warning light bulb. Then go to Step 6.

NO : Go to Step 4.

STEP 4. Check the harness for open circuit between ignition switch connector D-204 (terminal No.2) and combination meter D-03 (terminal No.62), and between combination meter D-04 (terminal No.44) and SRS-ECU connector E-08 (terminal No.8).

NOTE: After inspecting intermediate connectors D-04, D-03, junction block connectors D-210, D-208 inspect the wiring harness. If intermediate connectors D-04, D-03, junction block connectors D-210, D-208 are damaged, repair or replace them. Refer to GROUP 00E, Harness Connector Inspection P.00E-2. Then go to Step 5 .

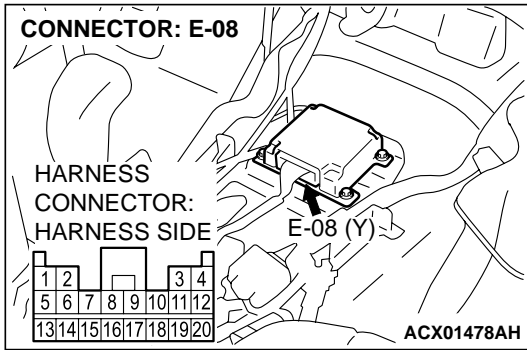
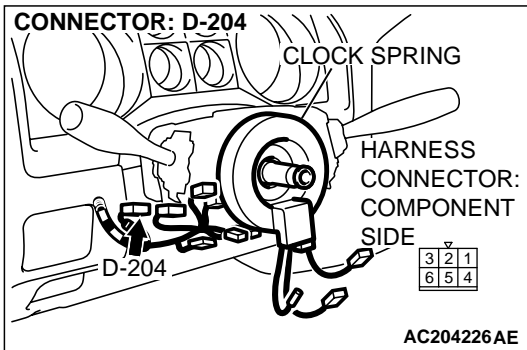




Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.8) and the ignition switch connector D-204 (terminal No.2) in good condition?

YES : Replace the combination meter. (Refer to GROUP 54A, Combination Meter Assembly P.54A-65.)

NO : Repair the harness wires between SRS-ECU connector E-08 and the ignition switch connector D-204. Then go to Step 6.

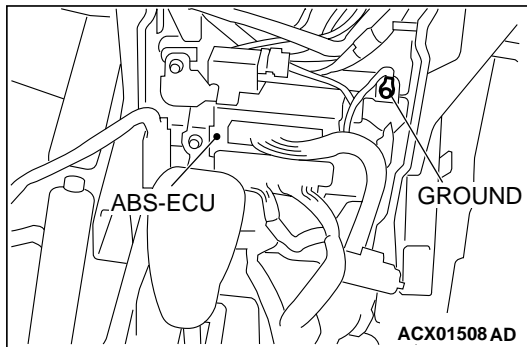


STEP 5. Check the harness for open circuit between SRS-ECU connector E-08 (terminal No.7) and ground.

Q: Is the harness wire between SRS-ECU connector E-08 (terminal No.7) and ground in good condition?

YES : Go to Step 6.

NO : Repair the harness wires between SRS-ECU connector E-08 and ground. Then go to Step 6.



STEP 6. Recheck for diagnostic trouble code.

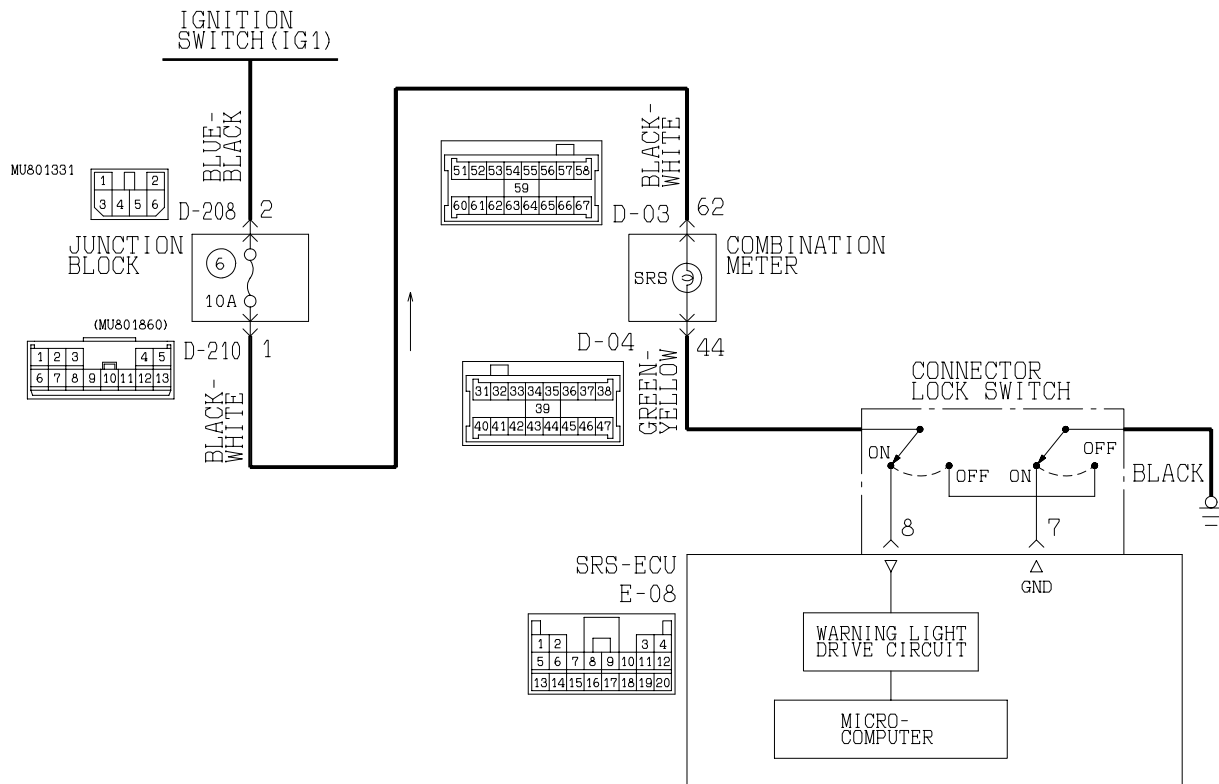
Q: Is DTC 43 set?

YES : There is no action to be taken.

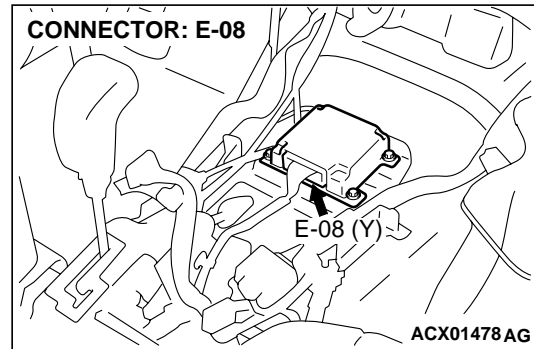
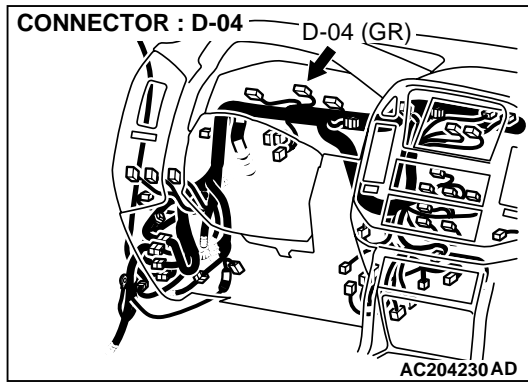
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 43: SRS Warning Light Drive Circuit System Fault 1 (Light does not Switch Off.)

SRS Warning Light Drive Circuit



W3007M0 1AA
AC204592AB



CIRCUIT OPERATION

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

DTC SET CONDITIONS

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

TROUBLESHOOTING HINTS

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

DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)

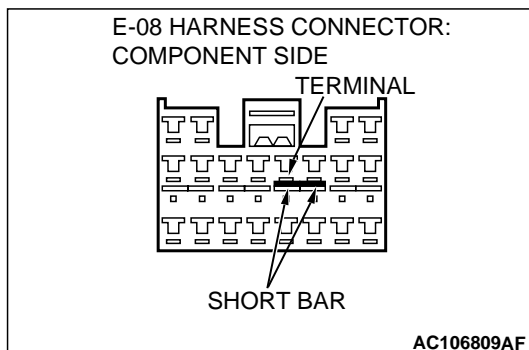
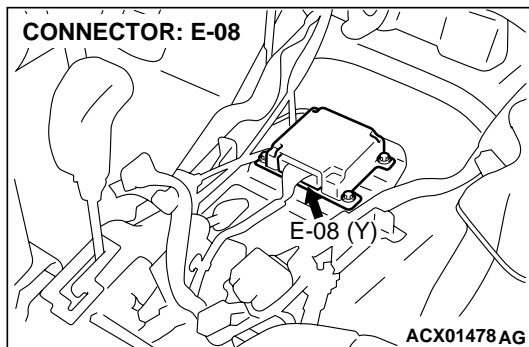
STEP 1. Check the SRS-ECU connector E-08.

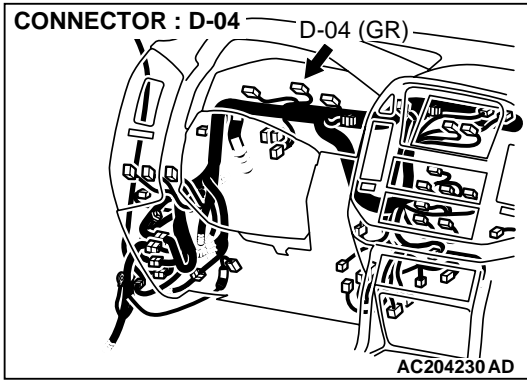
- (1) Disconnect SRS-ECU connector E-08.
- (2) Check the short bar for the warning light inside the harness connector for improper contact or deformation.

Q: Is SRS-ECU connectors E-08 good condition?

YES : Then go to Step 2.

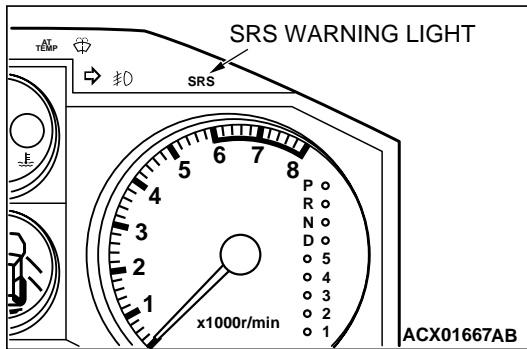
NO : Repair or replace the SRS-ECU connector E-08.
Then go to Step 4.





STEP 2. Check the SRS warning light.

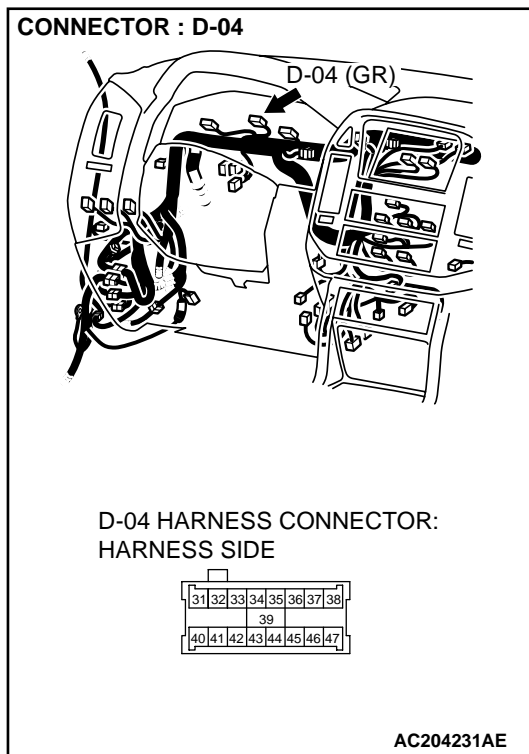
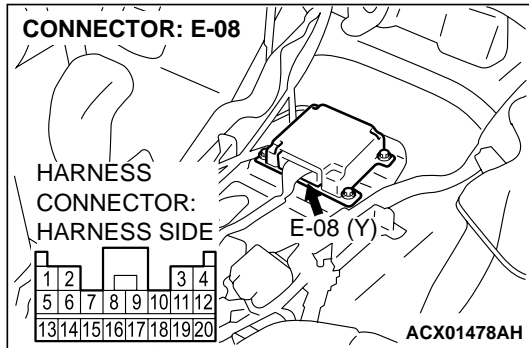
- (1) Disconnect the negative battery cable.
- (2) Disconnect the combination meter connector D-04.
- (3) Connect the negative battery cable.
- (4) Turn the ignition switch to the "ON" position.



Q: Does the SRS warning light go out when combination meter connector D-04 is disconnected?

YES : Go to Step 3.

NO : Replace the combination meter. Then go to Step 4.



STEP 3. Check the harness for short circuit to ground between SRS-ECU connector E-08 (terminal No.8) and combination meter connector D-04 (terminal No.44).

Q: Is the harness wire between the SRS-ECU connector E-08 (terminal No.8) and combination meter connector D-04 (terminal No.44) in good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 43 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 4.

NO : Repair the harness wire between SRS-ECU connector E-08 and combination meter connector D-04. Then go to Step 4.

STEP 4. Rereck for diagnostic trouble code.

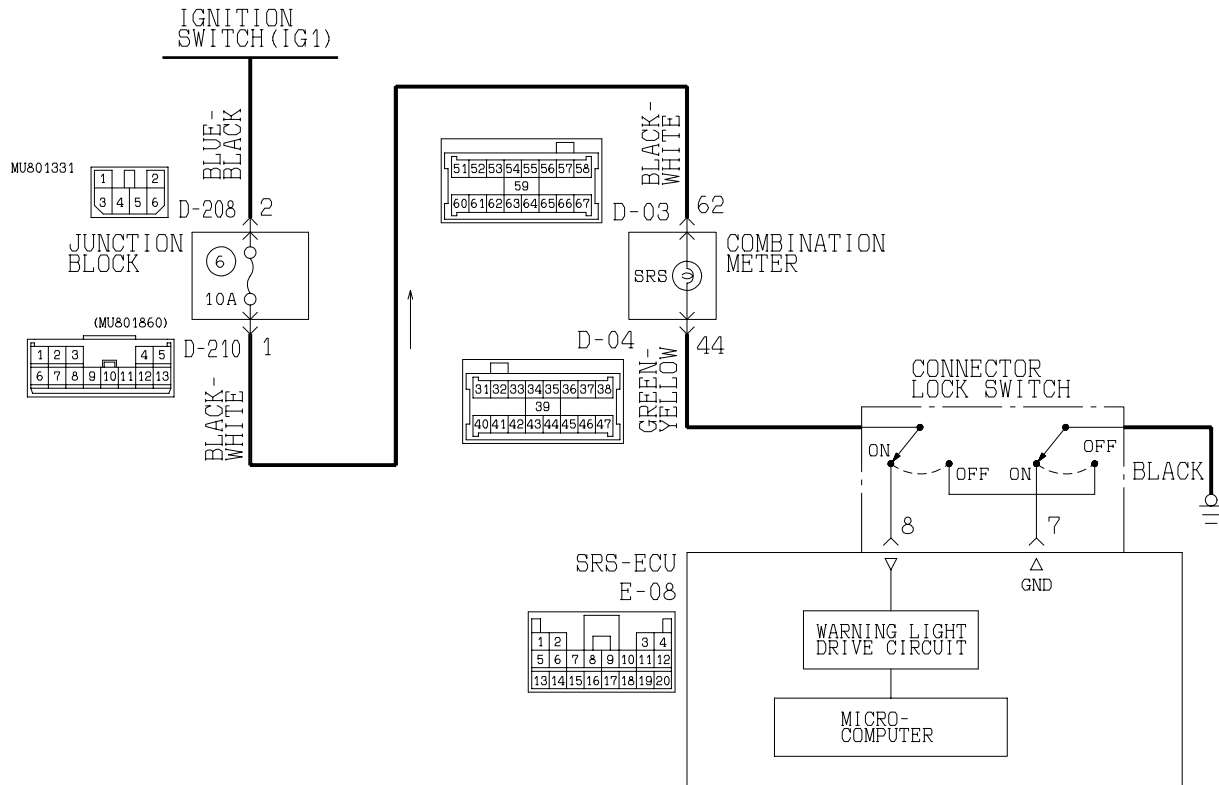
Q: Is DTC 43 set?

YES : There is no action to be taken.

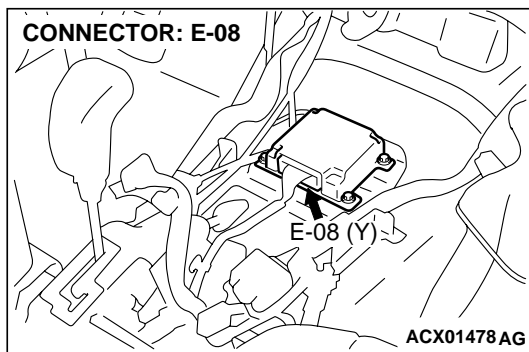
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 44: SRS Warning Light Drive Circuit System Fault 2

SRS Warning Light Drive Circuit



W3007M01AA
AC204592AB



CIRCUIT OPERATION

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

DTC SET CONDITIONS

This DTC is set under one of the following cases while the SRS-ECU is monitoring the warning light drive circuit:

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

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

TROUBLESHOOTING HINTS

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

DIAGNOSIS**Required Special Tool:**

- MB991502: Scan Tool (MUT-II)

STEP 1. Check the SRS warning light drive circuit system.
(Refer to [P.52Bb-3.](#))**Q: Is the SRS warning light drive circuit normal?**

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 43 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 2.

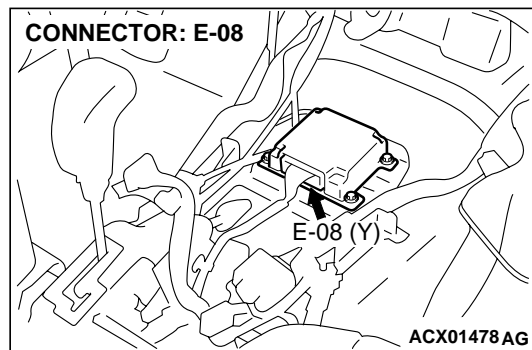
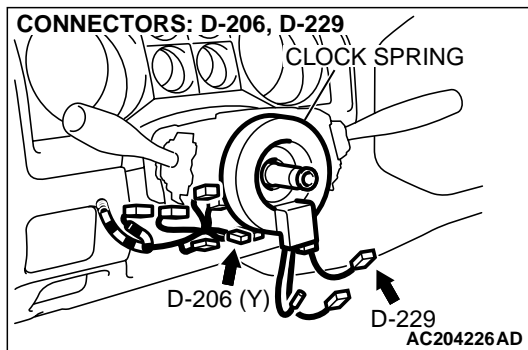
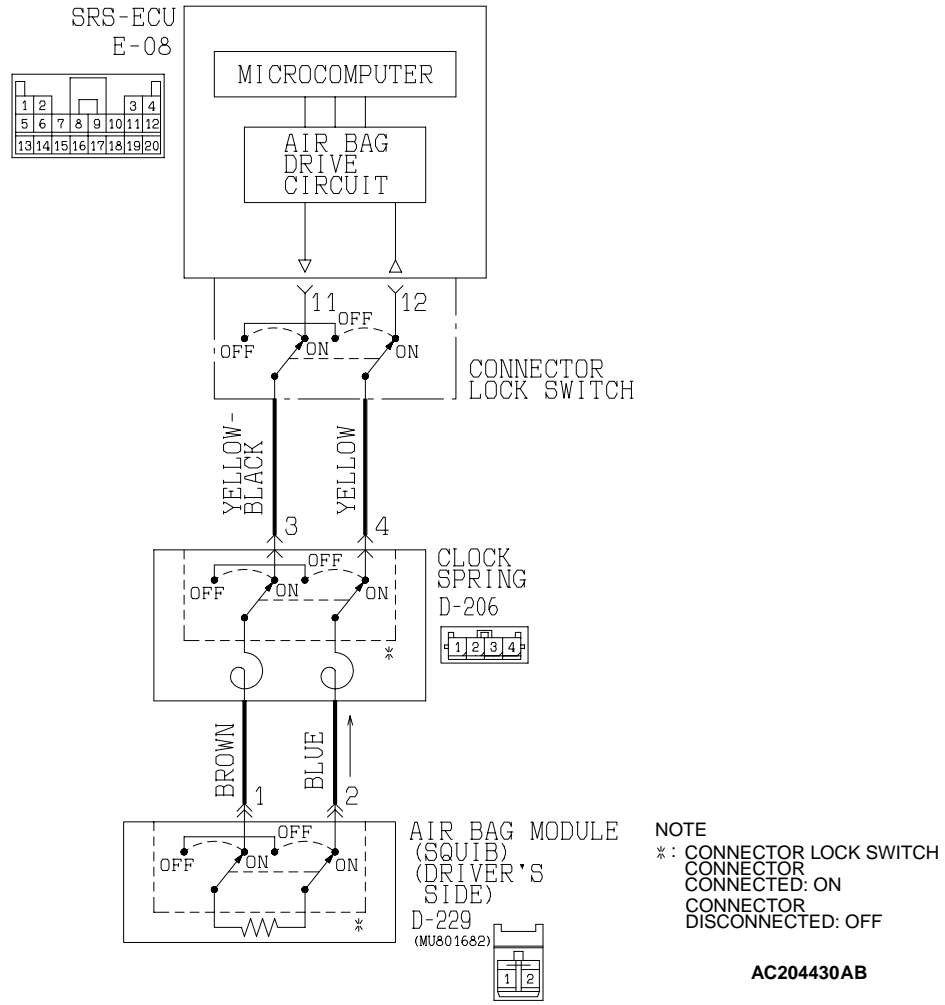
STEP 2. Recheck for diagnostic trouble code.**Q: Is DTC 44 set?**

YES : There is no action to be taken.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 61: Driver's Air Bag Module (Squib) System Fault for Power Supply Circuit (Short-Circuited to Power Supply)

Driver's Air Bag Module (Squib) Circuit



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's side air bag module (squib). However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

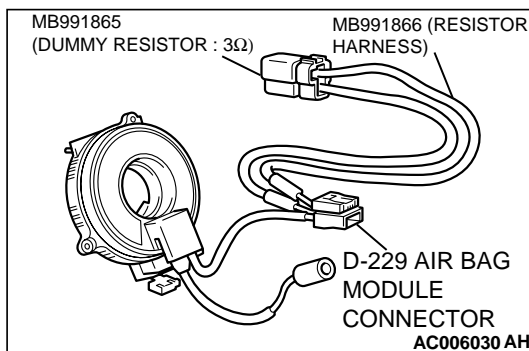
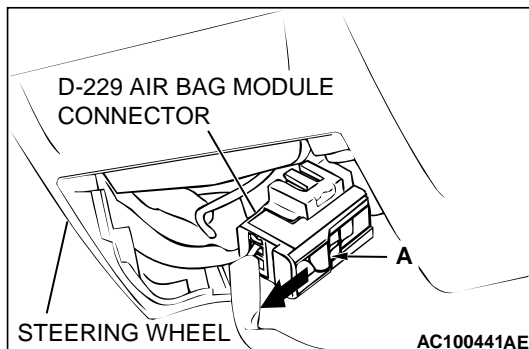
- Malfunction of the clock spring
- Damaged harness wires and connectors
- Short to the power supply in the driver's air bag module (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP 1. Check the driver's air bag module (squib).

- (1) Disconnect the negative battery terminal.
- (2) By sliding the A section (in the figure) of air bag module connector D-229 in arrow direction, disconnect the connector.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

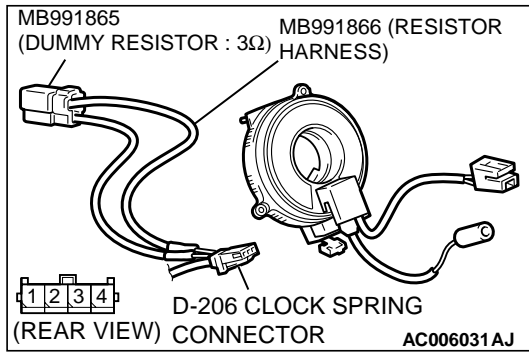
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring side air bag module connector D-229 by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 61 out put?

YES : Go to Step 2.

NO : Replace the driver's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 5.



STEP 2. Check the clock spring.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the clock spring connector D-206.
- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

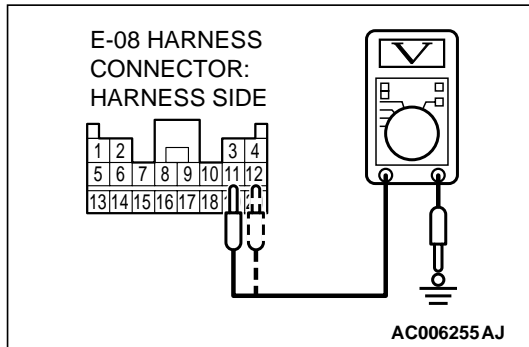
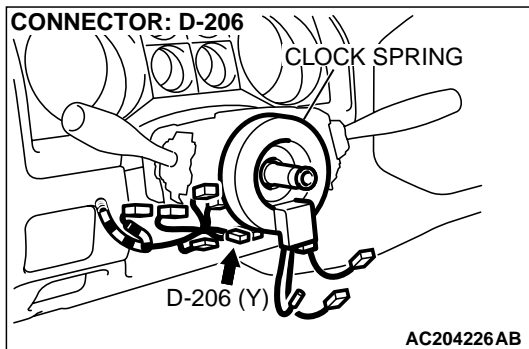
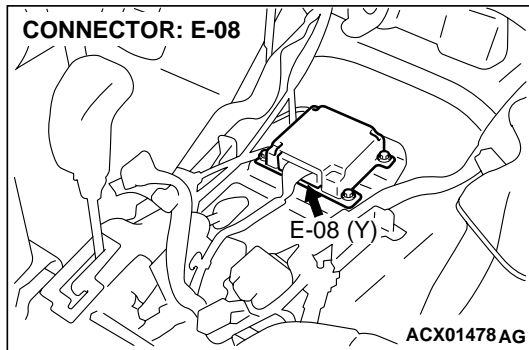
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring harness connector D-206 (terminal No.3 and 4) by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 61 set?

YES : Go to Step 3.

NO : Replace the clock spring. (Refer to [P.52Ba-33.](#)) Then go to Step 5.



STEP 3. Check the harness for short circuit to power supply between the SRS-ECU and the clock spring.

(1) Disconnect SRS-ECU connector E-08.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the clock spring connector D-206 to short the squib circuit.

(2) Disconnect the clock spring connector D-206.

(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.

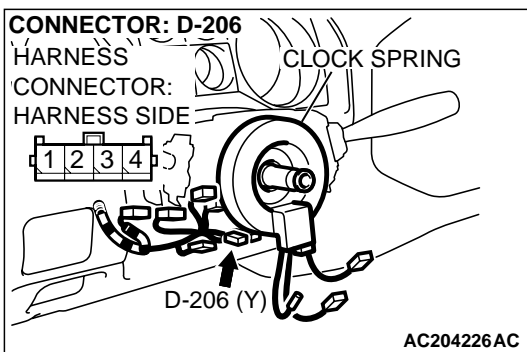
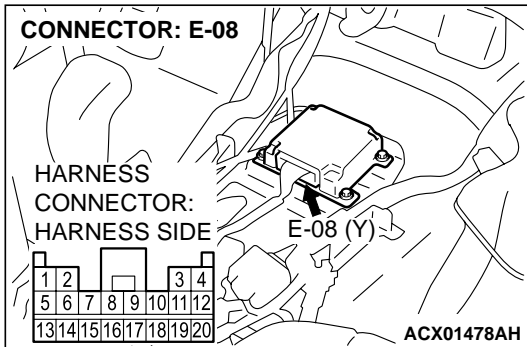
(4) Measure the voltage between E-08 harness connector terminals 11, 12 and body ground.

Voltage should measure 0 volt.

Q: Is the measured voltage within the specified range?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 61 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 5.

NO : Then go to Step 4.



STEP 4. Check the harness for short circuit to power supply between SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal Noo.3 and 4).

Q: Are harness wires between the SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal Noo.3 and 4) in good condition?

YES : Go to Step 5.

NO : Repair the harness wires between SRS-ECU connector E-08 and clock spring connector D-206. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

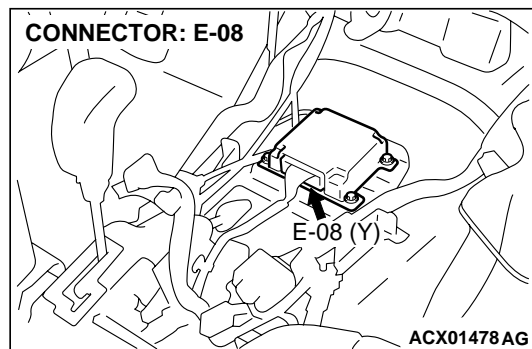
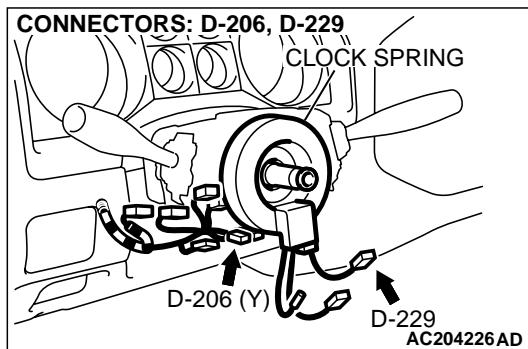
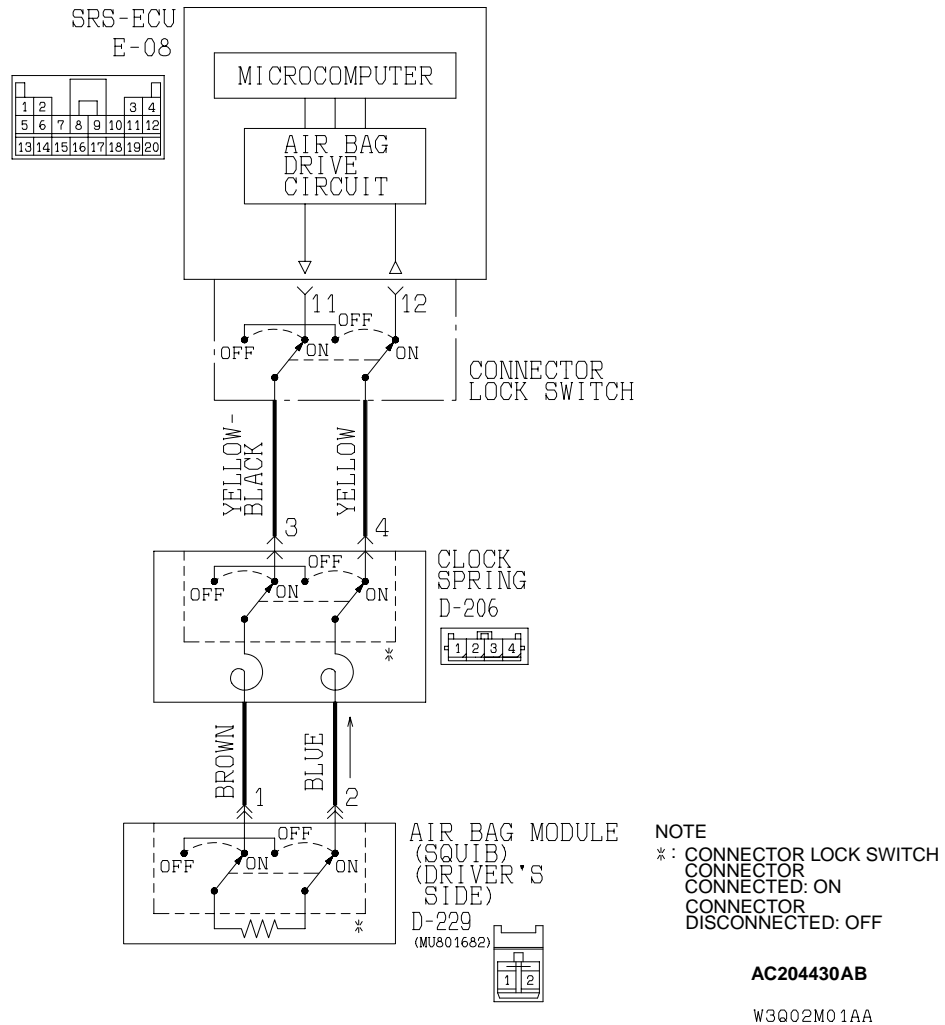
Q: Is DTC 61 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 62: Driver's Air Bag Module (Squib) System Fault for Ground Circuit (Short-Circuited to ground)

Driver's Air Bag Module (Squib) Circuit



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's side air bag module (squib). However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

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

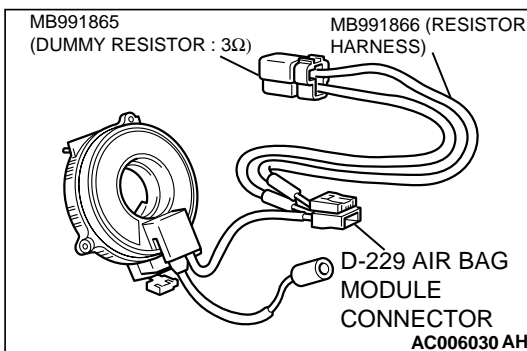
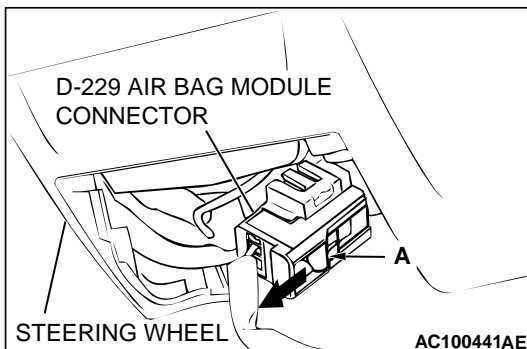
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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 D-229 in arrow direction, disconnect the connector.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

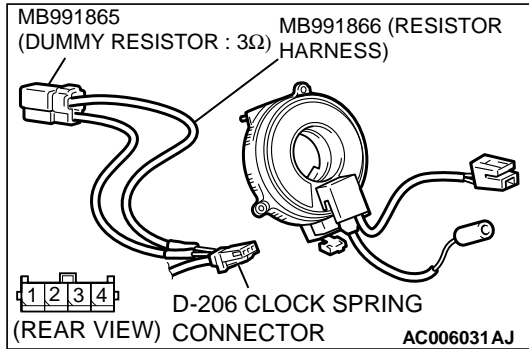
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring side air bag module connector D-229 by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and then recheck the diagnostic trouble code.

Q: Is DTC 62 set?

YES : Go to Step 2.

NO : Replace the driver's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 5.

**STEP 2. Check the clock spring.**

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the clock spring connector D-206.
- (3) Connect special tool MB991865 to special tool MB991866.

⚠ CAUTION

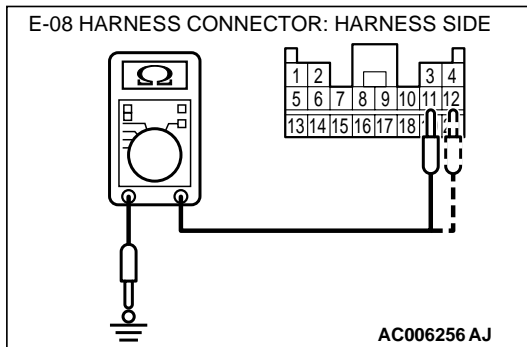
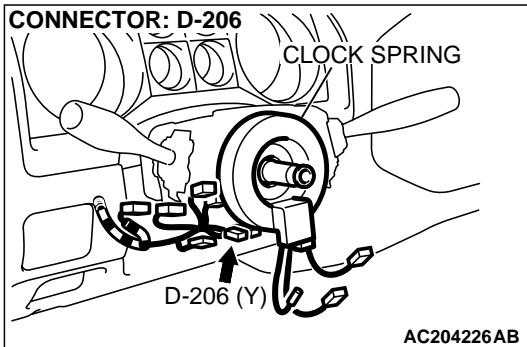
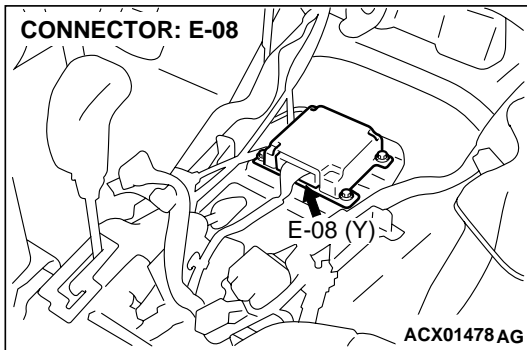
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into clock spring harness side connector D-206 (terminal No.3 and 4) by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 62 set?

YES : Go to Step 3.

NO : Replace the clock spring. (Refer to [P.52Bb-85.](#)) Then go to Step 5.



STEP 3. Check the harness for short circuit to ground between the SRS-ECU and the clock spring.

(1) Disconnect SRS-ECU connector E-08.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the clock spring connector D-206 to short the squib circuit.

(2) Disconnect the clock spring connector D-206.

⚠ CAUTION

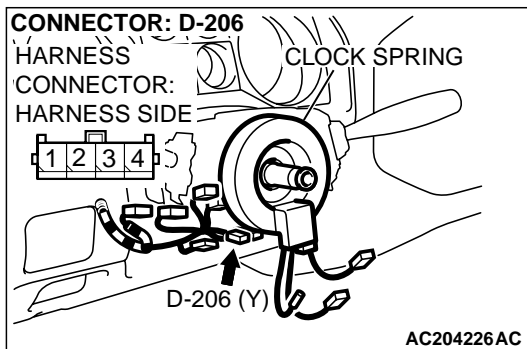
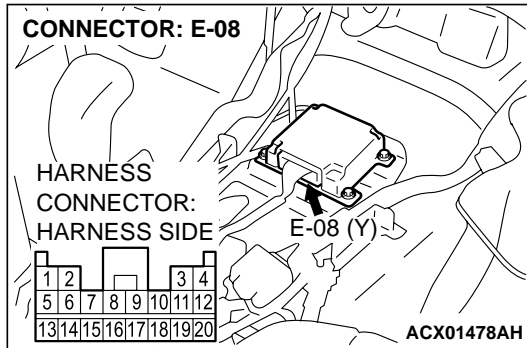
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Check for continuity between E-08 harness connector terminals 11, 12 and body ground. It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 62 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 5.

NO : Go to Step 4.



STEP 4. Check the harness for short circuit to ground between SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal No.3 and 4).

Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.11 and 12) and clock spring connector D-206 (terminal No.3 and 4) in good condition?

YES : Go to Step 5.

NO : Repair the harness wires between SRS-ECU connector E-08 and clock spring connector D-206. Then go to Step 5.

STEP 5. Recheck for diagnostic trouble code.

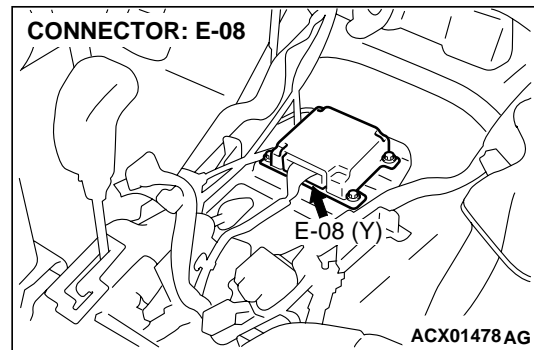
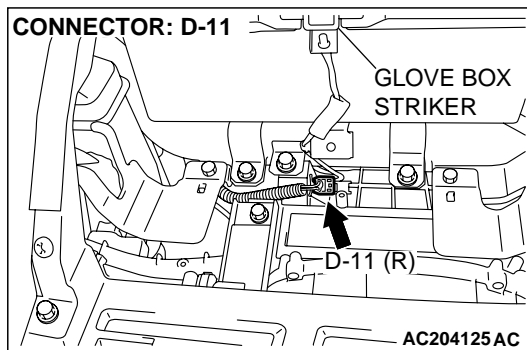
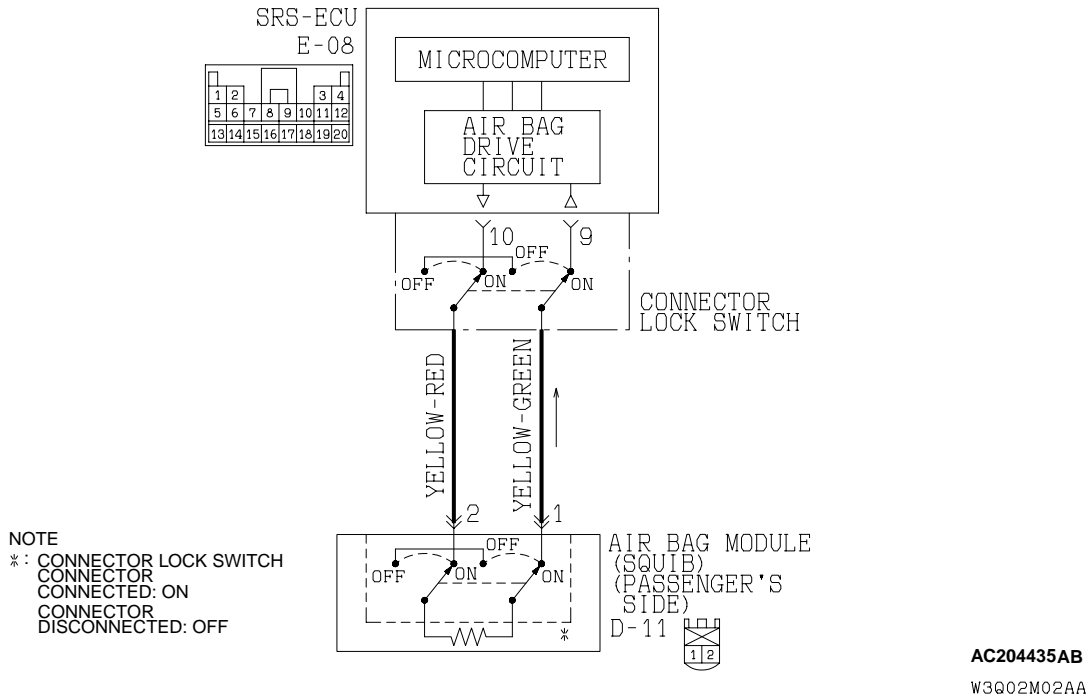
Q: Is DTC 62 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 64: Passenger's (Front) Air Bag Module (Squib) System Fault for Power Supply Circuit (Short-Circuited to Power Supply)

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



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's air bag module (squib). However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

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

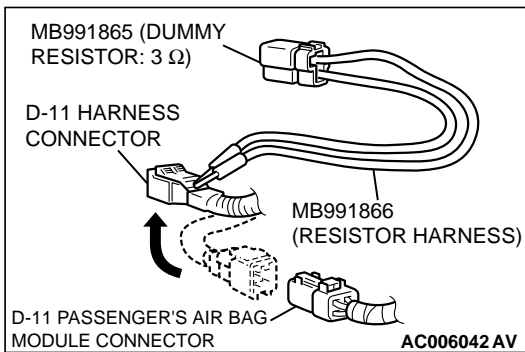
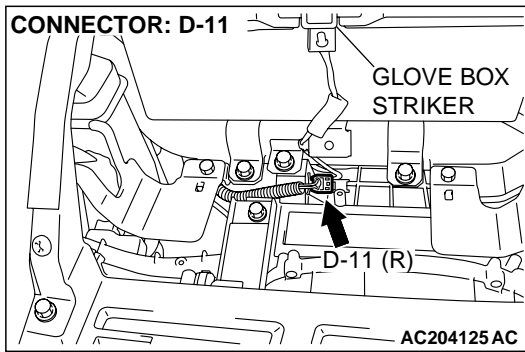
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP1. Check the passenger's air bag module (squib).

- (1) Disconnect the negative battery terminal.
- (2) Unclip passenger's air bag module connector D-11.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

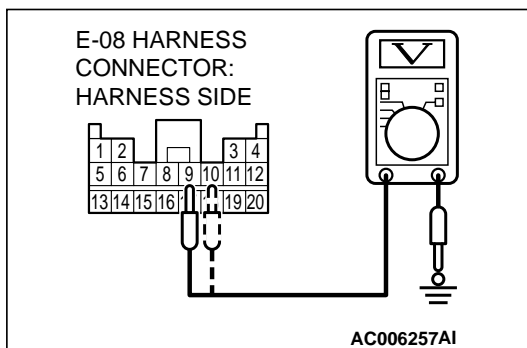
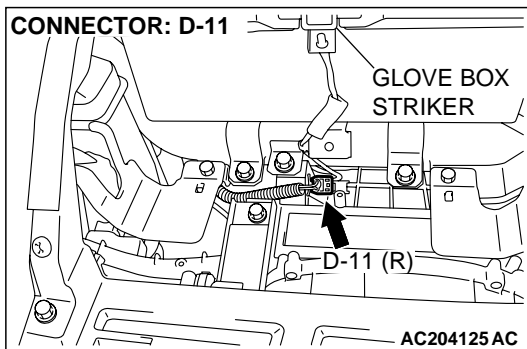
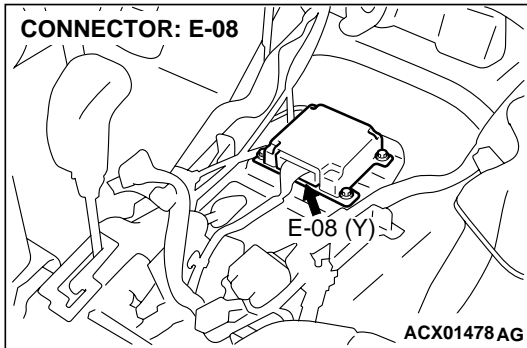
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Disconnect the passenger's air bag module connector D-11, and insert special tool MB991866 into the harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 64 set?

YES : Go to Step 2.

NO : Replace the passenger's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 4.



STEP 2. Check the harness for short circuit to power supply between the SRS-ECU and the passenger's air bag module.

- (1) Disconnect SRS-ECU connector E-08.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the passenger's air bag module connector D-11 to short the squib circuit.

- (2) Unclip passenger's air bag module connector D-11.
- (3) Disconnect the passenger's air bag module connector D-11.
- (4) Turn the ignition switch to the "ON" position.

⚠ CAUTION

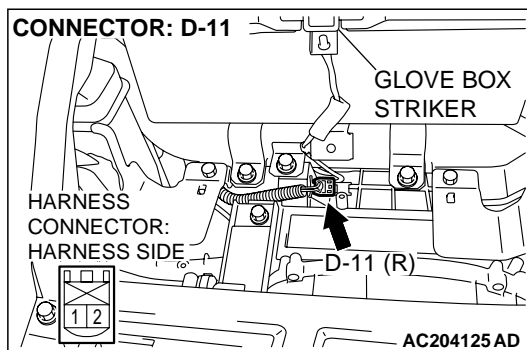
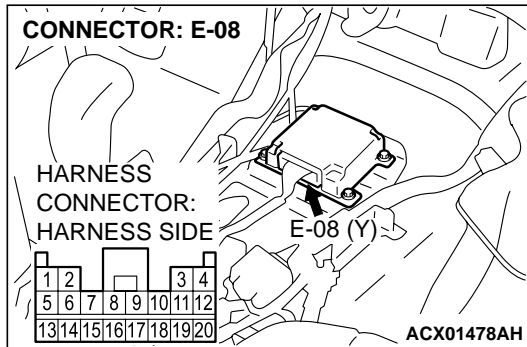
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (5) Measure the voltage between terminals 9, 10 and body ground.
Voltage should measure 0 volt.

Q: Is the measured voltage within the specified range?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 64 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 4.

NO : Go to Step 3.



STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's air bag module connector D-11 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's air bag module connector D-11 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-08 and passenger's air bag module connector D-11. Then go to Step 4.

STEP 4. Recheck the diagnostic trouble code.

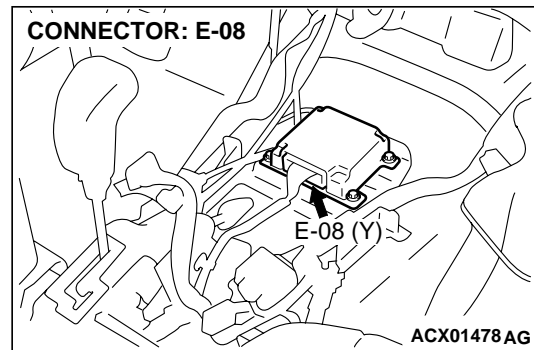
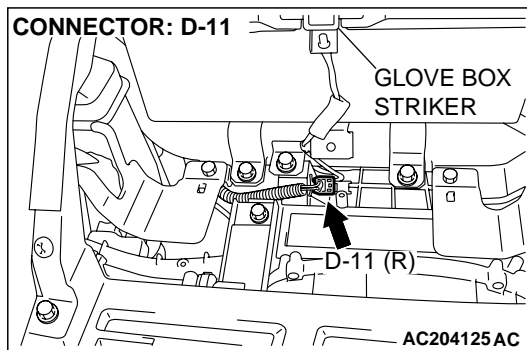
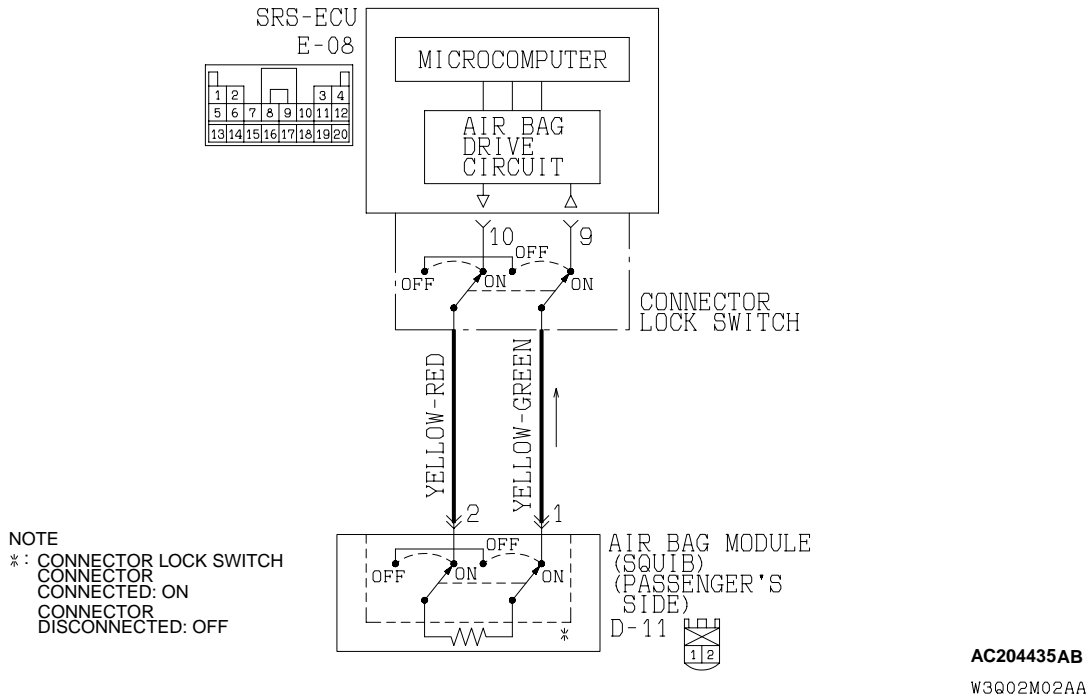
Q: Is DTC 64 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 65: Passenger's (Front) Air Bag Module (Squib) System Fault for Ground Circuit (Short-Circuited to Ground)

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



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's air bag module (squib). However, if no DTC resets, the SRS warning light will be switched off (DTC will be retained).

TROUBLESHOOTING HINTS

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

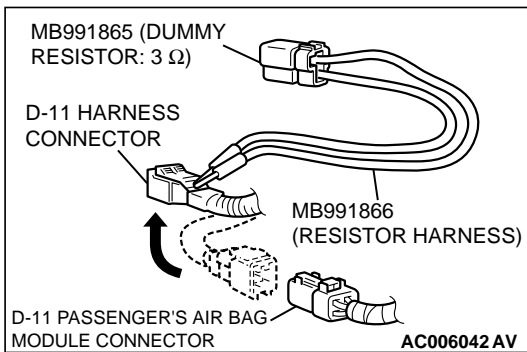
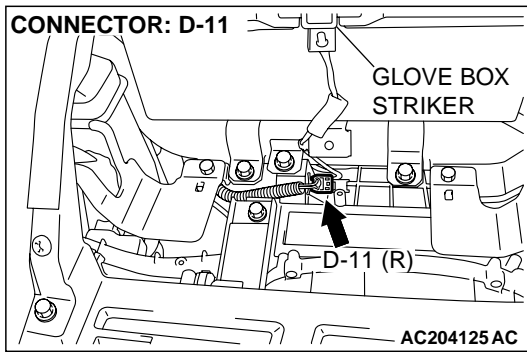
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP1. Check the passenger's air bag module.

- (1) Disconnect the negative battery terminal.
- (2) Unclip passenger's air bag module connector D-11.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

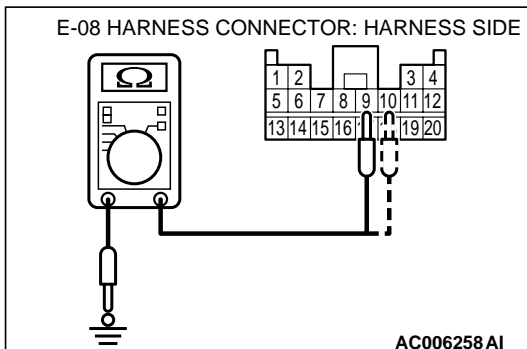
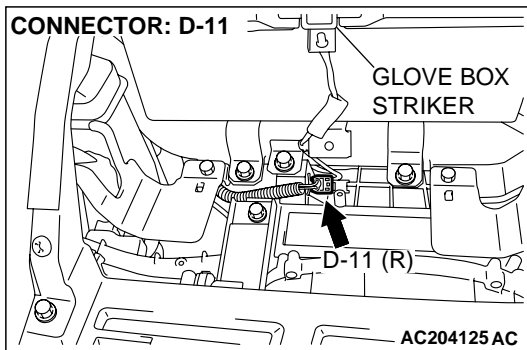
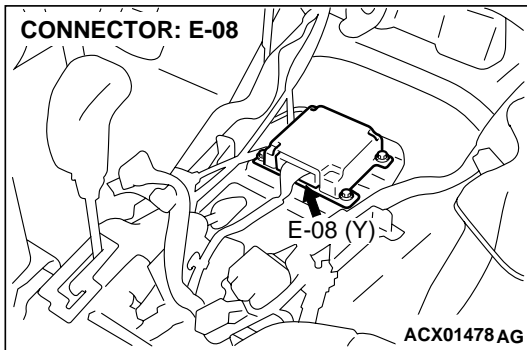
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Disconnect the passenger's air bag module connector D-11, and insert special tool MB991866 into the harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 65 set?

YES : Go to Step 2.

NO : Replace the passenger's air bag module. (Refer to [P.52Ba-33.](#)) Then go to Step 4.



STEP 2. Check the passenger's air bag module circuit at the SRS-ECU connector E-08.

- (1) Disconnect SRS-ECU connector E-08.

⚠ DANGER

Unclip passenger's air bag module connector D-11. To prevent the air bag from deploying unintentionally, disconnect the passenger's air bag module connector D-11 to short the squib circuit.

- (2) Disconnect the passenger's air bag module connector D-11.

⚠ CAUTION

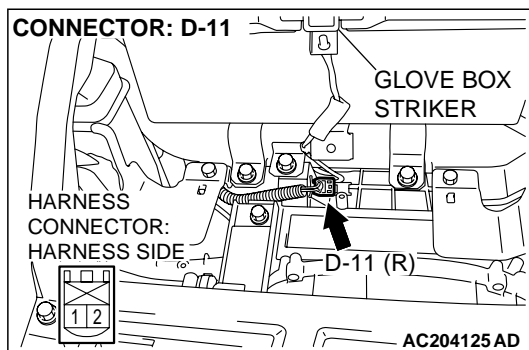
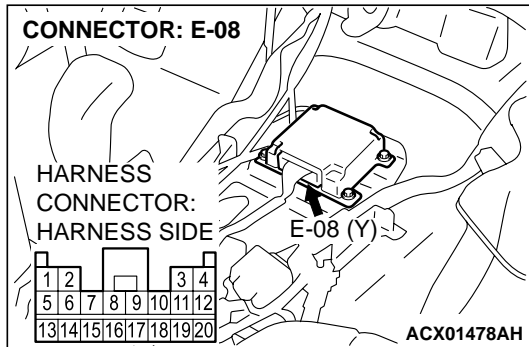
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (3) Check for continuity between E-08 harness connector terminals 9, 10 and body ground. There should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 65 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 4.

NO : Go to Step 3.



STEP 3. Check the harness wires for short circuit to ground between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's air bag module connector D-11 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.9 and 10) and passenger's air bag module connector D-11 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-08 and passenger's air bag module connector D-11. Then go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

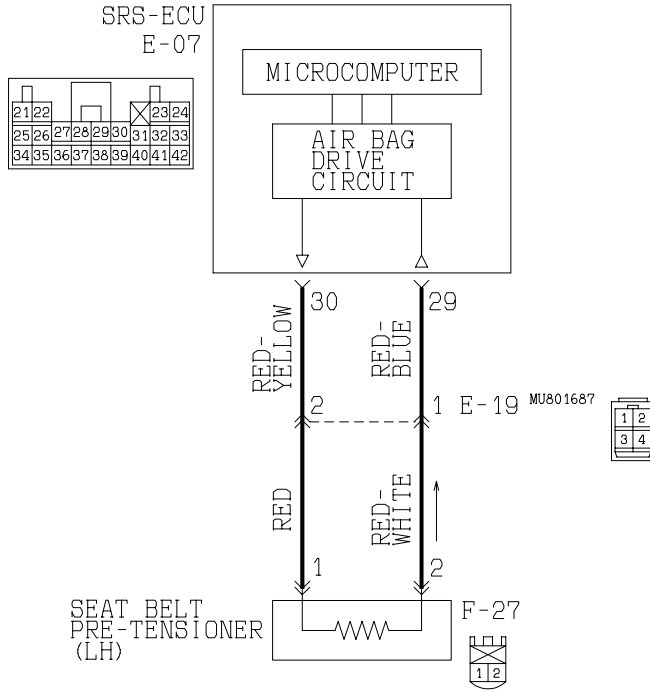
Q: Is DTC 65 set?

YES : Return to Step 1.

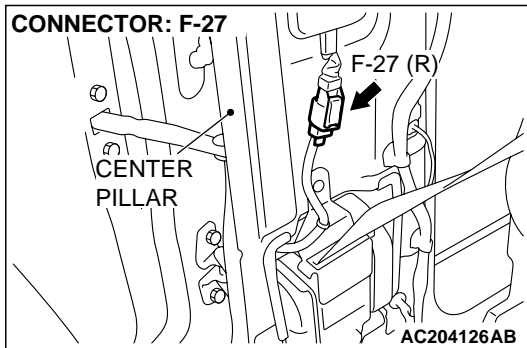
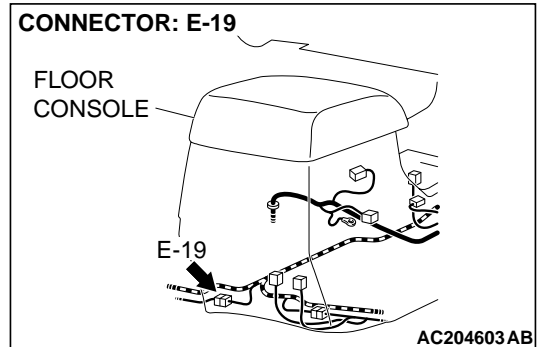
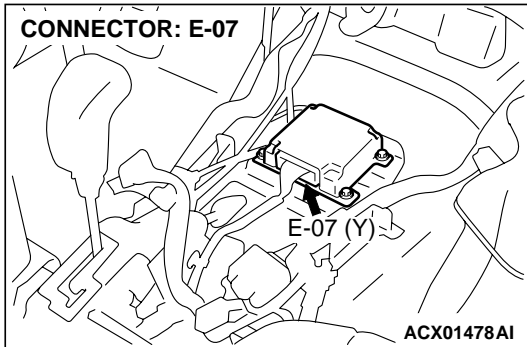
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 66: Driver's Seat Belt Pre-Tensioner (Squib) System Fault for Power Supply Circuit (Short-Circuit to Power Supply)

Driver's Seat Belt Pre-Tensioner (Squib)



W2006M03AA
AC102677AB



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

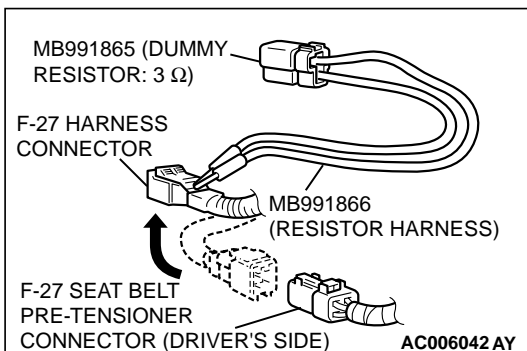
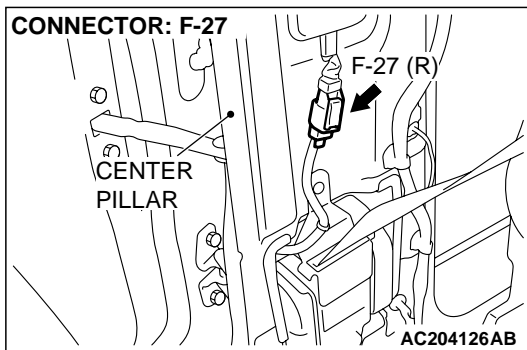
- Damaged wiring harnesses or connectors
- Short to the power supply in the driver's seat belt pretensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the driver's seat belt pretensioner connector F-27.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

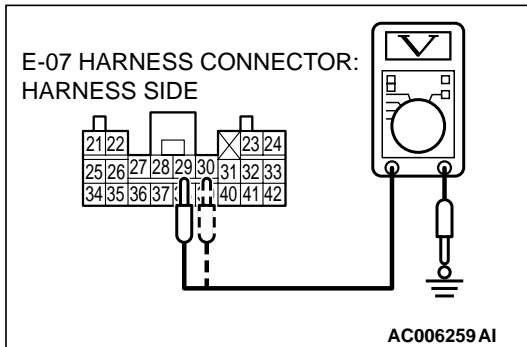
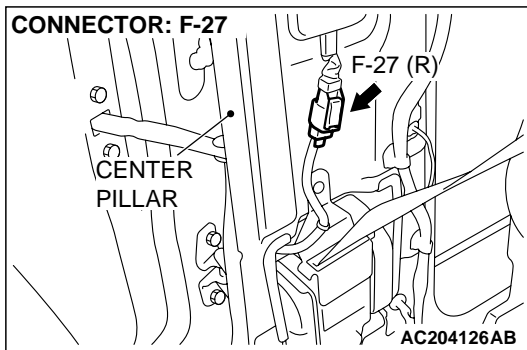
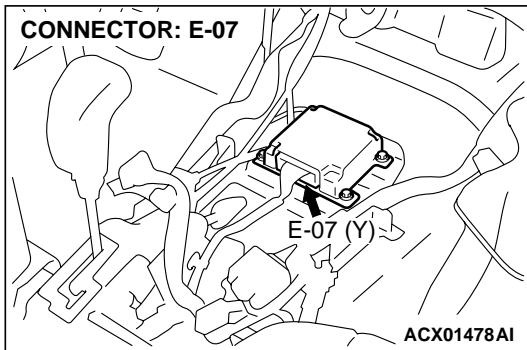
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 66 set?

YES : Go to Step 2.

NO : Replace the driver's seat belt pre-tensioner. (Refer to [P.52Ba-44.](#)) Then go to Step 4.



STEP 2. Check the driver's seat belt pretensioner circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect driver's seat belt pretensioner connector F-27.

(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 E-07 harness connector terminals 29, 30 and body ground.
Voltage should measure 0 volt.

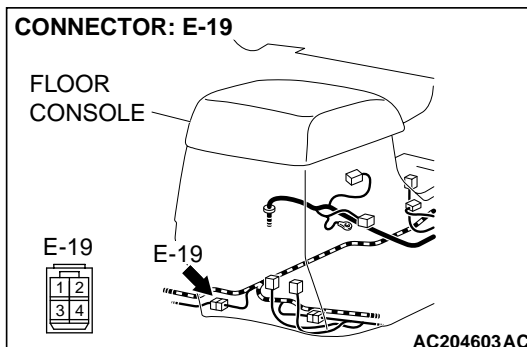
Q: Is the measured voltage within the specified range?

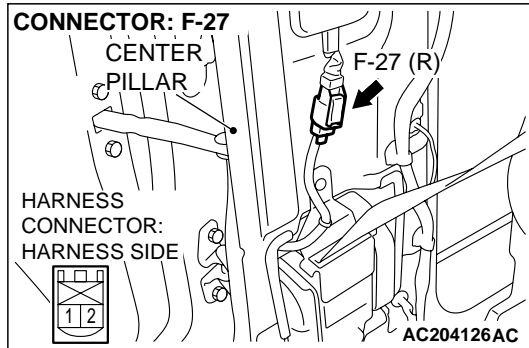
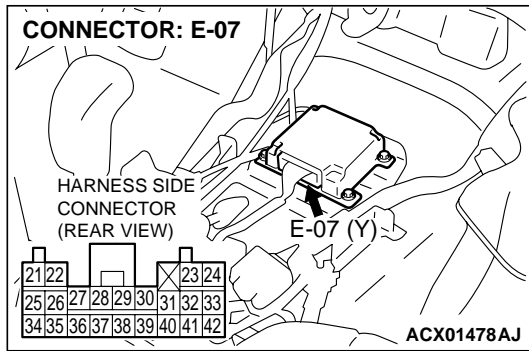
YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 65 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 4.

NO : Go to Step 3.

STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-19 inspect the wiring harness. If the intermediate connector E-19 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 4.





Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and driver's seat belt pre-tensioner connector F-27. Then go to Step 4.

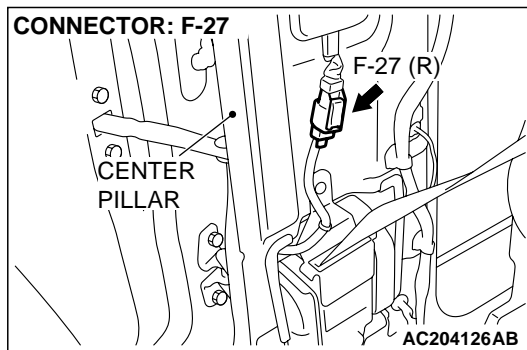
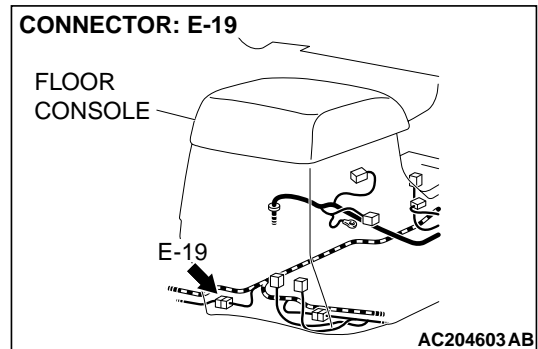
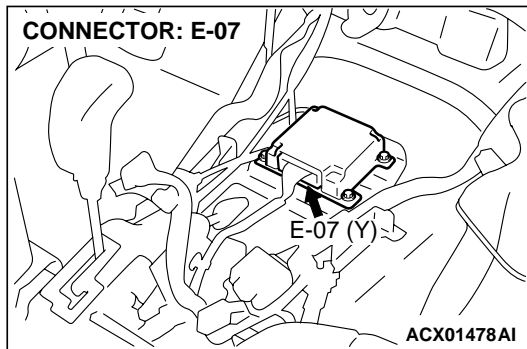
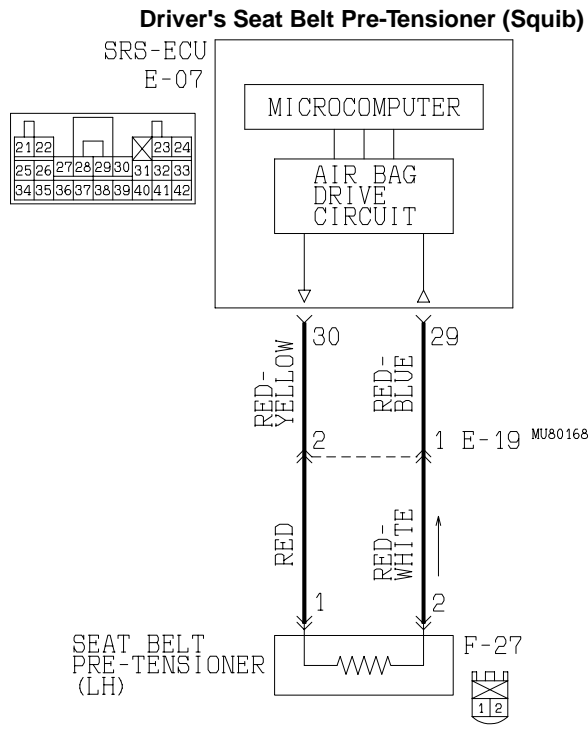
STEP 4. Recheck for diagnostic trouble code.

Q: Is DTC 66 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 67: Driver's Seat Belt Pre-Tensioner (Squib) System Fault for Ground Circuit (Short-Circuited to Ground)



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.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the driver's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

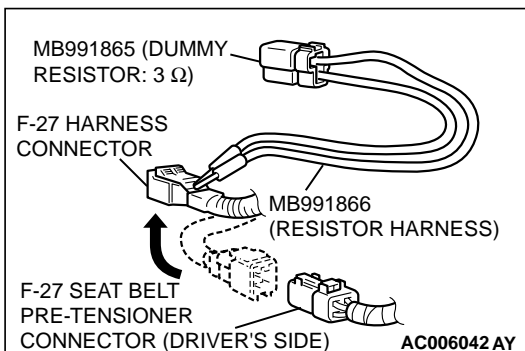
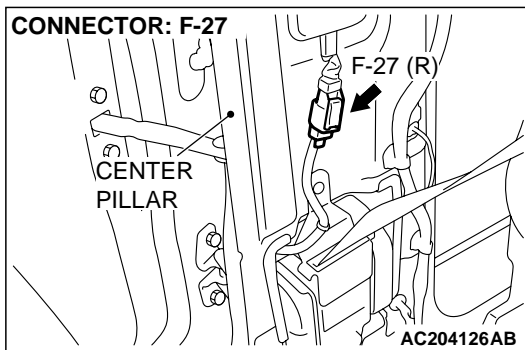
- Damaged wiring harnesses or connectors
- Short to the ground in the driver's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the driver's seat belt pretensioner connector F-27.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

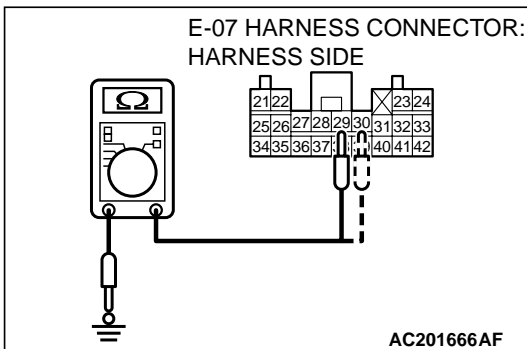
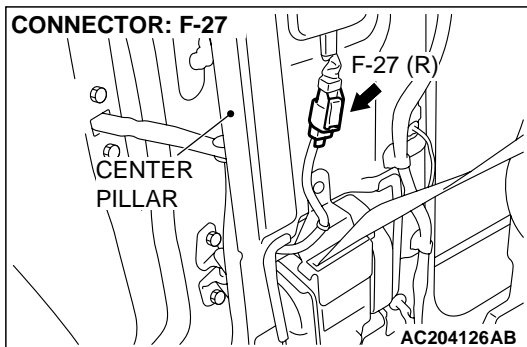
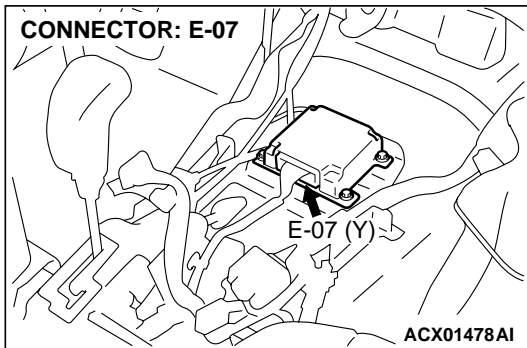
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 67 set?

YES : Go to Step 2.

NO : Replace the driver's seat belt pre-tensioner. (Refer to [P.52Ba-44.](#)) Then go to Step 4.



STEP 2. Check the driver's seat belt pretensioner circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect driver's seat belt pretensioner connector F-27.

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 E-07 harness connector terminals 29, 30 and body ground. It should be open circuit.

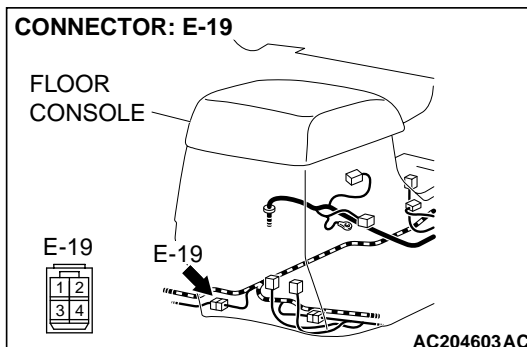
Q: Does continuity exist?

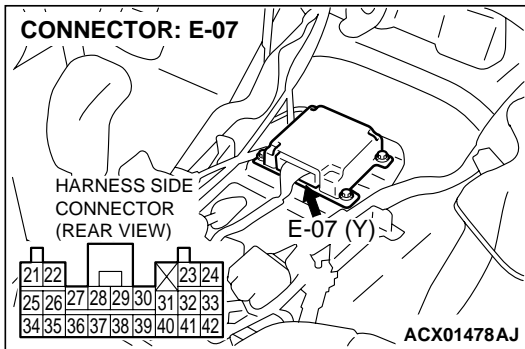
YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 67 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 4.

NO : Go to Step 3.

STEP 3. Check harness wires for short circuit to ground between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-19, inspect the wiring harness. If the intermediate connector E-19 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 4.

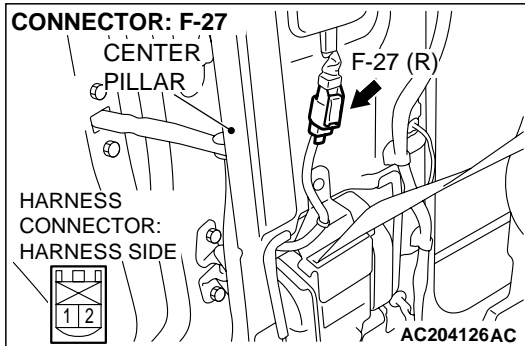




Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.29 and 30) and driver's seat belt pre-tensioner connector F-27 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and driver's seat belt pre-tensioner connector F-27. Then go to Step 4.



STEP 4. Recheck for diagnostic trouble code.

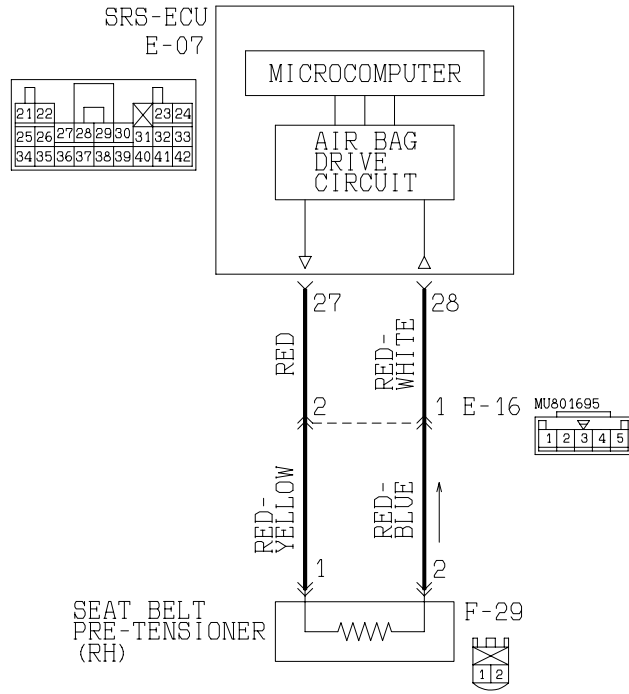
Q: Is DTC 67 set?

YES : Return to Step 1.

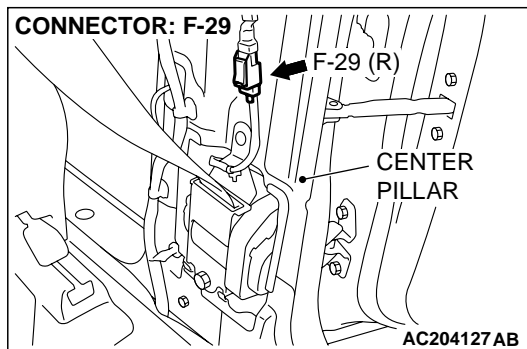
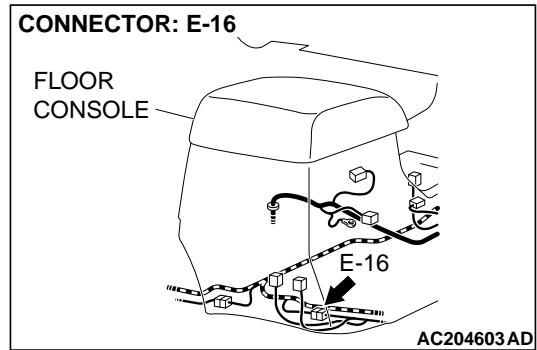
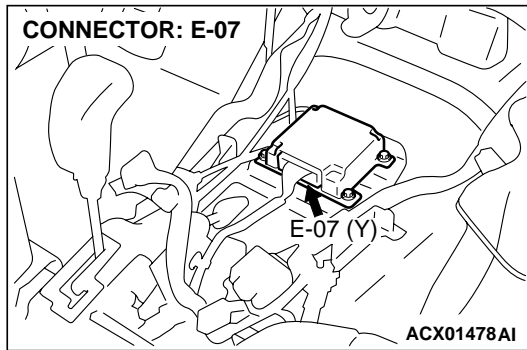
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 68: Passenger's Seat Belt Pre-Tensioner (Squib) System Fault for Power Supply Circuit (Short-Circuited to Power Supply)

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



W2Q06M02AA
AC102676 AB



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

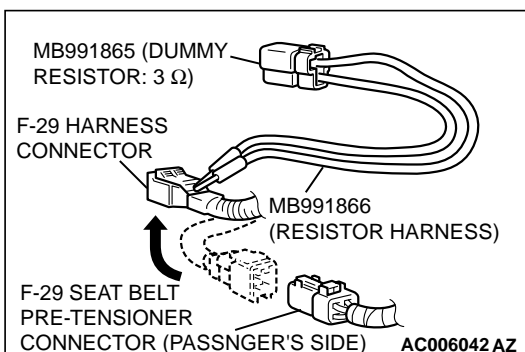
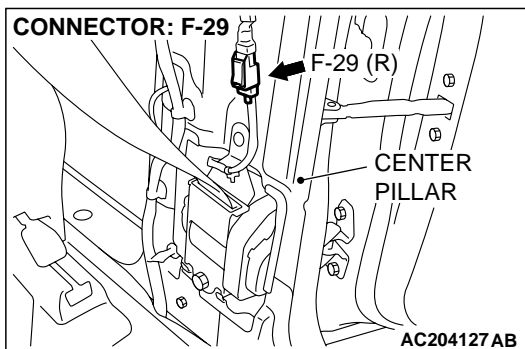
- Damaged wiring harnesses or connectors
- Short to the power supply in the passenger's seat belt pretensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the passenger's seat belt pretensioner connector F-29.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

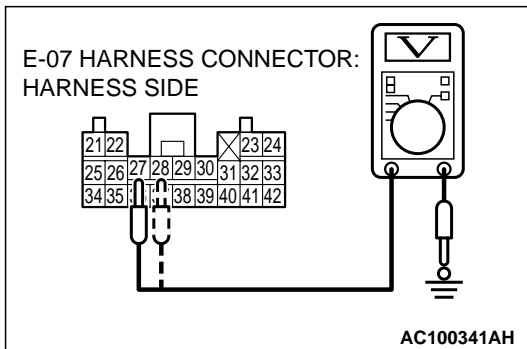
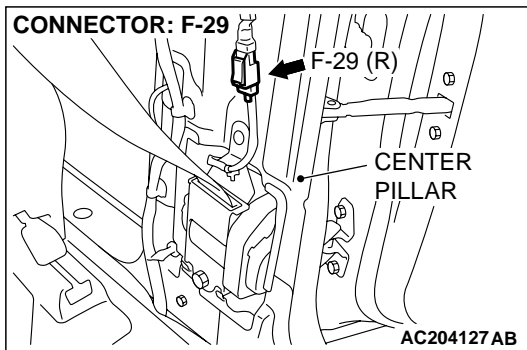
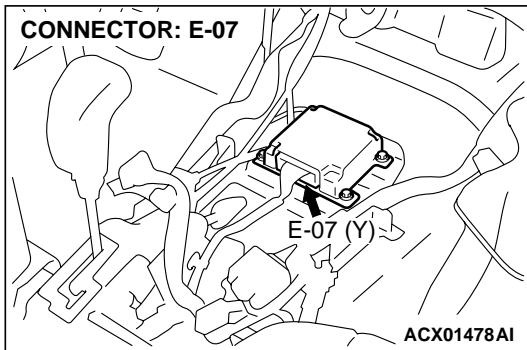
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 68 set?

YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52Ba-44.) Then go to Step 4.



STEP 2. Check the passenger's seat belt pretensioner at the SRS-ECU connector E-07.

- (1) Disconnect SRS-ECU connector E-07.
- (2) Disconnect passenger's seat belt pretensioner connector F-29.
- (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 E-07 harness connector terminals 27, 28 and body ground. Voltage should measure 0 volt.

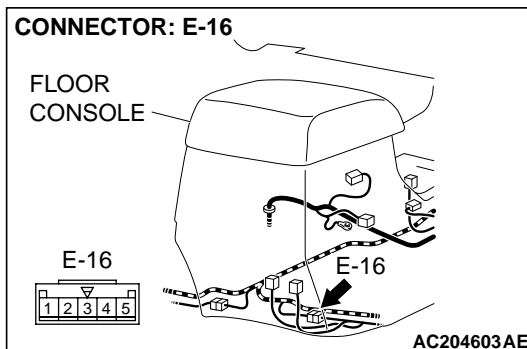
Q: Is the circuit normal?

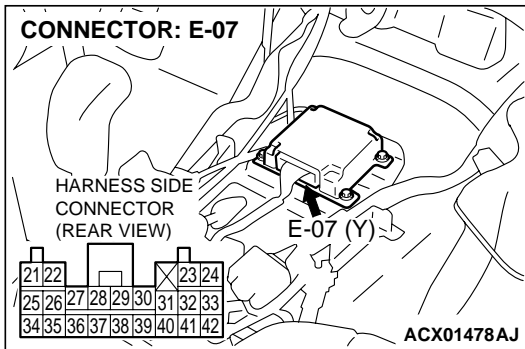
YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 68 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 4.

NO : Go to Step 3.

STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector E-07 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector F-29 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-16 inspect the wiring harness. If the intermediate connector E-16 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2. Then go to Step 4.

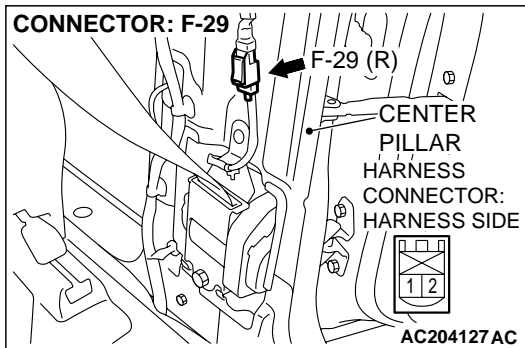




Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector F-29 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and passenger's seat belt pre-tensioner connector F-29. Then go to Step 4.



STEP 4. Recheck the diagnostic trouble code.

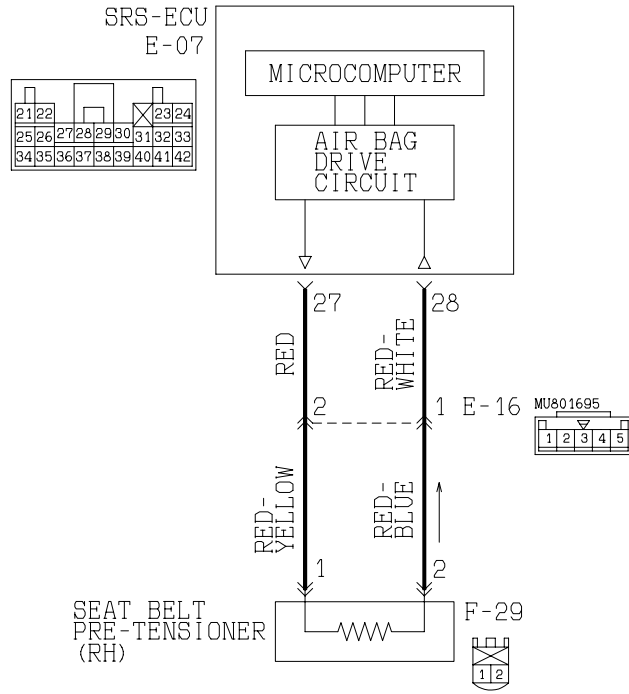
Q: Is DTC 68 set?

YES : Return to Step 1.

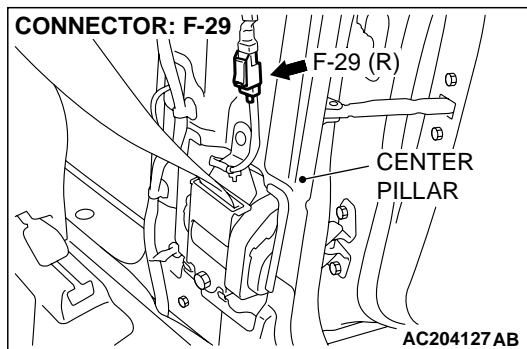
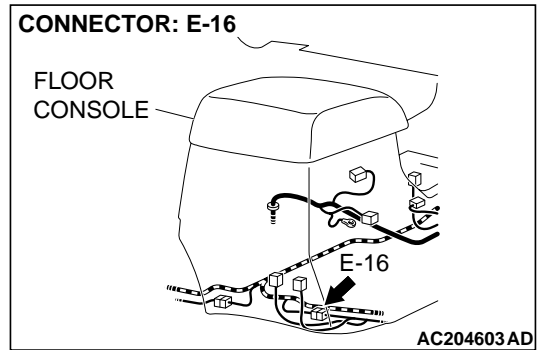
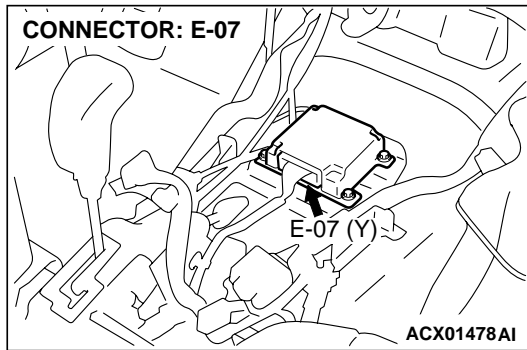
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 69: Passenger's Seat Belt Pre-Tensioner (Squib) System Fault for Ground Circuit (Short-Circuit to Ground)

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



W2Q06M02AA
AC102676 AB



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the passenger's seat belt pre-tensioner (squib).

TROUBLESHOOTING HITS

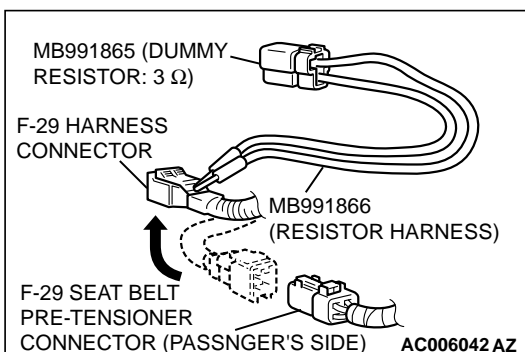
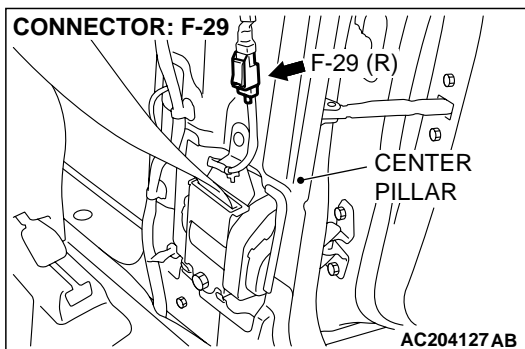
- Damaged wiring harnesses or connectors
- Short to the ground in the passenger's seat belt pre-tensioner (squib) harness
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the passenger's seat belt pre-tensioner connector F-29.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

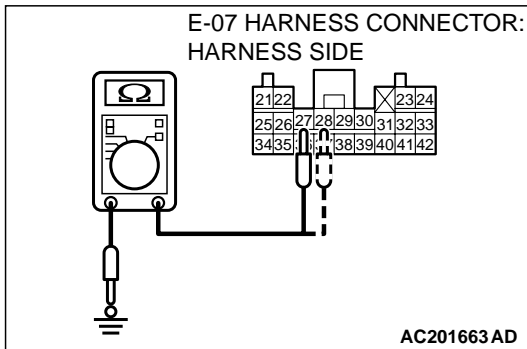
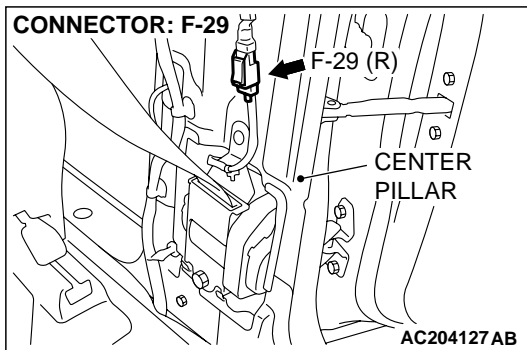
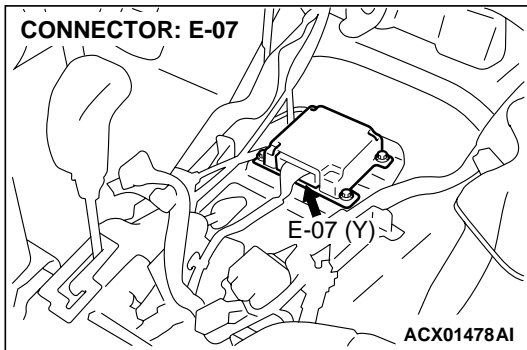
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into the harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnostic trouble code memory, and the diagnostic trouble code.

Q: Is DTC 69 set?

YES : Go to Step 2.

NO : Replace the passenger's seat belt pre-tensioner. (Refer to P.52Ba-44.) Then go to Step 4.



STEP 2. Check the passenger's seat belt pre-tensioner circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect passenger's seat belt pre-tensioner connector F-29.

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 E-07 harness connector terminals 27, 28 and body ground. It should be open circuit.

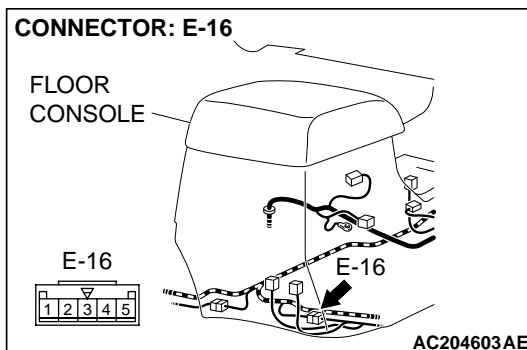
Q: Does continuity exist?

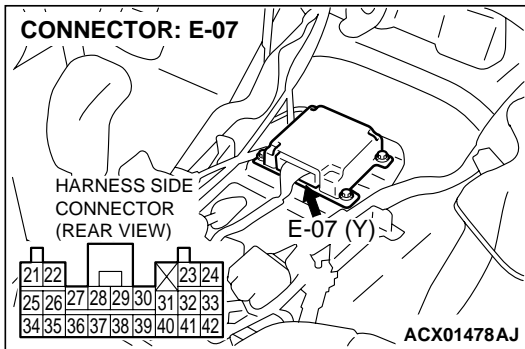
NO : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 69 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 4.

YES : Go to Step 3.

STEP 3. Check harness wires for short circuit to ground between SRS-ECU connector E-07 (terminal No.27 and 28) and passenger's seat belt pre-tensioner connector F-29 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-16 inspect the wiring harness. If the intermediate connector E-16 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 4.

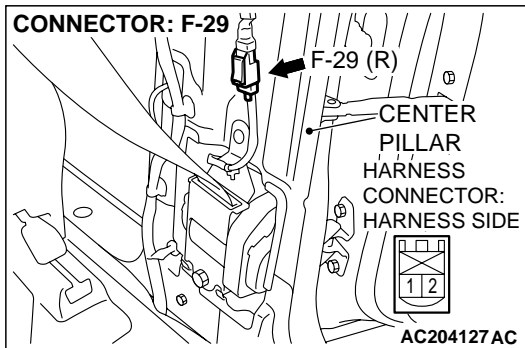




Q: Are the harness wires between SRS-ECU connector E-07 (terminals No.27 and 28) and passenger's seat belt pre-tensioner connector F-29 (terminals No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and passenger's seat belt pre-tensioner connector F-29. Then go to Step 4.



STEP 4. Recheck for diagnostic trouble code.

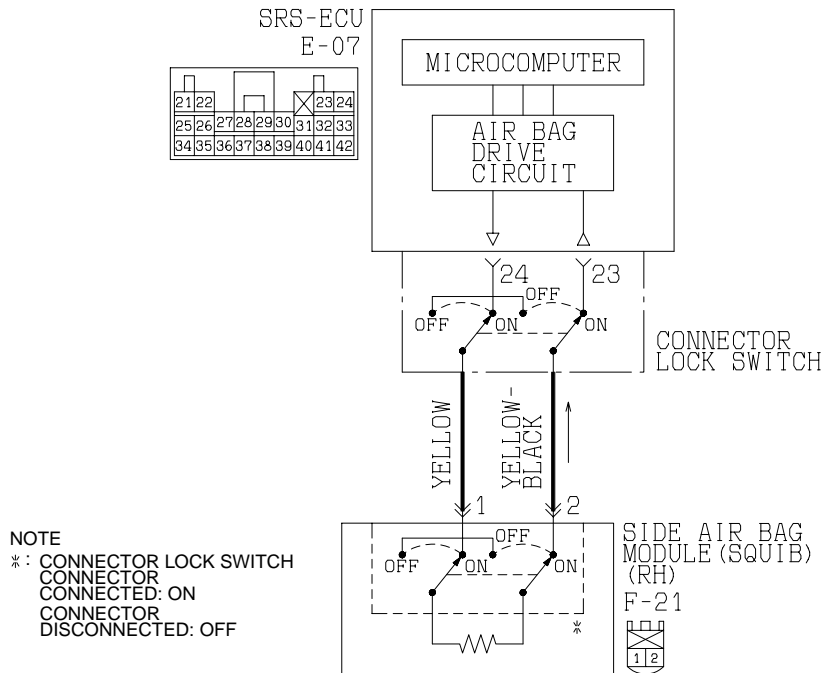
Q: Is DTC 69 set?

YES : Return to Step 1.

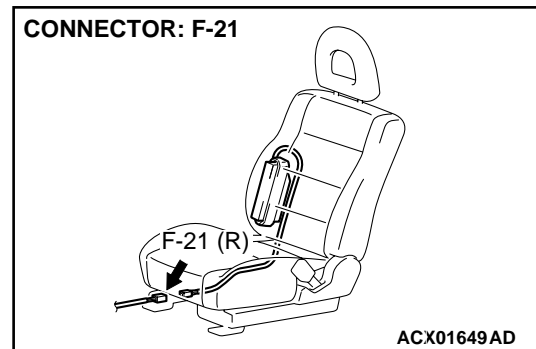
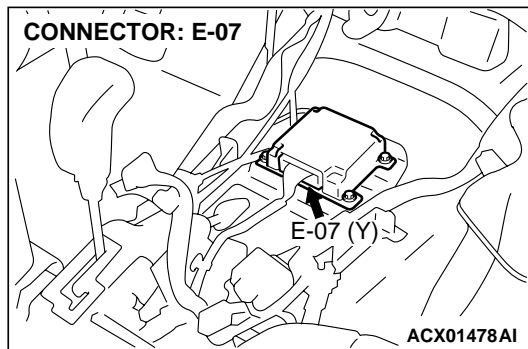
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 71: Right Hand Side-Airbag Module (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

Side-Airbag Module (RH) (Squib) Circuit



AC204436AB
W3Q02M03AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the air bag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (RH) (squib).

TROUBLESHOOTING HINTS

- Improper engaged connector or defective short bar*
- 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" bar (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the ground wire in the squib circuit when the connectors are disconnected). (Refer to P.52Ba-2.) Therefore, if connector E-07 and F-21 is damaged or improperly engaged, the short bar may not be released when the connector is connected.*

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.

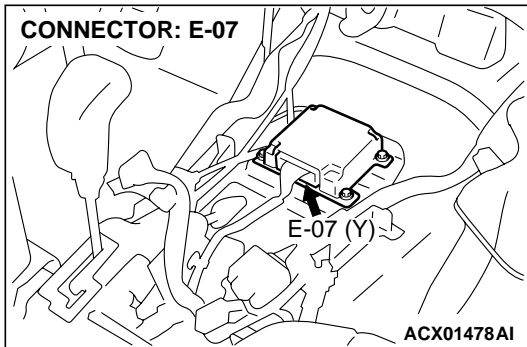
Q: Is DTC 34 set?

- YES** : Go to Step 2.
NO : Go to Step 3.

STEP 2. Check SRS-ECU connector E-07.

Q: Is the connector correctly engaged?

- YES** : Go to Step 3.
NO : Engage the connector correctly. Then go to Step 7.



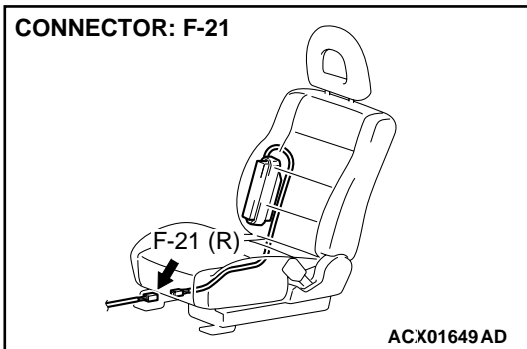
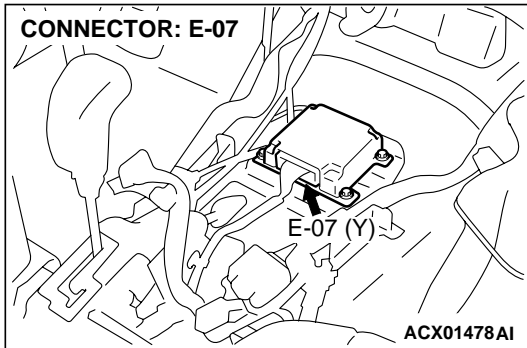
STEP 3. Check SRS-ECU connector E-07 and side-airbag module (RH) connector F-21.

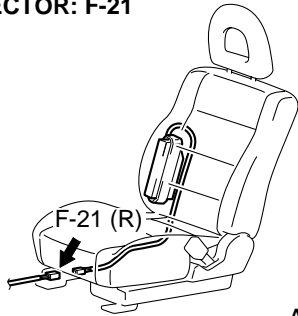
- (1) Disconnect the negative battery terminal.
- (2) Disconnect connectors E-07 and F-21, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 71 set?

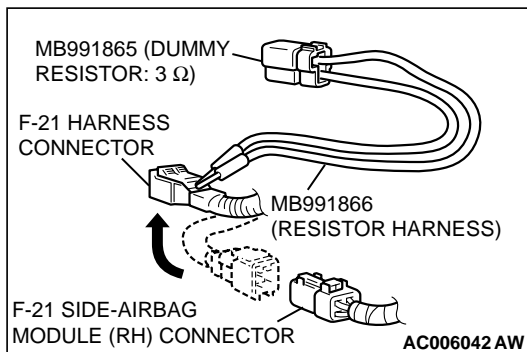
YES : Go to Step 4.

NO : The procedure is complete. (It is assumed that DTC 71 set as connector E-07 or F-21 was engaged improperly.)



CONNECTOR: F-21

ACX01649 AD



AC006042 AW

STEP 4. Check the side-airbag module (RH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the side-airbag module (RH) connector F-21.

- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

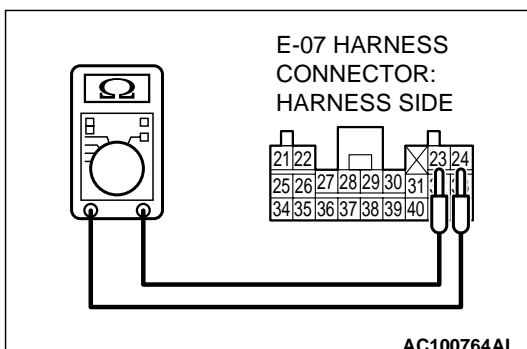
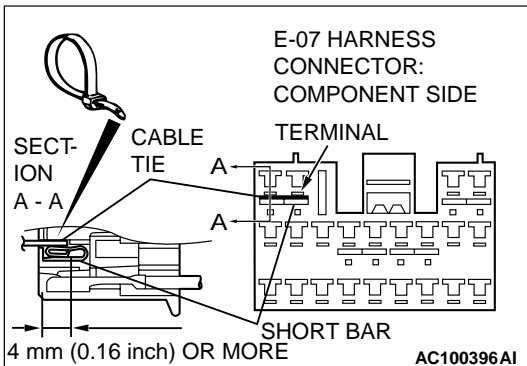
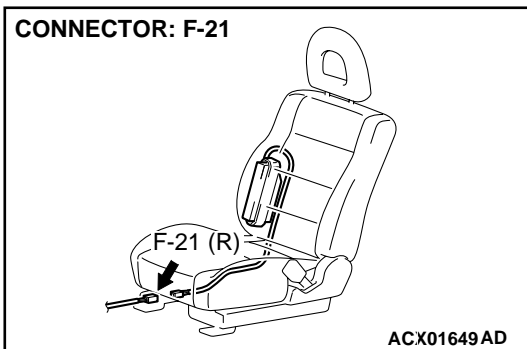
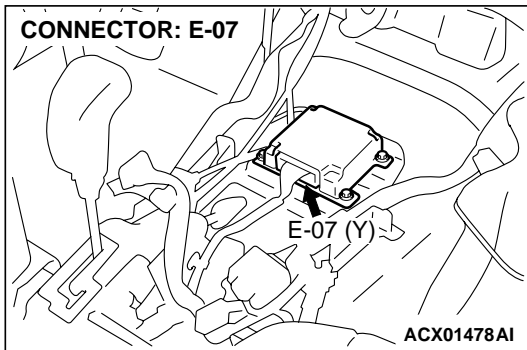
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into the F-21 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 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-13.) Then go to Step 7.



STEP 5. Check the side-airbag module (RH) circuit at the SRS-ECU connector E-07.

- (1) Disconnect SRS-ECU connector E-07.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the side-airbag module (RH) connector F-21 to short the squib circuit.

- (2) Disconnect side-airbag module connector F-21.

⚠ CAUTION

Insert an insulator such as a cable tie to depth of 4mm (0.16 inch) or more, otherwise the short bar will not cable tie release.

- (3) Insert a cable tie [3 mm (0.12 inch) wide, 0.5 mm (0.02 inch) thick] between terminals 23, 24 and the short bar to release the short bar.

⚠ CAUTION

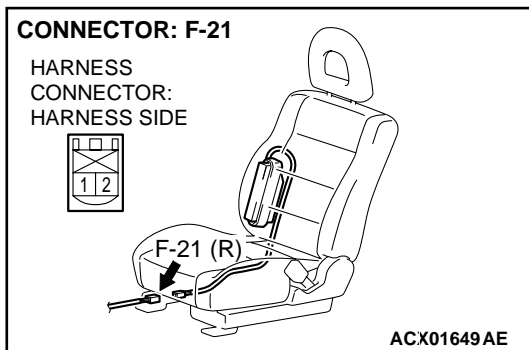
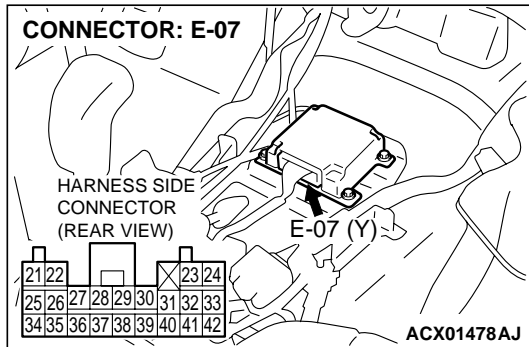
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Check for continuity between E-07 harness connector terminals 23 and 24. It should be open circuit.

Q: Does continuity exist?

NO : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 71 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 7.

YES : Go to Step 6.



STEP 6. Check the harness wires for short circuit between SRS-ECU connector E-07 (terminals No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2)

Q: Are the harness wires between SRS-ECU connector E-07 (terminals No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2) in good condition?

YES : Go to Step 7.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module connector F-21. Then go to Step 7.

STEP 7. Recheck for diagnostic trouble code.

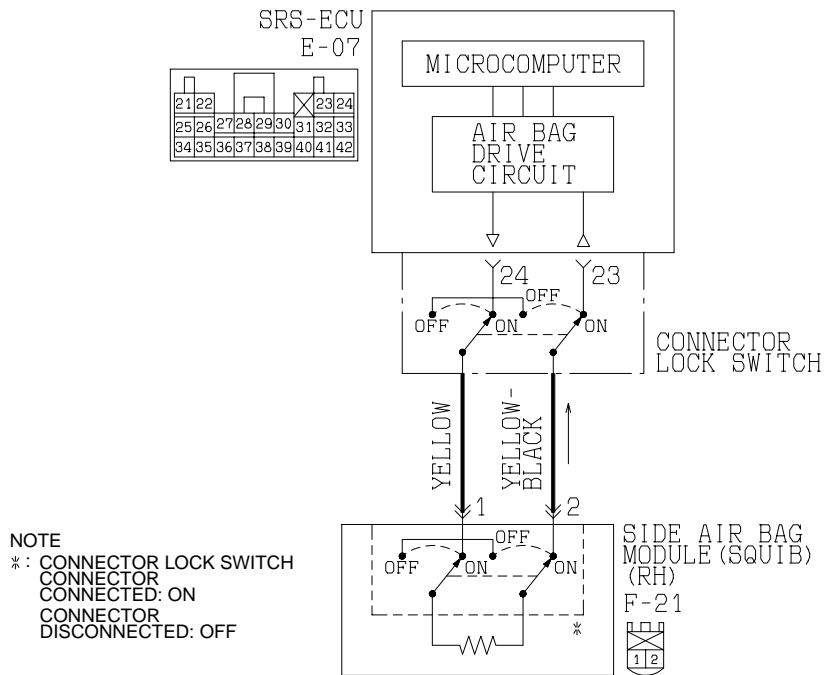
Q: Is DTC 71 set?

YES : Return to Step 1.

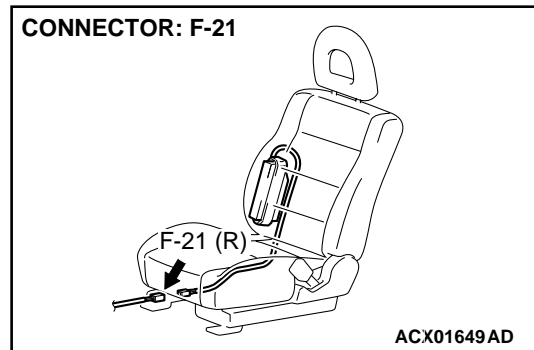
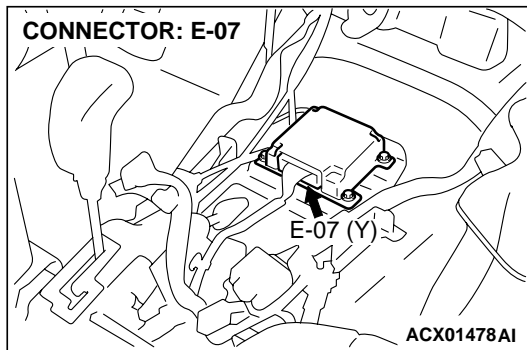
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 72: Right Hand Side-Airbag Module (Squib) System Fault 2 (Open in the Squib Circuit)

Side-Airbag Module (RH) (Squib) Circuit



AC204436AB
 W3Q02M03AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (RH) (squib).

TROUBLESHOOTING HINTS

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

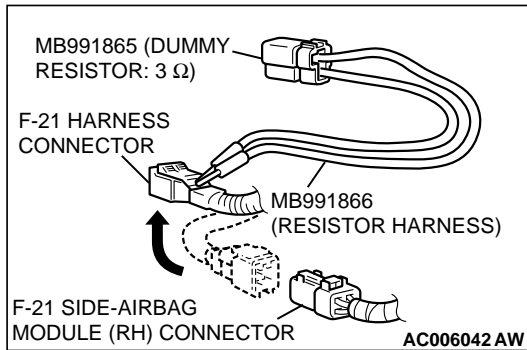
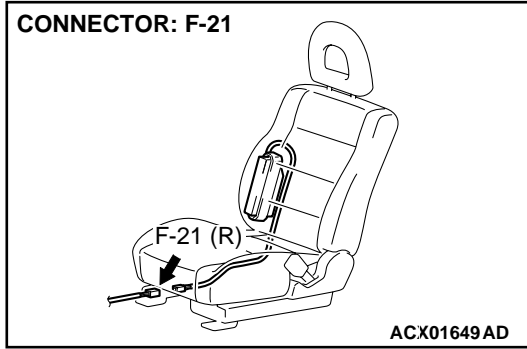
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP 1. Check the side-airbag module (RH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the side-airbag module (RH) connector F-21.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

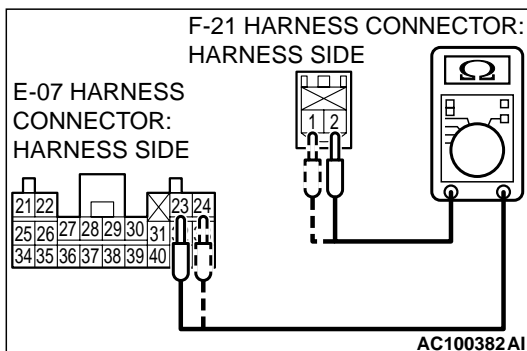
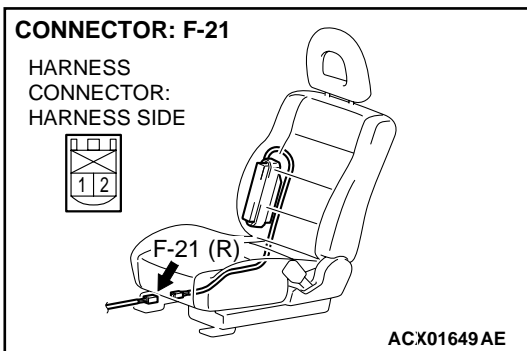
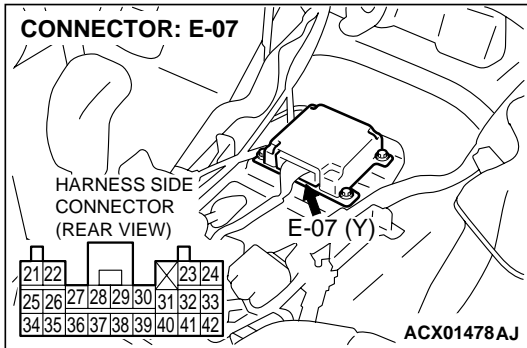
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 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-13.](#)) Then go to Step 3.



STEP 2. Check the harness for open circuit between SRS-ECU connector E-08 (terminal No.23 and 24) and the side-air bag module (RH) connector F-21 (terminal No.1 and 2).

(1) Disconnect SRS-ECU connector E-07 and side-air bag module (RH) connector F-21.

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 the following terminals.
Between connector E-07 terminal 23 and connector F-21 terminal 2
Between connector E-07 terminal 24 and connector F-21 terminal 1
It should be less than 2 ohms.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 72 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (RH) connector F-21. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

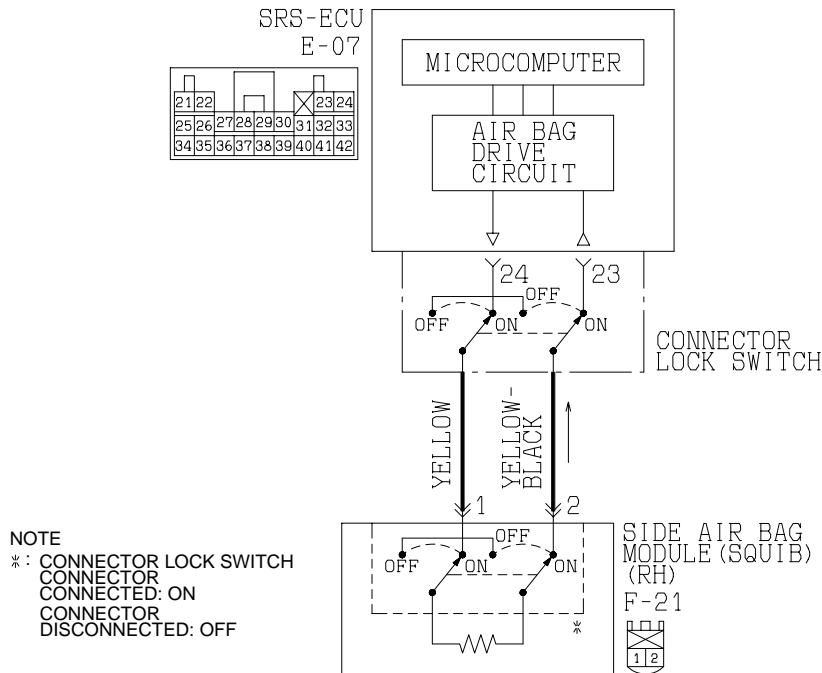
Q: Is DTC 72 set?

YES : Return to Step 1.

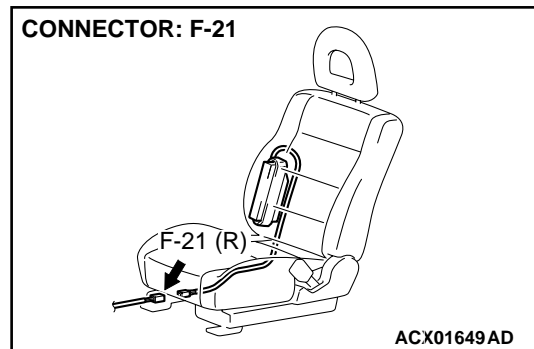
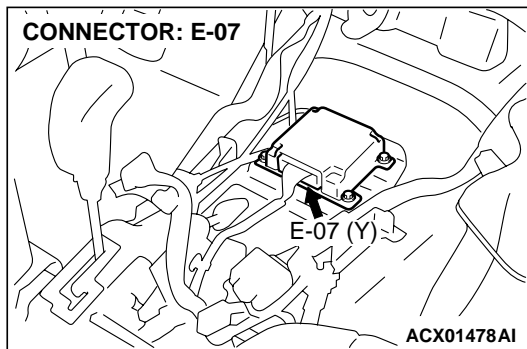
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 75: Right Hand Side-Airbag Module (Squib) System Fault Power Supply Circuit (Short-Circuit to Power Supply)

Side-Airbag Module (RH) (Squib) Circuit



AC204436AB
W3Q02M03AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the air bag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (RH) (squib).

TROUBLESHOOTING HINTS

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

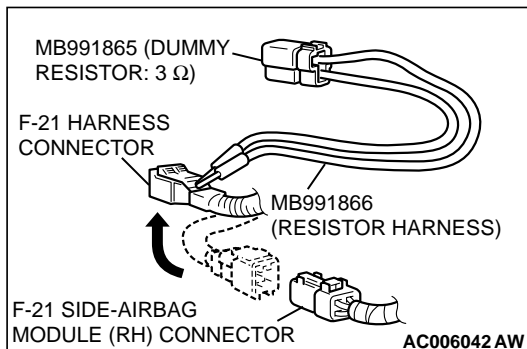
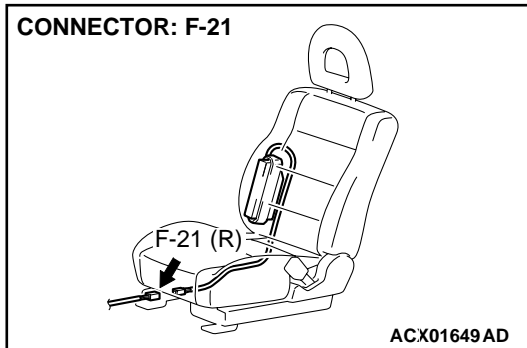
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP 1. Check the side-airbag module (RH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the side-airbag module (RH) connector F-21.



- (3) Connect special tool MB991865 to special tool MB991866.

⚠ CAUTION

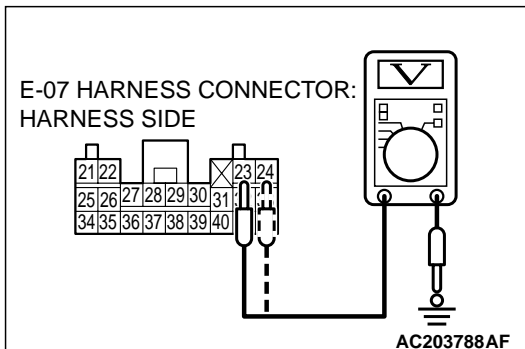
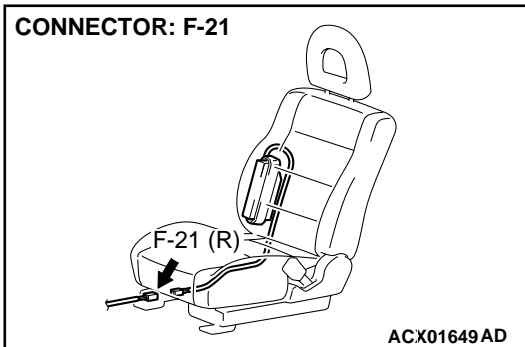
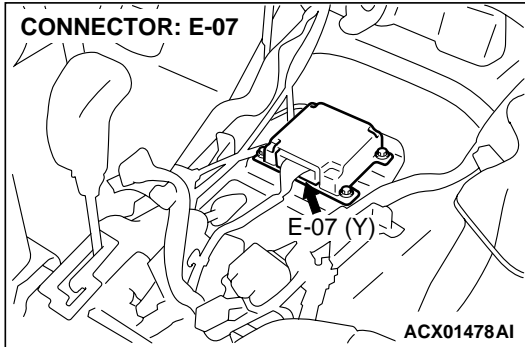
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 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-13.) Then go to Step 4.



STEP 2. Check the side-airbag module (RH) circuit at the SRS-ECU connector E-07.

- (1) Disconnect SRS-ECU connector E-07.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the side-airbag module (RH) connector F-21 to short the squib circuit.

- (2) Disconnect side-airbag module connector F-21.
(3) Turn the ignition switch to the "ON" position.

⚠ CAUTION

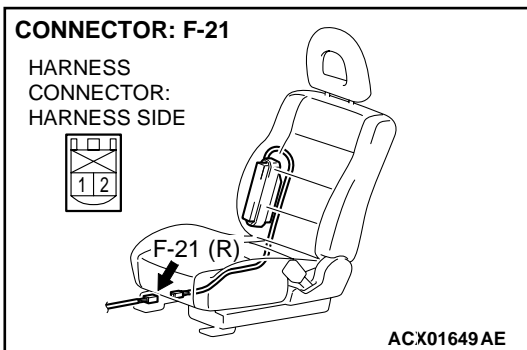
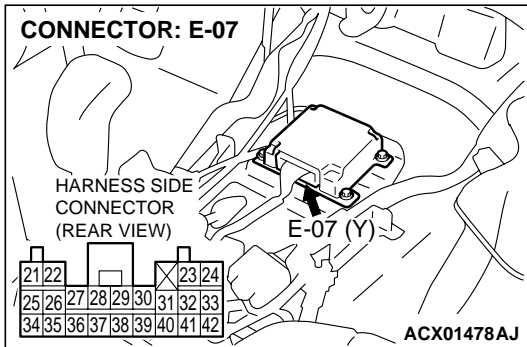
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Measure the voltage between E-07 harness connector terminals 23, 24 and baby ground.
Voltage should measure 0 volt.

Q: Is the measured voltage within the specified range?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 75 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 4.

NO : Go to Step 3.



STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector E-07 (terminal No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (RH) connector F-21. Then go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

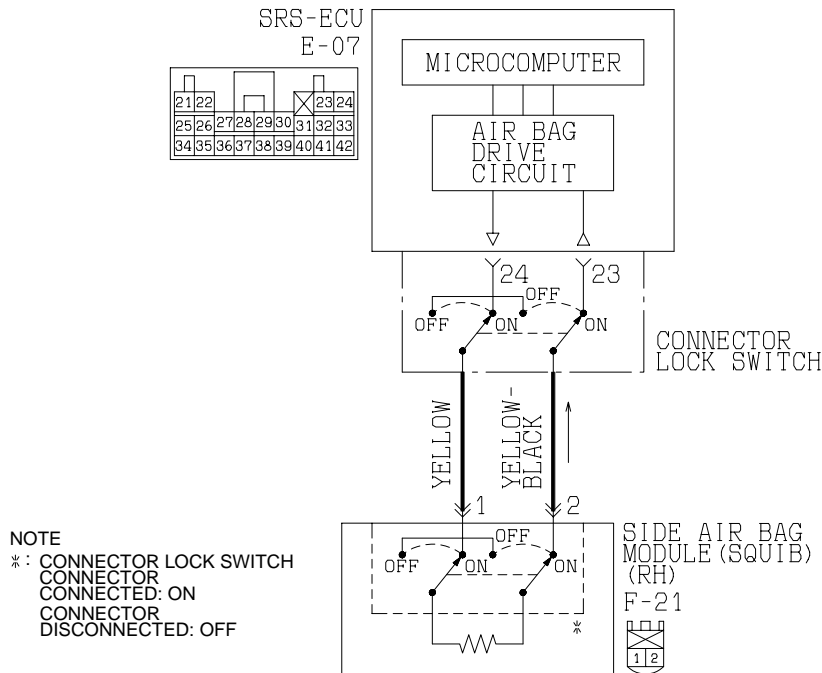
Q: Is DTC 75 set?

YES : Return to Step 1.

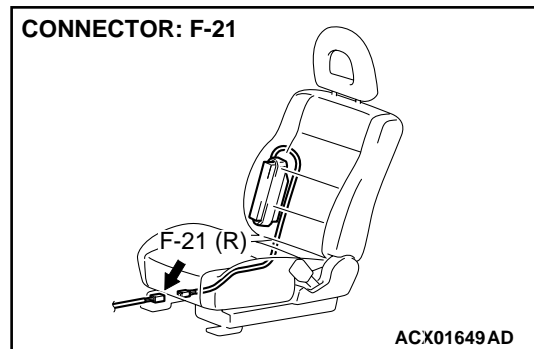
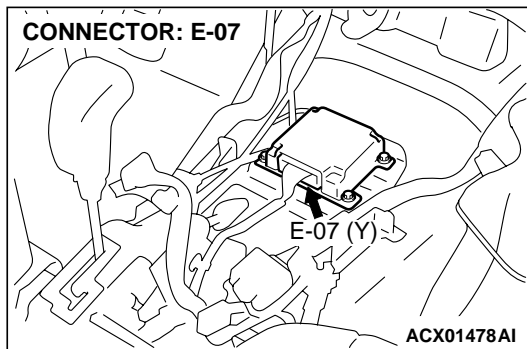
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 76: Right Hand Side-Airbag Module (Squib) System Fault Ground Circuit (Short-Circuited to Ground)

Side-Airbag Module (RH) (Squib) Circuit



AC204436AB
W3Q02M03AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (RH) (squib).

TROUBLESHOOTING HINTS

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

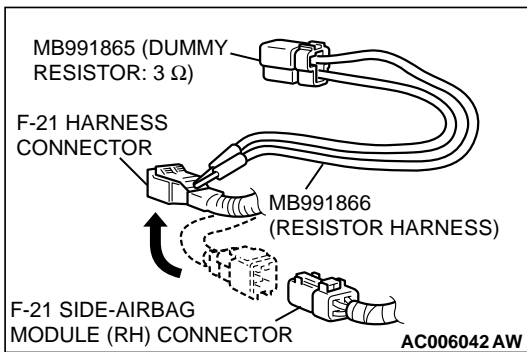
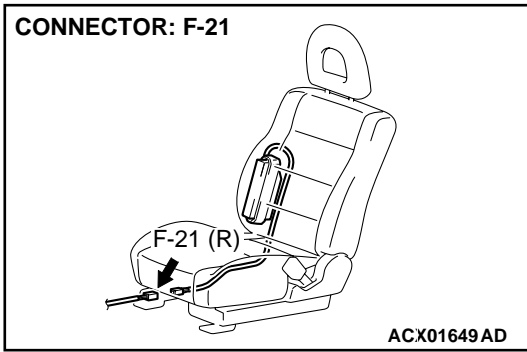
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP 1. Check the side-airbag module (RH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the side-airbag module (RH) connector F-21.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

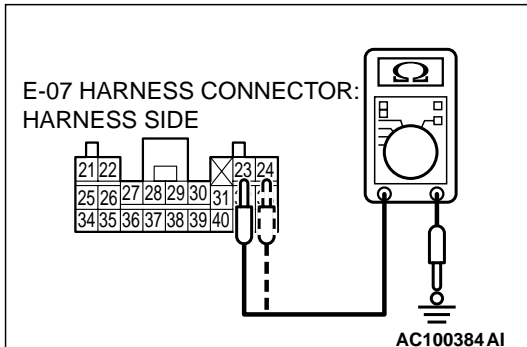
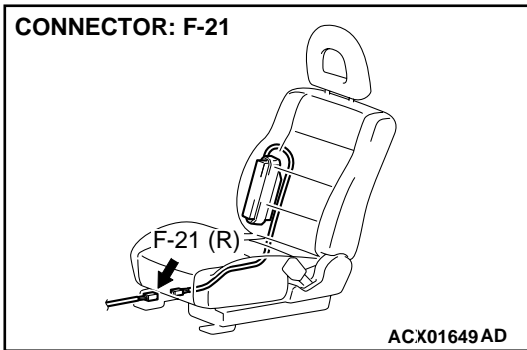
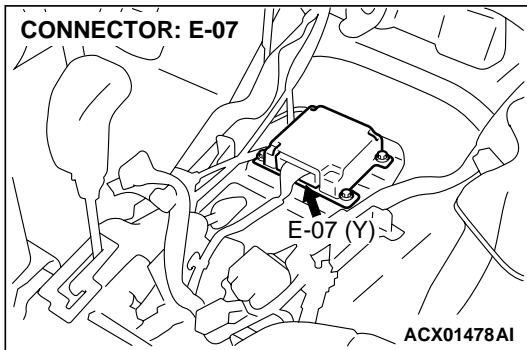
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

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

Q: Is DTC 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-13.) Then go to Step 4.



STEP 2. Check the harness for short circuit to ground between SRS-ECU and the side-airbag module (RH).

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect side-airbag module (RH) connector F-21.

CAUTION

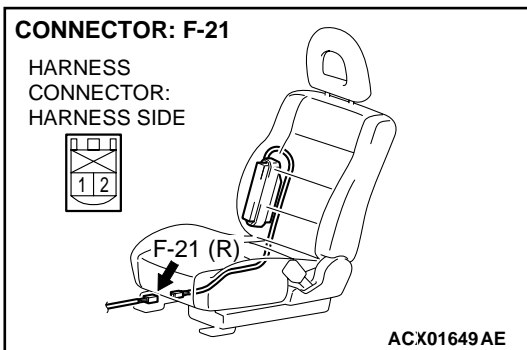
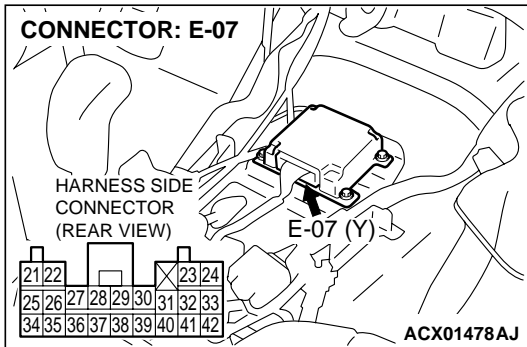
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Check for continuity between E-07 harness connector terminals 23, 24 and body ground. It should be open circuit.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 76 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 4.

NO : Go to Step 3.



STEP 3. Check the harness wires for short circuit to ground between SRS-ECU connector E-07 (terminal No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.23 and 24) and side-airbag module (RH) connector F-21 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (RH) connector F-21. Then go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

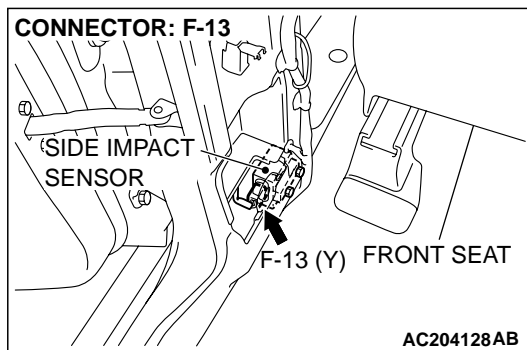
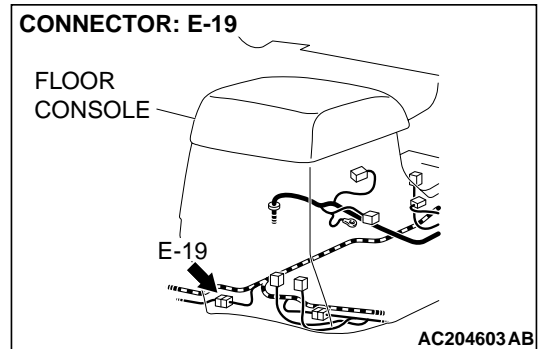
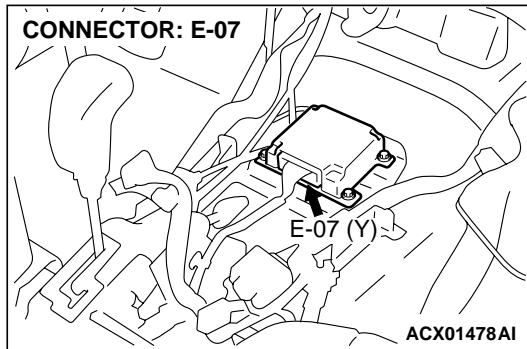
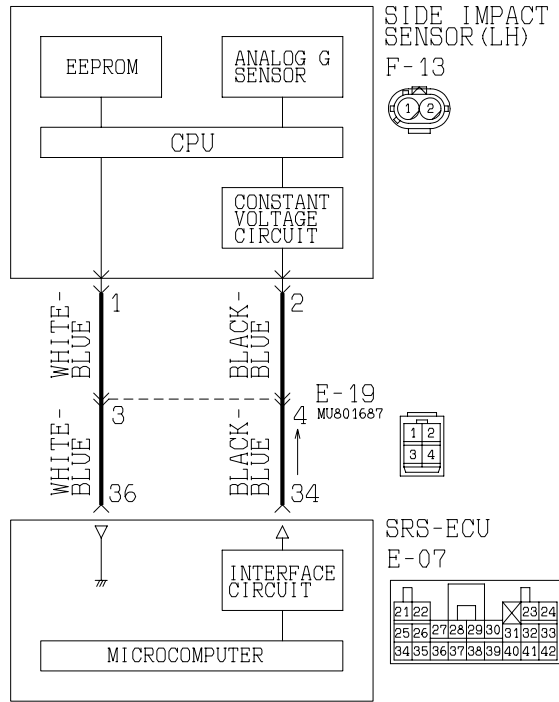
Q: Is DTC 76 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 79: Left Hand Side-Airbag Module (Squib) System Fault 5 for Power Pupply Circuit
DTC 93: Left Hand Side-Airbag Module (Squib) System Fault 6 for Communication System

Side Impact Sensor (LH) Power Supply Circuit



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

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

TROUBLESHOOTING HINTS

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

DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)

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

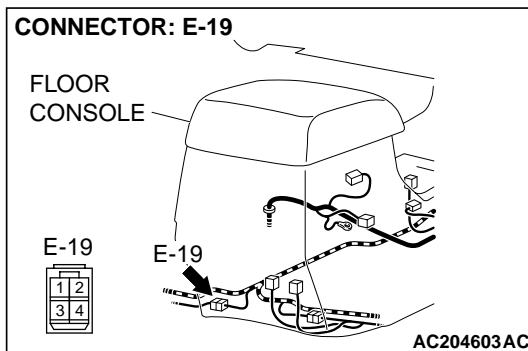
- (1) Disconnect the negative battery terminal.
- (2) Replace the side impact sensor (LH) with the side impact sensor (RH).
- (3) Connect the negative battery terminal.
- (4) Erase diagnostic trouble code memory, and then check the diagnostic trouble code.

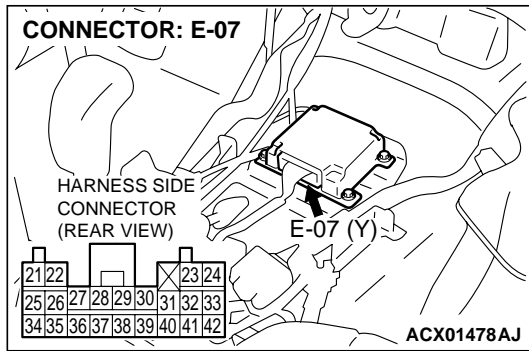
Q: Is DTC 89 or 96 set?

- YES :** Replace the side impact sensor (LH) with a new one. (Refer to [P.52Ba-42.](#)) 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 E-07 (terminal No.34 and 36) and side impact sensor (LH) connector F-13 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-19 inspect the wiring harness. If the intermediate connector E-19 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection [P.00E-2.](#)) Then go to Step 3. If harness wires are in good condition, go to Step 3. If any harness wires between SRS-ECU connector E-07 and side impact sensor (LH) connector F-13 are damaged, repair them or install the sensor cable. Refer to [P.52Ba-42.](#) Then go to Step 3.

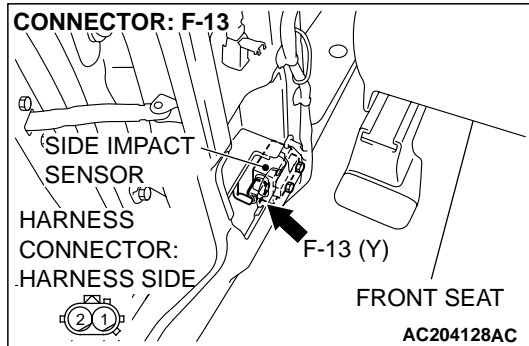




Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.34 and 36) and side impact sensor (LH) connector F-13 (terminal No.1 and 2) in good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 79 or 93 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 and side impact sensor (LH) connector F-13. Then go to Step 3.



STEP 3. Recheck for diagnostic trouble code.

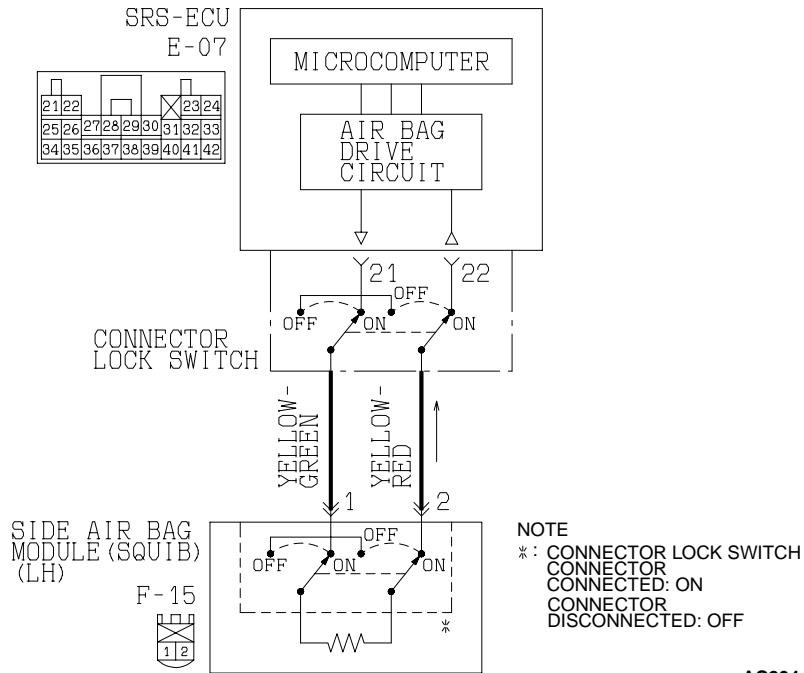
Q: Is DTC 79 or 93 set?

YES : Return to Step 1.

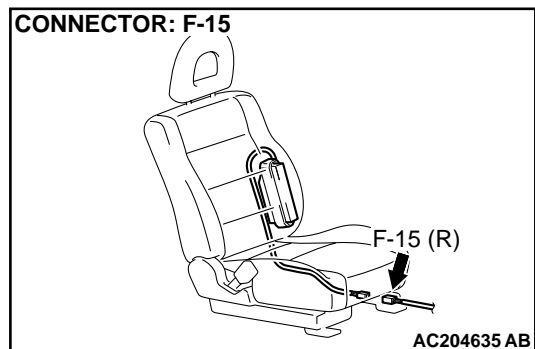
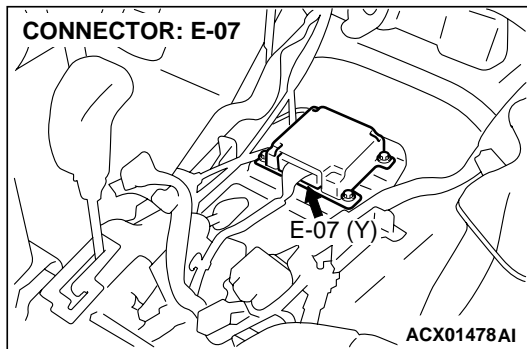
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 81: Left Hand Side-Air Bag Module (Squib) System Fault 1 (Short Circuit between Terminals of the Squib Circuit)

Side-Airbag Module (LH) (Squib) Circuit



AC204439AB
 W3Q02M05AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (LH) (squib).

TROUBLESHOOTING HINTS

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

*NOTE: *: The squib circuit connectors integrate a "short" bar (which prevents the air bag from deploying unintentionally due to static electricity by shorting the positive wire to the ground wire in the squib circuit when the connectors are disconnected). (Refer to P.52Ba-2.) Therefore, if connector E-07 or F-15 damaged or improperly engaged, the short bar may not be released when the connector is connected.*

DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resister harness

STEP 1. Check the diagnostic trouble code.

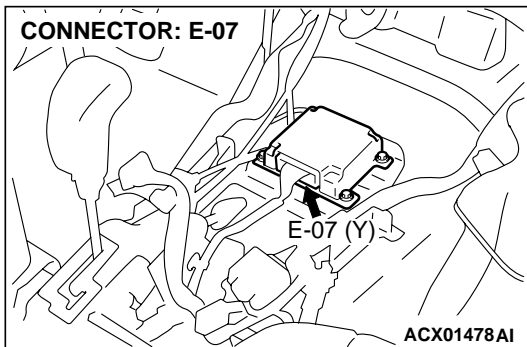
Q: Is DTC 34 set?

- YES** : Go to Step 2.
NO : Go to Step 3.

STEP 2. Check SRS-ECU connector E-07.

Q: Is the connector correctly engaged?

- YES** : Go to Step 3.
NO : Engage the connector correctly. Then go to Step 7.



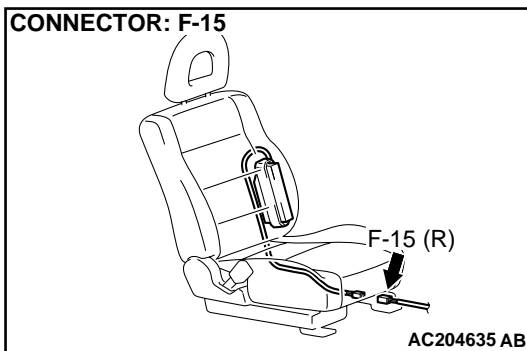
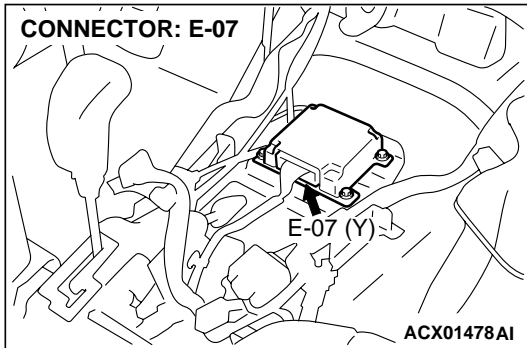
STEP 3. Check SRS-ECU connector E-07 and side-airbag module (LH) connector F-15.

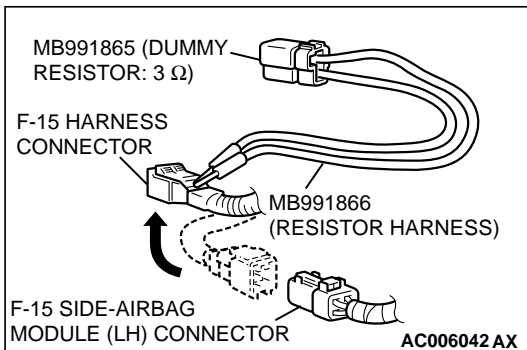
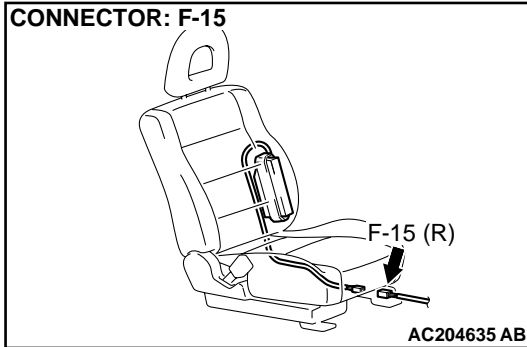
- (1) Disconnect the negative battery terminal.
- (2) Disconnect connectors E-07 and F-15, and then reconnect them.
- (3) Connect the negative battery terminal.
- (4) Erase diagnostic trouble code memory, and then check the diagnostic trouble code.

Q: Is DTC 81 set?

YES : Go to Step 4.

NO : The procedure is complete. (It is assumed that DTC 81 set as connector E-07 or F-15 was engaged improperly.)



**STEP 4. Check the side-airbag module (LH).**

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the left hand side-airbag (LH) connector F-15.

- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

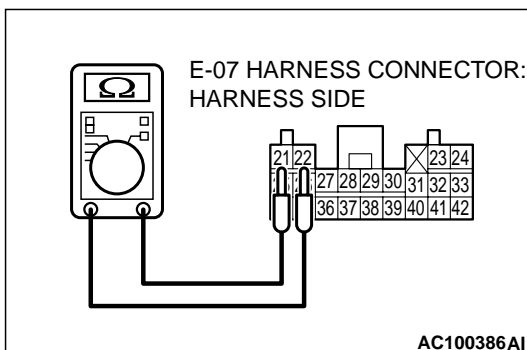
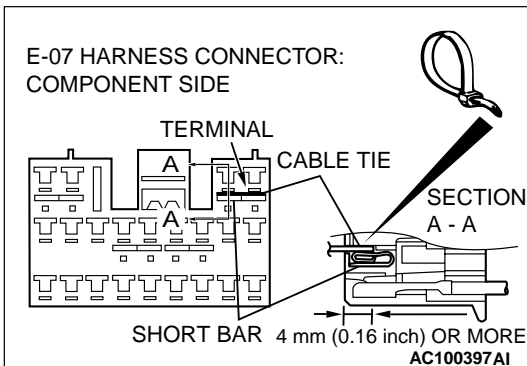
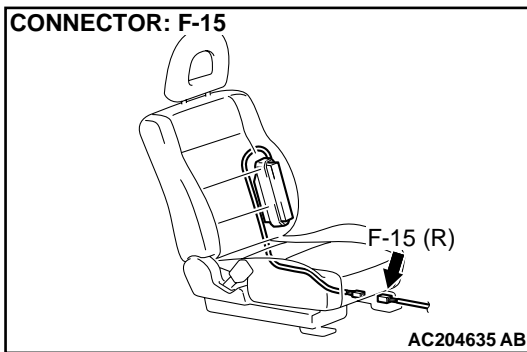
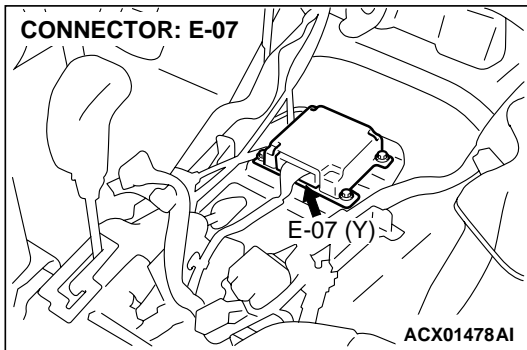
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into the F-15 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 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-13.](#)) Then go to Step 7.



STEP 5. Check the side-airbag module (LH) circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the side-airbag module (LH) connector F-15 to short the squib circuit.

(2) Disconnect side-airbag module connector F-15.

⚠ CAUTION

Insert an insulator such as a cable tie to a depth of 4mm (0.16 inch) or more, otherwise the short bar will not cable tie release.

(3) Insert a cable tie [3 mm (0.12 inch) wide, 0.5 mm (0.02 inch) thick] between terminals 21, 22 and the short bar to release the short bar.

⚠ CAUTION

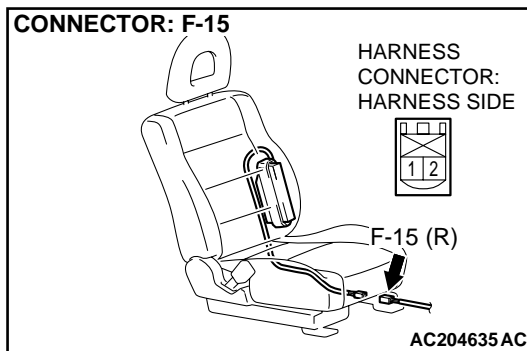
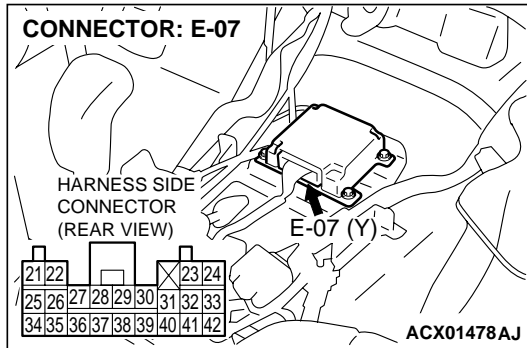
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(4) Check for continuity between terminals 21 and 22.
It should be open circuit.

Q: Is the circuit normal?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 81 sets, replace the SRS-ECU. (Refer to P.52Ba-31.)

NO : Go to Step 6.



STEP 6. Check the harness wires for short circuit between SRS-ECU connector E-07 (terminal No. 21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-07 (terminal No. 21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2) in good condition?

YES : Go to Step 7.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (LH) connector F-15. Then go to Step 7.

STEP 7. Recheck for diagnostic trouble code.

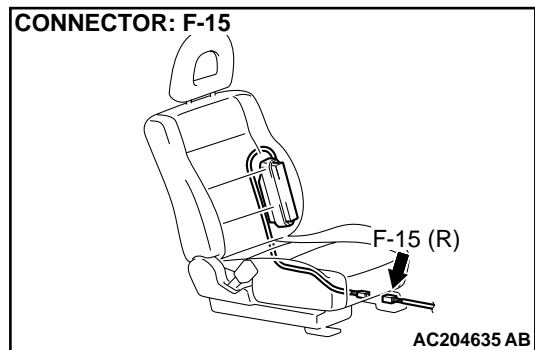
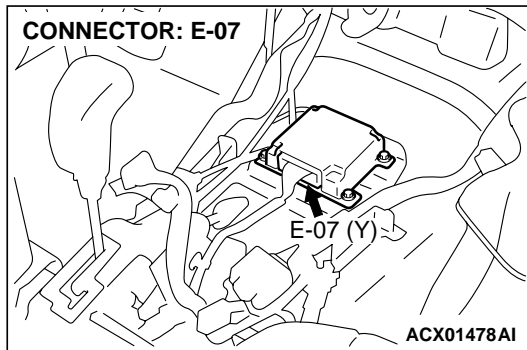
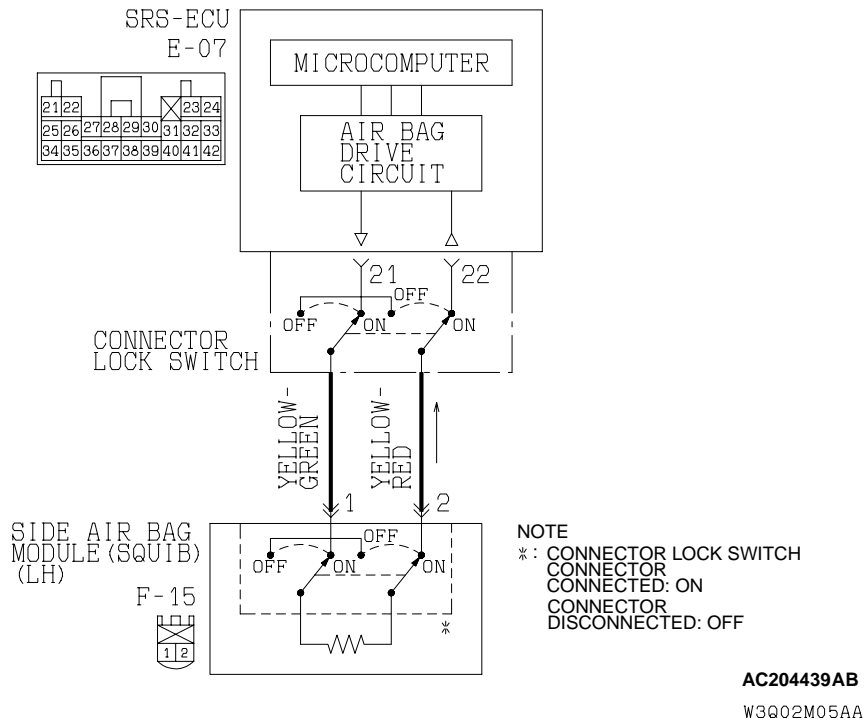
Q: Is DTC 81 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 82:Left Hand Side-Airbag Module (Squib) System Fault 2 (Open in the Squib Circuit)

Side-Airbag Module (LH) (Squib) Circuit



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (LH) (squib).

TROUBLESHOOTING HINTS

- Open circuit in the left hand side-airbag module (squib) circuit
- Improper connector contact
- Malfunction of the SRS-ECU

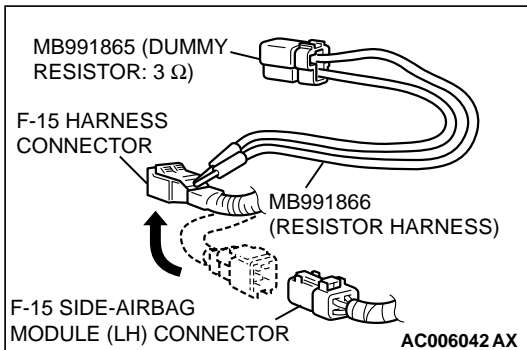
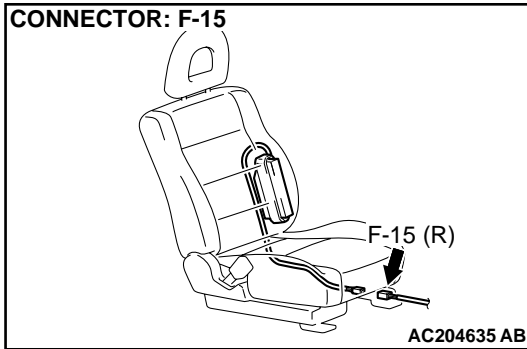
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

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

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the left hand side-airbag connector F-15.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

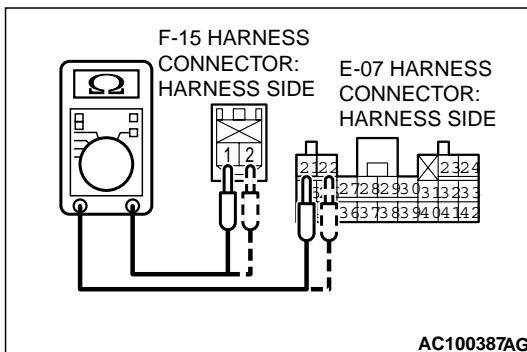
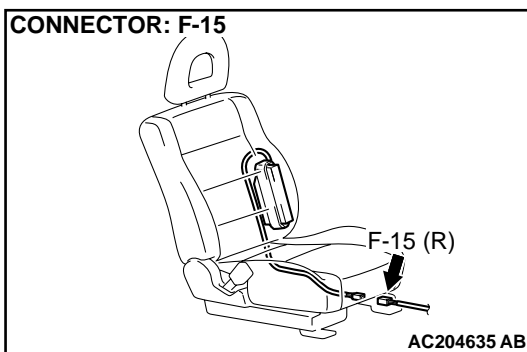
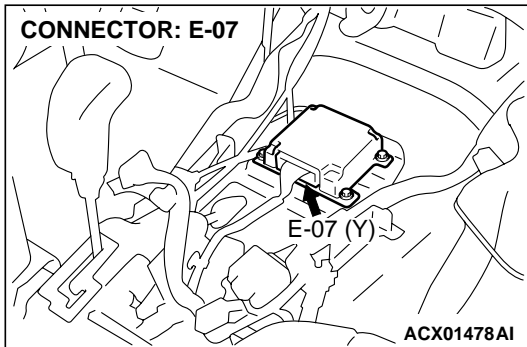
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into the F-15 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 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-13.](#)) Then go to Step 3.



STEP 2. Check the harness for open circuit between the SRS-ECU connector E-07 (terminal No.21 and 22) and the left hand side-airbag module (LH) F-15 (terminal No.1 and 2).

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect S side-airbag module (LH) connector F-15.

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 the following terminals.
Between connector E-07 terminal 21 and connector F-15 terminal 1
Between connector E-07 terminal 22 and connector F-15 terminal 2
It should be less than 2 ohms.

Q: Does continuity exist?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 82 sets, replace the SRS-ECU. (Refer to P.52Ba-33.) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (LH) connector F-15. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

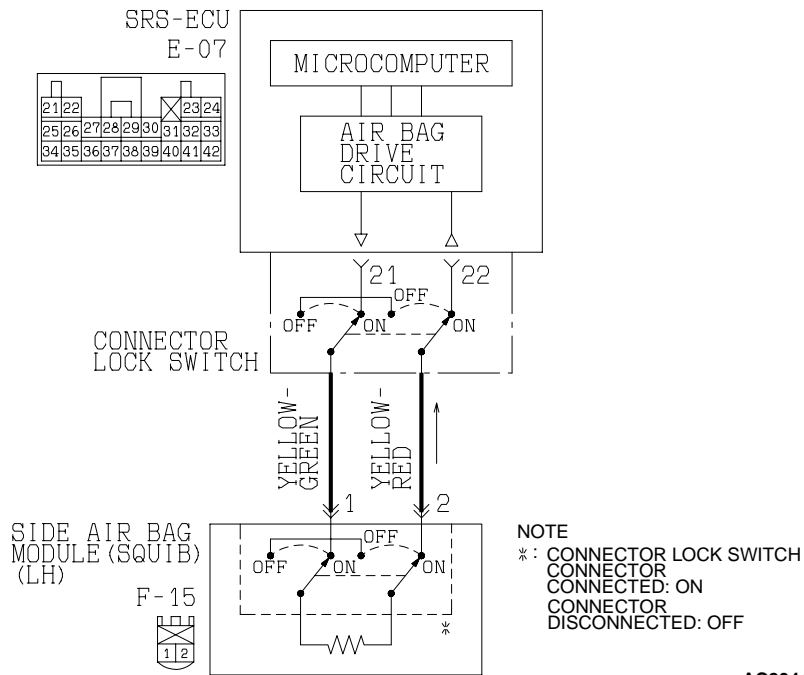
Q: Is DTC 82 set?

YES : Return to Step 1.

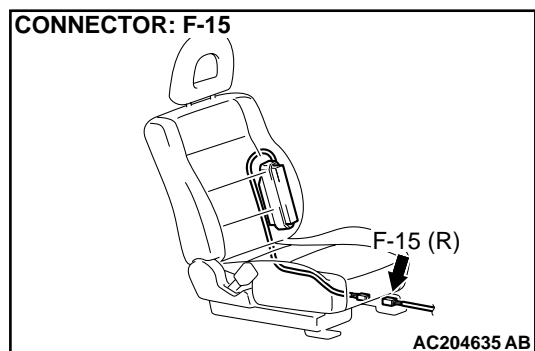
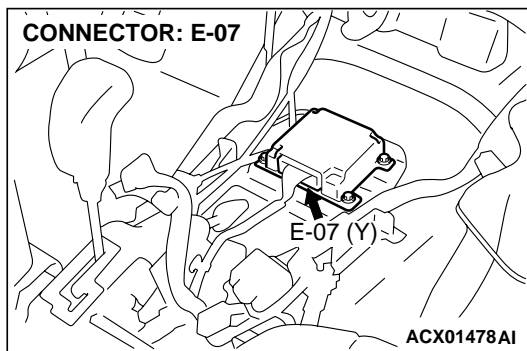
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 85:Left Hand Side-Airbag Module (Squib) System Fault Power Supply Circuit (Short-Circuited to Power Supply)

Side-Airbag Module (LH) (Squib) Circuit



AC204439AB
W3Q02M05AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (LH) (squib).

TROUBLESHOOTING HINTS

- Damaged wiring harnesses or connectors
- Short to the power supply in the left hand side-airbag module (squib) harness
- Malfunction of the SRS-ECU

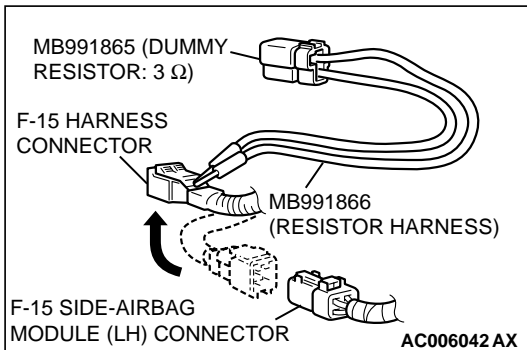
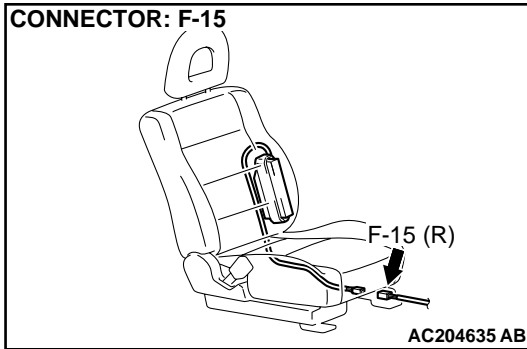
DIAGNOSIS

Required Special Tools:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resister
- MB991866: Resister harness

STEP1. Check the side-airbag module (LH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the left hand side-airbag connector F-15.



- (3) Connect special tool MB991865 to special tool MB991866.

CAUTION

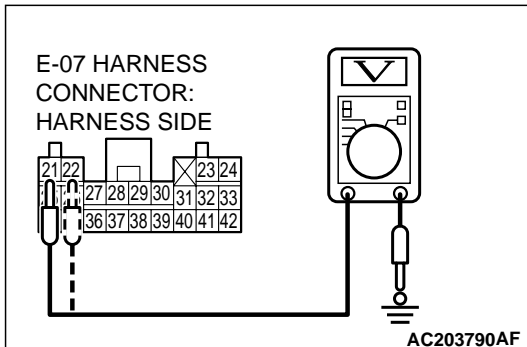
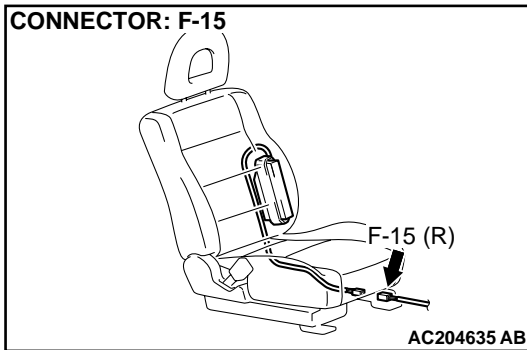
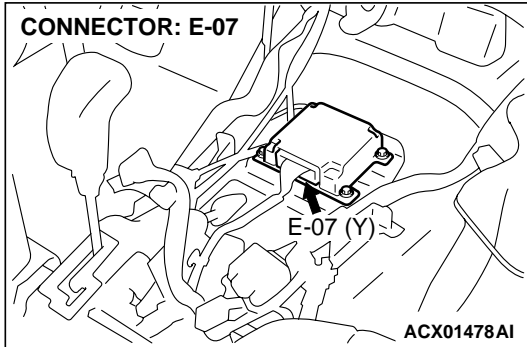
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Insert special tool MB991866 into the F-15 harness connector by backprobing.
- (5) Connect the negative battery terminal.
- (6) Erase the diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 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-13.](#)) Then go to Step 4.



STEP 2. Check the side-airbag module (LH) circuit at the SRS-ECU connector E-07.

- (1) Disconnect SRS-ECU connector E-07.

⚠ DANGER

To prevent the air bag from deploying unintentionally, disconnect the side-airbag module (LH) connector F-15 to short the squib circuit.

- (2) Disconnect left hand side-airbag module connector F-15.
(3) Turn the ignition switch to the "ON" position.

⚠ CAUTION

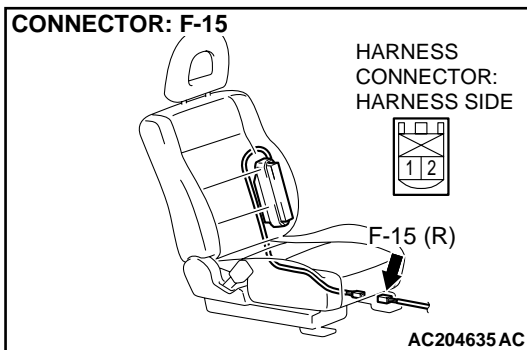
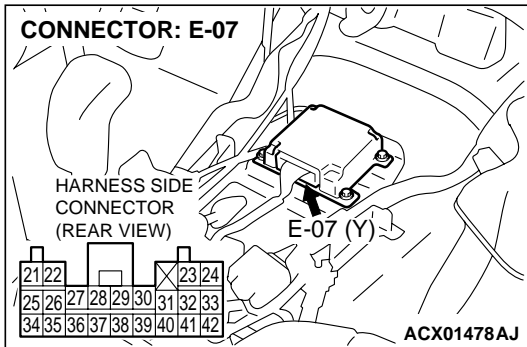
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (4) Measure the voltage between E-07 harness connector terminals 21, 22 and body ground.
Voltage should measure 0 volt.

Q: Is the measured voltage within the specified range?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 85 sets, replace the SRS-ECU. (Refer to [P.52Ba-33](#).) Then go to Step 4.

NO : Go to Step 3.



STEP 3. Check the harness wires for short circuit to power supply between SRS-ECU connector E-07 (terminal No.21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2).

Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (LH) connector F-15. Then go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

Q: Is DTC 85 set?

YES : Return to Step 1.

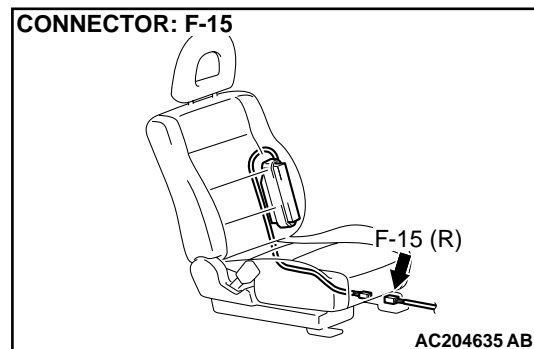
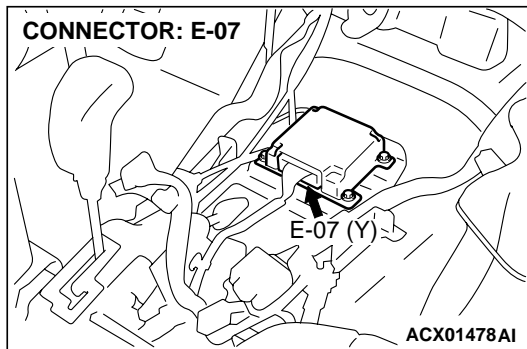
NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 86:Left Hand Side-Airbag Module (Squib) System Fault Ground Circuit (Short-Circuited to Ground)

Side-Airbag Module (LH) (Squib) Circuit



AC204439AB
W3Q02M05AA



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-airbag safing G-sensor is on, the SRS side-airbag will inflate.
- The ignition signal is input to the side-airbag module to inflate the side-airbag.

DTC SET CONDITIONS

This DTC is set if there is abnormal resistance between the input terminals of the side-airbag module (LH) (squib).

TROUBLESHOOTING HINTS

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

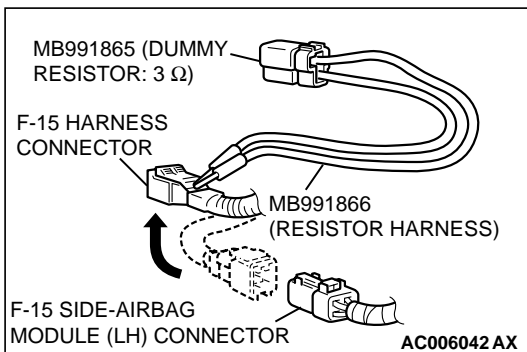
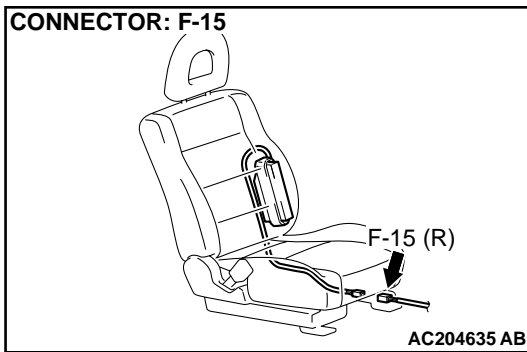
DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)
- MB991865: Dummy resistor
- MB991866: Resistor harness

STEP1. Check the side-airbag module (LH).

- (1) Disconnect the negative battery terminal.
- (2) Disconnect the left hand side-airbag connector F-15.
- (3) Connect special tool MB991865 to special tool MB991866.



- (4) Connect special tool MB991865 to special tool MB991866.

CAUTION

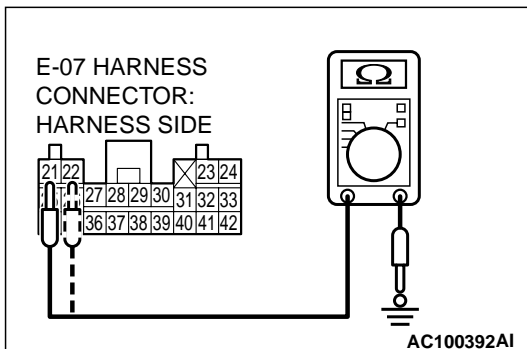
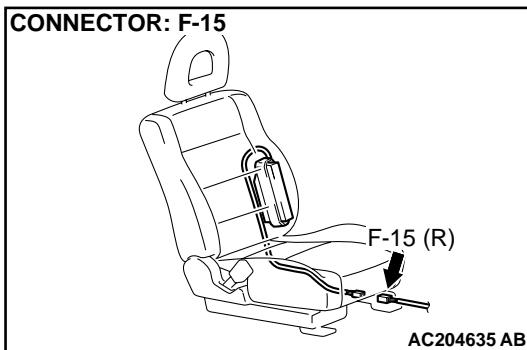
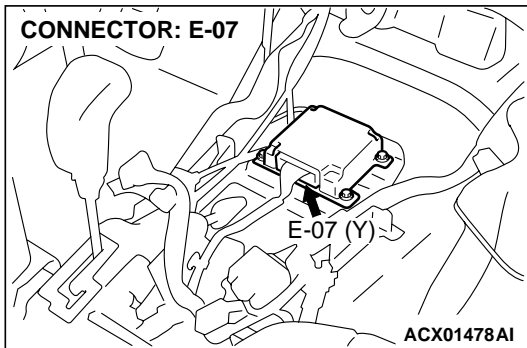
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (5) Insert special tool MB991866 into the harness side connector by backprobing.
- (6) Connect the negative battery terminal.
- (7) Erase diagnostic trouble code memory, and check the diagnostic trouble code.

Q: Is DTC 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-13.](#)) Then go to Step 4.



STEP 2. Check the side-airbag module (LH) circuit at the SRS-ECU connector E-07.

(1) Disconnect SRS-ECU connector E-07.

(2) Disconnect left hand side-airbag module connector F-15.

CAUTION

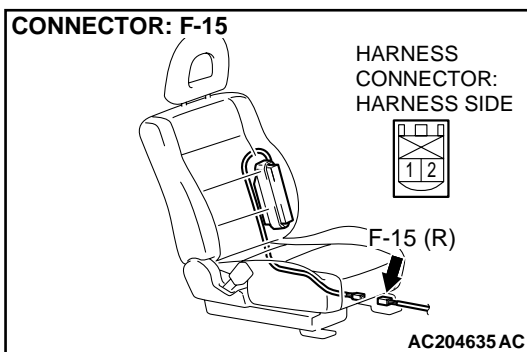
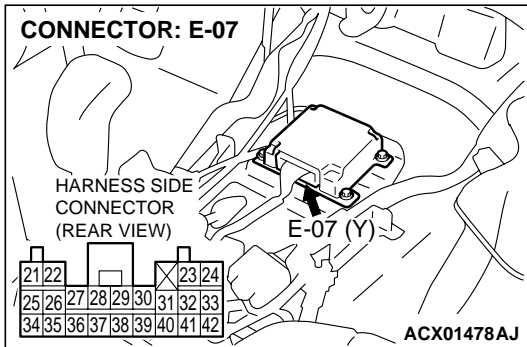
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

(3) Check for continuity between E-07 harness connector terminals 21, 22 and body ground. It should be open circuit.

Q: Does continuity exist?

NO : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 86 sets, replace the SRS-ECU. (Refer to [P.52Ba-33.](#)) Then go to Step 4.

YES : Go to Step 3.



STEP 3. Check the harness wires for short circuit to ground between SRS-ECU connector E-07 (terminal No.21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2).

Q: Are the harness wires for short circuit to ground between SRS-ECU connector E-07 (terminal No.21 and 22) and side-airbag module (LH) connector F-15 (terminal No.1 and 2) in good condition?

YES : Go to Step 4.

NO : Repair the harness wires between SRS-ECU connector E-07 and side-airbag module (LH) connector F-15. Then go to Step 4.

STEP 4. Recheck for diagnostic trouble code.

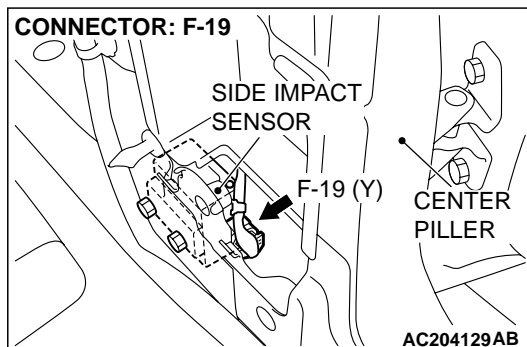
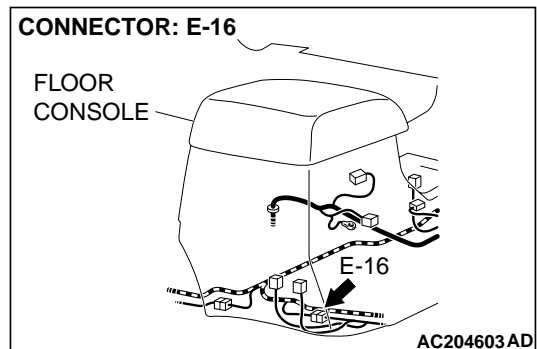
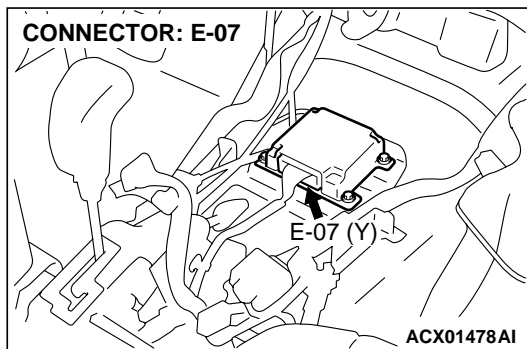
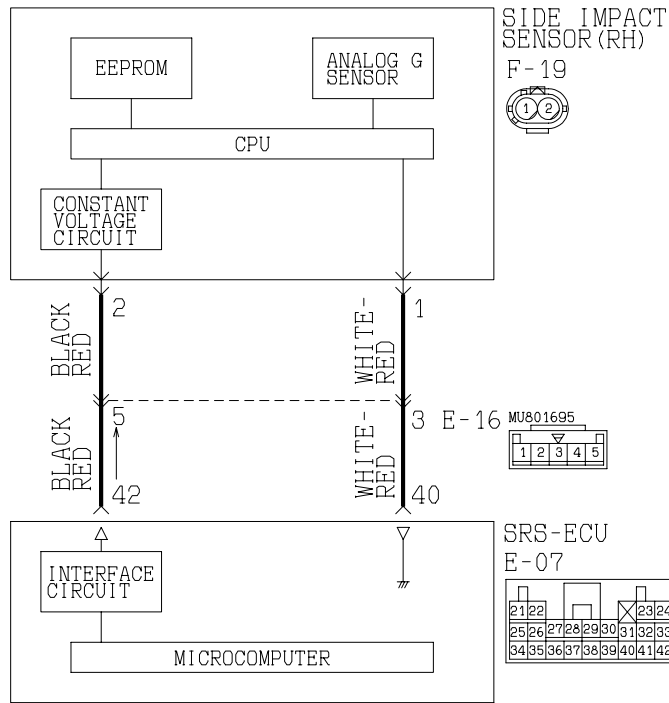
Q: Is DTC 86 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 89: Right Hand Side-Airbag Module (Squib) System Fault 5 for Power Supply Circuit
DTC 96: Right Hand Side-Airbag Module (Squib) System Fault 6 for Communication System

Side Impact Sensor (RH) Power Supply Circuit



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

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

TROUBLESHOOTING HINTS

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

DIAGNOSIS

Required Special Tool:

- MB991502: Scan Tool (MUT-II)

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

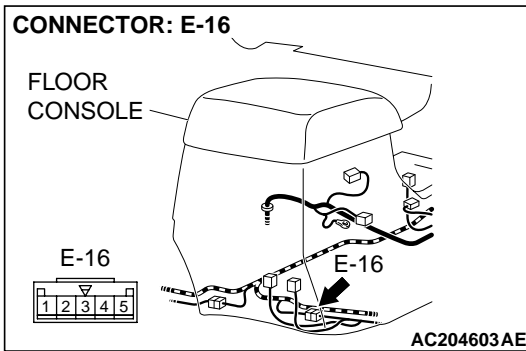
- (1) Disconnect the negative battery terminal.
- (2) Replace the side impact sensor (RH) with the side impact sensor (LH)
- (3) Connect the negative battery terminal.
- (4) Erase diagnostic trouble code memory, and check the diagnostic trouble code.

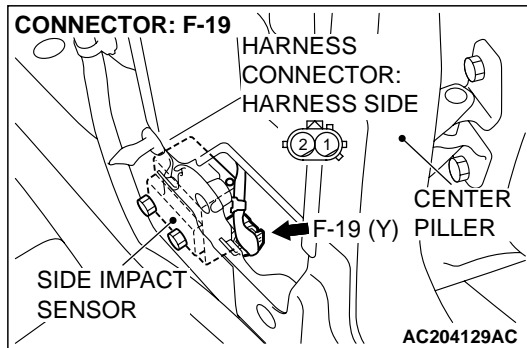
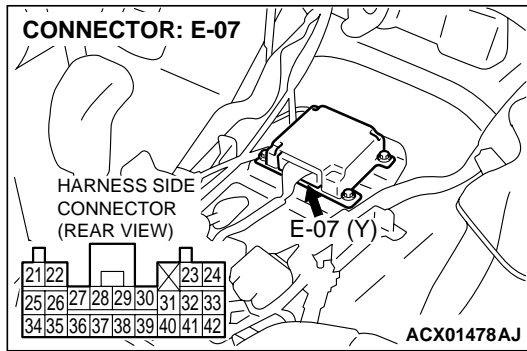
Q: Is DTC 79 or 93 out put?

- YES :** Replace the side impact sensor (RH) with a new one. (Refer to [P.52Ba-42.](#)) 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 E-07 (terminal No.40 and 42) and side impact sensor (RH) connector F-19 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-16 inspect the wiring harness. If the intermediate connector E-16 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection [P.00E-2](#). Then go to Step 3. If harness wires are in good condition, go to Step 3. If any harness wires between SRS-ECU connector E-07 and side impact sensor (RH) connector F-19 are damaged, repair them or install the sensor cable. Refer to [P.52Ba-42](#). Then go to Step 3.





Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.40 and 42) and side impact sensor (RH) connector F-19 (terminal No.1 and 2) is good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 89 or 96 sets, replace the SRS-ECU. (Refer to [P.52Ba-31.](#)) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 and side impact sensor (RH) connector F-19. Then go to Step 3.

STEP 3. Rereck the diagnostic trouble code.

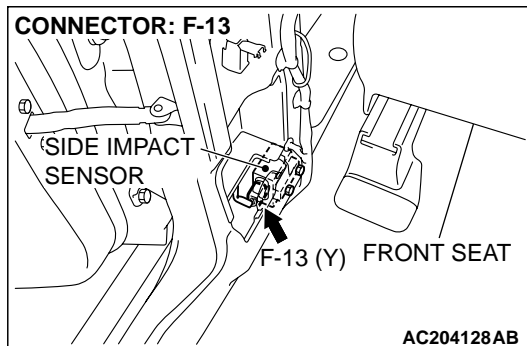
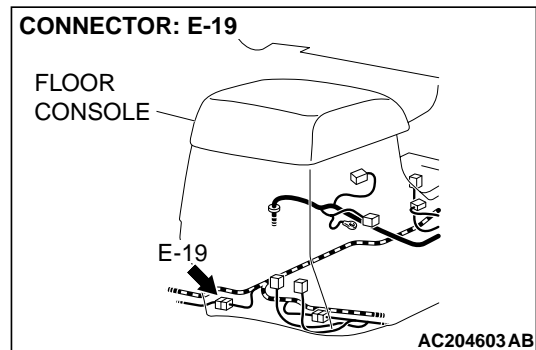
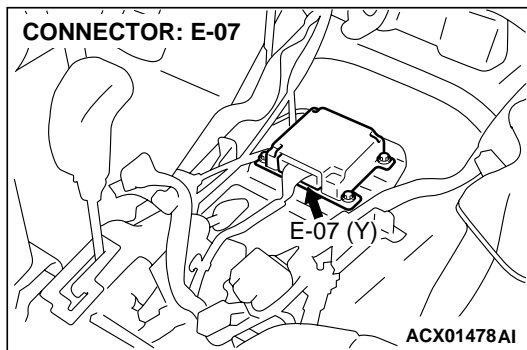
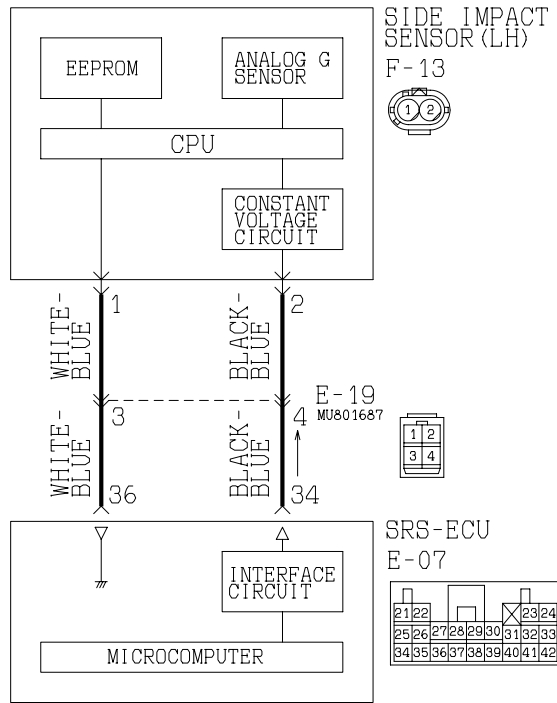
Q: Is DTC 89 or 96 set?

YES : Refer to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6.](#))

DTC 91: Left Hand Side-Impact Sensor Power Supply Circuit System

Side Impact Sensor (LH) Power Supply Circuit



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

This DTC will set when the power supply voltage to the left-side impact sensor remains less than a pre-determined value for five seconds. However, if the system returns to normal condition, code number 91 will be erased automatically and the SRS warning light will go out.

TROUBLESHOOTING HINTS

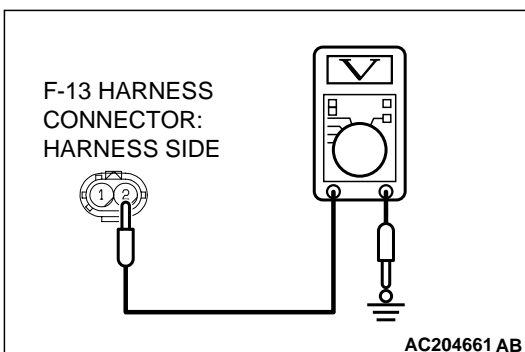
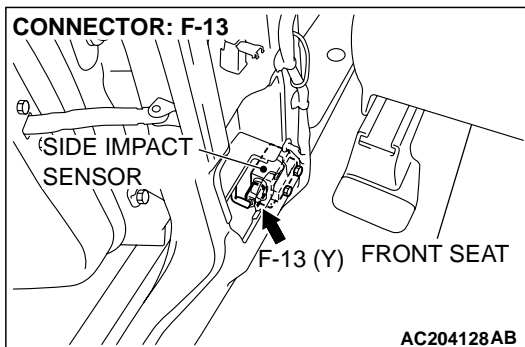
- Damaged wiring harness or connectors
- Malfunction of the side-airbag module (LH) (squib)
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991223 (MB991222): Harness set (Probe)

STEP 1. Check the side impact sensor (LH) power supply circuit at the side impact sensor (LH) connector F-13.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect left hand side impact sensor connector F-13, and measure at the wiring harness.
- (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 F-13 harness connector terminal 2 and the ground. Voltage should measure 9 volts or more.

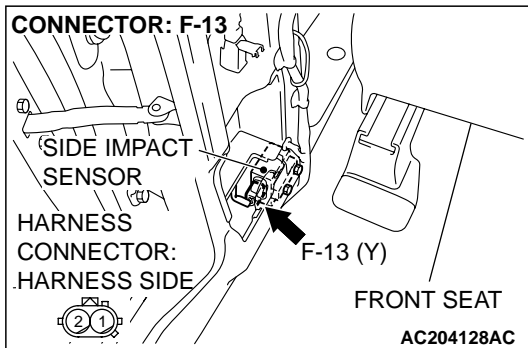
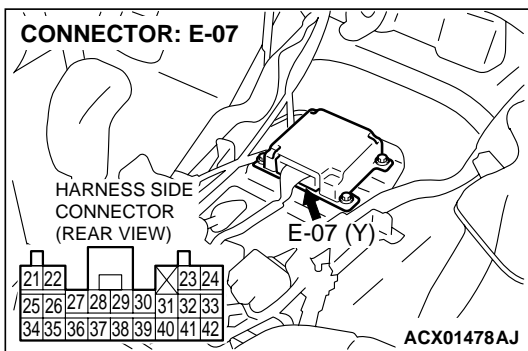
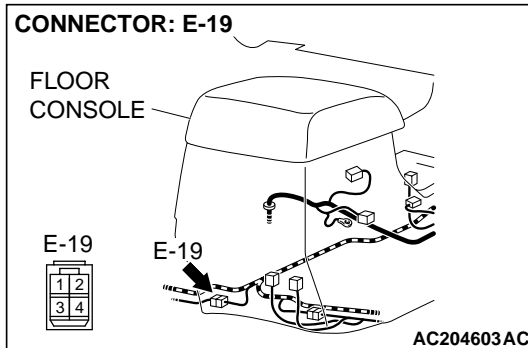
Q: Is the measured voltage within the specified range?

YES : Replace the side impact sensor (LH). (Refer to [P.52Ba-42.](#)) 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 E-07 (terminal No.34 and 36) and side impact sensor (LH) connector F-13 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-19 inspect the wiring harness. If the intermediate connector E-19 is damaged, repair or replace it. Refer to GROUP 00E, Harness Connector Inspection P.00E-2. Then go to Step 3.



Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.34 and 36) and side impact sensor (LH) connector F-13 (terminal No.1 and 2) in good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 91 steps. Replace the SRS-ECU. (Refer to P.52Ba-31.)

NO : Repair the harness wires between SRS-ECU connector E-07 and side impact sensor (LH) connector F-13. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

Q: Is DTC 91 set?

YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

DTC 92: Left Hand Side-Impact Sensor System for Fault 1**DTC 95: Right Hand Side-Impact Sensor System for Fault 1**

DTC SET CONDITIONS

These DTC are set if the followings are detected from the analog G-sensor output.

- Analog G-sensor is not operating.
- Analog G-sensor characteristics are abnormal.

- Analog G-sensor output is abnormal.

TROUBLESHOOTING HINTS

Malfunction of side impact sensor <LH> (for DTC 92) and side impact sensor <RH> (for DTC 95)

DIAGNOSIS**Required Special Tool:**

- MB991502: Scan Tool (MUT-II)

STEP 1. Recheck the diagnostic trouble code.

- (1) Replace side impact sensor <LH> (for DTC 92) and side impact sensor <RH> (for DTC 95). (Refer to [P.52Ba-42.](#))
- (2) Eras diagnostic trouble code memory, and check the diagnostic trouble code.

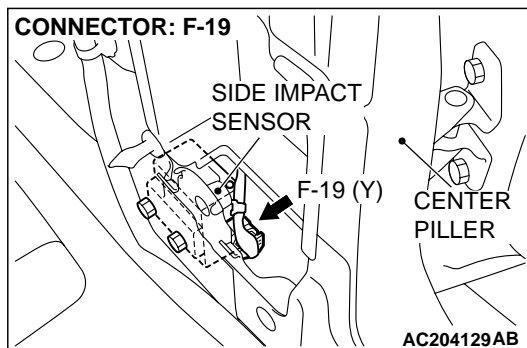
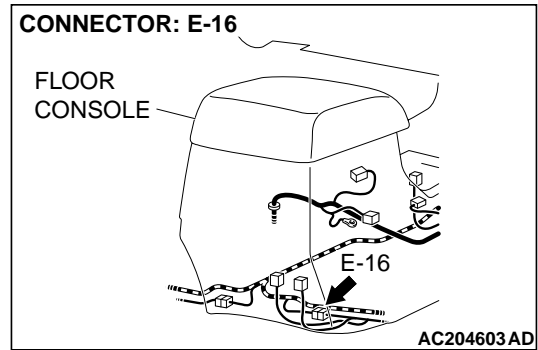
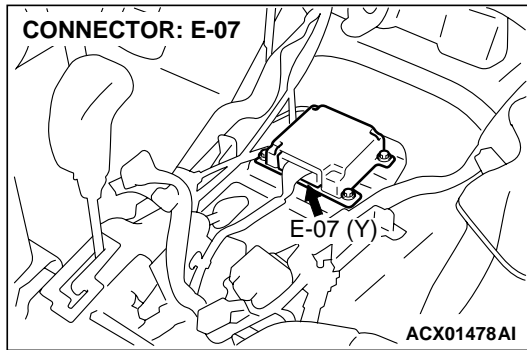
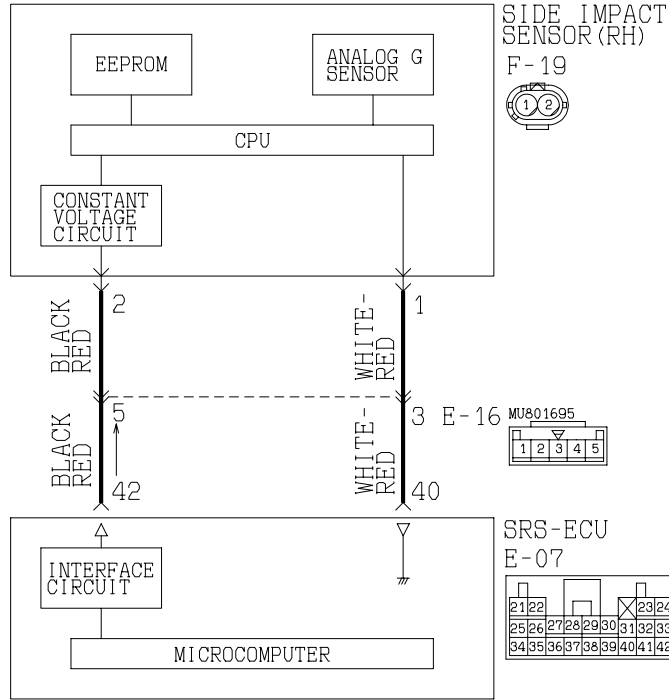
Q: Is any of DTC 92 or 95 set?

YES : Replace the SRS-ECU. (Refer to [P.52Ba-31.](#))

NO : The procedure is complete.

DTC 94: Right Hand Side-Impact Sensor Power Supply Circuit System

Side Impact Sensor (RH) Power Supply Circuit



CIRCUIT 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-airbags should be deployed, it sends a fire signal to the SRS-ECU to deploy the side-airbags. 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 diagnostic trouble code.

DTC SET CONDITIONS

This DTC 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, DTC number 94 will be automatically cleared and the SRS warning light will switch off if the condition returns to normal.

TROUBLESHOOTING HINTS

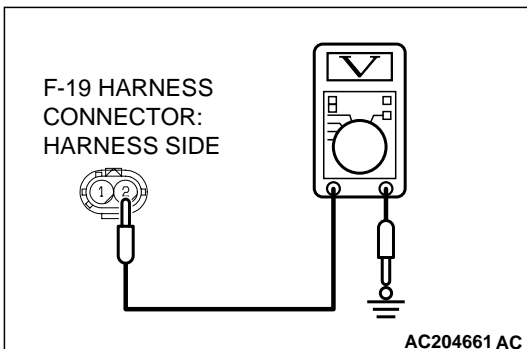
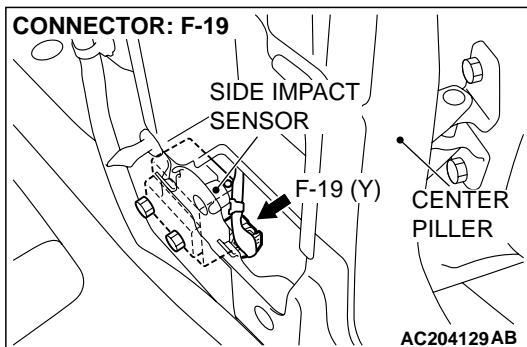
- Damaged wiring harnesses or connectors
- Malfunction of the side-airbag module (RH) (squib)
- Malfunction of the SRS-ECU

DIAGNOSIS**Required Special Tools:**

- MB991502: Scan Tool (MUT-II)
- MB991223 (MB991222): Harness set (Probe)

STEP 1. Check the side impact sensor (RH) power supply circuit at the SRS-ECU connector E-07.

- (1) Disconnect the negative battery terminal.
- (2) Disconnect right hand side impact sensor connector F-19, and measure at the wiring harness.
- (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 F-19 harness connector terminal 2 and body ground. Voltage should measure 9 volts or more.

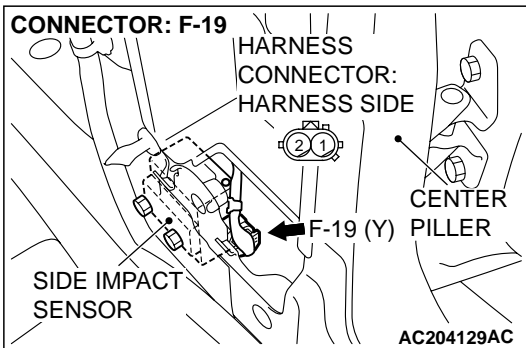
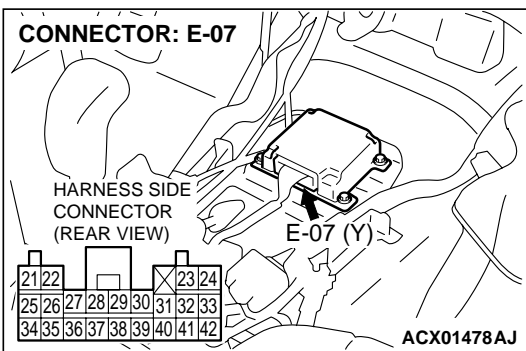
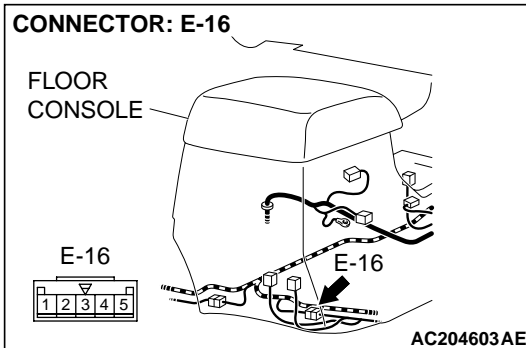
Q: Is the measured voltage within the specified range?

YES : Replace the side impact sensor (RH). (Refer to [P.52Ba-42.](#)) 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 E-07 (terminal No.40 and 42) and side impact sensor (RH) connector F-19 (terminal No.1 and 2).

NOTE: After inspecting intermediate connector E-16, inspect the wiring harness. If the intermediate connector E-16 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 3.



Q: Are the harness wires between SRS-ECU connector E-07 (terminal No.40 and 42) and side impact sensor (RH) connector F-19 (terminal No.1 and 2) in good condition?

YES : Erase the diagnostic trouble code memory, and check the diagnostic trouble code. If DTC 94 sets, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 3.

NO : Repair the harness wires between SRS-ECU connector E-07 and side impact sensor (RH) connector F-19. Then go to Step 3.

STEP 3. Recheck for diagnostic trouble code.

Q: Is DTC 94 set?

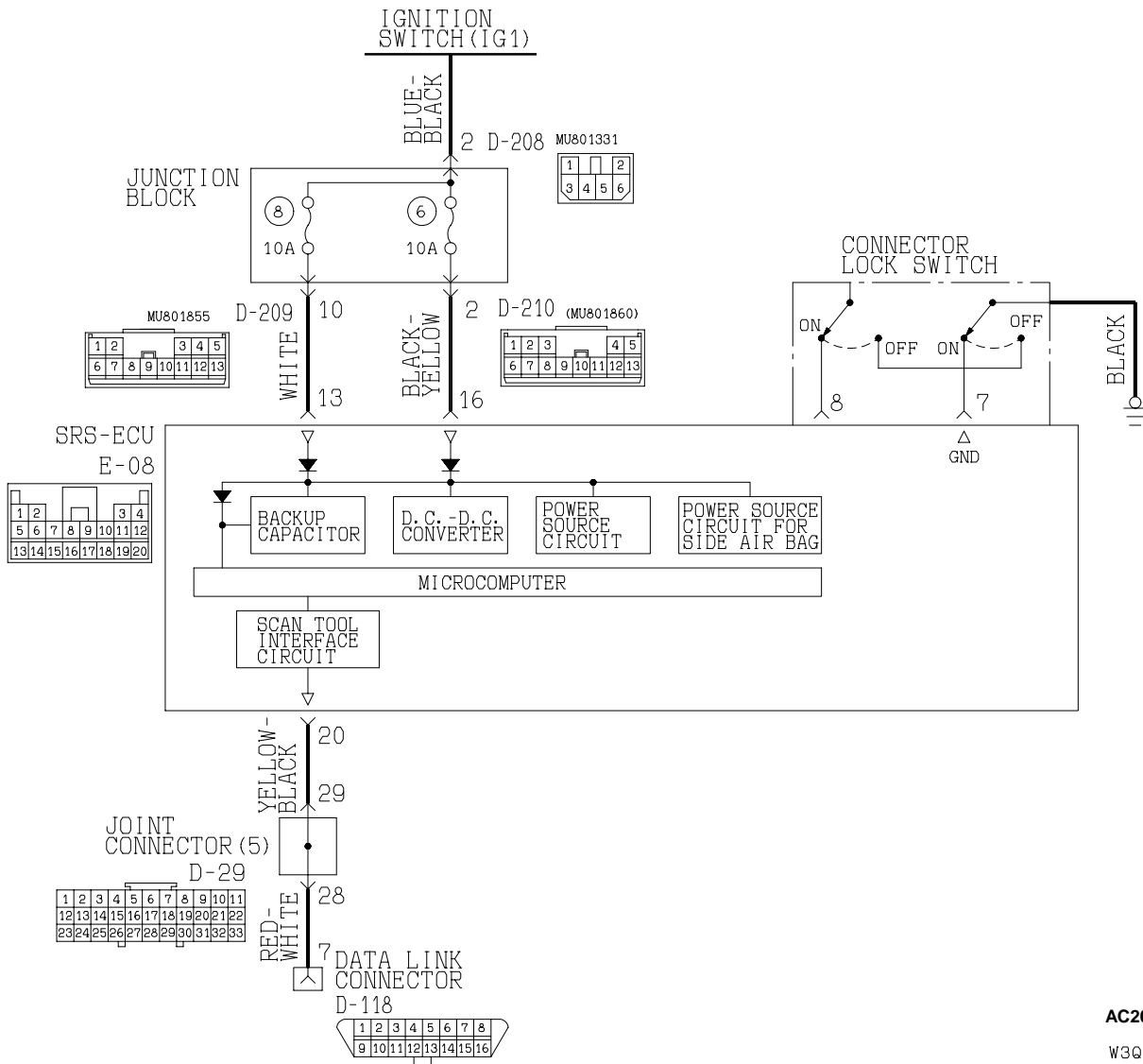
YES : Return to Step 1.

NO : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction P.00-6.)

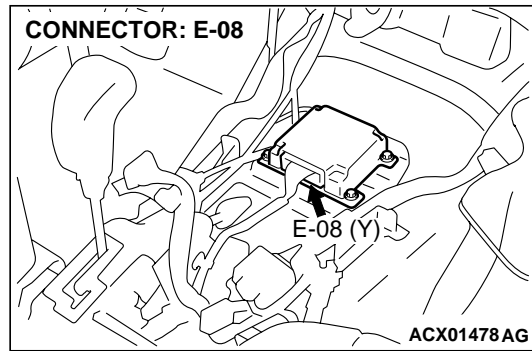
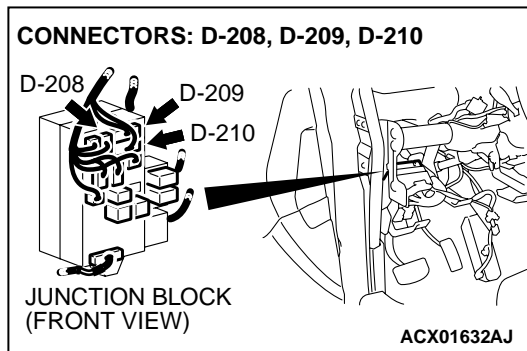
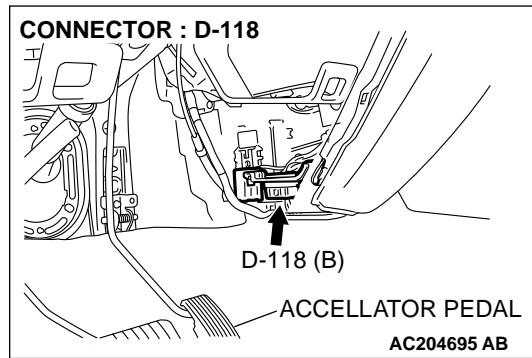
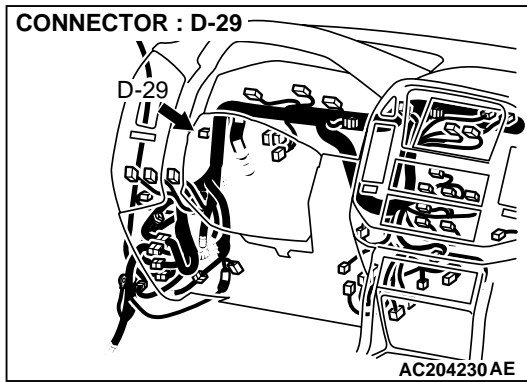
SYMPTOM PROCEDURES

**INSPECTION PROCEDURE 1: Communication with scan tool MB991502 is not possible
(Communication is not possible with SRS.)**

SRS-ECU Power Supply Circuit



AC204441AB
W3Q02M07AA



CIRCUIT 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 scan tool MB991502 to the data link connector.

TECHNICAL DESCRIPTION (COMMENT)

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 ground circuit).

TROUBLESHOOTING HINTS

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

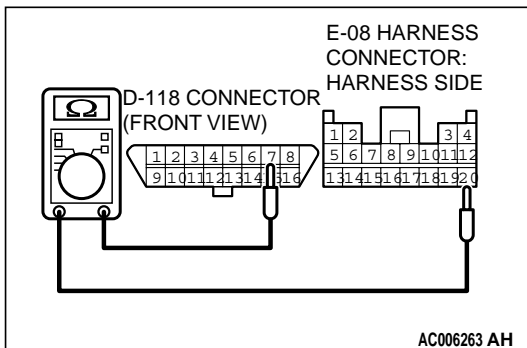
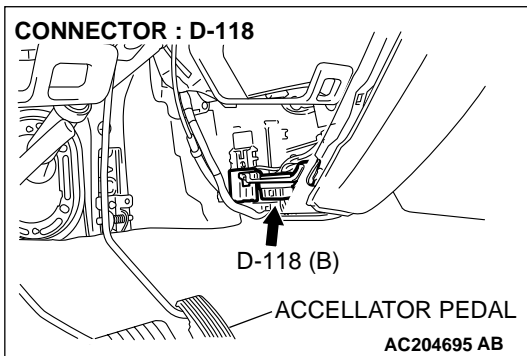
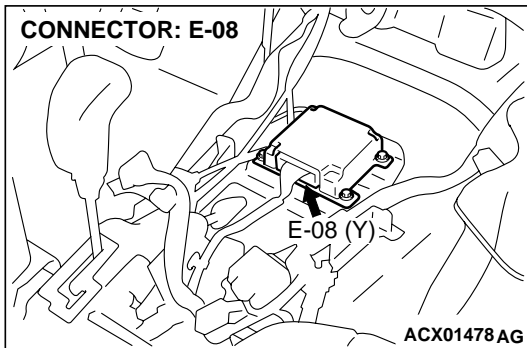
DIAGNOSIS

STEP 1. Check that the scan tool can communicate with the other systems.

Q: Can the scan tool communicate with the other systems?

YES : Go to Step 2.

NO : Refer to GROUP 13A, Diagnosis [P.13Ad-2](#).



STEP 2. Check the communication line between the SRS-ECU and the scan tool.

- (1) Disconnect SRS-ECU connector E-08 and data link connector D-118 and measure at the wiring harness side.

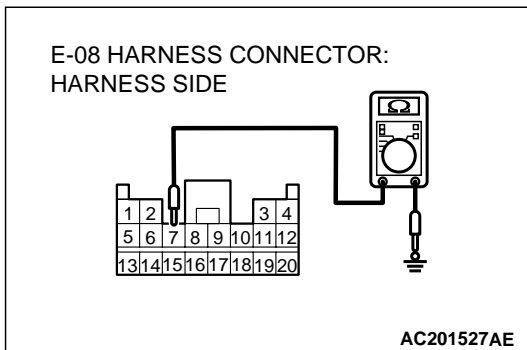
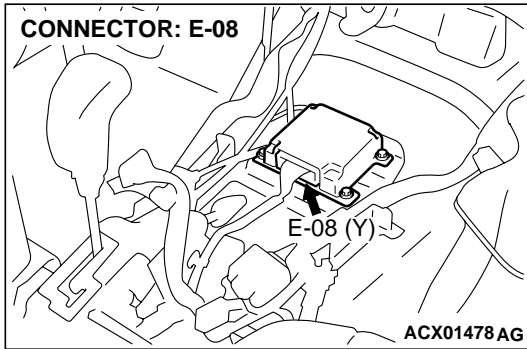
CAUTION

Do not insert a test probe into the terminal of the SRS-ECU connector E-08 from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between the following terminals.
Between connector E-08 terminal 20 and connector D-118 terminal 7
It should be less than 2 ohms.

Q: Does continuity exist?

- YES :** Go to Step 3.
NO : Go to Step 5.



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

- (1) Disconnect SRS-ECU connector E-08, and measure at the wiring harness side.

CAUTION

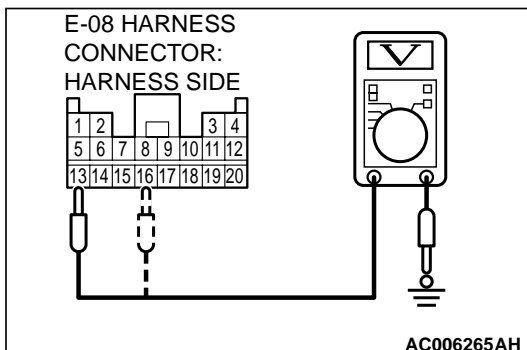
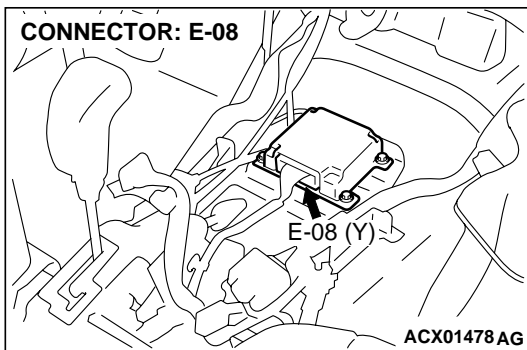
Do not insert a test probe into the terminal from its front side directly as the connector contact pressure may be weakened.

- (2) Check for continuity between E-08 harness terminal 7 and body ground.
It should be less than 2 ohms.

Q: Does continuity exist?

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 E-08, 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 ground.
Voltage should measure 9 volts or more.

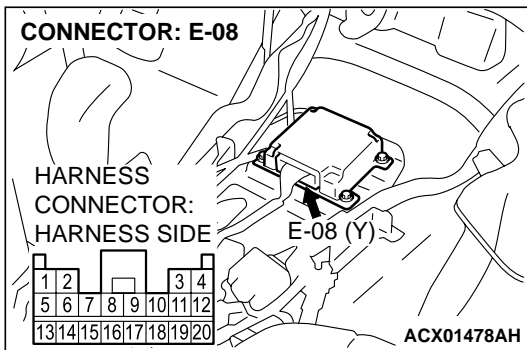
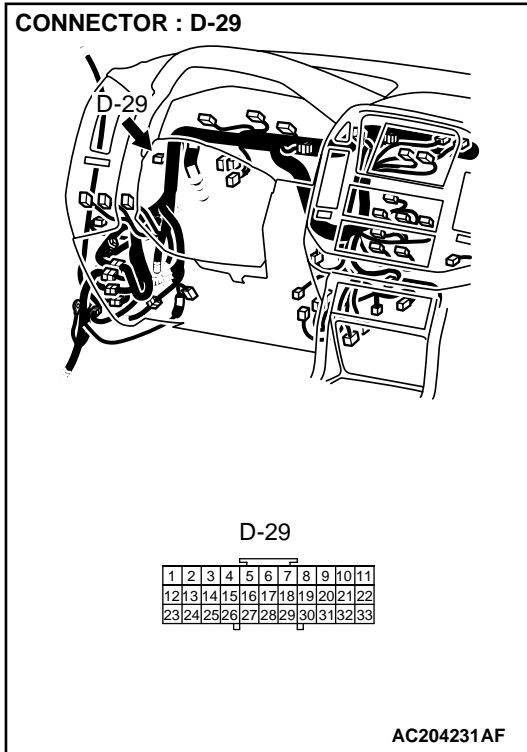
Q: Is the measured voltage within the specified range?

YES : Recheck the trouble symptom. If it is not solved, replace the SRS-ECU. (Refer to P.52Ba-31.) Then go to Step 8.

NO : Go to Step 7.

STEP 5. Check the harness wires between SRS-ECU connector E-08 (terminal No.20) and data link connector D-118 (terminal No.7).

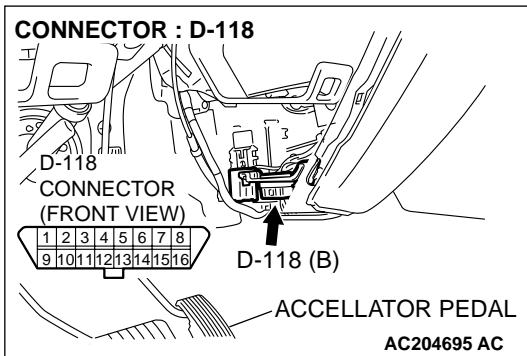
NOTE: After inspecting intermediate connector D-29 inspect the wiring harness. If the intermediate connector D-29 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.). Then go to Step 8.

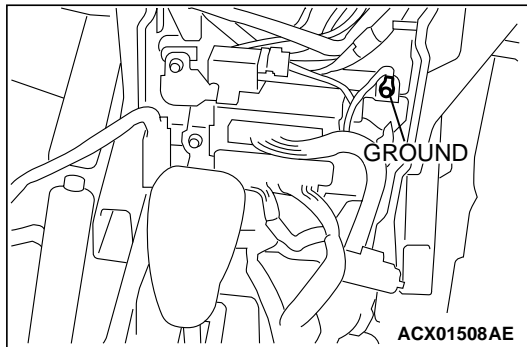
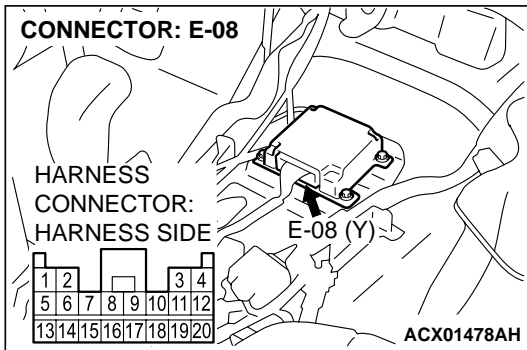


Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.20) and data link connector D-118 (terminal No.7) in good condition?

YES : Go to step 8.

NO : Repair the harness wires between SRS-ECU connector E-08 and data link connector D-118. Then go to Step 8.



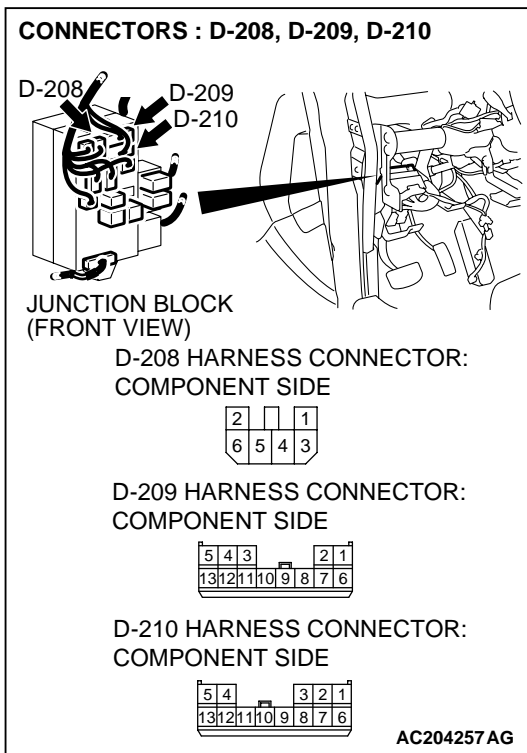


STEP 6. Check the harness wire between SRS-ECU connector E-08 (terminal No.7) and ground.

Q: Is the harness wire between SRS-ECU connector E-08 (terminal No.7) and ground in good condition?

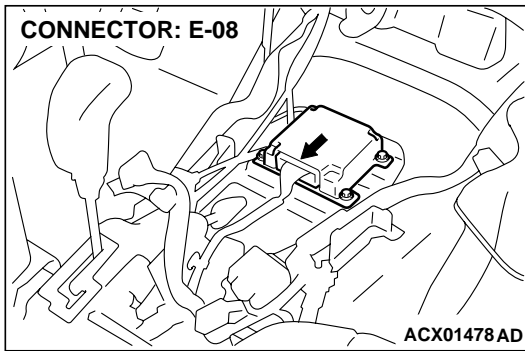
YES : Go to Step 8.

NO : Repair the harness wire between SRS-ECU connector E-08 and ground. Then go to Step 8.



STEP 7. Check the harness wires between SRS-ECU connector E-08 (terminal No.13 and 16) and ignition switch connector D-204 (terminal No.2).

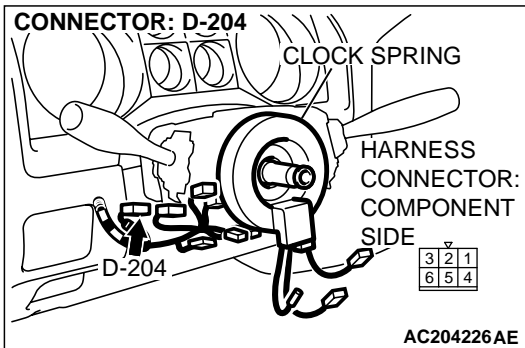
NOTE: After inspecting junction block connector D-210, D-209 and D-208 inspect the wiring harness. If the junction block connector D-210, D-209 or D-208 is damaged, repair or replace it. (Refer to GROUP 00E, Harness Connector Inspection P.00E-2.) Then go to Step 8 .



Q: Are the harness wires between SRS-ECU connector E-08 (terminal No.13 and 16) and ignition switch connector D-204 (terminal No.2) in good condition?

YES : Go to Step 8.

NO : Repair the harness wires between SRS-ECU connector E-08 and ignition switch connector D-204. Then go to Step 8.



STEP 8. Retest the system.

Q: Does the scan tool communicate normally with the SRS system?

YES : The procedure is complete. (If no malfunctions are not found in all steps, an intermittent malfunction is suspected. Refer to GROUP 00, How to Use Troubleshooting/Inspection Service Points – How to Cope with Intermittent Malfunction [P.00-6](#).)

NO : There is no action to be taken.